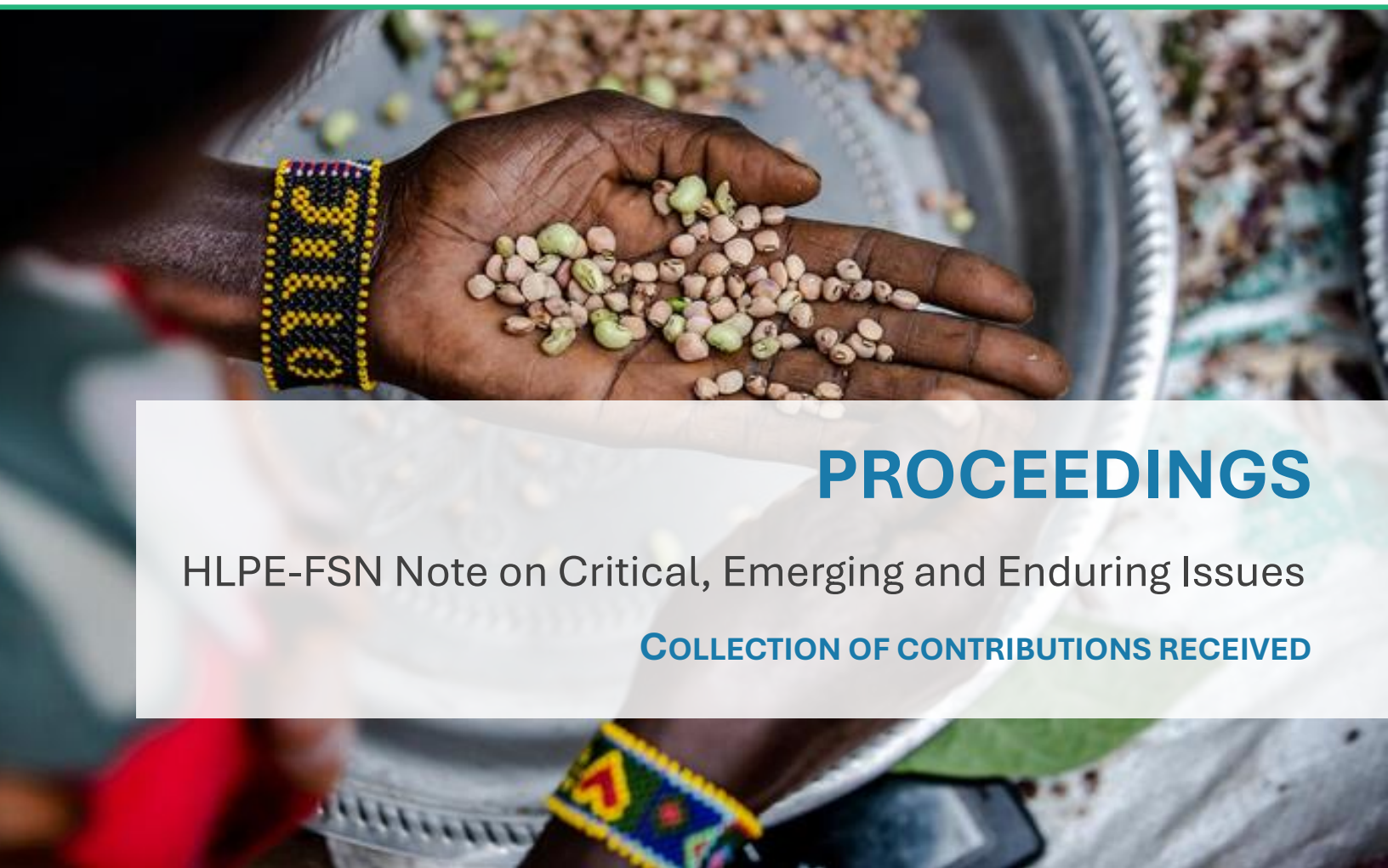




HLPE
*High Level
Panel of Experts*



PROCEEDINGS

HLPE-FSN Note on Critical, Emerging and Enduring Issues

COLLECTION OF CONTRIBUTIONS RECEIVED

11 May 2026

Background

The Committee on World Food Security (CFS), the foremost intergovernmental and international evidence-based and multi-stakeholder platform related to food security and nutrition, mandated its High Level Panel of Experts on Food Security and Nutrition ([HLPE-FSN](#)) to “identify emerging issues, and help members prioritize future actions and attentions on key focal areas” (CFS reform Document, 2009).

As part of the note development process of the 4th “Note on critical, emerging and enduring issues” (CEEI), to inform the preparation of the CFS MYPoW 2027-2030, the HLPE-FSN invited CFS stakeholders to provide inputs, suggestions, and comments through an e-consultation on the first draft of the note (V0 draft).

This draft note identifies ten key issues affecting food security and nutrition (presented in no particular order):

1. Advancing the post-2030 Development Agenda through food systems transformation
2. Achieving food security and nutrition in climate crises
3. Food security and nutrition, and the three Rio Conventions: Biodiversity, Desertification and Climate
4. Geopolitical uncertainty and polycrises: how to predict and prevent impacts on food security and nutrition
5. International trade for food security and nutrition
6. Corporate concentration in food systems
7. Digital innovations and artificial intelligence (AI) for healthy, sustainable, and equitable food systems
8. “One Health” as an integrating framework for food security and nutrition
9. Affordability of healthy and nutritious diets to ensure food security and nutrition
10. Agency for food security and nutrition

E-consultations are a key part of the inclusive and knowledge-based dialogue between the HLPE-FSN Steering Committee, the drafting team and the scientific and knowledge-holding community at large.

Contributions

The online consultation was launched on 2 April 2026 and closed on 4 May 2026.

The HLPE-FSN Secretariat has received **114 insightful and sharp contributions** from experts and practitioners of diverse public and private organizations working in different fields of expertise, academia, civil society, and other institutions from 31 countries, namely Argentina, Armenia, Australia, Austria, Belgium, Benin, Brazil, Canada, Colombia, Democratic Republic of Congo, Egypt, Ethiopia, France, Germany, India, Ireland, Italy, Japan, Jordan, New Zealand, Nigeria, Malawi, Mexico, Panama, South Africa, Switzerland, Tunisia, Uganda, United Kingdom of Great Britain and Northern Ireland, United States of America and Yemen.

The results of this consultation will be used by the HLPE-FSN to elaborate the note. More information about the CFS request and the e-consultation is available [here](#). More information on the HLPE-FSN publication process is available [here](#).

 **Total Contributions: 114**

 **Countries: 31**

 **Contributions on behalf of a team/organization: 69**

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Guiding questions

Share your feedback on the proposed list of selected critical, emerging and enduring issues:

1. Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?
2. Are there any other key issues that should be added and elaborated? If yes, please justify why they are “critical”, together with relevant literature and data.
3. All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Share your inputs on one or more of the ten CEEI listed:

1. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?
2. Is there any aspect of direct or indirect FSN outcome that should be further elaborated?
3. Is there any missing reference to key literature and data?
4. Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

Contributions

Contributions are presented in chronological order, reflecting the sequence in which they were submitted, same formatting and in their original language.

1. Oromo Grassroots Development Initiative (HUNDEE), Ethiopia

Surname	Regassa
First name	Bekele Alemayehu
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Area Manager
Current institution/organization	HUNDEE Oromo Grassroots Development Initiative
Country	Ethiopia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	On behalf of HUNDEE Oromo Grassroots Development Initiative, we appreciate the effort by the HLPE-FSN in identifying the proposed Critical, Emerging, and Enduring Issues (CEEI) affecting global food security and nutrition. Overall, the listed issues reflect many of the key structural and systemic challenges observed both globally and in local contexts such as Ethiopia, including climate change impacts, market instability, inequality, and vulnerabilities in agri-food systems. However, we suggest further emphasis on localized realities, particularly the interconnected challenges of smallholder farmers' limited access to finance, land degradation, weak extension systems, and the need for stronger community-based resilience mechanisms. Additionally, greater attention should be given to nutrition-sensitive agriculture, youth engagement, and the role of grassroots institutions in sustaining long-term food system transformation. Strengthening context-specific interventions alongside global priorities will ensure the CEEI framework is both inclusive and actionable across diverse settings.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yes, on behalf of HUNDEE Oromo Grassroots Development Initiative, we suggest that several additional issues should be explicitly incorporated into the CEEI framework, as they are increasingly “critical” due to their systemic, cross-cutting, and accelerating impacts on food security and nutrition (FSN): 1. Digital divide and unequal access to Agri-food innovations: While digital agriculture and data systems are emerging rapidly, unequal access to technology, infrastructure, and digital literacy is widening disparities between smallholder farmers and commercial systems. This is critical because digital tools influence productivity, market access, early warning systems, and resilience; yet marginalized rural communities risk exclusion, reinforcing inequality in FSN

	outcomes. 2. Youth unemployment and demographic pressure in rural areas: With a rapidly growing youth population in regions like Sub-Saharan Africa, limited access to land, finance, and decent jobs in agriculture is undermining the sustainability of food systems. Evidence shows declining youth participation in farming and barriers to entry, which threaten long-term food production and innovation capacity. This is critical because future food security depends on generational renewal in agriculture. 3. Migration and displacement as structural drivers of food insecurity: While conflict is recognized, the broader migration–food security nexus deserves stronger emphasis. Displacement disrupts livelihoods, reduces agricultural production, and increases dependency on markets and aid. Studies show strong interlinkages between migration flows, remittances, and household food security outcomes, especially in fragile contexts. 4. Data gaps and weakening food security information systems: Reliable, timely data is essential for policy and early warning, yet global monitoring systems are weakening due to funding constraints. The decline of major datasets (e.g., early warning and nutrition surveys) limits the ability to respond to crises and plan interventions, making this a critical governance and accountability issue. 5. Structural inequality in access to productive resources (land, water, finance): Although inequality is noted, stronger emphasis is needed on structural barriers faced by smallholders, especially women and marginalized groups. Limited access to land and inputs directly constrains food production and nutrition outcomes, reinforcing poverty cycles and vulnerability.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	On behalf of HUNDEE Oromo Grassroots Development Initiative, we acknowledge that while the separation of issues by the HLPE-FSN is useful for analytical clarity, stronger integration would better reflect the systemic nature of food security and nutrition challenges. In our view, several issues could be more explicitly clustered or analysed through an integrated lens. For instance, climate change, conflict, and economic instability could be combined under a broader “shock and stressors” framework, as they simultaneously disrupt food production, supply chains, and access to food. Similarly, inequality, food system workers’ rights, and access to resources could be consolidated under a “social inclusion and equity” pillar, given their shared influence on vulnerability and livelihoods. Urbanization and food supply chains could also be more closely linked, as rapid urban growth is

	reshaping demand, distribution systems, and rural–urban food dynamics. Beyond clustering, we strongly recommend that the analysis further emphasize causal linkages and feedback loops among issues—for example, how climate change exacerbates conflict, how conflict drives displacement and weakens supply chains, and how these in turn deepen malnutrition. A more systems-based framework, supported by cross-cutting themes such as governance, resilience, and local institutional capacity, would enhance coherence and better guide integrated policy and program responses across diverse contexts.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	On behalf of HUNDEE Oromo Grassroots Development Initiative, we recognize that the drivers and trends identified by the HLPE-FSN capture many of the core linkages between the selected CEEI and food security and nutrition (FSN) outcomes. In particular, the emphasis on climate change, conflict, and supply chain disruptions appropriately reflects their direct impacts on food availability, access, and stability. However, we believe that some critical drivers remain underrepresented or insufficiently articulated. These include structural constraints such as limited access to land, finance, and extension services for smallholder farmers; weak local governance and institutional capacity; and socio-economic inequalities, especially affecting women and youth. Additionally, the role of market systems including price volatility, input costs and power imbalances within value chains requires stronger attention, as these directly influence household food access and dietary quality. The trends related to urbanization and technological change are relevant, but their differentiated impacts on rural versus marginalized populations need clearer analysis. We therefore recommend strengthening the framework by more explicitly linking these drivers to all six dimensions of FSN (availability, access, utilization, stability, agency, and sustainability), and by incorporating context-specific evidence from grassroots and local food systems to ensure a more comprehensive and actionable understanding.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	On behalf of HUNDEE Oromo Grassroots Development Initiative, we believe that while the HLPE-FSN framework adequately addresses core FSN outcomes, several direct and indirect aspects require further elaboration to ensure a more comprehensive analysis. In particular, greater attention should be given to diet quality and nutrition outcomes, not only food availability, as hidden hunger and micronutrient deficiencies remain widespread even where caloric intake is sufficient. The dimension of agency, especially the capacity of smallholder farmers, women, and local communities to make decisions over food systems also needs deeper exploration, as

	it directly influences sustainability and resilience. Furthermore, intra-household food distribution and gender dynamics should be more explicitly addressed, given their significant impact on child and maternal nutrition outcomes. Indirectly, the role of water, sanitation, and hygiene (WASH), health services, and education in shaping nutrition outcomes deserves stronger integration into the FSN framework. Additionally, the effects of market volatility and income instability on dietary diversity and coping strategies should be more clearly articulated. Strengthening these aspects would provide a more holistic understanding of FSN outcomes and better inform integrated, nutrition-sensitive interventions across diverse contexts.
Is there any missing reference to key literature and data?	On behalf of HUNDEE Oromo Grassroots Development Initiative, we note that while the HLPE-FSN draws on a solid body of global literature, there are some important gaps that, if addressed, would strengthen the evidence base and contextual relevance of the analysis. In particular, greater reference to flagship global reports such as the FAO's State of Food Security and Nutrition in the World (SOFI), the Global Report on Food Crises (GRFC), and World Bank poverty and food security assessments would provide up-to-date quantitative evidence on hunger, malnutrition, and vulnerability trends. For instance, recent estimates indicate that nearly 295 million people faced acute food insecurity globally, underscoring the scale and urgency of the challenge. Additionally, more emphasis on peer-reviewed literature examining the intersection of climate change, conflict, and economic shocks would strengthen the analytical depth, as these compound crises are increasingly recognized as key drivers of FSN outcomes. Furthermore, there is a need to better incorporate context-specific and localized evidence, including national surveys, indigenous knowledge systems, and program-level evaluations, particularly from low-income and fragile settings. Strengthening references to data systems and early warning mechanisms is also critical, given the growing concern over declining investment in food security data infrastructure and its implications for timely decision-making. Integrating these additional sources would enhance both the credibility and applicability of the CEEI framework, ensuring it is grounded in robust, diverse, and up-to-date evidence.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any	On behalf of HUNDEE Oromo Grassroots Development Initiative, we consider that the questions identified by the HLPE-FSN provide a strong foundation to guide the development of the report, particularly in framing key drivers, trends, and policy implications. However, we suggest that

additional questions or dimensions that should be further elaborated	additional questions and dimensions be incorporated to enhance depth, inclusiveness, and practical relevance. Specifically, the framework would benefit from questions that explicitly address: (i) how different CEEI affect the most vulnerable groups, especially women, youth, and smallholder farmers across diverse contexts; (ii) what institutional and governance capacities are required at local and national levels to effectively respond to these challenges; (iii) how market systems, including price volatility and private sector dynamics, influence FSN outcomes and (iv) what scalable, evidence-based best practices exist from grassroots and community-led interventions. Furthermore, more attention should be given to cross-cutting dimensions such as resilience, agency and sustainability including how trade-offs between short-term food access and long-term environmental sustainability can be managed. Incorporating forward-looking questions such as the implications of emerging technologies, demographic change, and climate uncertainty would also strengthen the analytical and strategic value of the report. Overall, expanding the guiding questions in these areas would ensure a more comprehensive, context-sensitive, and action-oriented assessment of food systems transformation.

2. Raghavendra Guru Srinivasan

Surname	Srinivasan
First name	Raghavendra Guru
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Independent researcher
Current institution/organization	Member- The institution of Chartered Accountants of India
Country	India
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The current document mentions right based approach to meet the objectives and one of the problems dealt is non communicable diseases. Non communicable diseases are function of unhealthy eating, physical inactivity, smoking and being alcoholic. All the solutions like doing physical activity is a Human Cooperation and not a Human right. This is the same for other risk factors like being a non-smoker, being a non-alcoholic and making healthy food choice. The Constitution of World Health Organization Mentions that health can be derived with the Cooperation of States and Individuals. So, the Document needs to stress the need for Human Cooperation from all the individuals for attainment of objectives. Both Human right and Human cooperation is

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

necessary. In sum, health in some cases is earned and it cannot be claimed.

I am an independent researcher working in health-related food taxation (Public health tax) for more than 17 years and the 2022 G20's Think 20 policy brief process mentioned that my innovation fat and tickle tax (a tax on business behaviour of tickling food consumption) is the solution for the problem of childhood with overweight and obesity. The matters agreed in the G20 process for nutrition security.

Health economic discovery: A family member cooks food for wellbeing while a business prepares food for profit motive. In this process I discovered the business behaviour of tickling food consumption in humans which can also be classified as overeating factors that lead to obesity and other non-communicable diseases.

Inequality in recognition of the system of medicine for policy (PFM reform and Regulatory law reform)

1. Micro Data - Inequality in Information available to Children. A sample application of Fat and Tickle tax for Sugar Sweetened Beverages will bring the following factors. Sugar sweetened beverages (SSBs) are consumed for two reasons: one for thirst and another for consumption experiences (tickling factors). My innovation fat and tickle tax brings out the following Tickling factors for SSBs.

1. Fizzy or soda experience
2. Influence of Colouring agents.
3. Flavour or Unique product formula
4. Sugar sweetened taste including artificial sweeteners
5. Chilled servings experience
6. Caffeine or other additives
7. Influence of Price discounts
8. Influence of Quantity discounts
9. Influence of combo offers in fast food restaurants for e.g. unlimited soft drink servings for fast food.
10. Influence of others marketing offers like free tickets for sports events, loyalty points or gifts, sports sponsorships, and others
11. Influence of an obesogenic environment like the availability of soft drinks in the network of retailers with no health option.
12. Market influence of SSB companies to get water resources with no such option for the general consumer.
13. Advertisement including TV and electronic media.
14. Lack of information on Health externality and internality

	Perennial Health cost of consumption including the cost of diabetes, cardiovascular disease, non-alcoholic fatty liver disease, dental caries, obesity, cancer, etc. 15. Lack of information on the environmental (externality) influence of plastic containers includes the effects of plastic containers burnt in remote villages of developing countries or the cost of contamination. 16. Externality Influences specific to regions like the case of chemicals mixing with liquid when plastic containers are exposed to the sun during transportation. My work concludes that a Child may not understand the business behaviour of tickling food consumption and therefore direct sale of SSBs to children should be considered unethical. Therefore, such transactions should be banned. However, a parent can buy soft drinks for their Children. In that case there is a need to educate the parents about the business behaviour of tickling food consumption. We need to implement Fat and Tickle tax for the problem of Childhood with overweight and obesity and this is also agreed in the G20 process.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	For the purpose of One Health, we need investment in human cooperation. Human right Vs Human cooperation Yoga Education & Cooperation Today we see wide acceptance of democracy and human rights-based approaches to solve society's problems. In ancient traditions education was provided on the basis of Teacher and Student cooperation. Yoga is a slow process, and it takes years (even decades) of practice to gain basic knowledge. In the case of yoga education is possible only if the student offers the cooperation doing the physical activity. Doing Physical activity is a Human cooperation and not a human right. In yoga Knowledge can be obtained only by cooperation. Family & Cooperation - Today one of the society's problems is the state of decline in the family institution. In the UK the number of births outside of the family institution is more and this is due to rights-based living in the society. Since there is no family institution to protect children from Children obesity, Child & Adolescents rapes and Childhood ill health like tooth decay resulting in mouth without tooth. Here again we have to stress that Marriage & Family is a human cooperation agreement between two individuals and not a human right between individuals. If there is micro

cooperation in the society of living as a family the governments need not have to worry about micro governance for children.

Financial reward, Food preparation & Cooperation: A family prepares food for well-being while a business prepares food for profit motive. In present day society there is focus on financial well-being and the food preparation in some families is being considered as less important. As already explained, a family is a human cooperation, and we need education that human cooperation of family cooking is even more important. Every aspect of human cooperation involves human effort without financial reward, but it involves the prevention of costs. Every human cooperation effort involves human effort, and it doesn't bring immediate financial rewards.

3. Women Agro-Farmers Association, Nigeria

Surname	Igbine
First name	Lizzy
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Chair Steering Committee
Current institution/organization	Nigerian Women Agro-Farmers Association
Country	Nigeria
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yardstick and template for Monitoring and Evaluation and Reporting annual statistics and changes.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages	Yes, the cause of Malnutrition stems from poor balanced diets in foods and low-income earnings and poverty.

between different issues should be further strengthened in the analysis.	
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The Ten CEEI though lengthy and inclusive still needs elaborate and detailed analysis and inclusion of the needs of the poor and vulnerable who cannot afford quality foods and Nutrition intakes due to poverty whom survival are also critical to achievement of our set goal.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Yes, we need to support our vulnerable families with Education, Engagement and trainings, Example is a program that we developed for Students in Senior Secondary Schools in Nigeria named Operation Feed My Family. This program supports students to grow food vegetables and grains around their homes in Plastics, used Pots and Bags. This has been proven to be a game changer as the students participate in growing foods and vegetables for households around their homes and environment thereby reducing risks of kidnaping and Boko Haran harassment in Nigeria as a test case.
Is there any missing reference to key literature and data?	Physical data collection should form part of Monitoring and Evaluation engagements.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	I acknowledge the efforts of experts who wrote the templates but there is no end to modification as I am suggesting inculcating the contributions of practitioners, Rural Farmers and Food Consumers.

4. Riccardo Pozzo

Surname	Pozzo
First name	Riccardo
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Professor of Philosophy
Current institution/organization	Tor Vergata University of Rome, Department of Literary, Philosophical, and Art History Studies
Country	Italy
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important	All ten CEEI point out to their own urgency. It seems to me that two of them stand out for their intersectoral relevance, namely the ones on Geopolitical Uncertainty and on Digital Innovation and AI. The biosphere of agriculture ought to interact positively with the noosphere of communication.

issues affecting food security and nutrition, globally and in specific contexts?

5. Claudio Schuftan

Surname	Schuftan
First name	Claudio
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	member advisory council
Current institution/organization	PHM
Country	Viet Nam
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	I had written here 10 mins before but then disappeared. Not sure you got it. I am surprised mention of food sovereignty only once and in passing. Also, poverty not mentioned (A ctrlF yields zero hits). 'The poor' are mentioned when it should say 'those rendered poor'. The same for 'poorest populations' when it should say 'populations rendered poor by the prevailing system'. I also feel very uncomfortable with 'pro-poor': It victimizes them and refers to poverty alleviation measures when what we need is 'disparity reduction measures' !! I have sent you an email with some complementary info on this. I have not answered the questions below specifically

6. Green and Blue Frontiers Consulting, Malawi

Surname	Chimutu
First name	Fatsani Damson
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Agricultural Consultant and Irrigation Projects Manager
Current institution/organization	Green and Blue Frontiers Consulting
Country	Malawi
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The issues identified by the HLPE-FSN broadly capture key global drivers of food security and nutrition (FSN), particularly in relation to climate change, inequalities, and sustainability transitions. However, from a Sub-Saharan African perspective, especially in smallholder-dominated systems like Malawi, the framing could better emphasize context-specific vulnerabilities and system-level interactions. In many developing contexts, food insecurity is not driven by isolated factors but by compound risks, including

	hydroclimatic variability, land degradation, limited access to irrigation, and socio-economic constraints. While these may be individually reflected in the CEEI, their interconnected and cascading nature requires stronger emphasis. Additionally, the current list appears to prioritize global-scale drivers, but may underrepresent localized system dynamics, such as farmer decision-making under uncertainty, informal food systems, and governance limitations at sub-national levels.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yes, I have the following issues that i think should be further elaborated: a) Hydroclimatic extremes and localized risk pathways This is critical due to increasing frequency of droughts and floods, especially in Sub-Saharan Africa. These risks are not only climatic but are shaped by land use, water management systems, and socio-economic conditions. Example: Smallholder farmers in Malawi face yield instability due to rainfall variability and limited irrigation access. Literature: IPCC (2022), FAO (2023) reports on climate impacts and agriculture. b) Irrigation access and water governance Water access is a decisive factor in FSN but often underrepresented. Irrigation systems significantly influence resilience, productivity, and nutrition outcomes. In Malawi, less than 5% of smallholders use irrigation despite high vulnerability to drought. c) Knowledge integration and participatory governance Bridging scientific and local knowledge systems is critical for designing adaptive and context-specific solutions. Participatory approaches improve adoption of climate-resilient practices and policy relevance.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Several issues could be more explicitly integrated: Climate change, land degradation, and water scarcity should be treated as a linked system, rather than separate issues. Food systems transformation and inequality are strongly interconnected, particularly in access to resources, markets, and technologies. Strengthening these linkages would allow for a systems-based

	analytical framework, which better reflects real-world FSN dynamics.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The identified drivers are relevant but could be expanded to better capture: Socio-economic heterogeneity (e.g., differences among smallholder farmers, gender dynamics) Institutional capacity and governance gaps, particularly in implementing policies Behavioural and decision-making processes at farm level under climate uncertainty From my experience in agroecosystem resilience assessments, FSN outcomes are strongly influenced by how farmers perceive and respond to risks, which is not always fully captured in macro-level analyses.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The analysis could further elaborate on: Stability and resilience dimensions of FSN, not just availability and access Nutrition-sensitive agriculture, linking production systems to dietary diversity Long-term system adaptability, including transformation pathways
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	The guiding questions are generally appropriate but could be strengthened by adding: How do compound and cascading risks affect FSN outcomes in specific contexts? What are the trade-offs between productivity, resilience, and sustainability? How can participatory and co-design approaches improve FSN interventions? What role do local institutions and governance systems play in enabling or constraining adaptation? These additions would improve the operational relevance of the report.

7. Samson Agbo

Surname	Agbo
First name	Samson
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	CEO/Global Public Health Expert and Advisor

Current institution/organization	Sam-Divine Health Vanguard International CIC
Country	United Kingdom of Great Britain and Northern Ireland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, especially noting the persistent structural failures. The draft correctly identifies fragmentation, climate shocks, and inequities, but remains normative rather than operational for LMICs (fragile and low-capacity systems). There is limited guidance on: - o Implementation under weak governance / fragile states - o Financing constraints (domestic vs donor transition) - o Institutional capacity realities
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Recommend adding a new chapter: “Operationalizing Food Systems Transformation in LMICs” With 5 pillars: 1. Financing & investment pathways 2. Governance & institutional strengthening 3. Digital & data systems 4. Community & agency-driven models 5. Resilience & shock-responsive systems A new HLPE chapter on “Operationalizing Food Systems Transformation in LMICs” would fill this void by translating broad goals into actionable pathways. It would guide countries on how to execute reforms through practical sequencing of financing, governance, data, community, and resilience measures. Sources: HLPE-FSN draft; FAO guidance on producer organizations; World Bank/community-driven development examples; WHO/UNICEF guidelines on resilient food systems (not explicitly cited). These pillars draw from LMIC case studies (e.g. Ethiopia’s safety nets, Brazil’s food councils, digital-extension pilots) and international best practices. “While the draft provides a strong conceptual and analytical foundation, it requires further operationalization to address the realities of LMICs—particularly in fragile and resource-constrained settings. A stronger focus on financing, institutional capacity, integrated service delivery, and implementation pathways will be essential to translate food systems transformation from global ambition into country-level impact.”
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	None

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Yes.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Yes: FINANCING & ECONOMIC REALITY GAP: Weak articulation of financing mechanisms • The draft highlights affordability challenges but does not sufficiently address: - o How LMICs finance transformation - o Role of blended finance / PPP / innovative financing 🔗 Evidence: • Affordability crisis highlighted (2.6–3 billion unable to afford healthy diets) • But no structured financing solutions AGRICULTURE–HEALTH–NUTRITION INTEGRATION GAP: Weak integration with health systems (critical for LMICs) • Food systems discussed largely from agriculture + environment lens • Limited integration with: - o Primary Health Care (PHC) - o Community health platforms - o Nutrition service delivery systems DATA, DIGITAL & SYSTEMS GAP (CRITICAL): Digital transformation lacks LMIC readiness lens • The document acknowledges AI risks and opportunities but: - o Underestimates digital divide - o Lacks implementation models for low-connectivity settings 🔗 Evidence: • AI depends on infrastructure, data, and capacity • Evidence gaps especially in LMICs GOVERNANCE & POLITICAL ECONOMY GAP: Insufficient focus on implementation politics in LMICs • Power asymmetries identified, but: - o No concrete tools for policy reform or enforcement CLIMATE–FOOD–LIVELIHOOD NEXUS GAP: Climate adaptation lacks livelihood protection depth • Strong on climate impacts, weaker on: - o income resilience - o shock-responsive systems AFFORDABILITY & MARKET SYSTEMS GAP: Affordability problem diagnosed, but solutions limited • Document highlights: - o Price volatility - o Ultra-processed food dominance AGENCY & COMMUNITY SYSTEMS GAP: Agency concept

	strong but not operationalized • Good conceptual framing of agency • Missing: - o How to implement at scale in LMICs EQUITY & VULNERABLE POPULATIONS GAP: Limited disaggregation of LMIC vulnerabilities • Mentions vulnerable groups but lacks: - o Targeted strategies for: § conflict zones § displaced populations § urban poor IMPLEMENTATION & ACCOUNTABILITY GAP: No clear results framework • Missing: - o KPIs - o Monitoring tools - o Accountability mechanisms Cross-cutting enablers and KPIs Develop and pilot a costed minimum viable plan (MVP) for this chapter, align donors on core priorities, and iterate with LMIC partners.
Is there any missing reference to key literature and data?	None
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	None

8. Zeliha Yilmaz

Surname	YILMAZ
First name	Zeliha
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	agricultural engineer
Current institution/organization	Ministry of Agriculture and Forestry
Country	the Republic of Türkiye
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and	yes

nutrition, globally and in specific contexts?	
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	yes When we consider food supply on a global scale rather than a regional one, some regions will unfortunately be more severely affected by significant climate crises in food production. The capacity to cope with these crises will also vary from region to region. This situation brings about a negative shift in food supply areas and product yields, while the population needing food is progressing positively. Therefore, from the perspective of global food supply, the priority areas where losses are likely to occur, the amount of production lost from these areas (primarily basic food sources such as cereals, oilseeds, and legumes), and population projections are of great importance. Furthermore, where can lost production be compensated? Where are the areas that can potentially provide food supply? These concepts will guide which regions can be prioritized in long-term investments for sustainable food supply, increasing production capacity, and managing financial resources. Of course, high-risk areas will not be left entirely without investment. Projects can be implemented in these areas based on prioritization according to the degree and status of risk, and according to the determined measures. However, compensation for unavoidable food production losses is also necessary. For this purpose; The following issues should also be considered in global production quantity planning: - Calculating the potential losses in vulnerable regions and basic food production in these regions due to the climate crisis, - Estimating the population and financial losses to the food sector that will be affected by these losses, - Estimating which regions can benefit from ensuring food security for the population affected by the crisis and - developing the basic food production potential in these regions.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	If the goal is a sustainable food supply, then both food losses and potential areas for replenishing those losses must be considered.

9. Marisa de Lujan Gonnella

Surname	Gonnella
First name	Marisa de Lujan
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Investigacion
Current institution/organization	UNR
Country	Argentina
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Los campos de poderes institucionales y territoriales incluyen estos temas ya sea en acceso a tierra, en acceso a capital para producir, en las concepciones del sistema agroalimentario
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Es critica la distribución y se incrementara tanto para la producción como para el acceso según se acentuarlas desigualdades económicas y las condiciones climáticas
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Genero-acceso-desigualdad -racismo-discriminación deben ser temas prioritarios porque degradan la condición del ser humano que puede reducir y acceder a alimentos en igualdad de condiciones y derechos
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Reflejan, pero varían en los territorios según los micropoderes imperantes
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Como se hacen los relevamientos en los países y sus deficiencias ayudan a que los países se pongan a trabajar en el tema acerca de cómo se generan datos
Is there any missing reference to key literature and data?	Los de cada contexto que puede sugerirse, y que no siempre son quienes conocen a nivel internacional, pero si conocen lo regional
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any	Cuáles son las dimensiones predominantes que guían los cruces y por tanto el sesgo de interpretación que pueda hacerse

additional questions or dimensions that should be further elaborated?

10. Chadwick Digo

Surname	Digo
First name	Chadwick
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Researcher/ Trainer
Current institution/organization	Kabete National Polytechnic/ AgriEcoTech Consulting Limited
Country	Kenya
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The HLPE-FSN's identification of Critical, Emerging, and Enduring Issues (CEEI) effectively highlights the fundamental factors influencing global food security and nutrition (FSN) challenges. These include resilient supply chains, urban food systems, conflicts, climate policies, worker rights, knowledge interfaces, and infectious diseases. These seven issues are of paramount importance on a global scale, as they tackle ongoing crises such as conflicts, which are projected to increase hunger for 318 million people by 2026, alongside climate extremes and supply chain disruptions in the face of a growing population expected to reach 10.5 billion by 2100. They resonate with UN findings indicating that 2.3 billion individuals currently experience moderate to severe food insecurity. While these issues are relevant in specific contexts like Kenya or across Africa, they may overlook critical localized challenges such as agroecological degradation, the vulnerabilities of smallholder farmers, and the need for nutrition-sensitive agriculture in the face of droughts and inequality. Enhancing the integration of regional data would improve their applicability. It is advisable to maintain the current list as a foundational framework while expanding it to include evidence on intersecting risks, such as the digital divides affecting urban FSN. Additionally, increasing input from the Global South would ensure that context-specific priorities are adequately represented. Overall, these issues form a vital framework for the CFS MYPoW 2027-2030, although they are not exhaustive.
Are there any other key issues that should be added and elaborated? If	Yes, several critical issues should be integrated into the HLPE-FSN CEEI draft to address significant gaps in dietary health,

yes, please provide a justification of why they are “critical”, together with relevant literature and data.

youth engagement, and biodiversity loss, thereby enhancing its relevance to global and regional food security and nutrition (FSN) priorities.

The rise of diet-related non-communicable diseases (NCDs) is a pressing concern, driven by the prevalence of ultra-processed foods and obesity, which contribute to a "syndemic" that intertwines undernutrition and climate shocks. By 2030, an estimated 2.5 billion adults will be overweight, jeopardizing the achievement of Sustainable Development Goal 2 and highlighting inequities in food access and utilization. Furthermore, the issue of youth engagement in agrifood systems is critical, particularly in regions like Africa, where youth unemployment rates range from 20% to 30%. This demographic shift, coupled with an aging farming population, threatens the sustainability and innovation necessary for resilient food systems. Lastly, the ongoing loss of biodiversity and ecosystem degradation, with 75% of crop varieties lost since 1900, exacerbates climate vulnerability and diminishes the resilience of food systems. Despite its importance, this issue remains underrepresented in the draft, even though it is closely linked to supply chains and nutritional diversity. To strengthen the draft, it is essential to incorporate these issues while cross-referencing existing topics, particularly focusing on data from the Global South to ensure the relevance of the CFS MYPoW.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Yes, while separate presentation aids analysis, certain HLPE-FSN CEEI issues exhibit strong synergies that warrant combination or explicit linkage to enhance policy relevance and avoid siloed approaches.

Recommended Combinations

Resilient Supply Chains + Urban/Peri-urban Food Systems: Urban areas account for rising food demand (projected 70% by 2050), directly straining supply chains; merging creates a unified "Urban-Resilient Food Systems" theme for integrated rural-urban strategies.

Conflict/Climate Shocks + Infectious Diseases: Compound crises (e.g., pandemics amplifying climate hunger) affect 318 million in acute food insecurity; combine into "Multiple Shocks and FSN Fragility" for anticipatory governance.

Enhanced Linkages

Introduce a cross-cutting matrix or nexus section mapping interactions, e.g., worker rights to knowledge interfaces for agroecology, climate to supply chains via resilience tools like

	remote sensing. In African contexts like Kenya, emphasize urban-rural-health overlaps for localized MYPoW application. Rationale and Benefits This streamlines the seven issues into 4-5 clusters, reduces overlap, and aligns with HLPE systems transformation calls, enabling better trade-off analysis for CFS 2027-2030 priorities while retaining analytical depth.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The HLPE-FSN CEEI draft's drivers and trends partially capture linkages to FSN outcomes across its ten issues, but key gaps exist in nutrition-specific impacts, equity dimensions, and regional data—particularly for contexts like Kenya. Issue 1: Resilient Supply Chains - Drivers (e.g., trade shocks, input costs) link well to availability/access but underexplore nutrition outcomes like dietary diversity loss from homogenized supply chains, affecting 2.3 billion with moderate food insecurity. Elaborate micronutrient gaps via FAO SOFI data. Issue 2: Urban/Peri-urban Food Systems - Trends (urbanization at 68% by 2050) effectively tie to consumption/utilization yet miss obesity/malnutrition "double burden" in African cities (e.g., Nairobi's 30% overweight rates amid stunting). Strengthen with HLPE urban report evidence on the governance-food-health nexus. Issue 3: Conflict/Climate Shocks - Strong on acute insecurity (318 million affected), but indirect FSN utilization effects (e.g., mental health, caregiving burdens) need expansion; WFP data shows 69% of the hungry are in conflict zones. Cross-Cutting Gaps - Missing Literature: IPCC AR6 on climate-nutrition synergies; IFPRI on gender/inequality amplifiers. Questions should probe household-level FSN metrics (e.g., HDDS, FCS) for robust outcome tracing. Overall, drivers capture ~70% of linkages; prioritize Global South evidence for completeness.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Yes, the HLPE-FSN CEEI draft would benefit from deeper elaboration on several direct and indirect FSN outcomes, particularly nutrition utilization, gender/equity mediators, and psychosocial impacts, to strengthen evidence-based policy linkages. Direct FSN Outcomes Needing Elaboration Dietary Diversity and Micronutrient Gaps: While availability/access are covered, utilization metrics like

	Household Dietary Diversity Score (HDDS) and Food Consumption Score (FCS) warrant expansion; e.g., urban supply chains reduce diversity, contributing to "hidden hunger" affecting 2 billion globally. Anthropometric Indicators: Link drivers to stunting/wasting (e.g., 149 million stunted children), triangulating with Minimum Dietary Diversity for Women (MDD-W) for gender-sensitive analysis. Indirect FSN Outcomes Psychosocial and Coping Mechanisms: Elaborate Coping Strategies Index (CSI) effects from shocks, where reduced dietary quality triggers distress, amplifying indirect malnutrition in fragile contexts like Kenya's arid regions. Gender and Caregiving Burdens: Conflict/climate stressors increase women's time poverty, undermining care practices and child nutrition; integrate the Household Hunger Scale (HHS) with gender-disaggregated data. Recommendations - I would urge you to add a subsection per issue with FSN indicator matrices (FCS, HDDS, CSI, rCSI, HFIAS), drawing from FAO SOFI and WFP standards for Global South relevance. This captures full outcome pathways beyond quantity to quality/utilization.
Is there any missing reference to key literature and data?	Yes, the draft omits several key references to authoritative literature and data sources essential for robust FSN analysis, particularly on nutrition utilization, gender equity, and Global South contexts. Critical Omissions by FSN Dimension Availability/Access: Missing FAO SOFI 2025 (2.3 billion moderately/severely food insecure) and World Bank Food Security Update 2026 (trade shocks impacting smallholders). Utilization (Diet Quality): Absent references to FAO/WFP HDDS/FCS guidelines, Minimum Dietary Diversity for Women (MDD-W, SDG 2.1.2), and GAIN Food Systems Countdown 2025 on ultra-processed food proliferation. Stability/Resilience: Lacks IPCC AR6 WGII Ch. 5 (climate-FSN synergies), IFPRI 2024 gender agri-food systems brief, and HLPE Report #20 (2024) urban food systems for peri-urban nutrition gaps. Regional Data Gaps (Kenya/Africa)

	No citations to AU Post-Malabo FSN assessment, IFAD Rural Youth Report 2024, or Kenya KDHS 2022 (31% stunting, 27% anaemia in women), crucial for contextualizing supply chain and climate shocks.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	The draft's questions for each of the ten issues provide a solid analytical foundation, effectively guiding report development by addressing drivers, trends, policy gaps, and FSN linkages. Adequacy Assessment Current questions adequately cover root causes, governance responses, and scalability, aligning with HLPE standards for scoping reports (e.g., prior notes on inequalities, resilience). They enable structured evidence synthesis for CFS MYPoW 2027-2030. Additional Questions Needed Equity and Agency Dimension: Add: "How do power asymmetries (gender, youth, and Indigenous) mediate CEEI impacts on FSN outcomes, and what agency-enhancing interventions exist?" Current lists underexplore this sixth FSN pillar. Regional/Contextual Adaptation: For each issue, "What context-specific manifestations and solutions apply in Africa/the Global South, including Kenya's agroecological/smallholder dynamics?" Enhances applicability beyond global trends. Metrics and Monitoring: Include the following: "Which FSN indicators (HDDS, FCS, MDD-W) best track progress, and how can real-time data systems integrate them?" Builds on utilization gaps noted earlier. Key Dimensions to Elaborate Trade-offs Analysis: Questions on synergies vs. conflicts (e.g., supply chain efficiency vs. nutrition diversity). Foresight/Scenario Planning: "What plausible futures emerge from CEEI interactions, and how do we build adaptive capacity?" Private Sector Role: "How can agribusinesses align with public goods under each CEEI?" These additions (3-5 per issue) ensure comprehensive, actionable reports without overwhelming scope, drawing from HLPE consultation precedents.

11. Alliance pour la Souveraineté Alimentaire (ASA-MENA), Tunisia

Surname	ISMAIL
First name	RABEB
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Coordinatrice du groupe genre au ASA-MENA
Current institution/organization	Alliance pour la Souveraineté Alimentaire (ASA-MENA)
Country	Tunisia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Les enjeux identifiés par le HLPE-FSN décrivent correctement les symptômes d'un système alimentaire mondial en crise. Mais ils évitent soigneusement d'en nommer les causes profondes. Qualifier la concentration corporative d'"asymétrie de pouvoir à corriger" revient à décrire un incendie comme un "excès de chaleur". Ce que le rapport ne dit pas, c'est que la faim de masse n'est pas un dysfonctionnement du système : elle en est un produit structurel. Les "pays à faible revenu dépendants des importations alimentaires" ne sont pas une réalité naturelle ils sont le résultat direct des plans d'ajustement structurel imposés par le FMI et la Banque mondiale depuis les années 1980, qui ont méthodiquement détruit les agricultures vivrières locales pour les remplacer par des cultures d'exportation au service des marchés du Nord. Dans des contextes spécifiques Afrique subsaharienne, Moyen-Orient, Asie du Sud les enjeux les plus critiques pour les communautés que nous représentons ne sont pas les "polycrises" abstraites du rapport, mais des réalités concrètes : la dette souveraine qui prive les États de tout budget agricole, l'accaparement des terres par des fonds d'investissement étrangers, et des conflits armés alimentés par des intérêts géopolitiques que le CFS, par sa structure même, ne peut pas nommer. La liste des ECEP décrit le monde tel qu'il est vu depuis Genève ou Rome. Elle ne décrit pas le monde tel qu'il est vécu par un paysan sans terre au Sahel ou une travailleuse agricole migrante en Europe.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are "critical", together with relevant literature and data.	Points essentiels à ajouter 1. La souveraineté alimentaire : concept volontairement absent Le terme « souveraineté alimentaire » n'apparaît pas une seule fois dans le document. Ce n'est pas un oubli : c'est un choix idéologique. Depuis 1996, ce concept a été développé pour nommer ce que la « sécurité alimentaire » efface : la différence entre manger ce que l'on importe et contrôler ce que l'on produit. Un pays peut atteindre la « sécurité

	alimentaire » en important du blé ukrainien et du soja brésilien, mais il reste en situation de dépendance totale et de vulnérabilité absolue face aux chocs géopolitiques et climatiques. La Déclaration des Nations Unies sur les droits des paysans (UNDROP, 2018) reconnaît ce droit. Le rapport HLPE devrait en faire un cadre central, pas un concept à ignorer. Référence : La Via Campesina, Déclaration de Nyéléni, 2007 ; UNDROP, Résolution ONU A/RES/73/165, 2018. 2. La financiarisation comme machine à produire la faim Depuis le rapport HLPE de 2011 sur la volatilité des prix, la spéculation financière sur les marchés agricoles a explosé. Les fonds spéculatifs et les ETF sur les matières premières alimentaires créent des flambées de prix qui n'ont aucun rapport avec les récoltes réelles et qui plongent des millions de familles dans l'insécurité alimentaire du jour au lendemain. La crise des prix de 2022, largement amplifiée par la spéculation autour du conflit ukrainien, en est l'exemple le plus récent. Réguler la financiarisation des marchés alimentaires est un levier direct sur la faim que le rapport refuse d'actionner. Référence: UNCTAD, Commodities and Development Report, 2022; Ghosh J., "The unnatural coupling: Food and global finance", Journal of Agrarian Change, 2010. 3. Le travail agricole invisible Qui produit la nourriture du monde ? Des travailleurs agricoles souvent migrants, souvent sans papiers, souvent des femmes dans des conditions d'exploitation documentées par l'OIT et des dizaines d'organisations de défense des droits humains. La filière cacao en Côte d'Ivoire, les serres d'Almería en Espagne, les plantations de thé en Assam : la chaîne alimentaire mondiale repose sur une super-exploitation invisible. Le rapport ne pose pas une seule fois la question du salaire agricole ou des conditions de travail comme déterminants de la sécurité alimentaire. C'est un angle mort qui révèle les limites du cadre analytique retenu. Référence: ILO, World Employment and Social Outlook, 2022; FAO, The status of women in agrifood systems, 2023.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Regroupements et liens à approfondir Le découpage actuel en dix enjeux séparés produit un effet analytique pervers : il donne l'impression que chaque problème a sa solution technique propre. Or, ces enjeux ont une racine commune que le rapport se refuse à nommer : la subordination des systèmes alimentaires à la logique de profit privé. Nous proposons trois regroupements qui rendent cette cohérence visible :

	Regroupement 1 : L'économie politique de l'accaparement : concentration corporative + commerce international + financiarisation. Ces trois enjeux sont les faces d'un même prisme : qui détient le contrôle des ressources alimentaires (terres, semences, données, marchés financiers) et qui en capture la valeur. Les traiter séparément permet d'éviter la conclusion qui s'impose : ce contrôle doit être remis en cause, pas simplement mieux régulé. Regroupement 2 : La dette comme arme alimentaire : géopolitique/polycrises + dette souveraine + politiques d'ajustement. Les crises alimentaires "géopolitiques" sont rarement des catastrophes naturelles. Elles sont le produit de décennies de conditionnalité économique qui ont détruit la capacité des États du Sud à investir dans leur agriculture vivrière. Ce lien causal doit être au cœur de l'analyse, pas en note de bas de page. Regroupement 3 : Le genre comme structure, pas comme catégorie : agentivité + travail reproductif non rémunéré + accès aux ressources pour les femmes. Le rapport traite le genre comme une "dimension transversale", ce qui revient à le rendre invisible dans chaque section. L'économie politique féministe montre que le travail non rémunéré des femmes dans les systèmes alimentaires (jardins potagers, transformation, soin) est une subvention invisible qui maintient la sécurité alimentaire de centaines de millions de ménages. Le rendre visible est un acte analytique et politique.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Les indicateurs proposés mesurent des flux sans capturer les rapports de force qui les produisent. Trois limites fondamentales : Les indicateurs de prix ne distinguent pas la spéculation de la rareté. Un pic de prix du blé dû à une sécheresse appelle une réponse différente d'un pic dû à des fonds spéculatifs qui parient sur la pénurie. Cette distinction n'est pas un détail technique elle détermine entièrement quelle politique publique est appropriée. Des indicateurs qui n'opèrent pas cette distinction sont analytiquement inertes. Les indicateurs de revenus agricoles masquent les inégalités internes au secteur. La moyenne des revenus agricoles mélange le grand propriétaire terrien brésilien qui exporte du soja et la paysanne zimbabwéenne qui cultive un demi-hectare pour nourrir sa famille. Un indicateur de distribution des revenus au sein du secteur agricole, désagrégé par genre et par rapport à la terre, serait infiniment plus informatif pour orienter des politiques de sécurité alimentaire. L'indicateur d'intégration aux marchés est normatif, pas analytique. Il mesure le degré d'insertion dans les marchés mondiaux comme si cette insertion était en soi un progrès

	vers la sécurité alimentaire. Or, des décennies de recherche agraire documentent des cas précis où l'intégration aux marchés d'exportation a fragilisé la sécurité alimentaire des ménages ruraux en les rendant dépendants de prix internationaux volatils. Indicateur manquant prioritaire : la part des dépenses alimentaires dans le revenu des ménages, désagrégée par quintile et par zone (urbain/rural). Cet indicateur capture directement l'accessibilité réelle à l'alimentation et ses inégalités c'est l'expérience vécue de la faim ou de son absence.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Aspects des résultats SAN à approfondir Le travail non rémunéré des femmes comme infrastructure cachée de la SAN. Des études montrent que les femmes rurales assurent entre 60 et 80% de la production alimentaire vivrière dans plusieurs régions d'Afrique subsaharienne, en plus du travail domestique de transformation et de soin. Ce travail est totalement absent des indicateurs SAN. Des politiques qui améliorent les statistiques de production sans alléger cette charge aggravent simultanément les inégalités de genre et l'épuisement des productrices elles-mêmes contradiction que le rapport ne pose jamais. Référence: FAO/IFAD/WFP, Gender and food systems, 2023; Agarwal B., A Field of One's Own, 1994. Les effets intergénérationnels de la malnutrition. La recherche en épidémiologie nutritionnelle montre que les privations alimentaires dans les 1 000 premiers jours de vie ont des effets irréversibles sur les capacités cognitives et la santé à l'âge adulte reproduisant ainsi la pauvreté d'une génération à l'autre. Ce mécanisme est l'un des arguments les plus solides pour un investissement public massif et prioritaire dans la sécurité alimentaire des femmes enceintes et des jeunes enfants. Le rapport le mentionne sans en tirer les conclusions politiques qui s'imposent. Référence: Victora CG et al., "Maternal and child undernutrition", The Lancet, 2008.
Is there any missing reference to key literature and data?	Références manquantes Les absences bibliographiques les plus révélatrices sont : • Bina Agarwal, A Field of One's Own, Cambridge, 1994 - référence fondamentale sur genre, droits fonciers et sécurité alimentaire en Asie du Sud. • Bernstein H., Class Dynamics of Agrarian Change, Fernwood, 2010 - économie politique agraire, outil indispensable pour analyser les inégalités dans les systèmes alimentaires. • Murphy S. (IATP), travaux sur la financiarisation des marchés agricoles - absents alors que la spéculation est identifiée comme facteur de volatilité.

	• La Via Campesina, Déclaration de Nyéléni sur la Souveraineté Alimentaire, 2007 - le texte de référence du mouvement paysan mondial, ignoré dans un rapport sur la sécurité alimentaire mondiale. • Van der Ploeg J.D., The New Peasantries, Earthscan, 2008 - analyse des dynamiques paysannes contemporaines comme alternatives au modèle agro-industriel. • UNCTAD, Trade and Development Report, 2023 - sur l'impact de la dette et des politiques commerciales sur les pays du Sud. • Les expériences de réforme agraire au Brésil (MST), en Bolivie et au Kerala - cas documentés du lien entre sécurité foncière et sécurité alimentaire, inexistant dans la bibliographie.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Les questions actuelles orientent la rédaction vers des réponses de gestion et de régulation. Pour produire un rapport à la hauteur de son propre diagnostic, chaque ECEP devrait être accompagné d'au moins une question qui interroge les fondements, pas seulement les modalités : Sur la concentration corporative : Quelles formes de propriété collective ou publique des ressources stratégiques (semences, brevets, données agricoles) permettraient de sortir de la logique d'accumulation privée qui génère la concentration identifiée ? Sur le commerce international : Dans quelles conditions les règles de l'OMC constituent-elles un obstacle à la souveraineté alimentaire des pays du Sud, et quelles réformes permettraient aux États de protéger leurs agricultures vivrières sans pénalités commerciales ? Sur le changement climatique : Quelle est la responsabilité spécifique des grandes firmes agro-industrielles dans les émissions du secteur alimentaire, et quels mécanismes de responsabilité contraignante y compris financière pourraient être mis en place au niveau international ? Sur la géopolitique et les polycrises : Dans quelle mesure les politiques d'aide alimentaire internationale reconduisent-elles les dépendances alimentaires des pays bénéficiaires plutôt que de renforcer leurs capacités productives locales ? Sur l'agentivité : Quelles transformations des droits de propriété sur la terre, les semences et l'eau sont nécessaires pour que l'agentivité des communautés paysannes soit réelle et non simplement formelle ?

12. Barbara Burlingame

Surname	Burlingame
First name	Barbara
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Professor, Nutrition and Food Systems
Current institution/organization	Riddet Institute, Massey University
Country	New Zealand
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	No. While the issues identified are individually important, the overall framing does not adequately capture the most urgent and consequential issues today. In particular, the draft underrepresents the extent to which hunger is being actively produced in conflict settings through deliberate starvation, denial of humanitarian access, and destruction of the means of food production. These are not simply components of a broader “polycrisis,” but constitute a distinct category of crisis with clear legal and policy implications. Without elevating this issue, the analysis risks mischaracterizing both the nature and the scale of contemporary food insecurity.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yes. One critical issue that should be more explicitly added and elaborated is the deliberate use of hunger in conflict settings, including starvation as a weapon of war, obstruction of humanitarian relief, and the systematic destruction of food systems and livelihoods. While the draft refers to conflict, famine risk, and a single mention of “the use of food as a weapon of war,” it does not treat these as a distinct and central issue. Instead, they are subsumed within broader framings such as “polycrisis” and “geopolitical uncertainty,” which obscures the specific legal and policy implications. This issue is critical in scale—conflict is now the leading driver of acute food insecurity globally; emerging in form—there is ever-increasing evidence that hunger is being intentionally inflicted, not merely arising as an indirect consequence of conflict; and enduring in impact—the destruction of cropland, irrigation systems, fisheries, livestock, and markets undermines recovery and food security for years or decades. Importantly, the issue is not limited to famine “risk”; in some contexts, famine is credibly identified and documented, and should be named as such. FAO has reported widespread destruction of agricultural systems in Gaza, including cropland, greenhouses, wells, and fisheries infrastructure. The IPC has identified catastrophic levels of food insecurity and famine conditions, not only famine risk, in conflict-affected settings such as Gaza and Sudan. The prohibition of starvation of civilians and the protection of

	objects indispensable to survival are clearly established under International Humanitarian Law, including the Geneva Conventions. Treating this issue as a subcomponent of broader crisis framings is therefore analytically insufficient. Where hunger is deliberately inflicted, responses must go beyond resilience and coordination to include explicit recognition of prohibited conduct, prioritization of cessation and humanitarian access, and attention to accountability.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	While it is important that the treatment of conflict-related hunger, famine, etc., should remain addressed across categories such as “polycrisis,” “resilience,” and “geopolitical uncertainty,” it should also be more clearly consolidated and foregrounded as a distinct issue. Specifically, the deliberate use of starvation, obstruction of humanitarian relief, and destruction of food systems and livelihoods could be brought together into a single, clearly defined category rather than only being referenced indirectly across multiple sections.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The drivers and trends identified are relevant, but they do not always fully capture the pathways through which each CEEI affects FSN outcomes. In several places, the analysis remains too broad, too technocratic, and even euphemistic, relying on formulations such as “polycrisis,” “geopolitical uncertainty,” and “resilience” without adequately specifying the causal mechanisms involved. This is particularly problematic in relation to conflict, where the draft underplays the extent to which FSN outcomes are shaped by deliberate starvation, obstruction of aid, forced displacement, and destruction of food systems and livelihoods. More generally, the report would benefit from stronger attention to governance, power, inequality, rights, and the science–policy interface, including whose knowledge counts in defining both problems and solutions.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Already stated.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	Yes, simply ask if there is anything else that needs to be addressed. My answer to such a question would be this: The HLPE, with its evidence-based mandate, has a duty to state the realities of food security and nutrition plainly and unequivocally in its Note on Critical, Emerging and Enduring Issues. Its role is not to dilute findings in anticipation of political sensitivities, but to present independent, evidence-based analysis. Whether the CFS, as an intergovernmental (i.e., political) body, accepts or rejects the 'Note' is not the responsibility of the HLPE. The published Note will have an impact and influence beyond the CFS process, and the credibility and reputation of the HLPE depends on that.

13. Paul Rigterink

Surname	Rigterink
First name	Paul
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Retired
Current institution/organization	Retired
Country	United State of America
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Very little information on inland aquaculture and model farm plans for small farmers
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	See Wolffia: A sustainable aquatic crop for future food systems and space agriculture https://www.sciencedirect.com/science/article/abs/pii/S0924224425002055#:~:text=Unlike%20conventional%20crops%20that%20require,al.%2C%202022;%20Romano%20& "Unlike conventional crops that require arable land and extended cultivation periods (30–90 days), Wolffia species exhibit remarkably fast growth, with a doubling time of 1–3 days and biomass productivity ranging from 4.5 to 10 g dry weight (DW)/m²/day under optimal conditions (Chookhampaeng et al., 2022; Romano & Aronne, 2021). Nutritionally, Wolffia provides 30–45 % protein (DW), essential amino acids, polyunsaturated fatty acids (PUFAs), omega-3 lipids, and various bioactive compounds (Sembada & Faizal, 2022; Yahaya et al., 2022). These attributes exceed those of conventional protein crops, such as soybean (~40 % protein DW with longer growth cycles) and many microalgae, positioning Wolffia as a valuable alternative protein source for functional foods and dietary supplements (Bai, 2025; Ernst et al., 2025; Pachter et al., 2024; Tan et al., 2024; Yadav, Somagond, et al., 2024)."
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	See https://www.aquanet.com/palestine_country Aquaponics and hydroponics are increasingly viewed as "lifelines" for Palestinian food security, offering a way to produce vegetables and fish in high-density urban areas or refugee camps with minimal water. These soil-less systems are particularly valuable in the West Bank and Gaza because they utilize up to 90% less water than traditional agriculture and

	bypass the issues of soil salinity and contamination. Initiatives like Petrithor Aquaponics and the Applied Research Institute – Jerusalem (ARIJ) have implemented hundreds of small-scale "wicking bed" and rooftop systems, empowering marginalized families to grow chemical-free produce and fish for home consumption. By 2026, these integrated models have been integrated into broader regional strategies, such as the EcoFuture Project, to combat desertification and promote "climate-smart" resilience. These systems allow farmers to reconnect with the land while navigating severe restrictions on movement and resource access.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	See Use of algae and aquatic macrophytes as feed in small-scale aquaculture FAO FISHERIES AND AQUACULTURE TECHNICAL PAPER 531 https://www.fao.org/4/i1141e/i1141e00.htm
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	FAO needs to develop model farm plans for small scale farmers growing crops in different climatic conditions Professor Booker T Whatley (Tuskegee University) developed an approach for helping small southern farm holders in the United States that was very different than the approach used by the FAO. Dr. Whatley developed a small farm plan for poor black southern family farmers that was designed to net \$100,000 a year for farmers who had 25 acres of land. See https://www.motherearthnews.com/homesteading-and-livestock/small-farm-plan-zmaz82mjzkin/ Dr. Whatley noted: “The truth is that we professional agronomists have helped create the situation that exists today. We’ve made life hard on the small farmers by recommending that they grow exactly what the big boys produce. We’ll tell a little guy with 40 acres to plant a scaled-down version of the crop mix that some fellow with 2,000 acres raises. For example, we’ll suggest that he keeps fifteen acres in cotton, ten acres in soybeans, seven acres in corn, seven in pasture and then try to raise a few head of beef cattle. Well, those particular crops give a very low per-acre return, so what happens? The man works hard and just about starves to death. I say let the big boys grow soybeans, cotton, hay, peanuts and beef cattle. The plan I’m talking about takes the small farmer out of the big guys’ ballpark.”

14. Alois Leidwein

Surname	Leidwein
First name	Alois
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	1) Head of Knowledge Transfer and Research, AGES - Austrian Agency for Health and Food Safety 2) Expert, analyst and lecturer for agricultural and food markets, agricultural inputs markets, market position, supply security, supply chains, and the valuation of agricultural businesses and cooperatives
Current institution/organization	Austrian Agency for Health and Food Safety Free Lance, 3 Universities
Country	Austria
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	ad chapter 3: Biodiversity is not only beneficial, but also the source of numerous infections for humans, animals, and plants. Biodiversity has been deliberately reduced to facilitate agriculture: expansion of farmland, reduction of pests. Measures regarding the restoration of nature—at least as they are carried out in Europe—lead to a loss of agricultural land and productivity. The CBD's provisions are not only a problem for food security but are also controversial.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Renaturation measures patronize the rural population and restrict their traditions. Renaturation and ecologization are a new form of colonialism = eco-colonialism Companies that make a lot of money from renaturation and ecologization cooperate with local elites and large landowners. They are accompanied by “missionaries” who preach nature and a rejection of the traditional way of life. However, these missionaries are generally part of the urban intellectual elite. The rural population gains nothing from this except new problems
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The marginalization of pasture and grassland farming due to aggressive campaigns by animal rights and climate activists against cattle, sheep, and goat farming, on the grounds that methane is supposedly such a major problem. The origin problem are the IPCC guidelines: they equate methane from natural cycles—which dissipates after 12 years (cattle farming)—with methane from fossil sources. From a technical standpoint, this is incomprehensible. If one were to

follow this logic, one would also have to classify human respiration as harmful to the climate.

15. Jody Harris

Surname	Harris
First name	Jody
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Research Fellow
Current institution/organization	Food Equity Centre, Institute of Development Studies
Country	United Kingdom of Great Britain and Northern Ireland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	This is a good list.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	There are some crosscuts (human rights, effects on malnutrition and hunger....) but not specific topics I can think of
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	I certainly see room for combination - see question 11 below.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	I think prioritise (in this order 2027-2030): 2/3 (climate, maybe with biodiversity and desertification) 4+5 (geopolitics and trade together, maybe combining with 6 on corporate concentration) 10 (agency - because we need more on the structural reasons why some cannot exercise agency) 7 (AI - but later, around 2030, because we don't yet have much good research or thinking on this) This set would give a good range of topics over the 4 year cycle. See a few further notes on each below.

	1 Advancing the post-2030 Development Agenda through food systems transformation - this is too broad; I don't see how a report or a programme of work could be shaped on this. 2 Achieving food security and nutrition in climate crises - this seems like a vital topic - it has not been addressed in an HLPE report since 2012, and it is time. Need to differentiate from IPCC and other reports. 3 Food security and nutrition, and the three Rio Conventions: Biodiversity, Desertification and Climate - Combine with 2, but don't lose the climate piece 4 Geopolitical uncertainty and polycrises: how to predict and prevent impacts on food security and nutrition - also vital - but maybe the broader politics of food systems? 5 International trade for food security and nutrition - important. There was the price volatility report in 2011 but otherwise this has not been well covered so far. 6 Corporate concentration in food systems - I feel this has been well covered in other areas, such as IPES-Food reports. I would rather cover this within some of the other topics (trade, geopolitics) than on its own. 7 Digital innovations and artificial intelligence (AI) for healthy, sustainable, and equitable food systems - This is important, but I think perhaps too soon - we don't yet know all the implications, and there hasn't been enough research, Maybe this should be for later in the cycle, closer to 2030. 8 "One Health" as an integrating framework for food security and nutrition - I feel like there is already a lot on this, I'm not sure what more HLPE/CFS could bring? 9 Affordability of healthy and nutritious diets to ensure food security and nutrition - I feel like there is already a lot on this, I'm not sure what more HLPE/CFS could bring? 10 Agency for food security and nutrition - a really important lens, I would prioritise this at some point in the cycle.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Right to food
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	I would give pointers on crosscuts such as right to food I would think more about the specific question in the V1 draft...

16. Kim Anastasio

Surname	Anastasiou
First name	Kim
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Research Fellow
Current institution/organization	University of Sydney
Country	Australia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, I think you have identified the most critical issues. I particularly applaud the authors for putting power imbalances in food systems as a central theme in many of the priority areas. I strongly suggest that this underpins all work in this space, and that conflicts-of-interest are taken seriously, as well as systems redesigned to ensure that corporate actors are not having influence over policy design.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	In the geopolitical section, it could be acknowledged that transnational ultra-processed food corporations often use crises to promote products, donate infant formula and expand market share - and thus undermine traditional food systems that are often more resilient, healthier, just and more sustainable. The section on food affordability should be more strongly linked with introducing strong competition policy and reducing the growing profits and market share of both large retailers and transnational ultra-processed food corporations. Without addressing these issues, it will be difficult to ensure equitable access to affordable foods.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	As per my previous responses, reducing the power of large TNCs should underpin most of the issues discussed. Without addressing this, it will be very hard to make meaningful progress on the other challenges.

17. Getaneh Gobezie

Surname	Gobezie
First name	Getaneh
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Gender and Ruralfinance consultant

Current institution/organization	Independent Consultant
Country	Ethiopia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	I believe they are so critical.... Especially, I liked the inclusion of "Agency" and "Sustainability" in addition to Availability, Access, Utilization and Stability
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The importance of an "integrated" (as against "isolated") approach has been well captured. This ultimately determines the success and failures of promoting food and nutrition security. As such the actors are many, with varied interest and objective. Broadly, they can have a "social" objective, "profit" objective (while some can have both objective). Often the challenge is faced when trying to bring these actors together and make them work towards one objective (i.e promoting food and nutrition security). ... I believe that more space (with some success stories) could be given to this important issue.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	While "Agency" is well articulated, I believe that existing opportunity to promote agency, particularly of the poor in rural areas, women, youth (who are more vulnerable) could be more elaborated. Such section of the population is currently being effectively reached MORE through "institutionalized" rural finance (Microfinance Institutions, Saving and Credit Cooperatives, Village Saving and Loan Associations, etc) than any other institution (including agricultural or health extension). As such more millions of people are added in these services each year. Such services provide effective platform to effectively communicate rural people, since most of them utilize "group" systems for their services. That means individual and group agency could be strengthened through utilization of gender transformative tools like the Gender Action Learning System (GALS) which has been highly promoted by IFAD, FAO and other UN agencies... I believe this need to be incorporated.

18. Haramaya University, Ethiopia

Surname	FUFA
First name	Desta Dugassa
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	PhD, Assistant Professor

Current institution/organization	Haramaya University
Country	Ethiopia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, for example, the issue of food waste and climate change variability on food security and nutrition globally
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	food waste and climate change is a key factor in the food systems, specifically, food and nutrition security
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	- yes, interlinked
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	yes
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Yes, both direct or indirect impact

19. Judith Singibala

Surname	Singibala - PLEASE SHARE WITH ME MY RESPONSE FOR REFLECTION WITH MY COLLEAGUES
First name	Judith
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Founding Director - TUPO Foundation
Current institution/organization	TUPO Foundation - part of SADC Rural Women Assembly
Country	United Republic of Tanzania

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?

As a member of the Rural Women's Assembly (RWA) and a practitioner working on the front lines of agroecology in Tanzania, I believe the list identified by the HLPE-FSN captures the broad technical drivers of food insecurity but often misses the intersectional reality of those most affected. While the global themes of climate change and geopolitical instability are undeniably critical, they are experienced on the ground not as abstract concepts, but as direct threats to our traditional ways of life and our autonomy over our resources.

From our perspective, the focus on climate crises must go beyond "mitigation" to center on seed sovereignty. The push for commercial, uniform seeds—often driven by global policy—is an enduring issue that undermines our resilience. For rural women, food security is inseparable from the right to save, exchange, and plant indigenous, climate-resilient varieties. If the global agenda does not explicitly protect these traditional seed systems from corporate concentration, the "resilience" mentioned in the CEEI will remain out of reach for smallholder farmers.

Furthermore, while the HLPE correctly identifies land tenure as a critical issue, it must be framed through the lens of patriarchal norms and systemic inequality. In Tanzania, land insecurity is the primary barrier preventing women from investing in sustainable practices. When land is treated as a commodity in a global trade framework, women are further marginalized. The CEEI should emphasize that agency is not just a pillar of food security, but a prerequisite. For us, agency means Feminist Agroecology—the power to manage our own land, lead our own seed banks, and organize local markets without being stifled by patriarchal gatekeeping.

Ultimately, these issues are the most important only if they are addressed through a localized, gender-transformative lens. Globally, the list identifies the macro-shocks, but specifically in the African context, the most "enduring" issue is the disconnect between high-level policy and grassroots reality. We are not just "vulnerable groups" in need of assistance; we are practitioners with the solutions. The HLPE should prioritize supporting grassroots social innovations, like community-led resource centers, which serve as the blueprint for a truly equitable and food-secure future.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

I believe three additional "hidden" critical issues must be added and elaborated upon to provide a complete picture of food system challenges in sub-Saharan Africa. These issues represent the structural friction that often prevents high-level policy interventions from reaching the women who produce the majority of our food.

The first critical issue is the Triple Burden of Unpaid Care Work and Time Poverty. While global reports often mention "Agency," they rarely address the invisible structural ceiling that unpaid care workplaces on rural women's productivity. In Tanzania, women spend significantly more time than men on essential household tasks such as fetching water and firewood, which effectively acts as a "time tax." This burden prevents us from attending technical training, managing community seed banks, or participating in leadership roles. According to data from UN Women and recent 2026 reports from ActionAid, the economic loss to sub-Saharan Africa due to this underused potential in agriculture is substantial, often exceeding 6% of GDP. Without redistributing this care burden through infrastructure and social shifts, women remain trapped in a cycle of time poverty that stifles food security initiatives.

The second issue that must be prioritized is the Digital Divide and Data Colonization. As agriculture digitizes, a significant gendered gap in technology access is emerging, leaving rural women behind due to lower rates of smartphone ownership and digital literacy. Furthermore, there is a growing risk that data harvested from smallholder farms—often without the farmers' informed consent—is being used by large corporations to dictate market trends rather than empower local producers. Recent 2026 findings from the World Bank indicate that while digital tools can significantly increase yields, the adoption rate among women is roughly 25% lower than among men. A critical focus is needed on public-interest digital infrastructure that protects farmers' data rights and ensures that technological progress does not become a new tool for corporate extraction.

Finally, the Nutrition Transition and the "Supermarketization" of Rural Areas is an emerging crisis that threatens dietary diversity. In many rural Tanzanian hubs, traditional, nutrient-dense diets are rapidly being displaced by cheap, ultra-processed foods (UPFs) that are calorie-dense but nutrient-poor. This transition is creating a "double burden" of malnutrition, where vitamin deficiencies and obesity coexist

within the same household. Literature from *Frontiers in Sustainable Food Systems* (2025/2026) shows that trade liberalization has increased the availability of these processed goods in rural kiosks by over 40% in the last five years. This displacement of indigenous seeds and local food ways by commercial markets is a critical threat to the long-term health and sovereignty of rural communities. (this now is becoming a major issue, as we see experience our RWA regional sisters are facing)

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

From the perspective of the Rural Women's Assembly (RWA) - self organized movement of 11 SADC countries members, these issues are not just interlinked—they are deeply intertwined. For women practitioners, the "silos" created for academic analysis can sometimes obscure the systemic nature of the challenges we face. While the HLPE-FSN presentation is clear, combining certain issues would better reflect the lived reality of rural communities where one challenge rarely exists without the others.

The most logical combination would be to merge "Corporate Concentration" with "Digital Innovations and Data." In our context, these are not two separate forces; they are the same engine of modern agriculture. When corporate entities dominate the market, they often use digital platforms to lock smallholder farmers into specific seed and chemical regimes. By treating them as a single issue of "Corporate Influence and Technological Sovereignty," the analysis could better address how digital tools are being used to accelerate market concentration, potentially at the expense of local, traditional knowledge and farmer agency.

Furthermore, there is a strong case for linking "Climate Crises" directly with "Biodiversity and Seed Sovereignty." Currently, climate change is often discussed as a disaster to be managed, while biodiversity is seen as an environmental goal. However, for rural women, biodiversity—specifically indigenous seeds—is our primary tool for climate adaptation. Strengthening this linkage in the analysis would shift the focus from a "victim-based" narrative of climate change to a "solution-based" narrative centered on the ecological wisdom and seed-saving practices of women.

Lastly, the analysis should more explicitly connect "Agency" to "Trade and Macroeconomics." Frequently, agency is discussed at the household level, but it is actually the macro-level trade policies (like the shift toward commercial seed laws) that systematically strip women of their agency. By tightening the link between local empowerment and global trade frameworks, the HLPE can show that agency isn't just about individual confidence; it is about having a global economic policy environment that allows local grassroots innovations to thrive.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

From my experience and observation from the work we do at RWA, the drivers and trends identified in the ten CEEIs are technically accurate but incomplete, as they often fail to capture the gendered realities that determine food security and nutrition outcomes. While the HLPE-FSN 4th Note correctly identifies macro-level forces like corporate concentration and digital innovation, these trends are often analysed in a vacuum, overlooking how they manifest within rural households. For example, the focus on "Corporate Concentration" lacks a strong link to nutritional outcomes; in our experience, market monopolies drive a Seed-to-shelf uniformity that displaces nutrient-dense indigenous crops with processed, commercial alternatives. This shift doesn't just change what we grow; it fundamentally erodes dietary diversity and fuels the "double burden" of malnutrition in rural hubs.

Similarly, the drivers of Digital Innovations and AI are frequently framed through the lens of efficiency, yet for rural women, these trends often exacerbate existing power asymmetries. The current analysis does not fully capture how the digital divide and the risk of data colonization can strip women of their local knowledge and agency. If digital tools are designed without the participation of smallholder women, they become a mechanism for exclusion rather than empowerment. To truly capture the link with food security, the analysis must address how technological trends can either democratize agricultural expertise or further marginalize the very practitioners who provide the bulk of local nutrition.

Furthermore, while the elevation of Agency as a core pillar is a significant step forward, the drivers of agency must be understood as structural rather than purely social. A critical missing link is "Time Poverty" caused by the disproportionate burden of unpaid care work and a lack of basic rural infrastructure. For a woman practitioner in Tanzania, agency is limited by the hours spent fetching water or fuel, which directly reduces the time available for agroecological farming or community seed management. Without recognizing that time is a foundational resource for food security, the analysis of agency remains theoretical and fails to capture the practical constraints that hinder nutritional outcomes for rural families.

Finally, the connection between Climate Crises and Biodiversity needs to be more explicitly framed around seed

	sovereignty to reflect real-world FSN outcomes. Climate change is often analysed in terms of yield loss, but for us, it is a threat to our intergenerational genetic heritage. The current drivers do not sufficiently emphasize that indigenous seeds are our primary adaptation tool; when global policies push commercial climate-smart seeds that are not adapted to local micro-climates, the outcome is often total crop failure and a loss of local food sovereignty. To be fully effective, the HLPE's analysis must follow these global trends across the "farm gate" and into the household, where gendered dynamics and the preservation of local biodiversity ultimately determine long-term resilience
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	From the perspective of a rural women's advocate, the aspect of Intergenerational Nutritional Resilience is a critical indirect outcome that requires much deeper elaboration. Current analysis often focuses on immediate food security—calories consumed today—but misses the longitudinal impact of losing local seed systems. When women are forced by economic or climate pressures to abandon indigenous, nutrient-dense crops in favour of commercial monocultures, we aren't just losing a harvest; we are losing the "biological library" that ensures future generations can eat in a changing climate. This erosion of seed diversity is a silent nutritional crisis that will manifest years from now as a permanent loss of dietary variety and resilience, making it an enduring issue that bridges the gap between biodiversity and long-term health. Another essential outcome to elaborate on is the Psychosocial and Social Cohesion dimension of food security. In rural Tanzania, food is more than nutrition; it is the foundation of the community's social fabric, managed largely through women-led networks of seed exchange and collective labour. When corporate-led models or climate-induced displacement break these traditional sharing systems, the result is a collapse of community safety nets. This loss of social capital is an indirect FSN outcome that makes households significantly more vulnerable to future shocks, as the "informal insurance" provided by neighbours and kin disappears. To fully capture FSN outcomes, the analysis must recognize that a well-nourished community is one that possesses not just food, but the social agency to manage its own food system. Lastly, the HLPE should further explore the Metabolic Health outcomes of the Nutrition Transition in rural areas. While global policy often celebrates "increased market integration"

	for smallholders, the indirect outcome is frequently the displacement of traditional, fibre-rich diets with ultra-processed, energy-dense foods available in rural kiosks. This transition is not just a shift in preference but a structural health risk that places an immense burden on rural healthcare systems that are ill-equipped to handle non-communicable diseases like diabetes and hypertension. Elaborating on this link would show that food security isn't just about having enough to eat, but about the quality and cultural appropriateness of food that supports life-long health rather than just temporary satiety.
Is there any missing reference to key literature and data?	As a member of the Rural Women's Assembly, I find the HLPE-FSN list accurate in identifying macro-trends like climate change and corporate power, but it lacks a strong focus on the systemic barriers—such as land insecurity, patriarchal norms, and time poverty—that dictate how these issues are felt on the ground. To be truly effective, the analysis must bridge the gap between global policy and the lived experience of rural practitioners, ensuring that agency is treated as a structural requirement rather than just a social goal. We specifically recommend strengthening the linkages between climate resilience and seed sovereignty, as indigenous seeds are our primary tool for adaptation. Furthermore, the analysis must address the Nutrition Transition and the digital divide, which risk displacing local food cultures and marginalizing women through data colonization. By centering these grassroots realities and citing critical data on the care economy and gendered land rights, the HLPE can move from identifying global problems to supporting the transformative local solutions already being led by women.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

The existing questions provide a strong technical foundation but remain too high-level to capture the structural barriers facing rural women. To be truly effective, the report must move beyond "what" is happening to "who" is being excluded and how power is redistributed.

Specifically, we suggest adding a dimension on Informal Systems and Time Poverty. The report should ask how global trends impact the unpaid care work and informal seed networks that sustain rural life. Without addressing the time-use constraints of women, any strategy for agency or productivity will remain theoretical.

Furthermore, the questions must address Technological Sovereignty and Nutrition. We need inquiries into how legal frameworks can protect traditional knowledge from "data colonization" and how macro-trade policies affect local dietary diversity. Shifting the focus to these areas ensures the report serves as a roadmap for real-world resilience rather than just a global summary.

20. Arab Federation for Food Industries, Jordan

Surname	JABR
First name	FADI
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	SECRETARY - GENERAL
Current institution/organization	ARAB FEDERATION For FOOD INDUSTRIES
Country	Jordan
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	have more if can add 1-Food loss and waste 2-Financing food system transformation

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

yes

The role of the food industry is often overlooked. It is not simply another sector, but a central player with a direct impact on virtually all aspects of food security and nutrition. Therefore, I strongly recommend including it as a key issue.

To illustrate this point, the role of the food industry (the private sector) can be summarized in three main points:

First point: Negative and Controversial Impacts

1-The Spread of Ultra-Processed Foods (UPFs): These foods are strongly linked to malnutrition and chronic diseases. A three-part series published in The Lancet in November 2025, featuring 43 international experts, described ultra-processed foods as a "major threat to public health" and blamed food companies for driving this global rise. These foods also contribute to the displacement of traditional dietary patterns based on fresh, unprocessed foods.

2-Corporate Concentration: A small number of companies dominate multiple stages of the global supply chain (inputs, production, processing, and retail). This concentration undermines people's ability to make food choices and has negative implications for governance and sustainability.

3-Aggressive Marketing Practices: Large corporations use sophisticated marketing strategies to influence consumers, especially children and vulnerable groups, pushing them towards unhealthy food consumption, thus undermining public health policies.

Pillar Two: Positive Impacts and Opportunities

1-Innovation in the Face of Challenges: Major companies are investing in innovation to produce more sustainable protein alternatives, using artificial intelligence to improve supply chains, reduce waste, and develop climate-smart farming technologies.

2-Developing Healthier Products: The industry can lead product reformulation to reduce sugar, salt, and saturated fat content, develop products with improved nutritional value, and expand the range of fortified foods that address malnutrition.

3-Strengthening Supply Chains: This plays a vital role in transforming perishable agricultural products into stable

	food, contributing to reduce on-farm losses and improved seasonal food security. 4-Supporting Smallholder Farmers: Through responsible contract farming models, companies can provide smallholder farmers with necessary inputs, technical knowledge, and guaranteed market access, thereby improving their income and productivity. Pillar Three: The Need to Redefine the Relationship with the Private Sector The question is no longer, "Should the private sector be involved?" But how can it be engaged responsibly and effectively? 1-Public-Private Partnerships (PPPs): There is an urgent need to develop partnership frameworks that go beyond mere financing to include shared objectives and risk-sharing, with a focus on measurable outcomes in areas such as public health and sustainability. These partnerships could include initiatives like school feeding programs that support local production. 2-Accountability Mechanisms: There is a growing consensus on the need for robust mechanisms to ensure that companies are held accountable for their impacts on human rights and public health. In a recent report (2025) by the United Nations, the Special Rapporteur on the Right to Food urged the establishment of regulations to ensure fair and stable food markets and to hold companies accountable for human rights violations.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Adding a section on financing and investment (financing food systems transformation) due to the critical funding gap. Including food loss and waste as a major structural challenge. As for the rest of the list, it represents the key strategic frameworks for global food policies in the coming years.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	How can consumers eat good, sustainable food?

21. Pushpanath Krishnamurthy

Surname	Pushpanath
First name	Krishnamurthy
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Global independent campaigner/consultant- on climate justice-poverty-inequality, fairtrade and livelihood/Food security programme advisor.
Current institution/organization	None
Country	United Kingdom of Great Britain and Northern Ireland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	I appreciate this report- it captures a wide arc- of key factors and triggers that render front line homes-food insecure and that directly impacts young families with under-five children and mothers with dire consequences that passes down generationally
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Not just key issues-which are well identified and can be streamlined too
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Concluding Chapter: What the Fields Already Know Lessons, Patterns, and a Call to Policy and Practice The soil is not a medium. It is a memory. And memory, when listened to, becomes instruction. This chapter is not a report. It is a dispatch from the field — drawn from years of walking, conversations, and lived experience across farms, markets, and communities in South India. What emerges is not anecdote, but pattern. I. The Pattern Beneath the Pattern Across diverse landscapes, one truth repeats itself: farms that work with nature endure; those that extract from it collapse.

Resilient farms rebuild soil, conserve water, diversify crops, and integrate animals and trees. They are not just surviving climate stress — they are designed for it.

Evidence reinforces what farmers already practice:

Organic soils store more carbon and retain more water

Biodiversity reduces pest risks

Yields are more stable, often higher during droughts

This is not ideology. It is system design. And it is urgent.

II. Lessons from the Field

1. Soil is the system

Healthy soil is living infrastructure — the foundation of all farming.

2. Diversification is insurance

Monocultures fail under stress; diversity builds resilience and income stability.

3. Women are the system

They are seed keepers, organisers, innovators — not beneficiaries, but architects.

4. Time is essential

Soil regeneration and trust-building require decades, not project cycles.

5. Systems, not schemes

Like the Green Revolution, transformation requires aligned policy ecosystems.

6. Demand drives change

Urban consumption — especially public procurement — can reshape agriculture faster than subsidies.

III. Policy Priorities

The field experience points clearly to actionable steps:

Support local champions: Farmers already practicing regenerative methods should become knowledge hubs.

Assured procurement: Allocate 15–20% of public food sourcing to organic/regenerative produce.

	Reward regeneration: Incentivise soil-building, water conservation, and biodiversity — not just output. Stabilise prices: Reduce risk for transitioning farmers through price support mechanisms. Expand access to credit: Especially for smallholders and women. Invest in local infrastructure: Storage, aggregation, and cold chains at the panchayat level. Centre women structurally: Through income support, land rights, and market access. Regions like Tamil Nadu already have the institutional base to lead — what is needed is coherence. IV. One Movement, Not Two Farm resilience and craft-based livelihoods are not separate pathways. They are complementary systems of security. The farmer, the weaver, the trader — all are part of a single, interdependent economy rooted in dignity and sustainability. V. What the Fields Already Know The knowledge to face the climate crisis is not missing. It exists — in soil practices, seed traditions, water wisdom, and lived experience. The real failure has been one of listening. Farmers who endure are those who stayed in conversation with the land. Policy can enable this conversation — by reducing risk, rewarding regeneration, and aligning markets. But listening itself cannot be legislated. The fields already know what to do. The question is whether we are ready to learn. With gratitude to all who shared their knowledge, time, and trust
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with	see above

food security and nutrition (FSN) outcomes?	
Is there any missing reference to key literature and data?	do not know enough to comment on this
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Questions are substantive-how ever I am much more concerned about the awareness of the report, its importance and the nature of consultations-I would like that good popular summary of the report is shared globally especially in those countries with very youthful demography. Call for assembly of these communities and seek response and reflections and participation- in public hearings. Like the climate hearings I was involved which reached 1.5 million in 2 months. Examples- https://www.oxfam.org.uk/get-involved/campaign-with-oxfam/climate-action/true-life-climate-change-stories/ and https://www.youtube.com/watch?v=utgQuQfNC98

22. Aquatic Life Institute, France

Surname	Malerbi
First name	Giulia
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Head of Global Policy
Current institution/organization	Aquatic Life Institute
Country	France
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The proposed issues capture many of the key global drivers affecting food security and nutrition (FSN), particularly in relation to climate change, geopolitical instability, and affordability. The inclusion of “One Health” and food systems transformation is especially welcome. However, a significant gap across the CEEI is the absence of explicit consideration of aquatic food systems and aquatic animal welfare. Aquatic animals represent the largest number of animals used in food production globally, and aquaculture is one of the fastest-growing food sectors. Despite this, these systems remain largely invisible in global food policy discussions. (https://www.ali.fish/aquaculture-resources/harmonizing-animal-health-and-welfare-in-modern-aquaculture)

	Failing to integrate aquatic systems risks overlooking critical dimensions of FSN, including production efficiency, environmental pressures, disease dynamics, and ethical considerations that influence long-term sustainability and resilience. (https://www.ali.fish/policy-resources/benefits-of-aquatic-animal-welfare-for-sustainable-development-goals)
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	A key issue that should be added or more explicitly integrated is the role of animal welfare, particularly aquatic animal welfare, in food systems. This is critical for several reasons: Scale: Trillions of aquatic animals are farmed and captured annually Scientific evidence: There is increasing consensus on sentience in fish and cephalopods Systemic risks: Poor welfare is linked to higher mortality, disease outbreaks, and inefficiencies in production systems Policy gap: Aquatic animals are largely excluded from welfare protections compared to terrestrial species Relevance to FSN: Welfare conditions directly affect productivity, food quality, resilience, and system sustainability Relevant literature includes recent analyses on welfare risks in aquaculture and broader work on the inefficiencies and environmental pressures of aquaculture systems (https://www.biologicaldiversity.org/programs/population_and_sustainability/pdfs/a-just-transition-blue-foods-brief.pdf) (https://www.ali.fish/aquaculture-resources/aquaculture-welfare-guide)
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	The issues are appropriately identified as interlinked, but these connections could be strengthened further. In particular: - “One Health,” climate change, and food systems transformation should be more explicitly connected through animal health and welfare - Corporate concentration, trade, and technological innovation could be more closely linked in shaping production models and standards - Affordability and agency should incorporate ethical dimensions, including consumer awareness and access to higher-welfare food options Explicitly integrating aquatic food systems across these linkages would strengthen the analysis.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	For several CEEI, key drivers and trends are only partially captured: - One Health: Animal welfare, particularly in aquatic systems, is underrepresented despite its relevance to disease prevention, antimicrobial use, and environmental impacts - Climate crises: The impact of climate stressors on aquatic production systems (e.g. temperature changes, oxygen depletion) and associated welfare risks is not sufficiently addressed - Food systems transformation: Current framing focuses primarily on productivity and sustainability, but does not fully consider welfare constraints for certain species and production systems
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	1. The relationship between animal welfare and production efficiency, including mortality rates and disease 2. The role of welfare in food quality and safety 3. The contribution of welfare improvements to system resilience, particularly in the context of climate change 4. The ethical dimension of FSN, including how societal values influence food systems and policy choices These aspects are particularly relevant in aquatic food systems, where welfare remains largely unaddressed.
Is there any missing reference to key literature and data?	The draft would benefit from including more references on welfare risks and species-specific challenges in aquaculture, the role of aquaculture in global food systems and its limitations, scientific evidence on fish and cephalopod sentience and links between animal health, welfare, and antimicrobial use within One Health frameworks. https://www.ali.fish/policy-resources/benefits-of-aquatic-animal-welfare-for-sustainable-development-goals https://www.biologicaldiversity.org/programs/population_and_sustainability/pdfs/a-just-transition-blue-foods-brief.pdf https://www.ali.fish/aquaculture-resources/harmonizing-animal-health-and-welfare-in-modern-aquaculture https://www.ali.fish/aquaculture-resources/aquaculture-welfare-guide https://www.ali.fish/aquaculture-resources/stunning-and-slaughter-best-practices-for-animal-welfare-in-aquaculture

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

The guiding questions are generally appropriate, but could be strengthened by including:

- How can animal welfare be systematically integrated into FSN policy frameworks, including for aquatic species?
- What are the trade-offs and synergies between productivity, environmental sustainability, and animal welfare?
- How can governance frameworks address current regulatory gaps in animal welfare?
- What role can financial institutions and investors play in incentivizing higher welfare practices?

23. Solutions from the Land, United States of America

Surname	Shea
First name	Ernie
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	President
Current institution/organization	Solutions from the Land
Country	United States of America

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Solutions from the Land submission for V0 draft of the HLPE 4th “Note on Critical, Emerging and Enduring Issues

Contributors: Dr. Lois Wright Morton; farmer and SfL Board member; A.G. Kawamura, farmer and SfL Co-Chair; and Ernie Shea, SfL President

Topics-

- the rapidly growing challenge of invasive species, which compromise FSN and accelerate biodiversity loss/degradation; and
- the need to accelerate the restoration of war ravaged agricultural.

1) Invasive species

Consider integrating into issue #8 “One Health” as an integrating framework for food security and nutrition.

The unprecedented introduction and spread of invasive alien species (IAS) throughout our planet is accelerating at such an alarming rate as to rank as one of the most urgent threats to humanity and the life systems and resources we depend on according to the IPBES 2023 Assessment Report . Alien species are classified as “invasive” when they have a harmful effect on the economy, environment, and/or health. The consequences of ignorance, forgetfulness and policy negligence in addressing the needed infrastructure to prevent, exclude, detect and eradicate invasive and opportunistic species have left our world and food systems vulnerable and predictably threatened. At any given time, serious outbreaks and infestations occur in countless locations, across habitats and multiple dimensions of life systems. Introductions of invasives can be inadvertent (hitchhikers), weather driven (hurricane winds), accidental, intentional (commercial), illegal (bio-smugglers) and terrorism driven (of particular recent concern). Individually they can appear to be localized and hopefully contained, but collectively, they represent a conflagration of barely controllable incidents of negative impact and catastrophic potential.

The tragic experiences of humanity over millennia should give us good wisdom and informed instruction on how to build protective infrastructure and response mechanisms as we prepare for predictably unpredictable plagues, droughts, famines, wars and collapse of systems that affect our capacity to sustain populations. Unfortunately, significant vulnerability continues to exist throughout our 21st Century world as natural events, political upheaval and poor policy

decisions negatively impact regions and continents. As global populations continue to grow, the never-ending task for humanity will be to continue to produce and maintain a reliable and abundant supply of food, feed, fiber, energy and water...if it can be protected.

The roles of Agriculture and the multiple dimensions of life systems management and resource utilization translates to the simple conclusion that there is no “one size fits all” solution to fulfilling the nutritional and material needs of over 8 billion human inhabitants and their domesticated animals. Rather, an all systems approach with an inclusive, working landscape strategy, utilizing a full “toolbox” array of ancient knowledge, current and new age technologies would deliver the best framework for a thriving agricultural sector that ensures human health, economic well-being and ecosystems in balance. Concomitant with that existing ‘framework’ should be a robust and comprehensive phytosanitary barrier that focuses on prevention, exclusion, detection, diagnostics, delimitation, mitigation and eradication planning. That same ‘toolbox’ mentality to defend against invasive species needs to be constantly upgraded, improved and strategically managed in order to build resilience. Plagues, pestilence, famines, outbreaks, epidemics, pandemics and quarantines are the old and new, after-the-fact words we use when we forget our lessons of the past and present. Successful agriculture depends upon our determined vigilance and commitment to invest in those areas that deliver more predictability for a positive harvest outcome

24. Nitya Rao

Surname	Rao
First name	Nitya
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Professor, Gender and Development, University of East Anglia, and Member, Scientific Advisory Committee, UNFSS Coordination Hub
Current institution/organization	As above
Country	India
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, the issues identified are appropriate, given that several other important ones have been covered in recent years by the CFS-HLPE, such as inequalities, urbanisation and indigenous knowledges.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	No
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Some of the issues are very broad, such as the first one on the SDG agenda, and is likely to cover several of the other issues.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

I would like to share my thoughts and inputs on two of the identified themes:

1. Theme 3: Food security and nutrition, and the three Rio Conventions: Biodiversity, Desertification and Climate. With a focus on land tenure security, apart from attention to indigenous communities, taking a gendered lens is critical. Three of the SDGs - 1, 2 and 5 - emphasize equal access to land and resources to women as key to achieving these goals. Yet, little or no progress has been made. There are several examples globally that demonstrate women's leadership in soil and water conservation, in the adoption of agroecological practices, protection of local knowledges, and most importantly, the feminisation of agrarian landscapes in the context of climate change and biodiversity loss. Men are increasingly opting out of agriculture for non-farm professions. A clear gender focus will contribute to also strengthening the CFS Voluntary Guidelines on gender equality adopted in 2023.

2. Theme 7: Digital innovations and artificial intelligence (AI) for healthy, sustainable, and equitable food systems. I felt that this theme has been framed as an issue of governance, otherwise benign, hence good governance can solve any outstanding tensions. The fundamental question that needs to be addressed however is who's knowledge and what knowledge counts, unpacking the epistemological foundations of different types of knowledge. It is not necessarily possible to just add some bits of indigenous knowledge or women's knowledges to the mix. The articulation and framing of this theme needs to move beyond a focus on appropriate infrastructure or digital literacy to really ask questions about whose priorities inform digital innovations, what kind of knowledge is fed to AI and by what means? There is evidence on the placing of energy-intensive back-end data entry centres in marginalised communities and remote locations, where emission of wastes and water pollution are hidden. AI is a tool, and a powerful one, but what finds its way in is a result of power and money, rather than appropriate questions, priorities or knowledges.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

There is very little in the paper on the choice of foods, the consumption of locally produced foods in relation to dietary diversity, agency, identity and affordability.

Is there any missing reference to key literature and data?	Theme 5: International trade for food security and nutrition. This is a welcome theme. However, I just wanted to note that the literature cited is quite outdated. In 2025, there was launched an updated EAT-Lancet Commission report on healthy, sustainable and just diets, updating the planetary boundary discussion in the previous 2019 report (Willett et al., 2019), but also introducing a new justice section. Similarly, on ultra-processed foods too a three-part Lancet Commission was released in November 2025. It would be useful to update the present text on this theme with the new evidence over the past 5 years.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	As noted above in point 11, additional questions could emerge from a slightly different framing of the theme.

25. Ministry of Economy, Armenia

Surname	Hovhannesyan
First name	Magda
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Head of division
Current institution/organization	Ministry of Economy
Country	Armenia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The proposed list of Critical, Emerging and Enduring Issues (CEEI) identified by the High Level Panel of Experts on Food Security and Nutrition is comprehensive, forward-looking, and well aligned with the complexity of today's global food systems. It appropriately reflects the shift from a narrow focus on food production toward a broader food systems approach, integrating environmental, economic, health, and governance dimensions. The inclusion of cross-cutting themes such as climate change, geopolitics, and affordability is particularly relevant in the context of increasing global volatility. At the same time, the list could be further enriched by giving additional attention to: - agricultural productivity and resilience, - food supply chain and logistics aspects, - as well as rural development and farmer livelihoods.

	Overall, the identified issues are highly relevant, and their effectiveness will benefit from continued contextualization and practical implementation at national and regional levels.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Several additional issues could be considered for further elaboration. - Resilience of food supply chains and logistics is critical, as recent crises have shown that disruptions in transport and trade can quickly lead to shortages and price spikes, even when production is sufficient. - Volatility of agricultural input markets (fertilizers, energy, seeds) remains a key constraint for farmers and directly affects production levels and sustainability. - Food price inflation and economic access continue to be major drivers of food insecurity, with affordability increasingly limiting access to nutritious diets.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	These issues are closely interlinked, particularly through their economic, governance, and access dimensions. In particular, geopolitical uncertainty, international trade, and corporate concentration are strongly connected, as they jointly shape market dynamics, price formation, and the stability of food supply chains. At the same time, affordability of healthy diets and agency are closely related, as both influence people’s ability to access and choose nutritious food. In addition, digital innovations and AI and the “One Health” approach can be seen as cross-cutting elements that support more integrated and resilient food systems. Therefore, while maintaining separate analytical focus, it would be useful to further strengthen the linkages between these issues in the analysis.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The drivers and trends identified for the proposed CEEI broadly capture the key linkages with food security and nutrition (FSN) outcomes. They reflect the major structural and emerging factors influencing availability, access, utilization, and stability of food systems.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	While the current framework already captures the key FSN outcomes, it may not be necessary to expand it further. However, if considered useful, some aspects could be more explicitly reflected, such as nutrition quality, income-related access, stability in the face of shocks, and rural livelihoods. This could help to further clarify how different drivers translate into FSN outcomes, while maintaining the overall coherence of the analysis.
Is there any missing reference to key literature and data?	The proposed list is generally well supported by relevant literature and data. At the same time, it could be further complemented, where appropriate, by additional references to recent analyses and data from key international sources, such as the Food and Agriculture Organization, World Bank, and other relevant global reports. This could help strengthen the evidence base and ensure that the analysis reflects the most recent trends and developments in food security and nutrition.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Overall, the list of questions identified for each CEEI is adequate and provides a solid basis for structuring a comprehensive report. It appropriately guides analysis across key dimensions of food systems and FSN outcomes.

26. Maryam Rahmanian

Surname	Rahmanian
First name	Maryam
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Senior Consultant
Current institution/organization	Food and Agriculture Organization of the United Nations (FAO)
Country	Iran (Islamic Republic of)
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	The war in West Asia has shone a spotlight on the issue of energy (and related byproducts) in agrifood systems and the impact of energy shortages on food security and nutrition. Energy is essential at every stage of agrifood systems – from crop production and livestock management to processing, transport, storage, and cooking – but the sector remains heavily dependent on fossil fuels and traditional biomass, making it highly vulnerable to energy price volatility and a significant source of greenhouse gas (GHG) emissions (content).

Rising fertilizer costs and higher fuel prices increase production expenses for farmers and may lead to reduced fertilizer use in many regions and higher energy prices are increasing costs throughout agricultural supply chains, including farm operations, irrigation, transport, storage, and food processing (content).

Disruptions to the export of fossil fuels are already impacting food security and nutrition in countries that are dependent on fuel from the Persian Gulf. The impacts of rising fuel and fertilizer prices impact multiple dimensions of food security. In India, Bangladesh, and Pakistan, for example, shortages and price surges in nitrogen based fertilizers have forced smallholder farmers to reduce application rates or delay planting, raising risks of lower yields for rice and wheat crops later in 2026 ('It all depends on the crop': Gulf crisis hits South Asia farmers | Agriculture News | Al Jazeera). Rising fuel prices in Asian countries have led, for example, to fisherfolk in the Philippines stopping operations because of high fuel prices ('At the edge': More fishers stop operations as fuel prices rise), which means their capacity to earn a living and feed their families is compromised. Countries with larger oil inventories, such as China (China, the United States, and Japan hold most strategic oil inventories in 2025 - U.S. Energy Information Administration (EIA)) are better placed to weather the shock. Other countries have responded by cutting fuel taxes, compromising tax revenues that are essential for public services (India takes a 'huge hit' on tax revenue to keep fuel prices from surging during the Iran war). The current focus on fuel prices raises questions about how countries can manage fuel price volatility in the short and medium term by diversifying sources, and transition to other sources of energy in the long term. The agricultural sector itself can be the source of energy production, in the form of biofuels, for instance, and solar panels can be installed on agricultural lands. Each of these options comes with trade-offs, which need to be assessed. National food security plans and policies should integrate the energy dimension explicitly in order to prepare for future shocks.

Possible questions: How much energy is used and produced in agrifood systems? Where does it come from? What are its environmental costs? How do high energy prices affect food security and nutrition? Can there be food sovereignty without energy sovereignty? What are the best examples of green energy transitions in agrifood systems? What could the CFS do to support energy transitions in agrifood systems?

27. Jane Battersby

Surname	Battersby
First name	Jane
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Associate Professor
Current institution/organization	University of Cape Town
Country	South Africa
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	This is a list of key issues facing the global food system. I do wonder if an explicit conflict focussed piece might be important, and I think that something addressing food security in the context of the rapidly shifting development funding terrain feels very important.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	See above - the rapid transformation/collapse of the development funding and action terrain and conversations about supporting food systems and food security outside of 'development' is crucially important.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	It may be valuable to think about combining international trade and corporate concentration in order to tighten the focus on issues of power, financialisation and distance

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

2. Achieving food security and nutrition in climate crises - When developing the scope it would be important to ensure that there is a focus on the whole food system and not just the production aspects. This also needs to have an equity angle, paying particular attention to the vulnerabilities and strengths of traditional and informal components of food systems. Finally it will be important to include the non-directly food aspects for consideration - infrastructure, residential areas etc.

4. Geopolitical uncertainty and polycrises: how to predict and prevent impacts on food security and nutrition - I would recommend that this include the role of sub-national scale government in preparedness and response. As HLPE 19 reflects, cities are both particularly vulnerable, but also have access to forms of data and mandates that are often neglected in national planning.

6. Corporate concentration in food systems - I would strongly support this work, but depending on where in the cycle it falls, it may be worth thinking of some kind of linkage to the UNDP Food and Power work.

9. Affordability of healthy and nutritious diets to ensure food security and nutrition - the first question in this scope is "What policy options exist to reduce inequalities in relation to the accessibility and affordability of healthy diets?" - this should lean heavily on HLPE 18.

28. Amy Carrad

Surname	Carrad
First name	Amy
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Research Fellow
Current institution/organization	Australian National University
Country	Australia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Overall, this list is good.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	A) Greater clarity of/attention to the growing power of corporations (not only food corporations, but also technology) in relation to: 1. Water governance (another response by Fatsani Damson Chimutu, Green and Blue Frontiers Consulting points out that "Water access is a decisive factor in FSN but often underrepresented". This is true and must be brought to the fore among the issues). 2. Land governance (see following response about land grabbing/use for things like AI data centres). 3. Control of technology and data. Water, land and biodiversity are mentioned in the issues more as biological and restoration issues, not in the context of the politics of private ownership vs water, land and biodiversity being commons. B) Echoing Barbara Burlingame's point about the weaponisation of food and the massive issue that is conflict and war being imposed on some countries by others. This is not sufficiently attended to in the listed issues.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Linkages between technology, specifically the boom in AI and related data centres, and issues of land grabbing (tech corporations taking over land for data centres, displacing food production and other biodiversity), environmental degradation, water use and pollution; and how the effects of data centres of data centres are often imposed on communities already facing extensive marginalisation and disadvantage.

29. An Notenbaert

Surname	Notenbaert
First name	An
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Thematic Lead
Current institution/organization	Alliance of Bioversity International and CIAT
Country	Kenya
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The proposed list of CEEI provides a strong and comprehensive overview of key challenges affecting food security and nutrition (FSN), capturing major drivers such as climate change, geopolitical instability, food systems transformation, and structural factors including trade and corporate concentration. The inclusion of cross-cutting frameworks such as One Health and the linkages to the Rio Conventions is particularly valuable, reflecting the need for integrated approaches. However, the list would benefit from a more explicit articulation of equity and justice as a central analytical lens. Many FSN challenges are fundamentally distributional, and without clearly addressing who benefits from and who bears the costs of transformation, important dimensions of FSN outcomes risk being overlooked.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

A key issue that could be more explicitly included is equity and justice in food systems transformation. FSN outcomes are fundamentally shaped by unequal access to resources, markets, and decision-making power. Climate change disproportionately affects vulnerable populations (climate justice), while structural inequalities (e.g. gender, land, capital) influence adoption and participation. Long-term sustainability challenges also raise intergenerational justice concerns. These dimensions are well documented (e.g. FAO, 2023; IPCC, 2022; HLPE reports) but are not yet explicitly reflected as a central analytical lens.

In addition, greater emphasis should be placed on trade-offs between nutrition, environmental sustainability, and climate goals. Many FSN interventions involve inherent trade-offs—for example between diet quality and affordability, productivity and emissions, or production expansion and biodiversity and water conservation. While environmental aspects are covered across several CEEI, the explicit analysis of these trade-offs remains underdeveloped and is critical for informing realistic policy decisions.

Finally, the role of livestock and feed systems could be more clearly recognised. These systems are central to nutrition, livelihoods, land and water use, and greenhouse gas emissions, and represent a key leverage point for improving FSN outcomes while managing environmental pressures.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

The separation of issues is understandable for analytical clarity; however, the linkages between them could be strengthened more explicitly. In particular:

The connection between food systems transformation, climate change, and environmental sustainability could be further elaborated, especially in terms of trade-offs between nutrition, productivity, and environmental outcomes
The relationships between corporate concentration, trade, and affordability could be made more explicit, as these jointly shape access to food and market dynamics
The interaction between digital innovation and structural inequalities (e.g. access to data, technology, and infrastructure) could be further explored
The role of agency could be more clearly linked to governance, power relations, and inclusion across all other issues

Overall, stronger articulation of these linkages would help move from a set of parallel themes to a more integrated understanding of FSN challenges.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	he drivers and trends identified are generally relevant, but in several cases the link to FSN outcomes could be strengthened. In particular: In the climate-related issues, the focus is largely on impacts of climate change on FSN, while the role of food systems as contributors to climate change (and opportunities for mitigation) could be further elaborated In the Rio Conventions framing, stronger attention could be given to how land use, biodiversity, and soil health directly affect food availability, diet quality, and resilience In affordability, the analysis could go beyond price to include income dynamics, cost of production, and structural determinants of food access In corporate concentration, the implications for value distribution along the value chain and for smallholder participation could be further developed
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	* Trade-offs between FSN objectives: For example, between improving diet quality, maintaining affordability, and achieving environmental sustainability * Resilience and stability of food systems: Including the ability to absorb shocks (climate, economic, geopolitical) and maintain FSN outcomes over time * Environmental feedbacks to FSN: Including soil degradation, water scarcity, and biodiversity loss, which directly affect long-term food production and nutrition * Distributional outcomes: Who benefits from improvements in FSN, and who remains excluded * Role of livestock systems: Particularly their dual role in providing essential nutrients and livelihoods, while also contributing to environmental pressures
Is there any missing reference to key literature and data?	Equity and inequality in food systems Climate–food system interaction Trade-offs and environmental limits Food system resilience and shocks
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Trade-offs and synergies: What are the key trade-offs between FSN outcomes, environmental sustainability, and climate objectives, and how can they be managed?

30. Ibrahim Sidibe

Surname	SIDIBE
First name	Ibrahim
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	National Coordinator
Current institution/organization	Centre for Agriculture and Rural Development - CARD
Country	Mali
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Our proposed approach is to develop sustainable agricultural production systems (agroecology, agroforestry, organic farming, etc.) that meet food and nutritional needs, and to promote local or regional agricultural markets
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	The resilience food systems and climate change
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Environmental issues and climate change, as well as issues relating to the Rio Conventions, can be grouped together
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Indicators relating to nutrition and health
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Food insecurity, post-harvest management, food waste, etc.
Is there any missing reference to key literature and data?	Research into sustainable food systems, agroecology, agroforestry, etc.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

No

31. Pamo Volunteers, Uganda

Surname	OMAGOR
First name	JOHN
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Executive Director
Current institution/organization	Pamo Volunteers
Country	Uganda
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Pamo Volunteers agrees that the identified list captures the essential drivers of food insecurity. However, we believe 'Achieving food security and nutrition in climate crises' must be treated as the central, most urgent priority, as it exacerbates almost every other issue on the list. Why this is a priority (Global & Specific Contexts): The Threat Multiplier: In our experience, climate change is no longer a 'future risk' but a current reality that erodes the Agency of smallholder farmers and destabilizes the Affordability of Healthy Diets by causing frequent crop failures. Local Vulnerability: In specific contexts where Pamo Volunteers operates, unpredictable weather patterns—such as prolonged droughts and flash floods—are directly responsible for local market volatility. Global trade (Issue 5) cannot always compensate for the loss of local production and biodiversity. Intersection with 'One Health': We suggest the HLPE-FSN more explicitly link the climate crisis to the 'One Health' framework. Climate-driven migration and environmental degradation are increasing the risk of zoonotic diseases, which further compromises nutrition and labor productivity in rural communities.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	1. Addressing Urban and Peri-Urban Food Insecurity Justification: While food security is often viewed as a rural issue, over three-quarters of the world's food-insecure population—roughly 1.7 billion people—now live in urban and peri-urban areas. Rapid urbanization is decoupling food consumption from production, making urban populations

uniquely vulnerable to market shocks and infrastructure failures.

Data & Literature: The 2024 HLPE-FSN report on urban food systems highlights that urban food security is determined not just by agriculture, but by "non-food" systems like housing, water, and sanitation. SOFI 2025 data shows that food price inflation disproportionately affects urban low-income households who spend a higher share of their income on food.

2. Food Loss and Waste (FLW) as a Resource Management Crisis

Justification: One-third of all food produced globally (1.3 billion metric tonnes) is lost or wasted annually. This is not just a loss of calories but a massive waste of land, water, and energy, contributing significantly to greenhouse gas emissions and environmental degradation. Reducing FLW is essential to meeting food demand without further straining limited natural resources.

Data & Literature: The FAO (2019) notes that addressing FLW could improve food availability and accessibility, especially in low-income regions where post-harvest losses are high due to poor storage and transport.

3. The Double Burden of Malnutrition and NCDs

Justification: Global food systems are increasingly failing to deliver quality diets. Nine of the top fifteen risk factors for morbidity—including diabetes and heart disease—are associated with poor diets. The "double burden" refers to the coexistence of undernutrition and obesity within the same communities, driven by the high cost of healthy foods and the proliferation of ultra-processed alternatives.

Data & Literature: Recent analysis in SOFI 2025 shows a direct link between high food prices and child wasting, while simultaneously noting rising obesity rates in adults (nearly 2 billion globally).

4. Indigenous and Traditional Knowledge Systems

Justification: Formal scientific approaches often overlook the "Agency" of local innovators. Indigenous food systems are inherently resilient to climate change and are key to preserving biodiversity. Protecting these systems from "knowledge grabbing" and intellectual property imbalances is critical for equitable food governance.

Data & Literature: The HLPE-FSN (2025/2026) workstreams emphasize that community-led innovation and the "Right to

	Food" must be at the center of environmental policy (Rio Conventions) to avoid unintended harm to local food access.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Combine "Climate Crises" with the "Rio Conventions" (Issues 2 & 3): Reasoning: Issue 2 focuses on the impacts of climate, while Issue 3 focuses on the policy frameworks (Biodiversity, Desertification, Climate). Strengthening their link would ensure that FSN is not just an "add-on" to environmental policy but a central goal of the Rio Conventions. Strengthen Linkage: Geopolitical Uncertainty International Trade (Issues 4 & 5): Reasoning: Geopolitical uncertainty often creates "polycrises" (war combined with extreme weather) that directly disrupt trade flows. The analysis should explicitly address how trade governance can protect food access during these overlapping shocks, rather than just treating them as separate variables. Strengthen Linkage: Digital Innovations Corporate Concentration (Issues 6 & 7): Reasoning: There is a risk that AI and digital tools could increase the power of a few large corporations, further marginalizing smallholders. The HLPE-FSN should analyze how "Agency" (Issue 10) can be protected by ensuring digital sovereignty for local communities. Strengthen Linkage: Affordability One Health (Issues 8 & 9): Reasoning: Climate-driven environmental degradation (One Health) impacts the productivity and nutritional quality of crops, which in turn drives up the price of healthy diets. A stronger link here would show that "affordability" is not just an economic issue but an ecological one. Key Data and Justification for Linkages The "Polycrises" Evidence: Data shows that 69% of acutely food-insecure people live in fragile or conflict-affected countries where climate events and political uncertainty overlap. Economic Impact: Climate change could increase food costs by up to 60% by 2050, according to the Climate Resilient Food System Alliance. Policy Coherence: Previous reports, like the HLPE-FSN 2025 Note, argue that "isolated environmental actions" can inadvertently impair food availability if they don't integrate the Right to Food as a primary lens.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Input on Issue 2: Achieving FSN in Climate Crises

Feedback on Drivers and Trends:

While the HLPE-FSN draft correctly identifies increasing frequency of extreme weather and long-term shifts in productivity, Pamo Volunteers believes the current drivers do not fully capture the disproportionate impact on food utilization and stability—two critical pillars of FSN.

1. The Missing Link: Nutritional Quality (Utilization)

The Trend: The draft focuses heavily on availability (crop yields). However, rising CO2 levels and soil degradation are reducing the micronutrient density (zinc, iron, and protein) of staple crops.

The Outcome: This creates a "hidden hunger" where communities may have enough calories but suffer from malnutrition. The analysis should more explicitly link climate drivers to the biological utilization of food.

Literature/Data: Research published in The Lancet Planetary Health suggests that climate change could jeopardize the nutritional quality of diets for over 100 million people by 2050 due to nutrient collapse in staples.

2. The Missing Link: Labor Capacity and Gender (Agency)

The Trend: Extreme heat is not just a threat to plants; it is a threat to the humans who grow them.

The Outcome: In regions where Pamo Volunteers operates, heat stress reduces the "labor capacity" of smallholders. Since women often perform the bulk of manual agricultural labor while also managing household nutrition, climate-driven labor loss directly translates to poorer nutrition outcomes for children. The analysis needs to capture heat-health-nutrition as a linked driver.

Data: The ILO estimates that by 2030, the equivalent of 80 million full-time jobs will be lost due to heat stress, primarily in agriculture.

3. The Missing Link: Disrupted Local Safety Nets (Stability)

The Trend: Current analysis focuses on global trade as a stabilizer.

The Outcome: For the most vulnerable, stability comes from informal community sharing and local markets. Climate shocks often wipe out these local safety nets simultaneously. The draft should emphasize the trend of "localized systemic collapse," where global trade cannot reach the "last mile" fast enough to prevent acute malnutrition.

Suggested Recommendation for the HLPE-FSN:

We recommend that the HLPE-FSN shift the focus from 'Global Agriculture Productivity' to 'Community-Led Climate Resilience.' The analysis must recognize that FSN outcomes are secured when local agency is supported through climate-

	smart infrastructure (like local seed banks and small-scale irrigation) that protects the stability of food access during shocks.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	1. Indirect Outcome: Food Safety and Environmental Health Climate change is a primary driver of emerging food safety hazards that indirectly impair a person's ability to utilize the food they do have. Contamination Pathways: Rising temperatures and humidity increase the prevalence of food-borne pathogens (like Salmonella) and mycotoxins (like aflatoxin) in stored staples. Water-Health Nexus: Flooding and droughts compromise water quality. This leads to a "vicious cycle" where diarrheal diseases prevent the body from absorbing nutrients, effectively turning "available food" into a nutritional loss. Justification: Pamo Volunteers can argue that without a "One Health" lens (Theme 8), food security policies only solve for calories while ignoring the health environment that allows those calories to be used. 2. Direct/Indirect Outcome: Non-Communicable Diseases (NCDs) There is a critical gap in analyzing how climate-driven shifts in food systems contribute to the "triple burden" of malnutrition: undernutrition, micronutrient deficiencies, and obesity. Dietary Shifts: When local, nutritious traditional crops fail due to climate stress, communities often shift to cheaper, ultra-processed, shelf-stable foods. Long-term Health Costs: This indirect outcome leads to a rise in NCDs like diabetes and hypertension, which reduce labor productivity and increase household medical expenses, further eroding food access. 3. Indirect Outcome: Social Stability and "Distress Migration" The draft should elaborate on how the loss of food stability leads to social outcomes that permanently alter food systems. Displaced Agency: In your context, climate shocks often lead to "permanent" migration. This drains the rural workforce (especially youth), leaving behind elderly and female-headed households with less "Agency" (Theme 10) to manage local food production. Livelihood Erosion: Frequent extreme weather events don't just destroy this year's harvest; they destroy "livelihood

assets" (like livestock and seeds), making it impossible for families to "bounce back" without external aid.

Is there any missing reference to key literature and data?

1. The Nutrient Collapse Gap (Direct Utilization)

Key Reference: Rockström et al. (2025), the EAT-Lancet Commission 2.0.

Data/Justification: The 2025 update to the Planetary Health Diet provides new evidence on how food systems are transgressing "just planetary boundaries". It warns that climate-driven elevated

is reducing the concentrations of protein, iron, and zinc in major staple crops like wheat and rice.

Action for Submission: Use this to demand that Issue 2 (Climate) be more explicitly linked to Issue 9 (Affordability/Nutrition).

Action for Submission: Use this to demand that Issue 2 (Climate) be more explicitly linked to Issue 9 (Affordability/Nutrition).

2. The "Hidden Costs" of Malnutrition

Key reference: The State of Food Security and Nutrition (SOFI) 2024 and 2025 Reports.

Data/Justification: SOFI 2025 highlights the "hidden costs" of unhealthy diets—estimated at roughly \$10 trillion USD—driven by the shift from failed local traditional diets to cheap, ultra-processed foods during climate shocks.

Action for Submission: Cite this to justify why the HLPE-FSN must go beyond "calorie availability" and focus on the economic and health outcomes of dietary shifts during crises.

3. The "Last Mile" Stability Gap

Key Reference: IPCC Sixth Assessment Report (AR6), Working Group II on Impacts, Adaptation, and Vulnerability.

Data/Justification: The IPCC (2022) confirms that up to 10% of currently suitable agricultural areas will be climatically unsuitable by 2050. It emphasizes "compound impacts"—such as the simultaneous failure of local markets and global supply chains—which are poorly addressed in the current draft.

Action for Submission: Use the IPCC's "compound risk" framework to argue for stronger linkages between Issue 2 (Climate) and Issue 4 (Geopolitical Uncertainty).

4. Indigenous Knowledge and Social Justice

Key Reference: HLPE-FSN Report #20 (2025) on Building Resilient Food Systems.

Data/Justification: This report stresses that Indigenous and local knowledge are not just "cultural artifacts" but are essential for climate-resilient development. The EAT-Lancet 2.0 also prioritizes "social justice and cultural adaptability" as a pillar of food sovereignty.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

1. Operationalizing Local Agency (Theme 10 Linkage)

Proposed Question: How can global and national climate adaptation funds be restructured to directly reach community-led volunteer organizations and smallholders who are the first responders to food crises?

Justification: While the draft mentions "Agency," it lacks questions on the financial mechanisms that empower local groups to act independently of slow-moving top-down aid.

2. The Food-Water-Health Nexus (Theme 8 Linkage)

Proposed Question: To what extent does the degradation of water systems during climate shocks indirectly limit nutritional outcomes by compromising food safety and human health?

Justification: Food security cannot be achieved without clean water for preparation and nutrient absorption. Strengthening the link between Climate (Theme 2) and One Health (Theme 8) is critical for a "systems" approach.

3. Youth and Rural Labor Retention

Proposed Question: How can climate-resilient food systems be designed to provide viable livelihoods for youth, thereby preventing the "rural brain drain" that undermines long-term food system stability?

Justification: Climate crises drive distress migration, often leaving behind aging populations with less physical capacity to sustain local food production.

4. Real-Time Data and Digital Sovereignty (Theme 7 Linkage)

Proposed Question: How can we ensure that AI and digital risk-forecasting tools remain open-access and community-owned, rather than increasing the data-gap between local farmers and large corporations?

Justification: As climate risks become more unpredictable, the ownership of data becomes a critical "Agency" issue for local volunteers.

32. Ryan Nehring

Surname	Nehring
First name	Ryan
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Research Fellow
Current institution/organization	International Food Policy Research Institute (IFPRI)
Country	United States of America

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	I think the issues are pretty great overall. However, I feel like the "agency for food security and nutrition" really lacks direction and, in fact, agency. To be honest, I feel like it's a missed opportunity to highlight clearer, more political messaging for potentially other issues which I'll list in the next box.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are "critical", together with relevant literature and data.	To me, one of the most important issues, if the the most important issues is equitable access to productive resources (e.g., land, water). I am actually a bit shocked that is not in the list.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Yes
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	No
Is there any missing reference to key literature and data?	No
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	Yes, however, the issue on agency is not very clear. Perhaps a report for that issue would make the most sense. But again, equitable access to productive resources should absolutely be one of the top ten issues.

33. Landesa, United States of America

Surname	Boudreaux
First name	Karol
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Director, Global Programs
Current institution/organization	Landesa
Country	United States of America

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Generally speaking, yes, but please see feedback below for additional thoughts.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yes. I do not believe that the topic of polycrises (no. 4) is sufficient to capture the critical role of armed conflict and food security and nutrition. As a stand-alone topic, conflict and fragility is absolutely essential to understanding important push and pull factors for FSN (significant literature already exists, including https://www.sciencedirect.com/science/article/abs/pii/S2949824425000485). As we know, many countries, conflict is a primary driver of food insecurity, affecting over 100 million people (https://www.securitycouncilreport.org/monthly-forecast/2025-11/conflict-and-food-insecurity-2.php). Armed conflict is not only contributing directly to food insecurity, but actors are also weaponizing food insecurity in multiple conflict zones (https://press.un.org/en/2025/sc16224.doc.htm). Conflicts exacerbate nutrition crises in many locations, destroying infrastructure, raising food prices and imposing disproportionate burdens on women and children (https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/food-crisis-12-million-people-suffer-catastrophic-conflict-driven-hunger-2025-2025-09-16_en). The current crises involving Iran, Israel and the US is one pertinent example of conflict directly affecting fertilizer availability and fertilizer prices that, in turn, will affect food prices. Looking in the other direction, food insecurity and hunger of course also contribute to conflict, recruitment to extremist organizations, and undermine governance. Altogether, a focus on conflict rather than, or in addition to, other crises, would be an extremely valuable addition.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

There may be scope to combine the climate crises and the Rio Conventions issues (no. 2 and 3) as these are different sides of the same issue: problem and strategic response. If combined, the focus on improving governance to address FSN issues should remain central. Particularly, inclusive land tenure and governance as an efficient and effective pathway to reducing deforestation, protecting biodiversity, addressing land degradation neutrality and building resilience is essential not only to highlight but, as you say in the document, to integrate purposefully into the CBD and UNFCCC to align with the UNCCD and its tenure decision. Exploring options to integrate land indicators for each convention is also useful as you point to in question 2 (see, among others:
<https://www.sciencedirect.com/science/article/abs/pii/S0305750X25003195>; <https://www.cbd.int/article/equitable-land-tenure-16March2022>;
<https://www.unccd.int/resources/publications/responsible-governance-land-tenure-strategy-strengthen-land-restoration-and>;
<https://www.unccd.int/resources/brief/securing-tenure-restore-land-and-safeguard-livelihoods>).

Additionally, I note that there may be some tension between a focus on corporate concentration in food systems (which leads to economies of scale but may not, without consumer/other pressure, increase production and lower the cost of healthy foods) and the affordability of healthy diets. The paper is critical of corporate concentration (which tends to reduce some prices) but wants to lower prices of healthy foods - how can the private sector be an ally, not a target - in these discussions? To promote a sense of balance, this tension should be addressed.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

I would like to make just a few comments on issue no. 3 - on the Rio Conventions. I would like to strongly welcome the opportunity for the HLPE-FSN to consolidate evidence on the role of secure land tenure for legitimate land holders to contribute positively to climate and biodiversity outcomes. It will also be helpful to continue to highlight and understand governance failures and political economy dynamics related to land (which also contribute to conflict at a variety of levels), particularly, if you are able to focus on the costs of these failures so that policy makers are better able to understand trade offs between a focus on land tenure as a tool to achieve climate goals and other non-tenure approaches. This latter could also feed into recommendations to strengthen FSN through secure tenure.

The VGGT, after more than 10 years of testing and implementation, do provide a strong basis for such work and example of positive domestication of the Guidelines could be useful to highlight (<https://openknowledge.fao.org/items/a01904e2-5a4c-4c96-8e40-b3669e92b61b>). However, implementation of equitable tenure rights continues to lag in many countries that have adopted improved land tenure frameworks, suggesting the strong need to emphasize the role of social norms in supporting inclusive governance, including land governance (this also applies, as suggested briefly, to the issue of agency in No. 10). Perhaps relatedly, given the VGGT's principle related to gender equality it is concerning to see question 3 is not also calling out women alongside Indigenous Peoples, local communities and other marginalized groups. We recommend that this need to be corrected, particularly as we understand the critical role women play as climate actors, smallholder farmers and laborers and so, who contribute disproportionately to feeding their families and communities yet continue to face legal and social barriers to exercising legitimate tenure rights which constrains the incentives they have to adopt climate-friendly farming practices (<https://www.tandfonline.com/doi/full/10.1080/13552074.2025.2461918>).

One final, small point is that for issue No. 1, under Key Actions, bullet 2 should include land policies, alongside other policy priorities to promote a more holistic and integrated set of frameworks.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Given the pervasive and significant barriers to effective participation in food systems that discriminatory social norms play, it would be useful to further elaborate this issue, not only in issue no. 10
Is there any missing reference to key literature and data?	Yes, please add: https://www.fao.org/gender/the-status-of-women-in-agrifood-systems/en ; https://www.ohchr.org/sites/default/files/RealizingWomensRightsstoLand_2ndedition.pdf
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	I suggest questions for issue No. 1, 3 and/or 10 along the following lines: Which social norms and practices are most important to address to promote more inclusive and resilient food systems and improved nutrition? What does the evidence gaps exist with regard to promoting positive, culturally appropriate work that supports social norms change in food systems and enhances resilience?

34. United Nations High Commissioner for Refugees, Switzerland

Surname	Theuri
First name	Terry
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Nutrition & Food Security Officer
Current institution/organization	United Nations High Commissioner for Refugees (UNHCR)
Country	Switzerland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The ten Critical, Emerging and Enduring Issues (CEEI) identified by the HLPE-FSN capture the most significant and interconnected drivers shaping food security and nutrition outcomes globally and across diverse contexts. The framing appropriately reflects the convergence of climate change, conflict, economic shocks, governance challenges, technological change and structural inequalities, and their cumulative impacts on FSN. The decision to address enduring issues alongside critical and emerging ones is particularly relevant, as many drivers of hunger and malnutrition are persistent, structural and mutually reinforcing rather than episodic.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Propose that food security and nutrition in forced displacement contexts should be explicitly included and elaborated.

Food security and nutrition in forced displacement settings should be recognized as an enduring structural issue that has become systemically critical under current global conditions.

- Forced displacement has reached unprecedented levels, exceeding 120 million people globally, with displacement increasingly protracted, recurrent and climate-amplified.
- According to the Global Report on Food Crises (GRFC), 86 percent of forcibly displaced people live in countries or territories experiencing food crises, and over 90 million displaced people are located in contexts where conflict, climate change and food insecurity overlap; In countries where disaggregated data exist, displaced populations consistently face higher levels of acute food insecurity than host or resident populations; Displaced populations are over-represented in IPC Phase 4 and 5, including famine situations; and displacement is not only a consequence of conflict, climate stress and food insecurity, but also a driver of further food insecurity, with repeated displacement cycles progressively eroding livelihoods, assets, diet quality and coping capacity.

Food security and nutrition in forced displacement contexts meets the HLPE-FSN criteria for:

- Enduring: displacement situations now last for years or decades, with long-term FSN consequences;
- Critical: climate change, conflict and economic shocks are intensifying food insecurity, malnutrition and dependency risks in displacement settings;
- Cross-cutting: FSN outcomes for displaced populations are shaped by legal status, economic inclusion, access to land and services, climate exposure and governance arrangements.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

The separation of the ten CEEI is analytically useful. However, linkages involving forced displacement should be strengthened across multiple issues, notably:

Climate change and environmental degradation: climate hazards increasingly undermine food production, livelihoods and settlement viability in displacement and return contexts, contributing to recurrent displacement and food insecurity. Geopolitical uncertainty, conflict and polycrises: displacement is a central manifestation of conflict-driven polycrises, with direct and indirect FSN impacts on displaced and host communities.

Affordability of healthy and nutritious diets: displaced populations face structural constraints in accessing diverse, affordable and culturally appropriate diets due to income insecurity, legal barriers and market exclusion.

Agency in food systems: displacement often entails loss of agency over food choices, livelihoods, productive assets and participation in decision-making processes.

Strengthening these linkages would improve the systems perspective of the analysis and help avoid treating displacement-related FSN outcomes as a residual or sector-specific issue.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Overall, the drivers and trends identified across the ten CEEI capture FSN dynamics well. However, the role of economic inclusion and legal access as mediating drivers of FSN outcomes in displacement settings is insufficiently explicit. Evidence indicates that:

Limited access to decent work, land for agriculture, financial services and social protection prolongs food insecurity and undermines nutrition outcomes among displaced populations.

Improvements in legal frameworks do not consistently translate into practical access, resulting in persistent income poverty, poor diet quality and reliance on negative coping strategies.

Climate change increasingly constrains the feasibility of agricultural-based FSN solutions and safe return options for displaced populations.

Explicitly recognizing these pathways would strengthen the analytical robustness of multiple CEEI.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Onward and recurrent displacement as an FSN outcome, where food insecurity itself becomes a driver of further mobility. Diet quality and nutrition outcomes in protracted displacement, including micronutrient deficiencies and child malnutrition. Intergenerational impacts, particularly for displaced children and youth whose disrupted education and livelihoods reduce future food system participation. Spillover effects on host communities, where food systems, markets and services are strained but may also benefit from inclusive and well-governed responses.
Is there any missing reference to key literature and data?	The 2026 Global Report on Food Crises for integrated analysis of conflict, climate, displacement and food insecurity; UNHCR's Global Survey on Livelihoods and Economic Inclusion as a core source on economic inclusion, agency and FSN pathways; Recent UNHCR analysis on climate change, conflict and forced displacement (e.g. No Escape, 2024), particularly regarding climate-amplified food insecurity and mobility cycles.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Questions with a displacement lens: - How do restrictions on livelihoods, land access, financial inclusion and social protection shape FSN outcomes over time? - How does climate change affect the feasibility of durable FSN solutions (return, local integration, resettlement)? - How can economic inclusion policies reduce long-term dependence on food assistance while improving nutrition? - What data, governance and accountability mechanisms are needed to ensure displaced populations are systematically included in FSN assessments and strategies?

35. World Wildlife Fund (WWF), United States of America

Surname	Whitt
First name	J. Preston
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Program Officer, Blue Foods
Current institution/organization	World Wildlife Fund (WWF)

Country	United States of America
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Separating out the closely related issues of 5. International Trade, 6. Corporate Concentration, and 9. Affordability is useful for understanding the nuanced trends and impacts of each. However, operationally, addressing these issues may require systematic approaches that cut across these (and other) issues. For example, a main FSN impact of the questions in Issue 6, like “unfair and abusive contracting and labour practices”, is on Affordability; similarly, the key questions for issue 5, like “assessing and addressing the impacts of international trade on food security” will necessarily intersect with multinational corporate concentration. This comment does not suggest combining these issues in this document but rather considering them as three parts of a whole in subsequent policy response documents.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	While Iss.1 recognizes the problems of sectoral silos and does contain references to fisheries, a more explicit recognition of the problem of siloed “blue” vs “green” food systems and the need for systematic approaches to the full food system should be considered. Iss.2 does not adequately include a fisheries perspective. For example, the impacts of climate change on fisheries-related nutrition and conflict are well-studied and significant. In addition, the frequent reference to “staple crops”, for example, implies a terrestrial focus that does not fully capture the importance of blue foods, and the impact climate change will have on blue food availability. Specifically, the paragraphs discussing “resilient, and nutritious foods from diverse crops” and “staple and underutilized crops” could benefit from additions around underutilized aquatic and marine species. Importantly, however, such additions should also include recognition of improved effective and adaptive fisheries management, especially for currently under-regulated fisheries, as part of the “institutional mechanisms that protect food security and nutrition during climate induced crises.” Iss.3 could include a more (pro-)active recognition of the duties of states to protect their citizens from human rights violations by criminal or non-state actors. This comment does not diminish the importance and need for eliminating state-led or –sponsored violations of human rights but rather adds to that the importance of redressing the violations by organized crime and other non- (or quasi-) state actors within state borders. The cited “Land and Governance Situation Report” does include some mention of businesses’

	responsibilities but leaves unaddressed the substantial impact of other non-state actors and states’ responsibilities regarding them. The draft would also benefit from more explicit mention of tenure rights in fisheries and consideration of where tenure rights may or may not be a critical component of blue food security (with tenure rights typically more appropriate – or at least differently defined – in small-scale coastal fisheries vs in large offshore fisheries). Iss.4 may be missing some drivers of conflict that have subtler interactions with geopolitics but still intersect with and impact conflict and food security. Specifically, IUU fishing often drives, connects to, and overlaps with conflict, and often most affects the most vulnerable in society. At the same time, responses to IUU must also recognize the substantial differences between different forms of IUU fishing, such as EEZ violations by foreign industrial fleets versus unlicensed subsistence fishers. Work on this issue would benefit from the input from and involvement of the FAO’s IUU fishing experts. Iss.5 and Iss.6 could both better include blue foods. Fisheries management efforts that focus on high-value export species like tuna and ignore locally consumed species; domestic consumption priced out by high-income markets; and state or state-backed access agreements that do not fairly distribute costs and benefits are all ways that international trade in fisheries directly and negatively impacts local food security. Climate change is also impacting fisheries; for example, in Fiji, coastal tuna is expected to shift eastward into international waters, with other countries in regionally managed waters standing to gain from Fiji’s losses. Fisheries subsidies also compound overfishing of coastal stocks and should be noted as a priority for reform. Similarly, applicable to either Iss.5 or Iss.6, large international companies can leverage legal and purchasing power to guarantee their quota even when overall fishery productivity falls. The asymmetric buyer power recognized in Iss.6 can be particularly acute in seafood processing. At the same time, buyers can be extremely influential in promoting best practices in their value chains.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Issue 6 may consider exploring the relationship between corporate concentration (in all food sectors, not just seafood) and labour abuses.

Is there any missing reference to key literature and data?

Corresponding to the above comments on Question 11:

Issue 1:

<https://www.sciencedirect.com/science/article/pii/S2211912422000281>

https://bluefood.earth/wp-content/uploads/Integrating-Blue-Foods-into-Food-System-Policy-and-Practice_Tf4.pdf

<https://www.sciencedirect.com/science/article/abs/pii/S2590332224004780>

<https://pubmed.ncbi.nlm.nih.gov/31866686/>

Issue 2:

<https://www.sciencedirect.com/science/article/pii/S0960982221008964>

<https://link.springer.com/content/pdf/10.1007/s12571-023-01362-8.pdf>

<https://openknowledge.fao.org/server/api/core/bitstreams/4adbe693-f41f-4768-bead-8e7629185d86/content>

<https://www.sciencedirect.com/science/article/abs/pii/S0308597X19304622>

<https://www.nature.com/articles/s43247-024-01851-4>

<https://www.nature.com/articles/s43247-023-01024-9>

Issue 3:

<https://www.ohchr.org/en/documents/thematic-reports/ahrc5946-internal-displacement-context-organized-criminal-activity>

Issue 4:

<https://www.nature.com/articles/s44183-025-00130-9>

<https://onlinelibrary.wiley.com/doi/pdf/10.1111/faf.12462>

Issues 5 and 6:

<https://onlinelibrary.wiley.com/doi/pdf/10.1111/faf.12602>

<https://www.nature.com/articles/s41893-021-00745-z>

<https://www.worldwildlife.org/pages/tnrc-practice-note-corruption-in-the-fisheries-sector-import-controls-transparency-and-wwf-practice>

<https://www.sciencedirect.com/science/article/abs/pii/S0308597X24003725?via%3Dihub>

<https://onlinelibrary.wiley.com/doi/pdfdirect/10.1002/aff2.70093>

<https://www.sciencedirect.com/science/article/pii/S0308597X21004553>

<https://link.springer.com/content/pdf/10.1007/s40152-025-00426-z.pdf>

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

Intersecting with Issue 7. Digital Innovations, the first question in Issue 2. Climate Crises, “How to anticipate climate-related risks to food and nutritional security?”, may not be a knowledge gap to the extent of the other questions/issues. Many initiatives have already leveraged machine learning and climate/biological modeling to predict location-specific changes in food availability. Specifically in the ocean / blue foods space, consider Oceansfutures.org and the work of Palacios-Abrantes, Cheung et al. at the University of British Colombia.
(<https://www.science.org/doi/full/10.1126/sciadv.adq5976>)

36. Colegio de Postgraduados, Mexico

Surname	Núñez-Espinoza
First name	Juan-Felipe
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Research senior
Current institution/organization	Colegio de Postgraduados
Country	Mexico
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Los temas identificados por HLPE-FSN logran identificar aquellos aspectos relacionados con la afectación a la seguridad alimentaria y nutrición a nivel global (en función de las experiencias regionales) pero no es suficiente para contextos locales.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Se sugiere incidir en los aspectos dinámicos de los procesos organizativos locales alrededor de los sistemas sostenibles de producción, principalment desde una perspectiva participativa e integral: ya no solamente los/las campesinos/as deben de ser "los productores" de alimentos, sino también los otros sectores de la sociedad (Núñez-Espinoza, J. F., Morales Antonio, P. Y., & Ramírez Najera, S. M. (2024). Aproximación a la construcción social del principio agroecológico en América Latina. <i>Desenvolvimento E Meio Ambiente</i> , 64. https://doi.org/10.5380/dma.v64i0.91288)

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Relativamente. Esto debido a que hay un elemento de transfondo en el cual no se logra la conjunción de los temas críticos: los procesos "glocales" de organización alrededor de la construcción de sistemas agroalimentarios sustentables (Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W. W. (1972). Los límites del crecimiento: Informe al Club de Roma sobre el predicamento de la humanidad. Fondo de Cultura Económica.)
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	la co-creación entre comunidades rurales e instituciones de investigación de sistemas de monitoreo y modelización de la recuperación y/o degradación de los recursos naturales locales.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	La descomposición de los sistemas agroalimentarios analizados a través de la perspectiva de sistemas complejos.

37. Ministry of Agriculture and Forestry and Fisheries, Japan

Surname	ONO
First name	Nozomi
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Section Chief, Export and International Affairs Bureau, International Strategy Division
Current institution/organization	Ministry of Agriculture and Forestry and Fisheries
Country	Japan
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	With regard to paragraph 7 (p.19) of “5. International trade for food security and nutrition” and paragraph 8 (p.23) of “6. Corporate concentration in food systems,” the text states that the consumption of sugars per se has adverse effects on health, such as increasing the incidence of non-communicable diseases (NCDs). Such statements are inappropriate. We therefore request that the references to sugars and sugar-sweetened beverages in these sections be deleted. In addition, with regard to paragraph 10 (pp.19–20) of “5. International trade for food security and nutrition,” as noted in the text itself, trade rules are agreed upon within the framework of the WTO. As such matters should not be

	discussed in the context of the CFS, we request that this paragraph be deleted.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	(Comment to the example in on Page 11 of “4th Note on Critical, emerging and enduring issues”) Although this is only a single case, given the reality that over 70% of deforestation is caused by agricultural land use (*SOFO2020), it risks causing misunderstanding and is therefore an inappropriate example. Alos, the necessity of halting deforestation due to agricultural land use is declared in some statements including COP26 “Glasgow Leaders’ Declaration on Forests and Land Use” Therefore this example of reforestation project that impair food access described on Page11 should be replaced or deleted. * According to FAO The State of the World’s Forests 2020 on Page XVI, main driver of deforestation is agricultural expansion.
Is there any missing reference to key literature and data?	The term “ultra-processed foods” (UPFs) is used extensively throughout the text. However, as “ultra-processed foods” does not have a clearly established definition, we request that the qualifier “so-called” be inserted immediately before each occurrence of the term “UPFs” in the text. As a reference, at the 38th FAO Regional Conference for Asia and the Pacific (APRC38), including the Senior Officials’ Meeting (SOM) held until 22 April, references to ultra-processed foods in the report were revised to “so-called ultra-processed foods,” and a footnote was added stating that “‘ultra-processed food’ is not multilaterally agreed terminology on nutrition.”

38. Ingrid Fritsche

Surname	Fritsche
First name	Ingrid
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Senior Project Manager
Current institution/organization	World Future Council Foundation

Country	Germany
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	I fully second that the focus of the first issue is on the food systems approach. This has to be advanced and strengthened, especially through food system governance - cross-sectoral, at all levels of governance and multistakeholder in nature. The first key action rightly underlines that right to nutritious food should be at the heart of policymaking. This also means that nutrition should be a key outcome, which is monitored and evaluated. This is not yet the case for many policies. The second key action asks for integrated policy frameworks. Agroecology policies and strategies that emerge across the world can well serve this purpose. See for instance: https://www.worldfuturecouncil.org/p/agroecology/; https://agroecology-coalition.org/national-agroecology-strategies/. The action "Strengthening inclusive governance mechanisms that enable participation, transparency, and accountability across food systems, including stronger safeguards against conflicts of interest and undue influence" is also critical. To advance accountability a shared Monitoring, Evaluation and Learning Framework across sectors and administrative levels is needed, which allows key stakeholders such as those in governance mechanisms/decision-making to understand what is going on and to redirect resources to the places that need it most. With view to such a MEL system, we need urgently also an alignment on values, indicators, and timescales. Whilst nutrition, soil health, water, and biodiversity are key, these are rarely at the centre of decision-making. Many policies still prioritise short-term results, undermining positive long-term outcomes. Hence, we also need alignment on what we consider worth measuring and valuing in the first place. Is this MEL focusing just on productivity, which is too often understood narrowly as single-crop yield? Or is it a more sustainable understanding that asks whether output can be maintained over time without degrading soils, water, and biodiversity? An agroecological MEL goes even further by valuing diversified production, resilience, nutrition, livelihoods, and ecosystem health, while also asking who benefits and whether local resources are being depleted for external markets. From that perspective, soil health, water retention, biodiversity, and nutrition are not side benefits. They become central indicators of success. Hence this MEL also needs to ask more

	explicitly about extraction from local systems. Because a production model may appear sustainable in technical terms, yet still deplete resources for local communities if its outputs are primarily directed elsewhere. So, the question is not only how production happens, but also for whom, and at what ecological and social cost. Such a MEL framework would be able to guide decisionmakers in making the right choices. Another aspect is that capacity-building on the food system perspective is urgently needed, perhaps a key action could focus hereon.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Please see my comment above
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Please see my comment above

39. Switzerland

Surname	Blank
First name	Christina
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a country
Country	Switzerland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Switzerland would like to thank the HLPE-FSN for the preparation of the note on Critical, Emerging and Enduring Issues (CEEI), identifying key issues affecting food security and nutrition. As outlined in the CFS reform documents, the HLPE plays a key role in identifying emerging issues and supporting the prioritization of future actions for the development of the CFS Multi- Year Programme of Work (MYPoW). Switzerland considers this note as a crucial input for the elaboration of the next MYPoW 2028–2031. Switzerland emphasizes that the identified issues are highly interlinked and cross-cutting. This systemic nature should be reflected in the prioritization and design of the MYPoW. Without losing focus, topics should be defined broadly enough to capture interdependencies and enable integrated policy responses.

	Switzerland considers a human rights-based approach, including the right to adequate food, and addressing all six dimensions of food security (availability, access, utilization, stability, agency and sustainability) as essential guiding principles for the CFS strategic direction towards 2030. Switzerland considers that the ten issues identified by the HLPE-FSN capture the most important global drivers affecting food security and nutrition. Nevertheless, the topic of water governance should be added. The list appropriately combines long-standing structural challenges (e.g. climate crisis, trade) with emerging dynamics (e.g. digitalization, AI). However, Switzerland emphasizes that these issues should not be addressed in isolation. Their interconnected nature requires integrated approaches, particularly when defining priorities for the MYPoW. From Switzerland's perspective, particular attention should be given to: - o Climate crisis, as an overarching systemic risk - o International trade, as a key mechanism for global food security when aligned with sustainability - o Corporate concentration, in relation to power imbalances - o Digitalization and AI, as both opportunity and risk - o Agency, as a cross-cutting enabler of equitable food systems The 'One Health' approach is relevant. However, we wonder whether the CFS can bring any added value here, or whether this issue is not already being comprehensively addressed and dealt with by the four relevant UN organizations.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are "critical", together with relevant literature and data.	Switzerland considers that the current list is comprehensive. Nevertheless, the topic of water governance should be added. Switzerland encourages that cross-cutting dimensions be further strengthened within existing issues and in the process of elaborating voluntary guidelines or policy recommendations, in particular: • Inequality • Urban and rural linkages within food systems • The role of governance and institutional capacity These aspects are critical as underlying drivers and should be systematically integrated across the ten CEEI.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Switzerland strongly supports reinforcing linkages between the issues and proposes the following:

- Climate crisis (2) and Rio Conventions (3) could be more explicitly combined or jointly analysed, given their strong conceptual and policy overlap

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Climate crisis (2)

Switzerland strongly agrees that climate change is a systemic risk. The note appropriately addresses adaptation and mitigation; however:

- Greater emphasis could be placed on resilience-building across food systems
- The links to long-term sustainability could be further elaborated
- Good balance between climate adaptation and mitigation

International trade (5)

Switzerland considers international trade as a key pillar of global food security. The note captures relevant tensions; however, more emphasis could be placed on:

- The role of open, transparent and rules-based trade systems
- The need to integrate sustainability considerations into trade frameworks

Reducing vulnerabilities through diversified trade relations
Trade should be framed not only as a risk factor, but also as a solution when aligned with sustainability and resilience objectives

Corporate concentration (6)

Switzerland acknowledges the relevance of this issue. The note could further elaborate:

- The implications for smallholder farmers and SMEs
 - The interaction with global value chains and trade systems
- Switzerland supports a balanced approach, focusing on transparency, competition and appropriate regulatory frameworks.

Digitalization and AI (7)

Switzerland supports the balanced approach taken. The note could further strengthen:

- The importance of data governance frameworks (as per CFS PR data)
- The importance of other types of innovations (organizational, social, etc.)

	• Ensuring equitable access to digital technologies • Preventing new forms of dependency and inequality A strong governance framework is essential to ensure that digital innovation contributes positively to FSN outcomes Agency (10) Switzerland strongly welcomes the inclusion of agency as a key issue. The note appropriately highlights power imbalances; however, further emphasis could be placed on: • The link between agency and the right to food • The role of inclusive governance mechanisms • The importance of empowerment of small-scale producers and consumers Agency should be recognized as a precondition for effective food systems transformation.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Switzerland suggests further strengthening: • The interaction between agency and access to food • The long-term sustainability dimension, including intergenerational aspects • The stability dimension, particularly in the context of polycrises A more explicit integration of all six FSN dimensions across each issue according to the HLPE- FSN definition is needed.
Is there any missing reference to key literature and data?	Switzerland considers that the note could benefit from: • More systematic reference to recent global assessments (e.g. on climate, biodiversity, nutrition) • Stronger use of data illustrating inequalities • Evidence on market concentration • Evidence on digitalization trends This would strengthen the evidence base for prioritization within the MYPoW
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	Switzerland finds the guiding questions useful overall. To further strengthen them, Switzerland suggests: • Including questions on governance and policy coherence • Explicitly addressing trade-offs and synergies between objectives • Integrating equity and human rights considerations systematically • Adding a forward-looking perspective on implementation pathways

40. Mountain Partnership Secretariat, Italy

Surname	Parisi
First name	Fabio
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Sustainable Mountain Development Expert
Current institution/organization	Mountain Partnership Secretariat
Country	Italy
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	We suggest dedicating more space to data gaps and to improved disaggregated data in mountains. As highlighted in the recommendation section of the latest United Nations Secretary General’s report on sustainable mountain development, there is a need to improve the availability and accessibility of disaggregated, mountain specific data in order to better monitor food security and nutrition trends and to inform targeted policies and adaptive responses.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Mountain communities face high levels of hunger and malnutrition and are often marginalized, with limited access to infrastructure, markets and essential services. Within these contexts, women often experience more nutritional problems due to their lower economic and social status. In some mountain societies, women and girls may also be more vulnerable due to prevailing gender biases. According to the latest available assessment of the vulnerability of mountain peoples to food insecurity, in developing countries 648 million people (65 percent of the total mountain population) live in rural areas. Of these, an estimated 346 million people—approximately half—were vulnerable to food insecurity in 2017. In other words, one in two rural mountain dwellers in developing countries lived in areas where the daily availability of calories and protein was estimated to be below the minimum threshold required for a healthy life. These figures not only illustrate the gravity of the situation, but also show a worrying trend: vulnerability to food insecurity among mountain communities has been steadily increasing since monitoring began in 2000. This underscores the need to address mountain communities’ vulnerability to food insecurity as a distinct issue requiring targeted attention.

	The fact that the most recent data dates back to 2017 further highlights the importance of conducting a new assessment and improving the availability of mountain specific data to better assess vulnerability to food insecurity. Despite these challenges, systematic assessments of food security and nutrition in mountain areas remain limited, and available global analyses lack disaggregation to capture gender and youth specific dimensions as well as adequate data on nutrition. Robust and up-to-date evidence is essential to inform global policy debates on food security and nutrition, support science-policy dialogue, and guide the design of targeted public policies which, in turn, can help mobilize and direct investments towards building resilient and sustainable food systems in mountain regions. Finally, a recent joint study conducted by the Budapest University of Technology and Economics and UNEP highlights persistent financing gaps and the need for more targeted investments in mountain areas. According to the latest available estimates, adaptation finance needs for mountainous developing countries are estimated at US\$187 billion per year, while international public finance flows reached only US\$13.8 billion in 2022, implying a gap of approximately US\$173 billion annually. Modelled adaptation costs are lower, at US\$92 billion per year, reflecting different assumptions on adaptation targets and residual risk.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Greater attention could be given to food security and nutrition outcomes in mountain areas, particularly with respect to women and youth.
Is there any missing reference to key literature and data?	United Nations Sustainable mountain development: report of the Secretary-General 2025 (A/80/255) Romeo, R., Grita, F., Parisi, F. and Russo, L. 2020. Vulnerability of mountain peoples to food insecurity: updated data and analysis of drivers. Rome, FAO and UNCCD. https://doi.org/10.4060/cb2409en Budapest University of Technology and Economics and UNEP. 2024. Adaptation Gap Report 2024: Come Hell and High Water - As Fires and Floods Hit the Poor Hardest, it is time for the World to Step up Adaptation Actions. https://wedocs.unep.org/handle/20.500.11822/46497

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

We suggest further elaborating the financial dimension, including financing gaps and access to targeted investments.

41. Food and Power Initiative, United Nations Development Programme Food Systems, Canada

Surname	Paskal
First name	Anna
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Advisor
Current institution/organization	Food and Power Initiative, UNDP Food Systems
Country	Canada
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The Food and Power Initiative, hosted by UNDP, is a collaborative global programme dedicated to identifying, addressing, and challenging power asymmetries within food systems. Our goal is to support the realisation of the right to food, promote greater equity, and uphold ecological integrity. The scoping phase of the Food and Power Initiative identified corporate concentration as a key power asymmetry holding back food system transformation. In this context, we would like to express support for a focus on issue number 6: Corporate concentration in food systems. Our Scoping Phase brief includes the following section on corporate concentration: Corporate Concentration Each stage of the food supply chain is dominated by a handful of companies. This concentration results largely from horizontal and vertical mergers that reduce competition and typically increase market share or control over related markets. Financial incentives, technological lock- ins, and skewed regulatory environments entrench these processes. This dominance enables corporations to lobby effectively - limiting governments', other duty bearers, as well as rights

holders' ability to implement necessary changes in support of healthy, just and sustainable food systems. Key areas of corporate concentration include:

Field to point of sale: A few multinational corporations' control most of the global market for seeds, fertilizers, pesticides, farm equipment and machinery, leading to high costs for smallholder farmers, reduced autonomy, loss of local food sovereignty, and increased economic disparities. Meanwhile, a handful of international commodity traders and processors dominate the middle of the industrial agri food chain, exerting outsize influence on market structure and pricing. These processes work hand in hand with big data, biotech and digitalization strategies being rolled out across the industrial food chain, favouring the interests of a small number of large data companies, alongside the field to point of sale agribusiness players.

Retail: Major supermarket chains and fast-food restaurants dominate food retail in many countries, exercising monopsony power to undermine small producers' livelihoods, displacing local and territorial markets, influencing prices and product availability, and advancing policies favoured towards big business. Retail concentration also reduces people's access to local, healthy and culturally appropriate diverse food, and shapes food environments towards less healthy options such as ultra-processed foods and beverages.

Ultra-Processed Food and Beverages (UPFBs): Large corporations control significant portions of this market, impacting consumer preferences through marketing and the shaping of narratives that support the consumption of UPFBs, contributing to the ballooning of chronic disease, favouring (heavily subsidised) monoculture commodities, and undermining local food systems. Corporate actors also exert significant pressure on lawmakers, using lobbying to shape legislation and policies in ways that serve their interests—often at the expense of public health and social well-being, particularly for the most vulnerable.

42. Natalia Estrada Carmona

Surname	Estrada Carmona
First name	Natalia
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Scientist
Current institution/organization	Alliance of Bioversity and CIAT
Country	Colombia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Agree on their importance. However, agrobiodiversity or the cultivated diversity is missing, when it can be a powerful lever for transforming food systems, empower communities and greatly contribute to agency.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	I am not sure if its a topic by itself or if its missing in the corporation one. But is important to assess the role of Agnontology (fabrication of ignorance) in food systems. Currently, all FS problems seem disconnected and are treated this way in science and media. The role of corporations and their philanthropies in shaping science directly or indirectly has been key to delay action and to point to the sources of often connected problems. Media, where those same groups have huge investments or power invisibilize important global reports that compromise the status quo. Hence, the Tobacco strategy to delay action is used over and over (e.g. Loi Duplomb in France). Science, and the knowledge it produces, can and need to key playing a key role in FS transformation, however, most important evidence gets drawn in fake news, while weak, fake or distorted evidence gets to people’s mind morning, noon and night. How can we overcome that? What is the role of co-creation of knowledge? How IPCC, IPBES, HLPE and other global key reports can be accessed by all and not by a few who take the effort to look beyond the daily news?

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Great work
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	As mentioned, my comment is probably relevant to the corporate one and can be looked into more detail. Another point could be the role of research for development in putting family and small-holding farmers in the "mouth of the wolf"? with the greater influence of corporate philanthropies, the quest to connect farmers has increased, with poor or little emphasis on aspects of data justice.

43. Rural Youth Cooperative for Agricultural Development (RYCAD), Yemen

Surname	Ali
First name	Yasser
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Dietary Program Coordinator
Current institution/organization	Rural Youth Cooperative for Agricultural Development- RYCAD YEMEN
Country	Yemen
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The proposed list of critical, emerging, and enduring issues (CEEI) provides a comprehensive and well-balanced overview of the main factors affecting food security and nutrition globally, including climate change, food systems transformation, geopolitical instability, trade, and innovation. However, priorities vary by context. In fragile and conflict-affected settings such as Yemen, challenges like weak governance, limited water access, and fragile agricultural infrastructure have a more direct impact. Overall, the list is strong at the global level but requires contextual adaptation to better reflect national and local realities.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Yes, there are additional key issues that should be considered, especially in fragile and developing contexts such as Yemen:

- Water scarcity and water resource management: A critical factor for food security, particularly in arid regions, where water shortages directly affect agricultural production and its sustainability.
- Weak local agricultural value chains: Lead to significant post-harvest losses and limit farmers’ access to markets, reducing income and productivity.
- Protracted conflicts and institutional fragility: Undermine the stability of food production, disrupt supply chains, and constrain governments’ ability to respond.
- Rural youth migration: Reduces the agricultural workforce and negatively impacts the sustainability of local food systems.

All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I

Yes, some issues can be merged or at least more strongly interconnected to improve the analysis. For example, climate change, the Rio Conventions, and food systems transformation could be linked within a single sustainability framework. Likewise, digital innovation and artificial intelligence can be connected with market concentration and governance in food systems to enhance efficiency and oversight.

In addition, stronger linkages should be made between geopolitical crises, international trade, and food affordability, given their combined impact on food availability and access. Highlighting these interconnections would support a more integrated and realistic analysis, especially in complex contexts.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Yes, the identified drivers and trends generally reflect the relationship between the ten issues and food security and nutrition outcomes, as they cover the main global drivers such as climate, crises, trade, and digital transformation, all of which directly and indirectly affect food availability, access, and quality.

However, they require further detail to better clarify their impact on vulnerable groups and to strengthen the understanding of interlinkages between issues, particularly the interactions between climate, biodiversity, and geopolitical crises.

Overall, the framework is comprehensive, but it needs greater clarity on how these factors translate into food security and nutrition outcomes at the community and individual levels.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Yes.

First, there is a need to better clarify the indirect outcomes of food security and nutrition, such as the impacts of changes in food systems on livelihoods, migration, and social stability, as the focus is often placed mainly on food availability and access without sufficiently addressing these broader effects.

Second, it is important to highlight differences within population groups, particularly the most vulnerable such as women, children, smallholder farmers, and rural communities, since the impacts of food security are not evenly distributed.

Third, greater attention should be given to food quality and nutrition, not only quantity or availability, including issues related to non-communicable diseases and the double burden of malnutrition (both undernutrition and overweight).

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

Yes, the current list of questions is generally sufficient to guide the preparation of the report, but it needs some strengthening.

It is suggested to add questions on practical implementation on the ground, governance and institutional capacity gaps, and the impacts on the most vulnerable groups.

It is also recommended to strengthen questions on the interlinkages between the different indicators rather than treating them separately.

Overall, it is appropriate but needs deeper focus on practical aspects, equity, and interconnectedness.

44. Healthy, Sustainable and Just Food Systems Group, School of Public Health, University of Sydney, Australia

Surname	Baker
First name	Phillip
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Associate Professor
Current institution/organization	Healthy, Sustainable and Just Food Systems Group, School of Public Health, University of Sydney
Country	Australia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The list of issues are excellent, however there is one key issue that is arguably missing, although it does cut across several of the issues (e.g. 6, 9 and 10): the rise of ultra-processed foods in people's diets worldwide, and the impacts of this industry on human health, the environment, and the displacement of local food economies and cultures.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are "critical", together with relevant literature and data.	The rise of ultra-processed foods in human diets is most critical because of the substantial impact on nutrition and health. The Lancet Series on Ultra-processed Foods and Human Health provides (across three papers) a large synthesis of the evidence demonstrating why this issue of ultra-processed foods should be considered a priority for global health and sustainable food systems.
Is there any missing reference to key literature and data?	The Lancet Series on Ultra-processed Foods and Human Health, and its three papers.

45. National Research Institute for Agriculture, Food and Environment (INRAE), France

Surname	HUET
First name	Joachim
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	International Project Manager - Multilateral cooperation
Current institution/organization	French National Research Institute for Agriculture, Food and Environment (INRAE)
Country	France
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Issue 1 addresses a core dimension of the HLPE-FSN's mandate, namely the transformation of food systems to deliver healthy and sustainable diets. The ambition of the section is appropriate, and its overall framing reflects widely shared concerns regarding malnutrition in all its forms and the environmental footprint of current dietary patterns. However, the section does not sufficiently emphasize that food systems are also major drivers of both communicable and non-communicable diseases, nor does it fully capture the breadth of challenges implied by the concept of food security itself. While the section refers to food availability, access and utilization, it overlooks a crucial dimension of food security: food safety. Ensuring that food is sufficient, accessible and usable is necessary but not sufficient if it is not also safe. The absence of a clear discussion on food safety significantly weakens the comprehensiveness of the diagnosis and risks underestimating one of the key interfaces between food systems and public health. the section treats health outcomes primarily through the lens of nutrition, with a focus on diet-related non-communicable diseases. While this focus is justified, it remains incomplete. Food systems also shape exposure to infectious diseases—through agricultural practices, livestock systems, food handling, and market organization—as well as to broader health risks associated with environmental degradation. A further limitation concerns the conceptualization of healthy and sustainable diets. The text relies largely on normative statements about the need to modify consumption patterns, without sufficiently engaging with the complex determinants of dietary behavior. A growing body of research highlights that food choices are strongly constrained by food environments, income, time availability, cultural norms, commercial practices and social influence.

	The articulation between nutritional objectives and environmental sustainability also remains underdeveloped. The section largely assumes that improving diet quality and reducing environmental pressures will naturally converge, yet empirical research increasingly points to the existence of trade-offs. The treatment of food processing illustrates this broader tendency toward simplification. Although ultra-processed foods are identified as a concern, the analysis remains binary and does not reflect the diversity of processing practices or their differentiated impacts on health, safety and sustainability. The potential of minimal/mild processing, especially fermentation, should be highlighted as both low cost and a source of healthy food (Sampsel et al., 2025). Issue 2 addresses a central and timely issue, namely the interactions between climate change and food security. While the overall framing is relevant, several concerns arise regarding the robustness of the arguments and the use of scientific evidence. The section tends to present climate change primarily as an external pressure on food systems, without sufficiently engaging with the complexity of policy responses and their potential trade-offs. In particular, some claims are formulated in a broad and assertive manner, without adequate empirical support. The effects of agricultural policies in high-income countries are more ambiguous than the text suggests. Laborde et al. (2021) shows that coupled subsidies increase emissions, whereas border measures can reduce them. This result reflects the fact that the environmental effects of border measures depend on the relative emission intensities of trading partners Issue 5: The topic is highly relevant, given the growing interdependence of food systems, the increasing frequency of supply shocks, and the multiple objectives that trade policies are expected to serve. However, the discussion still relies on some recurring narratives that would benefit from further nuance.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Issue 2: the key questions on food security and climate change should not be limited to identifying synergies; they should also evaluate them and address trade-offs, which are real and likely to affect policy recommendations, yet remain insufficiently studied. Similarly, it is important to look beyond the design of systems; it is necessary to study their implementation. More generally, given HLPE-FSN's stated role on food security and climate change, this limited engagement with the scientific literature published on the topic over the past

	decade constitutes a serious weakness of the report. Issue 7: Digital innovations and AI for healthy, sustainable, and equitable food systems The role of digitalisation in influencing consumer habits (purchasing, diet, etc.) certainly warrants further investigation, taking into account mechanisms such as information, influence, imitation, individualisation, monitoring of consumption and health status, and so on. However, it is also important to weigh up the impact of digital tools and AI on FSN against their energy consumption. On issue 8: The document makes no reference to new genomic techniques in breeding, which are already being used in the production of agricultural commodities in some countries, and for which the CFS could encourage further impact and risk assessments under the One Health framework – and for agency (issue 10).
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Issue 1: Social inequalities in access to healthy and safe diets are insufficiently explored. While disparities are mentioned, the section does not examine how proposed transformations might differentially affect social groups, nor how affordability constraints and exposure to unsafe food environments could exacerbate existing health inequalities. This is a significant omission, given that the populations most affected by poor diet quality are often also those most exposed to food safety risks. Issue 3: As in other sections of the note, the emphasis is placed mainly on identifying synergies across global objectives. While these synergies undoubtedly exist, the absence of a discussion on trade-offs is a weakness. Policies aligned with one convention may generate tensions with others or with short-term food security objectives, particularly in resource-constrained contexts. These potential conflicts are not sufficiently acknowledged or analysed. finally, the section would benefit from a clearer articulation of governance and research priorities. Addressing the links between food security, nutrition and the Rio Conventions requires coordinated, preventive and cross-sectoral approaches, as well as stronger integration between science and policy. Without such an explicit framing, the section risks remaining at a high level of generality. On issue 4: Focusing on polycrises linked to geopolitical uncertainty makes sense in the current context, but other polycrises situations threatening FSN could also be examined, or, at least, polycrises linked to geopolitical uncertainty could serve as a useful framework for considering other polycrises situations.

	Issue 5 provides a solid and relatively balanced overview of the role of international trade in food security and nutrition. Nevertheless, a deeper engagement with the existing tensions and trade-offs—particularly regarding subsidies, environmental regulation and policy autonomy—would improve consistency with the analytical standards implied by the HLPE-FSN’s mandate and bring this section into closer alignment with the more critical discussions developed elsewhere in the note. Although this section focuses on international trade, it aptly highlights the complementary role of shorter, more local supply chains. However, relocalization of a part of food trade is required for rebalancing and regaining control on food flows and reducing risks to achieve FSN in a context of growing systemic disorders (Lee, Marsden, 2009)—not just “where it is necessary and beneficial” as written in the document. All along the document, the term ‘resilience’ is mentioned several times. Given the concept’s multiple meanings, it is worth clarifying the definition used in the document.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Issue 3 remains largely descriptive and does not fully exploit the potential of an integrated analytical framework to address health, environmental and food security objectives simultaneously. Recent research increasingly highlights that food systems are not only affected by these environmental changes, but are also central drivers of them, with direct consequences for human, animal and environmental health. This bidirectional relationship is not sufficiently articulated. The treatment of biodiversity also remains relatively narrow. The importance of agrobiodiversity for resilience and diet diversity is acknowledged, but more emphasis could be put on the potential of Neglected and Underutilized Species for improving diets and nutrition (NUS) (Hunter et al., 2019), also in the Global North (while typically associated with the Global South). Issue 8: the treatment of One Health remains largely conceptual and insufficiently operational. While the issue strongly emphasizes the need for integrated approaches and cross-sectoral collaboration, it does not clearly specify how this integration should translate into concrete transformations of food systems or food security policies. The discussion tends to remain at a high level of abstraction, which limits its usefulness for prioritizing research or guiding decision-making. A key limitation lies in the relatively narrow focus on emerging infectious diseases and crisis prevention. the One Health perspective also encompasses chronic health burdens

	linked to food systems, including non-communicable diseases, long-term exposure to contaminants, and food safety risks. These aspects receive limited attention, despite their direct relevance for nutrition outcomes and population health. The role of food systems as a connecting nexus between environmental change, animal health and human health is acknowledged, but not fully explored. In addition, governance challenges are only briefly addressed. Implementing a One Health approach requires breaking down institutional silos, strengthening science–policy interfaces, and ensuring coordination across sectors and scales. Issue 9: the text fails to address the span of the challenges in healthy diets affordability, as it misses the opportunity to frame the discussion in the context of the broad food system, including food environments, distribution chains and policy instruments, and omits the underlying differences between low-income and high-income contexts. By discussing affordability outside of the food systems framework, the note fails to address the potential trade-offs between affordability and the other dimensions of food security, namely availability and access.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	On issue 6: It would be important to examine how public and private standardization processes support corporate concentration in food systems, as well as regulations, especially food safety regulations which limit SMEs. Participatory guarantee systems (PGS) already offer an opportunity to promote recognition of the quality of small-scale producers by reducing certification costs, whilst helping to improve consumers’ understanding of agriculture and food (Loconto, Hatanaka, 2017). It would be worth exploring how expanding these systems could help to both reduce corporate concentration and empower consumers in favour of FSN. Regarding food safety, exploring how flexible or differentiated policy measures—without compromising public health—can help diversify business models, as exemplified by the differentiated regulations for industrial slaughterhouses and local slaughterhouses in certain European countries. This ties in with issue 1: transforming food systems. In this regard, more largely, the document contains some repetition of arguments and could be strengthened by summarizing a series of key questions that address several issues.

Is there any missing reference to key literature and data?

All the issues would benefit from a stronger and more explicit engagement with the scientific literature developed over the past decade. The limited incorporation of these insights gives the impression of a diagnosis that is broadly correct but analytically incomplete.

On issue 1: Sampsell S., Schultz Marcolla C., Tapping S., Fan Y., Sánchez-Lafuente C.L., Willing B.P., Reimer R.A., Burton J.P., 2025. Current Research in Fermented Foods: Bridging Tradition and Science. *Advances in Nutrition*, 16(2), 100554, <https://doi.org/10.1016/j.advnut.2025.100554>.

On issue 2: The reference to Owino et al. (2022) should be reconsidered. The article is published in *Frontiers in Climate*, and the *Frontiers* publisher appears on several lists of potentially predatory publishers (e.g., <https://beallslist.net/> and <https://www.predatoryjournals.org/news/list-of-all-frontiers-predatory-journals>). Retaining such references may undermine the credibility of the overall work.

Same problem with:

- Lyu et al. 2025 and Sodano 2024 published both published in *Frontiers in Sustainable Food System*

- Hackfort 2021; Suarez & Adibi 2025; Garrido et al. 2025 that are published in particularly problematic MDPI journals.

For more information, you can also refer to Hanson et al. 2024 (https://doi.org/10.1162/qss_a_00327) and Crosseto et al. 2026 (<https://arxiv.org/abs/2601.07563>)

The reference to Allafta and Opp (2024) is missing.

Laborde, David, Abdullah Mamun, Will Martin, Valeria Piñeiro, and Rob Vos, “Agricultural subsidies and global greenhouse gas emissions,” *Nature Communications*, 12 (2021) (Springer Science and Business Media LLC).

Valin, Hugo, Ben Henderson, and Jussi Lankoski, “Reorienting budgetary support to agriculture for climate change mitigation: A modelling analysis,” *OECD Food, Agriculture and Fisheries Papers*, 2023 (Organisation for Economic Co-operation and Development (OECD)).

Valin, Hugo, Thomas Hertel, Benjamin Leon Bodirsky, Tomoko Hasegawa, and Elke Stehfest, “Achieving zero hunger by 2030: A review of quantitative assessments of synergies and trade-offs amongst the UN Sustainable Development Goals,” 2021 (United Nations Food Systems Summit).

Issue 3: Hunter, D., Borelli, T., Beltrame, D.M.O. et al. The potential of neglected and underutilized species for improving diets and nutrition. *Planta* 250, 709–729 (2019). <https://doi.org/10.1007/s00425-019-03169-4>

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Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	INRAE would be grateful if we could send you directly our comments and more missing references. The number of characters (not specified initially) is far way too small in order to fully respond of the relevant questions. Please, let us know if we can send something directly.

45a. Extended Version: National Research Institute for Agriculture, Food and Environment (INRAE), France

Document prepared by Yuna Chiffolleau (INRAE UMR Innovation) and Sophie Drogué (INRAE UMR Moisa) with contributions from Alejandra Giraldo (INRAE UMR Moisa), Christophe Gouel (INRAE UMR PSAE), Chantal Le Mouél (INRAE, UMR SMART), Pierre Levasseur (INRAE UMR Sadapt), Barbara Redlingshöfer (INRAE UMR Sadapt), Jean-Marc Touzard (INRAE UMR Innovation) et Simon Vonthron (UMR Innovation)

1) Critical comments on Issue 1: Transforming food systems to enable healthy and sustainable diets

Issue 1 addresses a core dimension of the HLPE-FSN's mandate, namely the transformation of food systems to deliver healthy and sustainable diets. The ambition of the section is appropriate, and its overall framing reflects widely shared concerns regarding malnutrition in all its forms and the environmental footprint of current dietary patterns. However, the section does not sufficiently emphasize that food systems are also major drivers of both communicable and non-communicable diseases, nor does it fully capture the breadth of challenges implied by the concept of food security itself.

In particular, while the section refers to food availability, access and utilization, it overlooks a crucial dimension of food security: food safety. Ensuring that food is sufficient, accessible and usable is necessary but not sufficient if it is not also safe. Foodborne pathogens, chemical contaminants and antimicrobial resistance linked to food production and processing are central determinants of population health, especially in low- and middle-income countries, but also increasingly in high-income contexts through globalized supply chains. Besides, ensuring food safety and reducing food waste can be conflicting goals in various situations (Feliciano et al., 2022; Lavelli, 2021), e.g., in storage and leftover management in households or when food is rescued (at retail, at food service) and redistributed to vulnerable populations. The absence of a clear discussion on food safety significantly weakens the comprehensiveness of the diagnosis and risks underestimating one of the key interfaces between food systems and public health.

More broadly, the section treats health outcomes primarily through the lens of nutrition, with a focus on diet-related non-communicable diseases. While this focus is justified, it remains incomplete. Food systems also shape exposure to infectious diseases—through agricultural practices, livestock systems, food handling, and market organization—as well as to broader health risks associated with environmental degradation. By not explicitly addressing these linkages, the section presents a partial view of the health impacts of food systems, which limits its ability to inform integrated policy responses.

A further limitation concerns the conceptualization of healthy and sustainable diets. The text relies largely on normative statements about the need to modify consumption patterns, without sufficiently engaging with the complex determinants of dietary behavior. A growing body of research highlights that food choices are strongly constrained by food environments, income, time availability, cultural norms, commercial practices and social influence (including physical and virtual social networks). By placing limited emphasis on these structural and relational drivers, the section implicitly overstates the role of individual choice and information, and underestimates the systemic nature of dietary change.

Furthermore, the definition of sustainable diets should encompass not only the purchase of food, but also its proper storage, the (re)use of leftovers and surplus food, and so on, which helps to reduce food waste and thus promotes sustainable diets in the broadest sense.

The articulation between nutritional objectives and environmental sustainability also remains underdeveloped. The section largely assumes that improving diet quality and reducing environmental pressures will naturally converge, yet empirical research increasingly points to the existence of trade-offs. Nutrient adequacy, affordability and environmental performance do not always align, particularly for low-income households. These tensions are not explicitly acknowledged, which weakens the analytical robustness of the proposed food system transformations.

The treatment of food processing illustrates this broader tendency toward simplification. Although ultra-processed foods are identified as a concern, the analysis remains binary and does not reflect the diversity of processing practices or their differentiated impacts on health, safety and sustainability. Ongoing research suggests that the effects of processing depend on multiple factors, including formulation, portion size, consumption context and regulatory frameworks. The lack of nuance in this discussion limits its usefulness for designing targeted policy interventions. On the other hand, the potential of minimal/mild processing, especially fermentation, should be highlighted as both low cost and a source of healthy food (Sampsel et al., 2025).

Social inequalities in access to healthy and safe diets are also insufficiently explored. While disparities are mentioned, the section does not examine how proposed transformations might differentially affect social groups, nor how affordability constraints and exposure to unsafe food environments could exacerbate existing health inequalities. This is a significant omission, given that the populations most affected by poor diet quality are often also those most exposed to food safety risks. Social inequalities in access to healthy and safe diets are also relevant in the case of food rescue and redistribution of surplus and leftover food, as Issue 2 points to policy incentives to promote and support these activities. Both the nutritional quality and food safety can be of concern in rescued food in high-income countries (Mossenson et al., 2024; Oldroyd et al., 2022), which can expose vulnerable populations to additional risk, which may be even more significant in low- and middle-income countries (risk of cold chain disruption, etc.).

Finally, as with other issues covered in the note, the section would benefit from a stronger and more explicit engagement with the scientific literature developed over the past decade. Many of the challenges discussed—diet-related diseases, food safety risks, social inequalities, and sustainability trade-offs—have been extensively studied. The limited incorporation of these insights gives the impression of a diagnosis that is broadly correct but analytically incomplete.

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2) Critical comments on Issue 2: Achieving food security and nutrition in climate crises

This section addresses a central and timely issue, namely the interactions between climate change and food security. While the overall framing is relevant, several concerns arise regarding the robustness of the arguments and the use of scientific evidence.

The section tends to present climate change primarily as an external pressure on food systems, without sufficiently engaging with the complexity of policy responses and their potential trade-offs. In particular, some claims are formulated in a broad and assertive manner, without adequate empirical support.

For example, the statement: "These pressures are reinforced by subsidies and investment policies especially in high-income countries that often favour a small number of staple crops that are climate sensitive rather than more diverse, nutritious and climate-resilient options."

is not directly supported by evidence. The effects of agricultural policies in high-income countries are more ambiguous than the text suggests. Laborde et al. (2021) shows that coupled subsidies increase emissions, whereas border measures can reduce them. This result reflects the fact that the environmental effects of border measures depend on the relative emission intensities of trading partners. For example, protecting cattle production in developed countries may reduce global emissions if the counterfactual is additional cattle production in Amazonia.

This is not to suggest that existing policies are environmentally beneficial, but rather that this is a complex issue involving important trade-offs, and the current text does not reflect either that complexity or the current state of the literature (Valin et al. 2021; Laborde et al. 2021; Valin, Henderson, and Lankoski 2023). This concern applies not only to the paragraph quoted above, but also to the subsequent paragraphs. These include no scientific references and largely ignore the existence of trade-offs, despite a substantial literature on agricultural GHG mitigation that emphasizes their importance.

Accordingly, the key questions on food security and climate change should not be limited to identifying synergies; they should also evaluate them and address trade-offs, which are real and likely to affect policy recommendations, yet remain insufficiently studied. Similarly, it is important to look beyond the design of systems; it is necessary to study their implementation.

More generally, given HLPE-FSN's stated role on food security and climate change, this limited engagement with the scientific literature published on the topic over the past decade constitutes a serious weakness of the report.

Comments on references

The reference to Owino et al. (2022) should be reconsidered. The article is published in *Frontiers in Climate*, and the *Frontiers* publisher appears on several lists of potentially predatory publishers (e.g., <https://beallist.net/> and <https://www.predatoryjournals.org/news/list-of-all-frontiers-predatory-journals>). Retaining such references may undermine the credibility of the overall work.

Same problem with:

- Lyu et al. 2025 and Sodano 2024 published both published in *Frontiers in Sustainable Food System*
- Hackfort 2021; Suarez & Adibi 2025; Garrido et al. 2025 that are published in particularly problematic MDPI journals.

For more information, you can also refer to Hanson et al. 2024 (https://doi.org/10.1162/qss_a_00327) and Crosseto et al. 2026 (<https://arxiv.org/abs/2601.07563>)

The reference to Allafta and Opp (2024) is missing.

The statement: "This imbalance is likely to increase by 2030, with climate-related hunger greatest in Sub-Saharan Africa, South Asia and Southeast Asia (Baba Ali et al., 2024)" is not adequately supported by the cited reference. Baba Ali et al. (2024) examines environmental quality among G20 countries, with a particular focus on environmental goods and low-carbon technologies. It is therefore not an appropriate reference for this sentence, and probably not for this section more generally. Accordingly, the statement about "climate-related hunger in 2030" requires either a different reference or substantial revision.

References:

Laborde, David, Abdullah Mamun, Will Martin, Valeria Piñeiro, and Rob Vos, "Agricultural subsidies and global greenhouse gas emissions," *Nature Communications*, 12 (2021) (Springer Science and Business Media LLC).

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Valin, Hugo, Thomas Hertel, Benjamin Leon Bodirsky, Tomoko Hasegawa, and Elke Stehfest, "Achieving zero hunger by 2030: A review of quantitative assessments of synergies and trade-offs amongst the UN Sustainable Development Goals," 2021 (United Nations Food Systems Summit).

3) Critical comments on issue 3 Food security and nutrition and the three Rio Conventions (Biodiversity, Desertification, Climate)

Issue 3 addresses the links between food security and nutrition and the three Rio Conventions on climate change, biodiversity and desertification. The choice to consider these conventions jointly is appropriate, as food systems sit at the intersection of these global environmental challenges. However,

the section remains largely descriptive and does not fully exploit the potential of an integrated analytical framework to address health, environmental and food security objectives simultaneously.

The discussion focuses primarily on environmental pressures affecting food systems, emphasizing climate impacts on production, land degradation and biodiversity loss. While these dimensions are essential, the analysis tends to approach them in parallel rather than as deeply interconnected processes. Recent research increasingly highlights that food systems are not only affected by these environmental changes, but are also central drivers of them, with direct consequences for human, animal and environmental health. This bidirectional relationship is not sufficiently articulated.

In particular, the section pays limited attention to the health pathways linking the objectives of the Rio Conventions with food security and nutrition. Beyond impacts on yields and ecosystem services, changes in biodiversity, land use and climate directly influence disease dynamics, exposure to contaminants and food safety risks. These dimensions are only marginally addressed, despite their relevance for nutrition outcomes and population health.

The treatment of biodiversity also remains relatively narrow. The importance of agrobiodiversity for resilience and diet diversity is acknowledged, but more emphasis could be put on the potential of Neglected and Underutilized Species for improving diets and nutrition (NUS) (Hunter et al., 2019), also in the Global North (while typically associated with the Global South). Moreover, the text does not sufficiently explore how broader ecosystems contribute to food safety, disease regulation and long-term system stability. Similarly, desertification is discussed mainly as a constraint on production, with limited consideration of its implications for livelihoods, food environments and vulnerability to health shocks.

As in other sections of the note, the emphasis is placed mainly on identifying synergies across global objectives. While these synergies undoubtedly exist, the absence of a discussion on trade-offs is a weakness. Policies aligned with one convention may generate tensions with others or with short-term food security objectives, particularly in resource-constrained contexts. These potential conflicts are not sufficiently acknowledged or analyzed.

Finally, the section would benefit from a clearer articulation of governance and research priorities. Addressing the links between food security, nutrition and the Rio Conventions requires coordinated, preventive and cross-sectoral approaches, as well as stronger integration between science and policy. Without such an explicit framing, the section risks remaining at a high level of generality.

Overall, while Issue 3 rightly emphasizes the relevance of the Rio Conventions for food security and nutrition, its contribution would be strengthened by a more integrated perspective that explicitly connects environmental change, health risks and food system transformations.

Reference

Hunter, D., Borelli, T., Beltrame, D.M.O. et al. The potential of neglected and underutilized species for improving diets and nutrition. *Planta* 250, 709–729 (2019). <https://doi.org/10.1007/s00425-019-03169-4>

4) Critical comments on issue 4: Geopolitical uncertainty and polycrises: how to predict and prevent impacts on FSN

Focusing on polycrises linked to geopolitical uncertainty makes sense in the current context, but other polycrises situations threatening FSN could also be examined, or, at least, polycrises linked to geopolitical uncertainty could serve as a useful framework for considering other polycrises situations and developing new strategies and policies for FSN.

5) Critical comments on Issue 5: International trade for food security and nutrition

This section corresponds to the fifth issue addressed in the 4th note on critical emerging and enduring issues of the HLPE-FSN, namely the role of international trade in food security and nutrition. The topic is highly relevant, given the growing interdependence of food systems, the increasing frequency of supply shocks, and the multiple objectives—economic, nutritional, environmental and social—that trade policies are expected to serve.

Overall, the treatment of international trade in this section is relatively balanced. The text appropriately begins by emphasizing the positive role of trade in enhancing food availability, stabilizing supplies, and reducing vulnerability to localized production shocks. This framing is important, as it acknowledges that, for many low- and middle-income countries, access to international markets remains a key component of food security, particularly in situations of domestic supply shortfalls.

The section then usefully moves on to discuss the potential negative effects of trade, especially in relation to nutrition outcomes and environmental sustainability. Highlighting these risks helps counter a purely efficiency-based view of trade and recognizes that increased openness does not automatically translate into improved diets or reduced environmental pressures. In that sense, the overall structure of the argument is coherent and reflects the multidimensional nature of food security.

However, the discussion still relies on some recurring narratives that would benefit from further nuance. In particular, the treatment of agricultural subsidies in high-income countries follows a familiar line that emphasizes market distortions and adverse effects on producers in the Global South. While this argument is not incorrect, it appears somewhat dated and incomplete. Such subsidies may indeed distort markets, but they can also increase production in exporting countries and, through trade, contribute to food availability in importing regions. These offsetting effects are not sufficiently explored, and the resulting picture of trade dynamics remains overly simplistic.

A more explicit engagement with these ambiguities would strengthen the analysis. As with the discussion on climate and food security in Issue 2, the central challenge here is not merely to identify whether trade is “good” or “bad” for food security, but to examine the conditions under which its benefits can be maximized while its negative impacts are mitigated. This necessarily involves recognizing trade-offs between affordability, nutritional quality, environmental objectives and domestic policy space.

One notable gap in the section concerns the rationale for regulating trade. While the text appropriately mentions nutritional considerations as a possible justification for regulatory interventions, it does not sufficiently address environmental governance. In particular, countries that seek to undertake an agroecological transition may require policy tools to protect their domestic markets from imports produced under less stringent environmental standards, which can be structurally cheaper and therefore

more competitive. Without some form of border adjustment or compensation mechanism reflecting differences in production standards and costs, such countries face a strong disincentive to move ahead with ambitious environmental reforms unless all trading partners do so simultaneously.

This omission is significant, as it directly relates to the feasibility of transitions toward more sustainable food systems. The ability to regulate trade on environmental grounds is not only a defensive measure but also a potential enabler of systemic change. Addressing this issue would align the trade discussion more closely with the broader emphasis, elsewhere in the report, on agroecological transitions as a pathway toward resilience and sustainability.

Finally, the recognition that agroecological transitions could form part of the solution is a welcome element of the section. However, this insight would benefit from being more clearly linked to the discussion on trade rules and policy space. Without such a link, the transformative potential of agroecology risks remaining largely aspirational.

In sum, Issue 5 provides a solid and relatively balanced overview of the role of international trade in food security and nutrition. Nevertheless, a deeper engagement with the existing tensions and trade-offs—particularly regarding subsidies, environmental regulation and policy autonomy—would improve consistency with the analytical standards implied by the HLPE-FSN’s mandate and bring this section into closer alignment with the more critical discussions developed elsewhere in the note.

Although this section focuses on international trade, it aptly highlights the complementary role of shorter, more local supply chains. However, relocalization of a part of food trade is required for rebalancing and regaining control on food flows and reducing risks to achieve FSN in a context of growing systemic disorders (Lee, Marsden, 2009)—not just “where it is necessary and beneficial” as written in the document.

Finally, in this section, as all along the document, the term ‘resilience’ is mentioned several times. Given the concept’s multiple meanings, it is worth clarifying the definition considered in the document.

References:

Lee, R. and Marsden, T. (2009), The Globalization and Re-localization of Material Flows: Four Phases of Food Regulation. *Journal of Law and Society*, 36: 129-144. <https://doi.org/10.1111/j.1467-6478.2009.00460.x>

6) Critical comments on issue 6: Corporate concentration in food systems

It would be important to examine how public and private standardization processes support corporate concentration in food systems. Participatory guarantee systems (PGS) already offer an opportunity to promote recognition of the quality of small-scale producers by reducing certification costs, whilst helping to improve consumers’ understanding of agriculture and food (Loconto, Hatanaka, 2017). It would be worth exploring how expanding these systems could help to both reduce corporate concentration and empower consumers in favour of FSN.

The contribution of public regulations to corporate concentrations would also require greater analysis, especially food safety regulations which limit SMEs. In this regard, it is worth examining how flexible or differentiated policy measures can — without compromising public health — help to diversify business

models and deconcentrate economic power, as exemplified by the differentiated regulations applicable to industrial slaughterhouses and local slaughterhouses in certain European countries. This ties in with issue 1: transforming food systems. In this regard, more largely, the document contains some repetition of arguments and could be strengthened by summarizing a series of key questions that address several issues.

In this section as in others, short supply chains (generally defined by the number of intermediaries) and local markets (defined by geographical distance) should not be confused – even if they often overlap -, as their contribution to FSN can vary. In any case, their role is not limited to supplementing the supply of global supply chains or markets, or to diversifying businesses; most of them support relational processes that contribute to learning, social influences, self-affirmation and cooperation which are mechanisms demonstrated as conducive to healthier and more sustainable diets (Chiffoleau, Akermann, 2023).

References:

Chiffoleau Y., Akermann G, 2023. How do alternative food networks contribute to changing food behaviours towards more sustainable diets?. In: Kevanny K., Prosperi P., Routledge handbook of sustainable diets, Routledge, pp.409-149, Routledge Environment and Sustainability Handbooks, 9781032004860.

Loconto A., Hatanaka, M., 2018. Participatory Guarantee Systems: Alternative Ways of Defining, Measuring, and Assessing 'Sustainability'. *Sociologia Ruralis*, 58: 412-432.
<https://doi.org/10.1111/soru.12187>

7) Critical comments on issue 7: Digital innovations and AI for healthy, sustainable, and equitable food systems

The role of digitalisation in influencing consumer habits (purchasing, diet, etc.) certainly warrants further investigation, taking into account mechanisms such as information, influence, imitation, individualisation, monitoring of consumption and health status, and so on.

However, it is also important to weigh up the impact of digital tools and AI on FSN against their energy consumption.

8) Critical comments on issue 8: “One Health” as an integrating framework for food security and nutrition

The issue dedicated to the One Health approach addresses an increasingly central framework for understanding the interconnections between food systems, human health, animal health and the environment. Its inclusion in the note is timely and relevant, particularly in light of recurrent health crises, the rise of zoonotic diseases, and growing concerns around antimicrobial resistance and environmental degradation.

However, the treatment of One Health remains largely conceptual and insufficiently operational. While the issue strongly emphasizes the need for integrated approaches and cross-sectoral collaboration, it does not clearly specify how this integration should translate into concrete transformations of food systems or food security policies. The discussion tends to remain at a high level of abstraction, which limits its usefulness for prioritizing research or guiding decision-making.

A key limitation lies in the relatively narrow focus on emerging infectious diseases and crisis prevention. Although these dimensions are essential, the One Health perspective also encompasses chronic health burdens linked to food systems, including non-communicable diseases, long-term exposure to contaminants, and food safety risks. These aspects receive limited attention, despite their direct relevance for nutrition outcomes and population health.

The role of food systems as a connecting nexus between environmental change, animal health and human health is acknowledged, but not fully explored. In particular, the issue does not sufficiently examine how agricultural practices, livestock systems, and food processing and distribution contribute simultaneously to health risks and environmental pressures. As a result, the preventive potential of the One Health framework—especially through upstream interventions in food systems—remains underdeveloped.

In addition, governance challenges are only briefly addressed. Implementing a One Health approach requires breaking down institutional silos, strengthening science–policy interfaces, and ensuring coordination across sectors and scales. The issue recognizes these challenges but stops short of identifying concrete mechanisms or priority areas where such coordination is most urgently needed in relation to food security and nutrition.

Overall, while the One Health issue provides a useful conceptual reminder of the interconnected nature of health, environment and food systems, it remains too general to fully support the HLPE-FSN’s role in informing evidence-based and actionable policy discussions. A more focused analysis of health pathways, preventive strategies and food system leverage points would strengthen its contribution and better align it with the broader challenges outlined in the note.

The document makes no reference to new genomic techniques in breeding, which are already being used in the production of agricultural commodities in some countries, and for which the CFS could encourage further impact and risk assessments under the One Health framework – also in the perspective to promote agency (issue 10).

9) Critical comments on issue 9: Affordability of healthy and nutritious diets to ensure FSN

This issue is highly relevant because it fundamentally questions the socioeconomic causes of nutritional inequality and potential policy responses that could be implemented to fight against the triple burden of malnutrition, i.e., hunger, micro-nutrient deficiencies and overweight. Despite its real interest, the text is a bit confusing because it suggests that different, even opposed, nutritional issues such as hunger and overweight have the same economic determinants: food inflation, price gaps between healthy and unhealthy food, and preexisting income inequality. While for the hunger issue, food price and earning aspects are indeed central, this is not really true for the increasing overweight burden, which seems to mostly depend on more complex, albeit invisible, factors.

The note’s conclusions mostly rely on results from research in health economics that has focused predominantly on price-based and supply-side interventions, under the assumption that changing relative prices between healthier and unhealthier food items would mechanically shift consumption (Dubois et al., 2020). Nonetheless, there is growing evidence of modest or heterogeneous effects of price-based policies, especially among low-income households (e.g., Cawley, Frisvold, Hill, et al., 2020; Cawley, Frisvold, & Jones, 2020; Finkelstein et al., 2010; Fletcher et al., 2010, 2013). Despite of limited

evidence, these approaches continue to dominate both academic research and public policy (Allcott et al., 2019).

Interestingly, non-economic social sciences have increasingly questioned supply-based explanations. Health geography has moved beyond the food desert hypothesis (Walker et al., 2010) toward the concepts of food swamps (Cooksey-Stowers et al., 2017) and food mirages, emphasizing sociocultural and perceptual barriers to healthy eating even in food-abundant settings (Breyer & Voss-Andreae, 2013). Sociological research similarly highlights processes of self-exclusion from healthy or organic food spaces, perceived as socially inappropriate or misaligned with working-class identities (Power, 2003).

Economics, however, has been slow to integrate these insights. A major turning point comes with Allcott et al. (2019), who show that relocating low-income households to healthier food environments reduces the income–obesity gap by only 10%, implying that the vast majority of nutritional inequality is driven by demand-side (unobserved) factors. Yet these factors remain largely unexamined in economics: they are typically absorbed into residuals and loosely labelled as “consumer preferences”.

Behavioral development economics has documented how poverty distorts decision-making through mechanisms such as present bias, limited attention, and cognitive load (Banerjee & Duflo, 2011; Mani et al., 2013). Some evidence suggests that such mechanisms may matter for obesity (Courtemanche et al., 2015; van der Pol, 2011), but this literature is mainly observational and does not infer causal effects. More importantly, symbolic and cultural mechanisms have been almost entirely neglected in economics. A notable exception is Atkin (2016), who shows that during the Indian famine, migrants chose culturally familiar foods even at the cost of higher prices and lower caloric intake. This work demonstrates that nutritionally suboptimal food choices can arise from cultural identity rigidities rather than material scarcity.

In many urban contexts, even in the global South, healthy food is available and affordable, yet socioeconomic gradients in diet and obesity persist. Understanding this gap requires moving future research in economics beyond traditional price-based and supply-side explanations to reveal more relevant policy responses.

In other terms, the text fails to address the span of the challenges in healthy diets affordability, as it misses the opportunity to frame the discussion in the context of the broad food system, including food environments, distribution chains and multi-level policy instruments, and omits the underlying differences between low-income and high-income contexts.

By discussing affordability outside of the food systems framework, the note fails to address the potential trade-offs between affordability and the other dimensions of food security, namely availability and access.

First, affordability cannot be separated from the food environment. Research indicates that eating habits are not merely a result of individual choice but are heavily influenced by the places where people live, especially for vulnerable populations. If healthy food is not physically present in a neighborhood, a phenomenon known as “food deserts”, the cost and time of transport effectively make those foods less affordable.

Second, food environments are shaped by a combination of factors, including industry practices and marketing. This section overlooks the oligopolistic structure of global food systems, namely, the distribution actors (related to section 6 of the note). Corporate concentration allows a few dominant firms to capture margins from small producers and potentially impose higher prices on consumers. Ignoring these power dynamics means ignoring the market distortions that keep healthy foods expensive while ultra-processed options remain cheap.

Moreover, the agri-food industry often lobbies for policies that favor their interests, resulting in a lack of regulation on the marketing of ultra-processed foods and a lack of information promoting healthier alternatives. These practices directly influence the price, availability, and promotion of food items within a specific area. For example, the location of sales points and how products are labeled or promoted can determine whether a consumer perceives a healthy option as a viable economic choice compared to less nutritious alternatives.

The report omits the fundamental difference in how affordability challenges manifest across contexts. In high-income countries (HIC), food insecurity often manifests as a quality–quantity trade-off. Unlike the absolute caloric deficits more common in low-income countries (LIC), individuals in HICs may report being food insecure while still consuming enough—or even too many—calories. This is because food insecurity in these contexts is frequently associated with uncertainty and volatility in food consumption rather than a constant lack of food. As such, affordability is driven by different sources. In low-income countries, the lack of affordability may be associated to supply-side inefficiencies (the approach taken in the note), whereas in high-income countries, the problem is more closely tied to the food environment.

As a final comment, the section is missing a discussion on how policy trade-offs affect affordability. For instance, policies promoting high environmental standards (e.g., organic production) can increase short-term prices, a burden often borne by the poor. Similarly, carbon regulations on transports could impact mobility within the food environment, hindering accessibility, especially for individuals living in food deserts. Furthermore, several key questions requiring further research are put forward, however, some key topics are not discussed in the main text, such as a discussion on food affordability policies, school feeding programs as a way of improving children's diet from most vulnerable households and short supply chain, and promotion of local foods as a key factor in the way towards more resilient food systems.

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10) Critical comments on issue 10: Agency for food security and nutrition

The inclusion of the issue of autonomy is relevant, but in the definition provided by the HLPE, it intersects with the issue of food democracy, conceptualized by Tim Lang (2007) who was particularly interested in FSN issues. The document cannot fail to cite this body of research, as it provided concrete

insights on how the implementation of food democracy, from policy-level measures down to local actions, can improve FSN (see, for instance, Booth and Coveney, 2015).

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General comment on the missing role of food loss and waste:

Surprisingly, the draft only briefly mentions food loss and waste, despite the extensive literature and reports from international organizations (FAO, 2019) describing the role of reducing food loss and waste for food security. Previous HLPE reports have addressed the challenge of reducing food loss and waste in the past (HLPE, 2014), which highlights the topic being an enduring issue for achieving food security.

From a food security perspective, reducing food loss and waste can have various outcomes for important aspects of food security.

- Food availability: Reducing food loss and waste improves food security by making more of the food that is already produced available for people to eat, which can increase supply and availability and therefore help keep prices lower. However, it must be mentioned that price effects, market feedback and rebound effects from reduction policies have been insufficiently explored at this point (Bellemare, 2023; Hegwood et al., 2023; Latka et al., 2022).
- Nutrition: Food loss and waste are a particular concern for highly perishable produce like fruits and vegetables, and animal based products, for which adequate storage conditions require infrastructure and energy (e.g. cold chain).
- Environmental change and ecological crises: Food loss and waste put pressure on resources, such as land, water, energy, plant nutrients and labor, used to produce food that never gets consumed; there are also impacts on biodiversity and climate change to cite some examples of environmental change (e.g. (Read et al., 2022). Food loss and waste therefore, put food systems under even more pressure to achieve environmental sustainability. Conversely, it must be mentioned that food loss and waste can be reinforced through climate change-related stress, e.g. droughts and flooding, and increased pressure from pests.

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46. Global Dairy Platform, United States of America

Surname	Bradley
First name	Beth
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Chief Science Officer
Current institution/organization	Global Dairy Platform
Country	United States of America
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Global Dairy Platform (GDP) welcomes the comprehensive and forward-looking identification of critical, emerging and enduring issues (CEEI). The proposed list reflects the complexity and interconnected nature of food security and nutrition (FSN), and appropriately highlights key systemic drivers, including climate change, affordability of healthy diets, trade, innovation, and governance. GDP particularly appreciates the emphasis on food systems transformation, given that progress toward eliminating hunger and malnutrition remains uneven and insufficient globally. We encourage HLPE-FSN to ensure that the analysis across all CEEI remains balanced, evidence-based, and reflective of the diversity of food systems and production models worldwide. Food systems encompass a wide range of actors, scales, and organizational forms, each of which can contribute to FSN outcomes depending on context. In this regard, it is important to recognize that: • Efficient production systems and well-functioning markets, including international trade, play an essential role in ensuring food availability and affordability. • Innovation and productivity improvements are key to meeting growing global demand while reducing environmental impacts. • Farmer-owned cooperative models and larger-scale

	systems can play a positive role in enabling investment, improving efficiency, strengthening resilience, and supporting smallholder participation in markets. With respect to the inclusion of corporate concentration in food systems, GDP encourages HLPE-FSN to adopt a carefully balanced and analytically neutral framing. Market concentration should not be treated as inherently problematic; its implications for FSN depend on context, governance, and market functioning. A robust assessment would: • Distinguish between different types of actors and ownership structures, including cooperatives. • Consider both potential risks and demonstrated benefits of scale, including efficiencies, innovation capacity, and supply chain resilience. • Avoid generalized assumptions that may not be supported across different sectors and geographies. Ensuring such balance will strengthen the credibility of the analysis and support constructive, evidence-based policy dialogue.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	GDP suggests further consideration of the following cross-cutting issues that are critical to advancing food security and nutrition (FSN): Access to nutrient-rich foods for healthy and sustainable diets Greater emphasis is needed on ensuring access to nutrient-rich foods (NRF), including diverse animal-source foods (ASF), as a central component of healthy and sustainable diets. NRF provide essential macro- and micronutrients—such as high-quality protein, vitamins, and minerals—that are critical for growth, cognitive development, immune function, and overall health. However, access to these foods remains uneven, particularly in low- and middle-income countries (LMICs), where populations most at risk of malnutrition often face the greatest barriers to affordability and availability. This issue is critical because: • Many populations continue to experience micronutrient deficiencies and poor diet quality, even where caloric intake may be sufficient.

- Nutrient gaps are most pronounced among vulnerable groups, including children and women.
- Evidence highlights that improving access to nutrient-rich foods is essential to addressing the multiple burdens of malnutrition

There is a need to ensure that NRF are:

- Produced sustainably.
- Accessible and affordable, particularly for vulnerable populations.
- Integrated into food systems policies and dietary strategies.

Role of inclusive and efficient value chains in supporting FSN and livelihoods

The development of robust, inclusive, and efficient value chains is a critical enabler of FSN.

Well-functioning value chains—across a range of commodities and production systems—can:

- Improve availability and affordability of nutritious foods.
- Support stable incomes and livelihoods, particularly for smallholder producers.
- Drive broader socio-economic development, including rural employment and gender inclusion

This issue is critical because:

- Weak or fragmented value chains limit the ability of food systems to deliver nutritious foods efficiently.
- Strengthening value chains can generate multiplier effects, improving both economic access to food and overall food system resilience

Evidence from sectors such as dairy demonstrates that investments in value chain development can contribute to income growth, poverty reduction, and improved food security outcomes.

Enabling policy environments for innovation and continuous improvement

Innovation is essential to achieving FSN objectives, particularly in the context of climate change, population growth, and evolving dietary needs.

Policies should support continuous improvement across food systems, including advances in:

- Productivity and resource efficiency.
- Environmental sustainability.

- Food safety, quality, and nutrition

This issue is critical because:

- Without innovation, food systems will struggle to meet increasing demand sustainably.
- Technological and scientific advances are key to reducing environmental impacts while improving nutritional outcomes.

GDP encourages that policy frameworks:

- Remain science-based and enabling of innovation.
- Avoid overly restrictive approaches that may unintentionally limit progress, investment, or adoption of improved practices and technologies.
- Support a diversity of approaches, recognizing that innovation can take multiple forms across different contexts

A balanced approach is needed to ensure that food systems can evolve to meet future FSN challenges effectively.

Role of trade and open markets in ensuring access to nutritious foods

International trade plays a critical role in enabling access to nutrient-rich foods across regions, particularly where local production is constrained.

Trade supports:

- Efficient allocation of production, allowing food to be produced where it is most suitable.
- Stability of supply, especially during periods of disruption, including conflict and climate shocks.
- Access to diverse and nutritious foods, including for populations in import-dependent

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

GDP agrees that the identified issues are highly interrelated and would benefit from strengthened articulation of linkages, particularly between:

- Trade, climate change, and nutrition outcomes: including how trade can support access to diverse and nutrient-rich foods, particularly in regions facing climate-related production constraints or limited natural resources.
- Innovation, productivity, and sustainability: recognizing that these elements are closely interconnected. Innovation can drive productivity improvements, which in turn can enhance resource efficiency and reduce environmental impacts per unit of output. More productive and efficient systems can contribute to increased and more stable supply, supporting affordability and access to nutritious foods. In this way, innovation plays a critical role in enabling food systems to simultaneously deliver on sustainability, economic viability, and improved FSN outcomes.
- Market structures, governance, and regional diversity: recognizing that global food system efficiency depends on acknowledging regional comparative advantages and diverse production realities. Policies that support well-functioning markets and enable food to be produced where it is most efficient and sustainable while ensuring appropriate governance frameworks can help balance trade-offs across multiple objectives, including climate adaptation, resilience, and affordability. For example, in the context of climate change and increasing production variability, trade and market integration can help stabilize supply and ensure that nutrient-rich foods reach populations most in need, thereby linking environmental, economic, and nutrition outcomes.

Strengthening these linkages would help ensure that FSN, particularly access to affordable, nutritious diets, remains central in the analysis, while supporting a more integrated understanding of how different policy domains interact within food systems.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Climate change and FSN: The draft provides a strong overview of climate-related risks to food systems. GDP recommends consideration of:

- o The role of innovation and technology (e.g., improvements in feed, genetics, and resource management) in supporting adaptation and reducing environmental impacts.
- o The importance of practical, scalable solutions that enable food systems to respond to climate challenges while continuing to deliver safe, nutritious, and affordable foods.

International trade for FSN: GDP supports the inclusion of

	international trade as a key issue. - o Trade contributes to balancing supply and demand, enhancing food availability, and supporting dietary diversity. - o Predictable and rules-based trade systems are important for food system resilience, particularly in times of disruption. - o Trade enables production in regions where it is most efficient, contributing to both sustainability and affordability, and supporting access to nutrient-rich foods globally. Corporate concentration in food systems: GDP encourages a carefully balanced, evidence-based, and analytically neutral approach to this issue. - o The implications of market concentration for FSN are context-specific and depend on governance frameworks, market conditions, and sectoral characteristics. - o Market structure alone is not a sufficient indicator of FSN outcomes; analysis should focus on measurable impacts on availability, affordability, nutrition, livelihoods, and sustainability GDP emphasizes that: • Efficient systems, economies of scale, and coordinated value chains can enable investment, innovation, and resilience. • In sectors such as dairy, farmer-owned cooperative models demonstrate that scale can coexist with strong producer participation, value sharing, and local economic benefits. • Larger or more integrated systems can support stable supply, improved infrastructure, and access to markets, including for smallholder producers. GDP therefore recommends that HLPE-FSN avoid generalized or normative assumptions that do not reflect the diversity and complexity of food systems across regions. A balanced and analytically grounded approach will support more constructive policy dialogue and better reflect the realities of global food systems.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	GDP suggests further elaboration of: • Diet quality and nutrient adequacy, including access to diverse, nutrient-rich foods. • Affordability of healthy diets, supported by efficient production and trade. • Livelihoods and economic sustainability. • Food system resilience, including the role of stable value chains and global market integration.

Is there any missing reference to key literature and data?	• FAO. 2018. Livestock and Agroecology: How they can support the transition towards sustainable food and agriculture. Rome, Italy, FAO. https://www.fao.org/publications/card/en/c/l8926EN/. • Chungchunlam, S. M. S., et al. (2021). Using Linear Programming to Determine the Role of Plant- and Animal-Sourced Foods in Least-Cost, Nutritionally Adequate Diets for Adults. <i>Curr Dev Nutr</i> 5(11): nzab132. https://www.sciencedirect.com/science/article/pii/S2475299122106037 • FAO. 2023. Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes – An evidence and policy overview on the state of knowledge and gaps. Rome, FAO. https://doi.org/10.4060/cc3912en. • Chungchunlam, S. M. S. and P. J. Moughan (2024). Diet affordability: a key dimension in the assessment of sustainable food systems and healthy diets. <i>Front Nutr</i> 11: 1399019. https://pubmed.ncbi.nlm.nih.gov/39188980/ • Felis, A., et al. (2025). Dairy's Development and Socio-Economic Transformation: A Cross-Country Analysis. <i>World</i> 6(3): 105. https://www.mdpi.com/2673-4060/6/3/105
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	The guiding questions are appropriate and relevant. GDP suggests consideration of additional questions such as: • How can trade and open markets be leveraged to support FSN outcomes? • What policy approaches best support innovation, productivity, and sustainability simultaneously? • How can diverse production systems and organizational models be supported to maximize their contribution to FSN?

47. Federal Ministry of Agriculture and Food, Germany

Surname	Chatelain
First name	Carla
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Administrator
Current institution/organization	Bundesministerium für Landwirtschaft, Ernährung und Heimat // Federal Ministry of Agriculture and Food, Germany
Country	Germany
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	- The identified drivers are overall comprehensive. However, the role of food safety as a prerequisite for food utilization could be more explicitly reflected, as unsafe food cannot contribute to FSN outcomes. - On p. 33, in the second paragraph: “Food inflation was influenced by the war between Russia and Ukraine as well as by restrictions on food exports. The resulting uncertainties have intensified speculative activity in the food sector and contributed to a further rise in prices (Algieri, Kornher, and von Braun, 2025).” The cited study is interpreted somewhat “one-sidedly.” The study focuses primarily on central banks’ monetary policy and also shows that speculative behavior contributed to the rise in food prices. In our view, this can remain as is, but it should under no circumstances be emphasized further. The main cause of the sharp rise in food prices in 2022 and 2023, was Russia’s war of aggression against Ukraine and the resulting increase in energy costs, as well as the shortage of agricultural products from Ukraine, which were absent from the global market due to the disruption of export routes via the Black Sea. - With regard to One Health—particularly in Chapter 8 on the “integrated framework for food security and nutrition”—we would like to positively highlight that the implementation of One Health in the context of nutrition and food security has been addressed in a very comprehensive manner. This is fully in line with the recommendations of the OHHLEP and its OHJPA, which, in addition to the traditional One Health pathways (infectious agents, zoonoses), also gives equal consideration to other relevant areas that must be

	understood in an integrated manner. Both the contextual connections and the challenges, potential solutions, and their obstacles are described. The holistic application of this approach, as illustrated by the example of nutrition and food safety, is very well addressed. On this regard: Pest management (page 30) might be - depending on where and how - a matter of conflict of interests with the environmental aspect of One Health.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Indirect effects such as the health and economic burden of foodborne diseases as well as food losses due to insufficient safety-related infrastructure (e.g. cold chains) could be further considered, as they affect actual affordability. In Chapter 8, animal health is an important part of One Health and it is not really part of this discussion.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	An additional question could be considered: How can food safety considerations be integrated into policies aimed at improving affordability, ensuring that increased access does not compromise public health? The Key Questions in chapter 8 are relevant, but not easy to answer and certainly require a meaningful dialogue—we can also expect differing underlying conditions between regions and between LMICs and HICs.

48. Centre de Recherche Agroécologique (CRAE), Democratic Republic of the Congo

Surname	CIZUNGU MUSHOSHERE
First name	LEON
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Actuellement dans toute nos zones d'intervention, on remarque les cas de malnutrition aigü severe dû aux problèmes de conflits armés dans les zones et les niveau de la catastrophe naturelle qui montent et débordement des lit de certaines riviére et lacs, le champs sont et les produits sont emporter par des eaux , un autre cas est celui lié aussi à l'accès à la Terre et à la dégradation du sol dans notre zone ici.
Current institution/organization	CENTRE DE RECHERCHE AGRO-ECOLOGIQUE "CRAE " asbl
Country	Democratic Republic of the Congo

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	oui, oui, nous le partageons avec l'ensemble des communautés humanitaire, et autres acteurs de développement et les décideurs (Gouvernement); a travers des alertes, les rapports d'activités, et les recherches ou évaluations des besoins, séances de plaidoyer et la communication radio.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Non ; juste renforcer l'aide humanitaire et accompagner les structures ou les acteurs qui interviennent et qui essayer de sauver les vies dans le secteur de la nutrition...
All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the l	Je crois à la combinaison de certains problèmes auxquels on peut trouver solution directement et qui ont même mission et objectif dans le but d'avoir un œil sur les besoins et problème et gérer les conséquences y relatives, les sujets dépendront également des régions et l'ampleur de problèmes identifier par acteur et par zone.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Oui, je suis d'avis par exemple : 2. Atteindre la sécurité alimentaire et la nutrition en période de crise climatique, 8« One Health » comme cadre intégrateur pour la sécurité alimentaire et la nutrition ? 9. Accessibilité des régimes sains et nutritifs pour garantir la sécurité alimentaire et la nutrition ; 3. Sécurité alimentaire et nutrition, ainsi que les trois conventions de Rio : biodiversité, désertification et climat.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Oui, a l'instard de : Incertitude géopolitique et polycrises : comment prédire et prévenir les impacts sur la sécurité alimentaire et la nutrition ;
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	OUI C'EST DEJA BONNE ET COMPELTE ? IL SIFFIS UN MECANISME DE SUIVI ET SON APPUI

49. Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN), South Africa

Surname	Mwamakamba
First name	Sithembile
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Programmes Director
Current institution/organization	Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN)
Country	South Africa
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	FANRPAN welcomes the comprehensive scope of the proposed Critical, Emerging and Enduring Issues (CEEI), which reflect the increasing complexity and interconnectedness of global food systems. The issues identified are appropriate for addressing some of the most urgent concerns surrounding Food Security and Nutrition (FSN), such as climate change, geopolitical tensions, and economic strains. It must be acknowledged, however, that their significance differs greatly depending on the region under consideration. For example, in the case of sub-Saharan Africa, issues like climate resilience, access to healthy diets at affordable prices, institutional limitations, and exposure to external shocks need to receive greater prominence. It is hoped that the proposed draft can incorporate more specificity and regionalization to make it relevant for different food systems.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Yes. FANRPAN proposes to enhance or add the following areas:

1. Governance of food systems and policy coherence: Ineffective governance systems pose structural barriers to development in many developing countries, especially in Africa. Fragmented policy frameworks for agriculture, health, trade, and environment affect successful implementation and coordination. There is evidence that governance is an important factor determining FSN outcomes from FAO and IFPRI.
2. Financing of food systems transformation: The lack of adequate and inclusive financing poses obstacles to food system transformation. Small-scale farmers are underserved in financing, and there are financing gaps for climate change initiatives. The World Bank and IFAD argue that financing gaps hamper agricultural production and resilience.
3. Inequality and inclusivity: Structural inequalities concerning gender, youth, and rural areas continue to influence FSN outcomes. Young people and women confront challenges to accessing land, finance, and markets, leading to low agricultural productivity and food security.
4. Data systems and information gaps: Data is critical for informing policy decisions. Early warning systems for food insecurity, nutrition, and climate risks have been inadequate in many African nations.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

FANRPAN acknowledges that the issues are highly interconnected but notes that the current framing presents them too discretely. A stronger systems-based approach is needed to explicitly map interdependencies, feedback loops, and trade-offs.

Important linkages, which need to be strengthened, are those between:

- Climate change and affordability of nutritious diets
- Trade systems and geopolitical instability
- Corporate concentration and agency
- Digitalization and inequality

Explicitly highlighting these relationships would improve the analytical depth and policy relevance of the report. Some issues could also be clustered under broader thematic areas such as governance, sustainability, and equity.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The identified drivers and trends are generally appropriate; however, they require stronger regional contextualization. From an African perspective, key drivers include: • Rapid population growth and urbanization • High dependence on food imports • Exposure to climate variability and extreme events • Dominance of informal food systems For example, climate change impacts are more severe in rain-fed agricultural systems common in Africa, directly affecting food availability and livelihoods. Similarly, global trade disruptions disproportionately affect import-dependent countries. The report would benefit from distinguishing between global drivers and region-specific dynamics to better capture their impact on FSN outcomes.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Yes. A more explicit linkage between food systems transformation and nutrition outcomes is essential, particularly in low-income and vulnerable contexts. The draft should strengthen its focus on: • Diet quality and affordability, not just food availability • Malnutrition in all its forms, including undernutrition, micronutrient deficiencies, and obesity • Livelihoods and income stability as key determinants of food access • Nutrition-sensitive food systems approaches
Is there any missing reference to key literature and data?	Yes. The draft could benefit from incorporating: • FAO, IFAD, UNICEF, WFP and WHO reports such as The State of Food Security and Nutrition in the World (SOFI) • World Bank data on agriculture, poverty, and climate impacts • IFPRI research on food systems and policy • IPCC reports on climate change and agriculture • Regional data from the African Union and related institutions Including more region-specific and recent data would strengthen the evidence base and relevance of the analysis.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

The proposed questions are relevant but could be strengthened to enhance policy applicability. These additions would improve the practical relevance of the report, especially for developing regions.

FANRPAN suggests adding:

1. How can regional institutions strengthen coordination for food systems transformation?
2. What policy instruments can balance global trade integration with local resilience?
3. How can digital innovations be made inclusive for smallholder farmers?
4. What governance mechanisms ensure accountability in food systems transformation?
5. How can financing mechanisms be scaled to support smallholders and climate adaptation?

50. Ministry of Foreign Affairs, Colombia

Surname	LAURA
First name	QUINTERO
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	First Secretary, Permanent Mission Colombia to FAO
Current institution/organization	Ministry of Foreign Affairs
Country	Colombia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Colombia considers that the ten issues selected capture, in broad terms, the principal forces shaping food security and nutrition in the post-2030 context. The explicit incorporation of agency (issue 10), corporate concentration (issue 6), and the Rio Conventions framing (issue 3) is particularly welcome and consistent with priorities we have championed in multilateral fora. From our perspective, the governance of tenure over land, water, fisheries and forests has cross-cutting relevance to at least six of the ten issues (1, 2, 3, 5, 6 and 10). The VGGT are the CFS instrument with the greatest operational capacity to articulate human rights, environmental sustainability and FSN, and their under-treatment in the draft should be addressed.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Responsible governance of tenure as a stand-alone eleventh issue, or as a substantially reinforced cross-cutting axis. The justification for elevating tenure governance to a dedicated issue rests on four elements. First, twenty years have elapsed since the original International Conference on Agrarian Reform and Rural Development (ICARRD, Porto Alegre, 2006), and the Cartagena Declaration (ICARRD+20, 2026) renews the global political mandate on agrarian reform, territorial rights and rural development. Second, accumulated evidence confirms that territories governed by Indigenous Peoples and local communities with secure customary rights achieve biodiversity and food system outcomes comparable to, or better than, formally designated protected areas. Third, tenure insecurity remains the primary structural driver of vulnerability for women in rural areas, peasants, small-scale fishers and Indigenous Peoples. Fourth, the VGGT require renewed operationalization more than a decade after their adoption, particularly in connection with trade, investment, climate finance and agroecological transition policies.

b) Family, peasant, Indigenous and community-based farming as a structural pillar of food systems transformation. The Note documents that family farms represent over 90 percent of the world's farms and produce approximately 80 percent of global food in value terms, but does not develop the policy implications of this finding. As the UN Decade of Family Farming (UNDDFF 2019–2028) is about to conclude, family farming deserves substantive treatment rather than illustrative mention.

c) Agroecological transition as a structuring public policy framework. The draft references agroecology dispersedly, but does not elevate it to the level of an articulating framework, despite the existence of relevant FAO guidelines and reports , and growing national policy experience.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Colombia suggests the following analytical linkages be strengthened in the final version:
 Issue 3 and Issue 6 should be more explicitly connected: the financialization of land and natural resources, and the role of institutional investors in land acquisitions, directly undermines the responsible governance of tenure and the coherent implementation of the Rio Conventions. Issue 5 and Issue 6 should also be more tightly articulated: bilateral and regional trade and investment agreements reinforce power asymmetries that constrain domestic policy space for food systems regulation, including public food procurement from family farming. Issue 2 and Issue 10 merit explicit connection: tenure insecurity erodes the agency of communities to pursue autonomous climate adaptation, making agency and tenure two sides of the same determinant. Finally, Issue 3 and Issue 10 should be linked through the principle of Free, Prior and Informed Consent (FPIC) and community-led monitoring mechanisms, which operationalize collective agency within the governance of natural resources.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Issue 1. Advancing the post-2030 Development Agenda through food systems transformation

The list of "key actions" would benefit from the explicit inclusion of the responsible governance of tenure as a precondition for equitable transformation. In its current form, tenure is absent from the key actions of issue 1, which is a significant omission given the cross-cutting role the draft attributes to tenure in issue 3.

The Note could also engage with the UNFSS+4 process and the National Pathways submitted by member states situating them as inputs to the post-2030 development agenda.

Issue 2. Achieving FSN in climate crises

The section correctly highlights agroecology and other holistic approaches. Colombia recommends anchoring this explicitly in the abovementioned reports.

Articulation with the COP30 commitments (Belém, 2025) would also strengthen the policy relevance of the section. Also, the section discusses the need to redesign production systems for adaptation, but does not recognize that tenure security is an empirically documented precondition for long-term investment in sustainable practices. This connection should be made explicit with direct reference to the VGGT.

Issue 3. FSN and the three Rio Conventions

Colombia firmly supports the positioning of the VGGT as the central analytical lens, and the proposal to integrate FPIC as a mandatory safeguard in climate and biodiversity finance mechanisms (Green Climate Fund, Global Environment Facility). This framing should be reinforced through explicit reference to ILO Convention 169, UNDRIP and Target 22 of the Kunming-Montreal Global Biodiversity Framework. Together, this instruments provide converging normative anchors for rights-based tenure governance.

The Final Declaration of the ICARRD+20 Conference (Cartagena, 2026), whose process was led by Colombia with FAO support, renews and updates the Porto Alegre (2006) commitments on agrarian reform, territorial rights and tenure governance. It constitutes the principal intergovernmental political instrument for follow-up to ICARRD and should figure in any HLPE-FSN report addressing tenure and food systems.

An additional guiding question is proposed: "How can national processes of agrarian reform and land restitution be articulated with Nationally Determined Contributions, National Adaptation Plans and National Biodiversity Strategies and Action Plans to generate co-benefits for FSN, mitigation and conservation?"

	Issue 5. International trade for FSN The analysis would benefit from explicit engagement with the principle of food sovereignty, as progressively recognized in CFS deliberations and in resolutions of the UN Human Rights Council. Large-scale land acquisitions linked to agricultural investment and global value chains represent a critical intersection of trade and tenure that deserves direct treatment. Part V of the VGGT on responsible investments provides an operational framework. The section should also address the implications of bilateral and regional trade and investment agreements for domestic food policy space, particularly regarding public food procurement from family farming, an instrument Colombia has developed through Law 2046 of 2020. Issue 6. Corporate concentration in food systems Colombia recommends explicit reference to the financialization of land and natural resources as a specific dimension of corporate concentration, with direct implications for the responsible governance of tenure and for community land rights. The incorporation of the UN Guiding Principles on Business and Human Rights as a normative anchor for recommendations on regulatory and policy frameworks and safeguards against undue corporate influence is also suggested. Suggested question: "How can states strengthen mandatory human rights and environmental due diligence mechanisms in global agrifood value chains to protect smallholder producers, small-scale fishers and rural workers?" Issue 10. Agency for FSN The link between agency and
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	answered in 11
Is there any missing reference to key literature and data?	ICCARD+20 Conference and declaration
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	answered in 11

51. Bindi Borg

Surname	Borg
First name	Bindi
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Researcher, practitioner and consultant on infant and young child feeding
Current institution/organization	Infant Feeding in Emergencies Core Group member
Country	France
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	No. The HLPE have excluded infants and young children from this V0 Draft.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Infants and young children have special nutrition needs that are not covered at all in the V0 Draft. I am talking about breastfeeding which is the only biologically normal food for infants aged 0-6 months, the predominant food for infants aged 6-12 months, an essential food for children 12-24 months, and a healthy and important food for older children. By not taking breastfeeding and breastmilk production into account, the HLPE have deemed the food security of infants aged 0-6 months unworthy of attention, and the health and nutrition of children up to 2 years and beyond as unimportant.
All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I	Breastfeeding is an issue that is cross-cutting across the 10 issues.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Infants and young children are excluded therefore none of the ten CEEI are fully captured.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The FSN of infants and young children cannot be excluded. It is the foundation for lifelong FSN.

Is there any missing reference to key literature and data?	ALL the key literature and data that demonstrate that infant and young child feeding is the foundation of health and nutrition is missing.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	Definitely not. The exclusion of infants and young children is inexcusable. The FSN of infants and young children, namely, breastfeeding and breastmilk production needs to be added.

52. Smart Lives Initiative, Nigeria

Surname	Reginald
First name	John
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Executive Director
Current institution/organization	Smart Lives Initiative
Country	Nigeria
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Climate Change and Conflict, especially in Africa

53. Land and Water Division, Food and Agriculture Organization of the United Nations (FAO)

Surname	Dubler
First name	Nathalie
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Land and Water Officer
Current institution/organization	Land and Water Division (FAO)
Country	Italy

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?

The 4th Note on Critical, Emerging and Enduring Issues provides a clear and well-structured selection of issues that are highly relevant to the transformation of sustainable agrifood systems. However, given the central role of water in food security and nutrition, and its influence across climate resilience, livelihoods, ecosystems and wellbeing, stronger and more explicit attention to water resources management and governance would be encouraged.

While water-related dimensions are referenced across several CEEIs, their cross-cutting and foundational nature suggests that water governance and/or integrated natural resource management could benefit from a dedicated treatment as a distinct CEEI. This would help ensure that structural constraints related to access, allocation, institutions and decision-making over water are adequately addressed, rather than remaining implicit across multiple issues.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

One critical issue that is currently addressed only indirectly but deserves more explicit and prominent attention, ideally as a stand-alone issue, is the management and governance of natural resources—particularly water tenure—for food security and nutrition.

Globally, water security is under increasing threat. Climate change, unsustainable development, pollution, land use changes, and demographic shifts are intensifying competition over freshwater. Around the world, about 733 million people live in highly water scarce areas. Vulnerable groups such as smallholder farmers, Indigenous Peoples, pastoralists, fisherfolk, as well as ecosystems, are disproportionately affected.

Water tenure is essential for food security. It determines who has reliable access to water for food production, including agriculture, livestock, and fisheries. Agriculture accounts for 72% of global water withdrawals. As the global population approaches 10 billion by 2050, food production must increase significantly. Worldwide, small family farmers produce 35 % of the world’s food. Secure water tenure, including the recognition and protection of customary arrangements, is essential for smallholder farmers, fisherfolk, and marginalized communities, including women, to access the water they need to grow food and sustain their livelihoods.

Looking ahead to 2050, global population is projected to approach 10 billion, requiring agrifood production to increase by around 50 percent compared to 2012 levels, at a time when per capita availability of both cropland and freshwater continues to decline and around 2.4 billion

	people live in water stressed countries. This situation is exacerbated by weak and inequitable water allocation systems, which fail to take into account all water users and uses, are not based on sound information on water supply and demand and are not implemented in practice. Despite progress, a significant policy gap persists water and food are still too often addressed in isolation. This “water blindness” undermines the integration urgently needed. In the Water Action Agenda launched at the UN 2023 Water Conference, only 13 percent of commitments include agriculture. Similarly, FAO analysis of 116 national food security pathways submitted for the 2021 UN Food Systems Summit found that two thirds did not meaningfully address water— including in countries facing severe water stress or scarcity. This gap is mirrored across national and international policies, where water remains poorly integrated into NDCs, NAPs, climate strategies, and national energy visions. Literature: FAO. 2025. The State of the World’s Land and Water Resources for Food and Agriculture 2025 – The potential to produce more and better. Rome.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	The Note presents the interlinkages and trade-offs among CEEIs clearly and convincingly. Nevertheless, there may be scope to merge or cluster selected issues to strengthen analytical coherence and coverage. In particular, CEEI 5 and CEEI 6 could be considered for consolidation under a broader issue on water and natural resource governance, which would make the set of CEEI would be strengthened and more comprehensive, encompassing a strong link to a food systems stage before production, whereas the other CEEIs are mostly focusing on post-harvest outcomes. Water resources management and governance directly impact healthy diets, climate resilience, regional stability, as well as ‘one health’ outcomes. Due to its cross-cutting nature, water management provides a great opportunity to showcase practical implementation and policy implications of cross-sectorial and integrated management approaches, such as through Integrated Water Resources Management and the Water-Energy-Food-Environment Nexus.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	CEEI 2 on the climate crisis mentions natural resources management as key driver to improve agricultural production systems. However, this area could be further developed and strengthened, since impacts of the climate crisis are most dominantly noticed through impacts on the water cycle; through floods, droughts, rising sea levels, shrinking of ice sheets that sustain irrigation. Climate change is exacerbating both water scarcity and water-related hazards, as rising temperatures disrupt precipitation patterns and the entire water cycle. In addition, CEEI 2 and CEEI 3 would benefit from a stronger mentioning of natural resources management, including issues on land degradation. As FAO reports show, over 60% of human-induced land degradation are happening on agricultural land. This shows a clear need to integrate land and soil restoration into agrarian reform policies. Therefore, FAO strongly collaborates with the UNCCD on providing support to the implementation of UNCCD COP16 Decision 19 on avoiding, reducing and reversing land and soil degradation of agricultural lands. Reflecting the importance of land restoration under CEEI 2 and 3 would be aligned with global efforts on this issue and provide a strong evidence for the need of integrated and holistic policy making.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	CFS has a strategic advantage to support policy design and implementation at national level for food security. The operationalization of the VGGT, for example, are mentioned across the document, which is very welcomed. Further strengthening the reference on water tenure, as a complement to land, forests and fisheries tenure, might be beneficial for potential build up to the VGGT implementation.

Is there any missing reference to key literature and data?

It is recommended to reference the State of the World's Land and Water Resources for Food and Agriculture (SOLAW 2025), which provides an up-to-date, integrated assessment of land and water challenges and their implications for sustainable agrifood systems.

Literature:

FAO. 2025. The State of the World's Land and Water Resources for Food and Agriculture 2025 – The potential to produce more and better. Rome.
FAO, 2016, Exploring the concept of water tenure <http://www.fao.org/3/i5435e/i5435e.pdf>, FAO, 2024,
FAO. 2020. Unpacking water tenure for improved food security and sustainable development. Land and Water Discussion Papers. Rome. <https://doi.org/10.4060/cb1230en> and FAO. 2024. Promoting water tenure for food security, climate resilience and equity – Workshop report. Rome, <https://doi.org/10.4060/cd0222en>;
Hodgson, S., Gillet, V., Espinosa Flor, S., Ramirez Fionda, S., Kiersch, B., Vallée, D., eds. 2024. Water tenure perspectives – Proceedings of the Water Tenure Mondays webinar series. Rome, FAO. <https://doi.org/10.4060/cd2941en>
Hodgson, S., Rothe, A.-K., Espinosa Flor, S., Troell, J. & Kiersch, B. 2024. Water tenure assessment. Rome, FAO. <https://doi.org/10.4060/cd1853en>

54. Right to Food Team, Food and Agriculture Organization of the United Nations (FAO)

Surname	Zdravka
First name	Dimitrova
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Agroecology Food Systems Specialist
Current institution/organization	Right to Food Team (FAO)
Country	Italy
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Overall, the ten CEEI identified are highly relevant. However, the draft would be strengthened by treating the right to adequate food not as an additional thematic issue, but as a cross-cutting analytical and normative framework across all CEEI. This would help connect agrifood systems transformation with accountability, participation, non-discrimination, policy coherence and the obligations of States under international human rights law.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	We suggest considering “Accountability for the right to adequate food in food systems” as a cross-cutting or standalone issue. It is critical because many of the drivers of food insecurity and malnutrition are not merely technical failures, but failures of governance, accountability and rights protection. This includes weak access to justice, limited remedies for affected communities, insufficient monitoring of State obligations, lack of transparency in public-private arrangements, and inadequate mechanisms to address violations affecting marginalized group. Governance capacity and accountability: Fragmented governance and lack of coordination undermine agrifood systems outcomes. Strengthening public institutions is essential to implement policies, regulate markets, and ensure equitable access to adequate food.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Overall, the analysis would benefit from the articulation of cross-cutting drivers, including inequality, power asymmetries, and governance capacity; and a clearer integration of food security dimensions – availability, access utilization, stability, sustainability, and agency.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	When addressing Advancing the post-2030 Development Agenda through food systems transformation, we strongly recommend systematically integrating human rights—and the right to adequate food in particular—throughout the narrative. Food systems sit at the intersection of human health, livelihoods, equity, climate resilience and ecosystem sustainability; human rights therefore cut across all dimensions of analysis. This includes, inter alia, the right to adequate food; women’s rights (equality, equal pay for equal work, economic participation); labour rights (decent work, freedom of association); children’s rights (freedom from child labour, nutrition, health and education); the rights to health, education, land and water; and the right to a clean, healthy and sustainable environment. Integrating this perspective would strengthen the analytical coherence of the note and align it more closely with internationally agreed normative frameworks. Similarly, when discussing fragmented governance and siloed policy approaches, it is important to highlight that fragmentation is not merely an institutional or technical

shortcoming. It often reflects competing policy objectives and entrenched sectoral interests, which continue to subordinate nutrition, equity, human rights and environmental sustainability to priorities such as productivity and economic growth. Making this explicit would sharpen the political economy analysis underpinning the CEEI.

In the key actions proposed for this section, we suggest explicitly referencing to the right to food —as established in Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR, 1966) and further clarified in General Comment No. 12 (1999)—to underline that the right to adequate food is a legally binding human right. In addition, we recommend adding a key action focused on ensuring that interventions align with international human rights law through the application of a human rights-based approach, including the empowerment of rights holders and the strengthening of duty bearers’ capacities, standards, accountability and knowledge.

Regarding identified analytical gaps, further emphasis could be placed on the need for more integrative, forward-looking and rights-based analysis to support policy coherence and anticipatory governance across agrifood systems.

Finally, when referring to the mandate of the Committee on World Food Security (CFS), we suggest underlining its explicit connection to human rights, given CFS’s role in supporting the progressive realization of the right to adequate food. The closing formulation could highlight that CFS action is “clearly aligned with the international human rights framework for the progressive realization of the right to adequate food, leaving no one behind.”

Regarding important gaps in the analysis, please consider highlighting for the need of more integrative, forward looking and rights-based analysis to support policy coherence and anticipatory governance.

In the last paragraph, when referring to the CFS mandate, consider underlining the connection with human rights given the CFS’ role to support achievement of the progressive realization of the right to adequate food. Potentially highlight at the end of the sentence “...clearly aligned with the international human rights framework for the

	progressive realization of the right to adequate food leaving no one behind.”
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	We recommend that the CEEI note more systematically integrate the right to adequate food as a normative, analytical and operational framework across the ten issues, strengthening the links between food security and nutrition outcomes, human rights obligations, accountability, prevention, and the mandate of CFS to support the progressive realization of the right to adequate food for all.

55. Right to Food Team, Food and Agriculture Organization of the United Nations (FAO)

Surname	Hubert-Chartier
First name	Marie-Lara
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Right to Food Specialist
Current institution/organization	FAO Right to Food Team
Country	Italy

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Part 1/2

Under Section 6 on corporate concentration in food systems

Corporate concentration in agrifood systems has systemic implications for food security and nutrition. While the drivers and trends identified are relevant, the analysis could be strengthened by more explicitly articulating how these dynamics affect the realization of the right to adequate food across its core elements, and by grounding the analysis in a human rights-based approach.

Corporate concentration affects food availability through the concentration of control over natural resources and productive inputs, including land, water, seeds, fertilizers, and technologies. This can limit access to productive resources for small-scale producers, undermine local production systems, and reduce the diversity of food supply. Increasing dependency on corporate-controlled and proprietary technologies can further constrain producers' autonomy and resilience.

Corporate concentration also has significant implications for food adequacy, particularly in relation to nutrition, food safety and cultural acceptability. The expansion and aggressive marketing of ultra-processed and nutrient-poor foods, alongside the homogenization of food environments, contributes to malnutrition in all its forms and to the erosion of traditional diets and food cultures.

It affects economic and physical accessibility of food through the concentration of market power alongside value chains, including in processing, storage, transport and retail. These dynamics can lead to unequal bargaining power, contractual dependency, and price-setting practices that undermine fair and well-functioning markets, with direct implications for the affordability of food and for the livelihoods of those working in agrifood systems.

Finally, it affects the sustainability of agrifood systems. Highly concentrated and vertically integrated models tend to promote input-intensive production systems that degrade ecosystems, reduce biodiversity, and undermine the long-term resilience of agrifood systems, with implications for present and future generations.

These dynamics highlight the central role of States'

obligations under the right to food. The obligation to respect requires that public policies – including in trade, investment and subsidies - do not reinforce harmful concentration dynamics. The obligation to protect requires effective regulation of corporate actors, including large-scale landholders and other actors exercising significant control over land and natural resources, through competition frameworks, safeguards against abuse of market power, and measures to prevent regulatory capture and conflicts of interest. The obligation to fulfil requires proactive support to diversified, inclusive and territorially grounded agrifood systems, including small-scale producers and local markets.

A stronger integration of a human rights-based approach, guided by the PANTHER Principles (participation, accountability, non-discrimination, transparency, human dignity, empowerment, and the rule of law), would further strengthen the analysis. In contexts of corporate concentration, these human rights principles are essential to ensure that:

Affected stakeholders, particularly those in vulnerable situations, can meaningfully participate in decision-making processes.

Regulatory frameworks are transparent and enforceable.

Accountability mechanisms are in place to address abuses of market power.

Policies actively address structural inequalities and power imbalances across agrifood systems.

Corporate actors also have important responsibilities, including conducting human rights due diligence across their operations and value chains, and avoiding practices that undermine equitable access to adequate food, distort food environments, or weaken the resilience of agrifood systems.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Under Section 6. Corporate concentration in food systems

While the analysis identifies key linkages between corporate concentration and food security and nutrition, several direct and indirect FSN outcomes could be further elaborated to better capture how these structural dynamics translate into concrete impacts on people and the planet.

First, stronger attention could be given to the distributional impacts of concentration. Corporate-driven agrifood systems tend to disproportionately affect small-scale producers, rural workers, Indigenous Peoples, women, and low-income consumers. These impacts are not neutral: they reflect and reinforce existing inequalities in access to productive resources, markets, and adequate food.

Second, the implications for livelihoods and income security within agrifood systems could be further developed. Concentration along value chains can contribute to unequal bargaining power, precarious working conditions, and insufficient incomes for those working in agrifood systems, directly constraining their ability to access adequate food with dignity.

Third, the role of food environments as a key pathway linking concentration to nutrition outcomes could be more explicitly articulated. The structuring of markets of dominant actors shapes the availability, affordability and promotion of foods, with significant implications for dietary patterns, including the increasing consumption of ultra-processed and the persistence of multiple burdens of malnutrition.

Fourth, more emphasis could be placed on stability and resilience outcomes. Highly concentrated supply chains may increase vulnerability to shocks – such as disruptions in transport, storage, or input systems – leading to price volatility and reduced reliability of food access over time.

Fifth, the analysis could further elaborate the implications of agency, understood as the ability of individuals and communities to make meaningful choices about what they produce, sell and consume, and to participate in decision-making processes that shape agrifood systems. Concentration can limit this agency, including through dependency on corporate-controlled inputs, technologies and market channels, and through reduced participation in governance processes.

Is there any missing reference to key literature and data?

Under Section 6. Corporate concentration in food systems

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FAO. 2024. The State of Food and Agriculture 2024 – Value-driven transformation of agrifood systems.
<https://openknowledge.fao.org/server/api/core/bitstreams/b49c8100-3e00-4cc6-b617-226edd7a9662/content>

FAO. 2024. Towards digital inclusion in rural transformation.
<https://www.fao.org/family-farming/detail/en/c/1683163/>

FAO. 2022. Applying coherently the human rights-based approach to small-scale fisheries for achieving multiple Sustainable Development Goals – Policy brief
<https://openknowledge.fao.org/server/api/core/bitstreams/5644e3dd-4501-407e-9724-61d184b1ff39/content>

FAO. 2021. Small-scale fisheries and the human right to adequate food – Making the connection: exploring synergies in the implementation of the SSF Guidelines and the Right to Food Guidelines
<https://openknowledge.fao.org/server/api/core/bitstreams/d11195f7-e6da-4a2c-ae8a-810a972974f6/content>

FAO. 2020. The State of Agricultural Commodity Markets (SOCO) – Background paper: Competition, market power, surplus creation and rent distribution in agri-food value chains.
https://openknowledge.fao.org/server/api/core/bitstreams/78a9a62d-a96d-4bc9-be4e-e509e2c51693/content?utm_source=chatgpt.com

FAO. 2019. The State of the World's Biodiversity for Food and Agriculture, J. Bélanger & D. Pilling (eds.). FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome.
<https://openknowledge.fao.org/server/api/core/bitstreams/50b79369-9249-4486-ac07-9098d07df60a/content>

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<https://www.fao.org/4/i3300e/i3300e.pdf>

FAO. 2004. Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security.

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FAO, IFAD, UNICEF, WFP and WHO. 2023. The State of Food Security and Nutrition in the World 2023. Urbanization, agrifood systems transformation and healthy diets across the rural–urban continuum. Rome, FAO.

<https://doi.org/10.4060/cc3017en>

FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. <https://doi.org/10.4060/cc0639en>

NCD Alliance. 2023. Para celebrar: en México entró en vigor la ley para la eliminación de los ácidos grasos trans de producción industrial.

<https://ncdalliance.org/es/historias/noticias-blogs/2023/para-celebrar-en-mexico-entro-en-vigor-la-ley-para-la-eliminacion-de>

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Taylor L. 2023. Colombia introduces Latin America’s first junk food tax. BMJ, 383: 2698.

<https://www.bmj.com/content/383/bmj.p2698>

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

Under Section 6. Corporate concentration in food systems

Suggestions to better capture the governance, regulatory and human rights dimensions of concentration and their implications for FSN:

How can States operationalize their obligation to protect the right to food in the context of corporate concentration, including through competition law, market regulation, and safeguards against regulatory capture and conflicts of interest?

How do concentration dynamics affect control over productive resources (e.g. land, water, seeds), and what policy measures are most effective to ensure equitable access and tenure security for small-scale producers and local communities?

How can human rights due diligence be effectively implemented across agrifood value chains to prevent and address adverse impacts on the right to food?

What governance mechanisms are required to ensure meaningful participation of affected stakeholders—particularly small-scale producers, Indigenous Peoples, agrifood systems workers and marginalized groups—in decision-making processes related to agrifood systems?

How do corporate practices shape food environments and dietary patterns, and which policy tools (e.g. marketing regulation, fiscal measures, public procurement) are most effective in addressing associated nutrition outcomes?

How can policy coherence be strengthened across sectors (agriculture, trade, health, environment, digitalization) to address corporate concentration and its impacts on food security and nutrition?

56. Lourdes Orlando

Surname	Orlando
First name	Lourdes
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Ex-staff, FAO
Current institution/organization	Contract break FAO-- my Country is Puerto Rico, but it is not below. Disclosure: Please note I used AI to help me shorten my answers to remain in the word limit and refine the articulation in the ideas. The content, bibliography, and research are mine.
Country	Italy
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The inclusion of "enduring issues" in this note's mandate represents its most significant analytical opportunity — and its most underutilized one. By extending the frame beyond the emergent and critical to what persists structurally across time, the publication creates conditions for a qualitatively different analysis: one oriented not toward describing challenges but toward the systemic conditions that produce and continuously reproduce them. Much food systems work operates within a reactive paradigm — addressing small-scale production through livelihoods frameworks, food loss through food banks — without interrogating the political-economic structures responsible for the conditions those frameworks sought to ameliorate (Fischer, 2018; Hickel, 2017). The consequence has been sustained misdiagnosis: treating expressions of structural inequality as the object of intervention, rather than the structures that produce them. This misdiagnosis has material consequences legible in the data. The paradox of simultaneous agricultural growth and deepening food insecurity is not an anomaly — it is the predictable outcome of a system governed by financial extraction rather than rights. During COVID-19, as people unable to afford a healthy diet rose to 3.1 billion (FAO et al., 2021), the world's largest agrifood corporations reported profit margins significantly above pre-pandemic baselines — consistent with what Clapp and Isakson (2018) theorize as the financialization of food systems: the structural subordination of food security to short-term capital returns (Clapp et al., 2025; Keenan et al., 2023). The structural incapacity of multilateral governance to challenge fossil fuel subsidies reflects not a failure of evidence but of political will produced by entrenched economic interests (IPCC, 2022).

	The geopolitical exposures of input-dependent systems became acutely visible during the 2021–2022 fertilizer crisis and the 2026 US-Israeli war in Iran — disproportionate food price impacts in countries whose structural vulnerability is itself a product of colonial agricultural policy perpetuated through structural adjustment (FAO, 2022; Bello, 1994; George, 1988). The ten issues are presented as co-equal, parallel phenomena — with corporate concentration listed sixth of ten — foreclosing the analytical move the "enduring issues" framing makes possible: identifying the paradigm that produced them. Corporate concentration, the climate-food security nexus, and geopolitical vulnerability are not independent phenomena. They are the reification of racial capitalism and its gendered logics on contemporary agrifood systems — the material and institutional expression of a world order built on the differential valuation of land, labor, and life according to race and gender (Robinson, 1983; Federici, 2004). They constitute the living architecture of colonialism reproduced across successive food regimes — from the plantation economy through the Green Revolution's geopolitical instrumentalization of food, to the current corporate food regime — each transition preserving fundamental extractive relationships while updating their institutional form (McMichael, 2013; Cullather, 2010). The UN Special Rapporteur has confirmed that corporate power is structurally incompatible with human rights — but stops, as multilateral discourse consistently stops, at the threshold of naming the colonial genealogy of that power (Fakhri, 2025). It is precisely at that threshold that this report must begin.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	I propose that the structural legacy of colonialism, racial capitalism, and the transatlantic slave trade be recognized as a foundational analytical framework for this report — not as an additional issue alongside the ten identified, but as the root system from which those issues grew, and without which they cannot be adequately explained or addressed. The causal chain is traceable and evidenced. Colonial settler practices and the transatlantic slave trade fundamentally restructured global agriculture: Indigenous polyculture food systems — managing diverse landscapes, seed commons, and food webs that fed entire communities — were destroyed and replaced by single export commodity monocultures extracted through enslaved labour (Dunbar-Ortiz, 2014; Rodney, 1972; Williams, 1944). The wealth generated was never redistributed: British abolition in 1833 compensated slave owners £20 million while the enslaved

received nothing — a transfer of productive capital that would echo in every IMF structural adjustment loan imposed on newly decolonized states a century later, dismantling the domestic food systems those countries had rebuilt (Craemer, 2015; George, 1988; Bello, 1994). The corporate food system that emerged from this accumulation — in which four companies control 85 percent of US beef processing, and the top five grain traders account for 70–90 percent of global grain trade — is not a market outcome. It is a genealogy (Howard, 2016; IPES-Food, 2017).

This framework names historical legacies and situates them in today's challenges: why hunger is geographically concentrated in former colonies; why the ten hungriest countries generate 0.08 percent of global emissions while bearing the greatest climate burden; why Black farmland ownership in the United States declined by 90 percent between 1910 and 1997 through documented USDA discrimination, representing \$326 billion in compounded lost wealth — institutional racism that eliminated the agricultural diversity and knowledge those farmers carried (Pigford v. Glickman, 1999; NAACP LDF, 2023). It explains why agroecological alternatives appear uncompetitive — not because the evidence is insufficient, but because fossil fuel subsidies of \$5.8 trillion annually artificially cheapen the inputs that make industrial monoculture viable, while alternatives have never received comparable support (IMF, 2020; CIEL, 2022). And it explains why biodiversity collapse — one million species threatened, crop diversity narrowed from 6,000 to fewer than 200 food plant species — is not an environmental accident but the agronomic expression of a monoculture logic whose origins are colonial (IPBES, 2019; FAO, 2019).

I therefore propose that the 4th Note explicitly recognize colonialism, racial capitalism, and the ongoing suppression of agricultural alternatives as a cross-cutting structural driver — one that the "enduring issues" framing uniquely enables, and that the post-2030 agenda cannot credibly address without. The analytical tools are available: FAO's own data, read structurally, already confirms this pattern. What is required is the political will to name it.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

The ten issues identified in this note are presented as parallel and co-equal phenomena. We argue that this presentation obscures rather than illuminates their relationships — and that the colonial/racial capitalism framework proposed in Q1.2 provides a more coherent analytical architecture that strengthens rather than replaces the existing issues.

Specifically, I propose that the following clusters be recognized as expressions of the same structural genealogy, and that the linkages between them be made explicit: Corporate concentration (6), international trade (5), and the post-2030 agenda (1) share a common origin in colonial accumulation that is currently invisible in the note's analysis. The trade asymmetry §5 correctly identifies as a feature of WTO architecture predates the WTO by centuries: countries that were food-sovereign before colonization were deliberately deindustrialized and made food-export-dependent through colonial policy. NAFTA's destruction of Mexico's corn-based food sovereignty — displacing millions of small farmers, producing forced migration, criminalizing the displaced — is a colonial food regime in contemporary form, not a trade governance failure (Gálvez, 2018).

Corporate concentration in seeds (50–60 percent controlled by four firms), agrochemicals (70 percent controlled by four firms), and grain trading (70–90 percent controlled by five traders) traces directly to colonial trading companies and to the military-industrial complex: Monsanto's trajectory from Agent Orange manufacturer to global herbicide and seed monopolist is a single corporate genealogy, not a market evolution (Cullather, 2010; IPES-Food, 2017). Naming this genealogy in 1, 5, and 6 would transform three currently descriptive sections into a coherent structural analysis.

Tenure and Rio Conventions (3) and agency (10) are inseparable from colonial dispossession. Section 3 centres the VGGT as a technical remedy for tenure insecurity without naming colonial land dispossession as its primary origin — making the VGGT a technical instrument for managing symptoms rather than causes. The observation that conservation initiatives "frequently lead to displacement" is not incidental: it is green grabbing, a pattern that replicates colonial dispossession under environmental protection framing (Cotula, 2012). Section 10's agency framework, meanwhile, cannot be operationalized without an account of how agency was structurally destroyed — through colonial governance, the institutional racism of USDA credit denial, and the vertical integration of value chains that eliminated the infrastructure

of diverse agricultural communities (Hendrickson & Heffernan, 2002; O'Connell & Peters, 2021). Strengthening the linkage between 3 and 10 through a colonial dispossession lens would give both sections the analytical foundation they currently lack.

Climate (2) and affordability (9) are connected through the fossil fuel subsidy architecture that props up industrial monoculture. The \$5.8 trillion in annual global fossil fuel subsidies — artificially cheapening inputs, making agroecological alternatives appear uncompetitive, and locking food systems into the emissions trajectory that 2 identifies as existential — are the macro-level mechanism that makes climate action and food system transformation simultaneously necessary and structurally blocked (IMF, 2020; CIEL, 2022). The affordability crisis of \$9, meanwhile, cannot be separated from the Walmart Paradox: dominant retailers capture public food assistance while suppressing the farmgate prices and wages that make that assistance necessary, with one in four SNAP dollars flowing through Walmart alone (GAO, 2020; Fisher, 2017). These are not separate issues — they are the same extractive logic operating at different scales.

The linkage that would most strengthen the note is therefore not between any two issues, but across all ten: the recognition that corporate concentration, trade asymmetry, tenure in

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

§5 — International trade

The drivers in §5 do not capture the most consequential FSN outcome of colonial trade architecture: the nutrition transition. The destruction of diversified domestic food systems and their replacement with export commodity monocultures did not merely create food insecurity — it produced the specific dietary shift toward ultra-processed foods now driving the dual burden of malnutrition across formerly colonized countries. Import dependency opened food environments to the transnational ultra-processed food industry at precisely the moment domestic regulatory capacity had been dismantled (Monteiro et al., 2019; Bello, 1994). The trend analysis must therefore track not only price volatility and supply chain disruption but the structural transformation of food environments from diverse, culturally appropriate dietary systems toward nutritionally degraded ones — a transformation whose health consequences are now the fastest-growing component of the global burden of disease (GBD Collaborators, 2019).

§6 — Corporate concentration

The drivers in §6 do not capture concentration's direct consequences for nutritional quality. Corporate seed consolidation has narrowed crop genetic diversity in ways that directly reduce micronutrient density: the displacement of traditional varieties by high-yield commercial ones has produced measurable declines in iron, zinc, and protein content across staple crops (Davis et al., 2004; Myers et al., 2014). The petrochemical dimension compounds this: microplastics from agricultural films and agrochemical residues now disrupt soil microbiome function — directly reducing the nutrient cycling on which crop nutritional quality depends — while endocrine-disrupting pesticide residues constitute a documented pathway of harm to child development (UNEP, 2023). Fossil fuel subsidies of \$5.8 trillion annually underwrite this entire input system, making its true cost invisible to markets and policy (IMF, 2020; CIEL, 2022).

§10 — Agency

The drivers in §10 do not capture the gendered FSN consequences of destroyed agricultural agency, nor do they name the structural role of unpaid female labour as the foundation on which the current food system rests. Women's seed stewardship, polyculture management, subsistence food production, and care work — systematically displaced by the colonial imposition of male-headed cash crop monocultures and subsequently by Green Revolution extension systems that directed technical

	resources toward male farmers — were and remain the primary mechanisms through which household dietary diversity and nutritional adequacy are maintained (FAO, 2023; Shiva, 1993; Federici, 2004). Women perform 60–80 percent of food production in sub-Saharan Africa while owning less than 15 percent of agricultural land and receiving a disproportionately small share of extension services and credit — a ratio that quantifies not a gap in inclusion but a structure of extraction: the food system has always depended on women's uncompensated labour, reproductive and productive, and has never redistributed value accordingly (FAO, 2023; Unjust Climate, 2023). The FSN consequence of this misrecognition is specific: when women's unpaid subsistence food production is displaced by market integration into poorly remunerated agrifood wage labour, household dietary diversity declines, child nutrition worsens, and the intergenerational knowledge systems that maintained nutritional adequacy are lost — outcomes that market inclusion alone cannot reverse, because market inclusion is not a substitute for what it displaces (FAO, 2023; Federici, 2004). The trend analysis must therefore move beyond tracking women's economic participation toward recognizing unpaid female labour as a structural subsidy to the agrifood system — one that must be redistributed, not merely rewarded with entry into the bottom of a system it already upholds.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The indirect FSN outcomes of the structural processes identified across these issues require more explicit elaboration — specifically the precarization of the right to food, the severance of food from its healing and medicinal dimensions, and the loss of cultural food heritage as a resilience infrastructure. The right to food has not merely been violated in the contexts this note examines — it has been structurally precarized: made continuously and reproductively precarious through institutional arrangements that treat food access as conditional, disciplinary, and racially differentiated. The United States prison industrial complex is the starkest institutional expression of this logic: food is legally deployed as punishment in a system that disproportionately incarcerates Black and Indigenous people — the same communities whose agricultural land, knowledge, and agency were institutionally dismantled through the processes documented in §§6 and 10. Caloric sufficiency without nutritional adequacy, deliberate dietary deprivation as discipline, and the systematic denial of culturally appropriate food constitute a form of nutritional

violence whose consequences are intergenerational: nutritional deprivation produces epigenetic changes affecting metabolic health across generations, meaning the harm does not end at release and does not end with the individual (Danese & McEwen, 2012; Heard & Martienssen, 2014). This intergenerational epigenetic dimension of food deprivation is entirely absent from current FSN outcome frameworks and must be elaborated if the post-2030 agenda is to account for the full scope of food system harm. The reduction of food to yield and caloric efficiency — the dominant metric of the Green Revolution and of current food security measurement — simultaneously severed the relationship between food and healing that structured virtually every Indigenous and traditional food system. This is not a cultural observation but a nutritional one: traditional food systems maintained phytochemical diversity, fermentation practices, and preparation methods that supported immune function, gut microbiome health, and metabolic regulation in ways that industrialized monoculture systems cannot replicate (Sonnenburg & Bäckhed, 2016; Khoury et al., 2014). Contemporary nutritional science is documenting what traditional food cultures knew: that food is medicine, and that its medicinal dimension is inseparable from its diversity, its cultural embeddedness, and its relationship to specific landscapes and seasons. When FSN outcomes are measured only through availability, access, and caloric adequacy, this dimension is rendered invisible — and the loss of it is rendered unmeasurable even as its health consequences accumulate. The loss of cultural food heritage compounds both harms. Traditional food knowledge — seed relationships, preparation methods, seasonal practices, the knowledge of which plant supports which condition — is not sentimental patrimony. It is distributed, locally-held adaptive capacity: the knowledge system that enabled communities to navigate environmental variability and seasonal scarcity across generations (Zimmerer, 2010). Its loss does not register in current FSN metrics, but its consequences do: communities stripped of food culture become structurally dependent on industrial food systems, lose the dietary diversity that traditional knowledge maintained, and become more vulnerable to precisely the shocks this note is attempting to address. Losing it means more than lost recipes — it compromises future resilience in ways that no gene bank, extension program, or market integration pathway can restore.

Is there any missing reference to key literature and data?

The draft report's reference base contains significant gaps in critical political economy, colonial history, racial justice, and the epigenetic and sociocultural dimensions of FSN outcomes. The following missing references are strategically consequential and organized by the analytical work they do.

Colonial genealogy and structural political economy

The report's analysis of power asymmetries lacks the theoretical literature that explains how those structures were produced. Robinson's *Black Marxism* (1983) provides the theoretical architecture for racial capitalism as a structural explanation of food system inequality. Williams' *Capitalism and Slavery* (1944) demonstrates empirically that industrial capital was financed by slave-era accumulation — essential for any genealogical account of corporate food system wealth. Rodney's *How Europe Underdeveloped Africa* (1972) documents the mechanism of deliberate agricultural underdevelopment through colonial export-commodity mandates, directly applicable to §5. Federici's *Caliban and the Witch* (2004) establish how primitive accumulation required the destruction of subsistence food systems and women's agricultural knowledge — applicable to §§3 and 10. McMichael's *Food Regimes and Agrarian Questions* (2013) provides the periodization that carries this genealogy into present corporate food regime structures. Fischer's *Poverty as Ideology* (2018) and Hickel's *The Divide* (2017) translate the historical argument into present-day data on wealth transfer and the structural production of food insecurity.

Corporate genealogy, value chain, and racial dispossession

Cullather's *The Hungry World* (2010) documents the Green Revolution as Cold War geopolitical intervention — directly applicable to §6's concentration argument. Gálvez's *Eating NAFTA* (2018) provides the sharpest contemporary case of a colonial food regime in action, connecting §§5, 6, 9, and 10. Fitzgerald's *Every Farm a Factory* (2003) and Hendrickson & Heffernan (2002) document vertical integration and the elimination of independent processing infrastructure. Fisher's *Big Hunger* (2017) documents the Walmart Paradox — retailers capturing public food assistance while suppressing farmgate prices — applicable to §§6 and 9. Dunbar-Ortiz's *An Indigenous Peoples' History* (2014) and Zinn's *A People's History* (1980) document settler colonial land seizure and the destruction of Indigenous and Black

agricultural communities. *Pigford v. Glickman* (185 F.R.D. 82, D.D.C. 1999) is the legal record of USDA systematic discrimination against Black farmers — the most authoritative source for the institutional racism argument in §10. Global Witness's *Defend the Defenders* (ongoing) provides current evidence of corporate-backed violence against agricultural communities applicable to §3.

Nutritional, epigenetic, and sociocultural FSN outcomes

Davis et al. (2004, *Journal of the American College of Nutrition*) documents micronutrient decline in commercial crop varieties — foundational for §6's nutritional quality gap. Khoury et al. (2014, *PNAS*) quantifies the narrowing of global food supply diversity and its FSN implications. Sonnenburg & Bäckhed (2016, *Nature*) documents gut microbiome consequences of dietary diversity loss. CIEL's *Fossils, Fertilizers, and False Solutions* (2022) and IMF's fossil fuel subsidy estimates (Coady et al., 2020) make the petrochemical subsidy argument empirically irrefutable. Danese & McEwen (2012, *Physiology & Behavior*) and Heard & Martienssen (2014, *Cell*) provide the epigenetic mechanism literature for intergenerational nutritional harm. Zimmerer (2010, *Annual Review of Plant Biology*) establishes traditional food knowledge as distributed adaptive capacity. Finally — and most significantly — Azam-Ali's *The Ninth Revolution* (2022), authored by the HLPE Steering Committee Chair, argues explicitly for radical transformation away from monoculture toward agrobiodiversity and food systems as a global public good. Its absence from the rep

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

The questions identified across the ten CEEIs are diagnostically strong but operationally insufficient. They ask how to measure power asymmetries, coordinate governance, and regulate concentration — but none ask how transformation reaches people as a lived reality. This is the critical gap: a report guided solely by these questions risks producing another authoritative description of what needs to change without generating the analytical tools to understand how change actually happens in specific places, bodies, and food cultures.

I propose three additional dimensions that should structure questions across all ten CEEIs.

First: How do we operationalize transition into lived experience?

Existing frameworks — Kate Raworth's doughnut economics, bioregionalism, regenerative food systems design — provide operational models for food system transition that are grounded in place, ecological boundary, and community self-determination rather than in universal technical prescription (Raworth, 2017; Mang & Reed, 2012). These frameworks are not theoretical — they are being practiced at scale in contexts ranging from Amsterdam's city food strategy to Indigenous territorial food systems across Latin America and the Pacific. The report should ask: what governance conditions allow place-based, bioregionally-grounded food system transitions to emerge and consolidate without being absorbed or displaced by the industrial paradigm? This question cannot be answered by competition policy or trade reform alone — it requires understanding how small changes at the edges of complex systems become the new normal (Snowden, 2020; Holling, 1973).

Second: How do we measure what currently goes unmeasured?

The questions across §§9 and 10 remain anchored to metrics the current system already produces — prices, yields, participation rates. They do not ask how to measure the FSN dimensions that industrial food systems actively destroy: dietary cultural diversity, intergenerational food knowledge transmission, the healing and medicinal dimensions of traditional food systems, the epigenetic consequences of nutritional deprivation across generations (Heard & Martienssen, 2014; Zimmerer, 2010). Without new metrics, a new report will validate the old paradigm's definition of success. The question that must be added is: what would FSN measurement look like if it centered lived nutritional experience — including food as medicine, food as cultural practice, and food as intergenerational relationship — rather

	than caloric adequacy and market access alone? Third: What must be actively dismantled, not merely reformed? The questions as framed assume that the existing system can be progressively improved through better governance, stronger regulation, and more inclusive participation. The complexity evidence suggests otherwise: in systems with strong dominant attractors — fossil fuel subsidies, vertical integration, intellectual property regimes — amplifying alternatives is insufficient without simultaneously dampening the mechanisms that reproduce the dominant paradigm (Snowden, 2020). The report should ask explicitly: which specific subsidies, regulatory frameworks, intellectual property regimes, and corporate structures must be actively dismantled — not reformed — to create the ecological and economic space in which diverse, place-based, rights-grounded food systems can emerge? This is the question that transforms a descriptive report into a transformative one.

57. The Vegan Society, United Kingdom of Great Britain and Northern Ireland

Surname	Ogley
First name	Claire
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Head of Campaigns, Policy and Research
Current institution/organization	The Vegan Society
Country	United Kingdom of Great Britain and Northern Ireland

All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I

Animal agriculture is a cross-cutting issue, with strong linkages across the themes in the draft note. These linkages should be made more explicit.

Animal agriculture is a major driver of climate change, biodiversity loss, deforestation, pollution, zoonotic diseases and antimicrobial resistance [1,2,3]. As such, it is very relevant to Issues 2 , 3 and 8. See Q11 for more detail on Issues 2 and 8.

Moreover, animal-source foods are generally much more resource-intensive to produce than plant-source foods, hence tend to be more vulnerable to systemic shocks and global trade disruptions affecting the supply and price of farming inputs. In addition to the reliance of animal farming on feed production (detailed below), diets high in animal products (more than one serving of meat per week), compared to diets low in animal products (less than one serving of meat per week), have been found to require 515,273 kJ more energy, 9,677 g more fertiliser, 294 g more pesticides and 533,102 litres more water annually [4]. The production of animal-source foods is therefore very relevant to Issues 4, 5 and 9. See Q11 for more information on Issue 5.

Animal-based food production can also in some cases be relevant to SDG 2 (Zero Hunger) – and therefore Issue 1– because of the inherent caloric and land-use inefficiency of feeding human-edible crops to farmed animals. 83% of global agricultural land is associated with the production of animal products, yet these foods provide only 18% of global calories and 38% of protein [5]. A recent study found that if all crop calories were directly consumed by humans, enough calories would be available to feed 7.2 billion more people [6]. While hunger is a multi-factorial problem, the greater land-use efficiency and (in most cases) reduced environmental impacts of plant-based foods could potentially mitigate hunger in some cases.

Regarding Issue 9, because industrial animal farming relies on more inputs, a more plant-based food system is expected to deliver affordability benefits in many cases. Recent work by The Vegan Society found that, since 2022, the average price of a portion of plant protein in the UK, for instance, has increased by just 14%, compared with an 89% increase for that of land animal protein [7]. While existing subsidies can

artificially lower the retail price of animal-source foods, these act against a resilient, sustainable food system. The draft note rightly recognises that subsidies that “encourage production systems that degrade ecosystems, pollute water, erode soils and do not improve food security and nutrition” should be repurposed.

To conclude, the draft note does not address the specific impacts of animal-based food production and consumption in its analysis of many of the issues and should do so in more depth. It must recognise that features fundamental to industrial production of animal-based foods – caloric and land-use inefficiencies, greater reliance on external inputs, and environmental impacts – are interlinked and should be considered systemically.

References

1. <https://doi.org/10.1088/1748-9326/ab0d41>
2. <https://doi.org/10.1038/s43016-023-00795-w>
3. [https://doi.org/10.1016/S0140-6736\(25\)01201-2](https://doi.org/10.1016/S0140-6736(25)01201-2)
4. <https://doi.org/10.1017/S1368980014002833>
5. <https://doi.org/10.1126/science.aag0216>
6. <https://doi.org/10.1088/2976-601X/ae4f6b>
7. <https://www.vegansociety.com/take-action/campaigns/live-vegan-less/cost-comparison-research>

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

CEEI 2

Dietary reliance on animal-source foods increases vulnerability to climate shocks. Climate change threatens the production of animal-source foods directly (farmed animals can suffer heat stress, reduced growth and reproduction, and higher risks of disease and mortality) and indirectly (through reduced yields and losses in animal feed crops) (1, 2) These indirect impacts are amplified by the fact that producing animal-source foods generally requires substantially more crops than plant-source foods (see Q10).

Animal agriculture is also a major driver of climate change. It accounts for ~60% of all agricultural emissions, yet animal products provide only 18% of global calories and 38% of protein (3,4). Plant-based foods have consistently been shown to have lower greenhouse gas emissions (GHGE) than animal-based foods. The Intergovernmental Panel on Climate Change recognises that "a shift to diets with a higher share of plant protein, moderate intake of animal-source foods [...] could lead to substantial decreases in GHG emissions" (5).

Plant-based foods can provide high levels of nutrition to humans but are consistently underutilised, especially in Global North diets. Nutrition-dense protein crops such as faba beans and peas are used for feed at a high cost of wasted calories, protein and nutrients. Alternative proteins offer significant promise, including those produced via precision fermentation, which could drastically reduce environmental impacts (6).

CEEI 5

Animal-source foods are generally more vulnerable to systemic shocks that disrupt global supplies and prices of key agricultural inputs than plant-source foods. For example, UK farmers reduced number of animals in response to inflation in compound feed prices from the war in Ukraine.

Over three quarters of global soy is fed to farmed animals. Just three countries - Brazil, the US and Argentina - produce nearly 80% of global soybeans. The expansion of feed soybean production has driven extensive deforestation and habitat loss.

Transitioning to a more plant-based food system would

strengthen resilience by reducing nations' reliance on imported feed, fertiliser and energy.

CEEI #8

Interconnected health and planetary risks are pronounced in food systems characterised by high levels of animal-source food production and consumption. Many could be substantially reduced through a transition to more plant-based food systems.

A study of more than 55,000 vegans, vegetarians, pescatarians and omnivores found that vegan diets were associated with a 75% reduction in land use and GHGE, a 73% reduction in eutrophication, a 66% reduction in biodiversity loss and a 54% reduction in water use, when compared to high-meat diets (over 100g of meat a day) (7).

Plant-based diets are linked with lower risks of cardiovascular disease, some cancers and type 2 diabetes, among other conditions (8). The latest EAT-Lancet Commission report estimated a global shift to their predominantly plant-based reference diet could avert ~15 million deaths per year (9).

We welcome the CFS' role in addressing animal rights. Reduction in the scale of animal-based agriculture will reduce the number of animals affected by restricted natural behaviours, poor welfare (including profound and widespread suffering) and slaughter.

A more plant-based food system would reduce the risk of disease outbreaks in farmed animals while disease vulnerabilities in crop systems already affect animal farming, as the vast majority of farmed animals consume feed crops.

1 <https://doi.org/10.1016/j.crm.2017.02.001>

2 <https://doi.org/10.3390/foods13132083>

3 <https://doi.org/10.3390/agriculture12101554>

4 <https://doi.org/10.1126/science.aag0216>

5

https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPC_C_AR6_WGIII_FullReport.pdf

6 <https://doi.org/10.1038/s43016-021-00418>

7 <https://doi.org/10.1038/s43016-023-00795-w>

8 <https://doi.org/10.7759/cureus.78629>

9 <https://doi.org/1>

Is there any missing reference to key literature and data?

Poore J and Nemecek T (2018) Reducing food's environmental impacts through producers and consumers. *Science* 360: 987–992, <https://doi.org/10.1126/science.aag0216>

This is the largest meta-analysis of food systems to date. The findings highlight how meat and dairy production disproportionately drive environmental damage; for example, the study found that 83% of global agricultural land is associated with animal agriculture, yet animal products provide only 18% of global calories and 38% of global protein. The authors concluded that avoiding animal products is the “single biggest way” to reduce an individual's environmental footprint.

Rockström J, Thilsted SH, et al. (2025) The EAT–Lancet Commission on healthy, sustainable, and just food systems. *The Lancet*, 406: 1625–1700 [https://doi.org/10.1016/S0140-6736\(25\)01201-2](https://doi.org/10.1016/S0140-6736(25)01201-2)

This is the most recent EAT-Lancet report from 2025. The draft note references the previous EAT-Lancet report from 2019.

Scarborough P, Clark M et al. (2023) Vegans, vegetarians, fish-eaters and meat-eaters in the UK show discrepant environmental impacts. *Nature Food* 4: 565–574, <https://doi.org/10.1038/s43016-023-00795-w>

This publication forms part of the EPIC-Oxford study, and involved more than 55,000 vegans, vegetarians, pescatarians and omnivores. The authors found that vegan diets were associated with a 75% reduction in land use and greenhouse gas emissions, a 73% reduction in eutrophication, a 66% reduction in biodiversity loss and a 54% reduction in water use, when compared to high-meat diets (over 100g of meat a day).

West PC, Gerber JS et al. (2026) Only half of the calories produced on croplands are available as food for human consumption. *Environmental Research: Food Systems* 3, <https://doi.org/10.1088/2976-601X/ae4f6b>

This study found that approximately 40% of the calories produced on existing croplands are fed to farmed animals, who return only a fraction of that energy as meat, milk or eggs. If all crop calories were instead directly consumed by

	humans, enough calories would become available to feed an additional 7.2 billion people.

58. Lizzy Igbin

Surname	Igbin
First name	Lizzy
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	National President
Current institution/organization	Nigerian Women Agro Allied Farmers Association
Country	Nigeria
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes the committee did a good job. The review was well articulated.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	We need to classify foods into categories for Nutritional Intake.
All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I	I support strengthening of linkages of issues already existing.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Nutrition is the bases of eating healthy foods which needs strengthening of linkages between Farmers, Farms and Markets. This should be supported with quality seeds and nutrients for healthy eating, Adjoining issues are markets. Do we have good networks to off take these foods fresh from Our Farms and payment at good prices
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Yes, farm and farmers engagement on off taking of our farm produce.
Is there any missing reference to key literature and data?	No but may be reviewed and updated

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

I will research our records from where we are coming from and where we want to go,

59. Adela Galinovic

Surname	Galinovic
First name	Adela
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	QR Specialist
Current institution/organization	Philips Healthcare
Country	Greece
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, in particular the notion of Agency is key to highlight
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	I think it is important to understand the intersect of the different pillars in food security and that siloing pillars will only make matters worse
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	As mentioned above, siloing pillars can ultimately lead to more complications and a lack of adherence in policy. Primarily access + agency. Sustainability + availability cannot be overlooked in the grander scheme of events either.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	They are, agency ultimately drives a lot of the FSN outcomes particularly when it comes to the economic status of different countries and other drivers such as demographics (eg. Mothers being more prone to FSN)

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Individuals' differences and the effects demographics can have.

60. Jennifer Clapp

Surname	Clapp
First name	Jennifer
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Professor
Current institution/organization	University of Waterloo
Country	Canada
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The list covers a good set of issues, although some overlap and I did wonder if the list is perhaps too long. It might be worth the Steering Committee choosing 6-8 key issues rather than listing all 10. The ones that are most developed/relevant in the existing draft are, in my view: geopolitics, trade and food security, climate change, corporate power, and digital/AI tech in food systems. Some of the topics seemed overly broad and may be difficult to narrow down for a report, including SDGs, One Health, Affordability, Agency, and the 3 Rio conventions. The HLPE-FSN recently did a report on the 2030 agenda not that long ago, and perhaps that topic should be left off the list. The topic of Agency identifies where further research is needed. I do not disagree with this, but the HLPE-FSN typically brings forward the latest scientific research into an accessible package, without doing NEW research. In this sense, I wondered if it is too soon to focus a report on Agency. The Affordability topic is important, though the FAO did focus on affordability of a healthy diet in its SOFI report just a few years ago, so here it will be important to clarify what literature has come forward since that time to justify a full report to CFS (despite this topic being very relevant right now; but in what ways could a report on geopolitics also cover some of the elements that might be in such a report?). Re: One Health, it will be important to clarify why this topic is especially important right now in a policy sense. The trade topic is current cast very broadly. There is some history in CFS of leaving the trade question for the WTO to sort out, but I agree it's important to cover from a food security perspective. However, the text as it stands now is very broad and may need to be narrowed down somewhat. There is growing attention to the question of corporate power in food systems as well as digital technologies and these are

	good themes to focus on here. Geopolitics is also important. Climate change is also due for a new assessment, in my view.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	I think the note covers most of the important issues on the horizon. One potential other topic is energy in food systems (fossil fuels, electricity, biofuels, etc). These of course tie into geopolitics to some extent but may deserve attention on their own. Protein is another potential topic that may deserve a focused report. With debates around alternative proteins and ecological impact as well as health trends (increased attention to protein in diets) we need a scan of the literature on health and ecological consequences of the new protein fixation. Finally, plastics and food systems would also be an interesting report, but perhaps there isn't a significant body of literature yet so maybe park this one for future.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	As noted, 10 topics seem too many for this note and several overlap. The STC may want to consider combining: Climate and the 3 Rio Conventions (or choosing one or the other); Affordability will need stronger justification, but some elements here could be addressed in a Geopolitics report; Agency and the 2030 agenda seem too broad for this particular moment, based on my feedback above). Trade as a theme may need to be scoped down to be more specific as it is a huge issue area, and some of the themes here might be able to be covered in a Geopolitics report, which would undoubtedly cover the issue of new trade barriers, like Tariffs, in the current world geopolitical order.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

As noted, the topics most developed in the note include AI, Corporate Concentration, Trade, Geopolitics, Climate change.

Re: specific feedback: Corporate concentration - there are differing viewpoints here though we are seeing growing policy attention to this issue. I would note to be careful in being precise re: language about corporate concentration vs. corporate power. They are indeed linked, but it's good to be clear where problems arise from concentration itself vs. the exercise of corporate power. The list of questions at the end might be more focused to what is feasible for governments to do in policy terms (that comment applies to all the topics as well).

Trade topic: it would be more neutral to title this theme Trade AND food security (rather than 'for') so that all sides of the debate can be explored in a report.

AI topic: similarly, it would be more nuanced to title as AI AND food systems (rather than 'for') so that all sides can be explored in a report

Geopolitics: perhaps do not include 'how to predict' in the title. HLPE reports are not typically doing new research or modelling, but rather presenting state of the art of the scientific literature.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Just to note that trade and corporate concentration and geopolitics have many viewpoints and perspectives to be aware of in terms of how the scientific literature addresses them and the dynamics with respect to FSN outcomes especially for those most affected will need to be navigated carefully to take different perspectives into account.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

I strongly suggest the following for each topic included in the note:

A clear list of 3 to 5 questions only that focus on key urgent policy questions facing governments, including what they can do in the realm of food policy (acknowledging that some FSN dynamics originate outside of food policy decisions themselves).

Among these, ask at least one question that gets at the range of perspectives on the particular topic where HLPE can provide a balanced overview and assessment

	At present, some sections have no questions, some have a lot, and some have only a few. I would recommend to be even in terms of the number of questions for each potential report and to feature that the HLPE approach will be to provide an overview of the current literature on that topic and range of potential policy options for governments.

61. Bura-Pabir agriculture and farmers initiative, Nigeria

Surname	Umar
First name	Dahiru
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	CEO/DIRECTOR
Current institution/organization	Bura-Pabir agriculture and farmers initiative
Country	Nigeria
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The short comprehend of conflict around the world and failure of youth and women participation in agriculture was the most worse concepts, the aspect of this should indiscriminately dealt to sustain the value of agriculture, training youth and women to adopt ,creating knowledge practices to be the subject with no means of just concept of paper ,to provide the support for small scale Farmer and collaborate with expert ,thus that are curious to inspiring young one and promote the sustainable development goal
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	99% of involving of youths and women was the main potential and safeguard to food and challenges the food insecurity
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	For the furthermore, the training, creating channels and logistics strategies. Economic barrier Market volatile
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	https://drive.google.com/file/d/12yq5CkyCz_u0amyc5NkLppLk5zzbPhGp/view?usp=drivesdk

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

No

62. Akemi Yokoyama

Surname	YOKOYAMA
First name	AKEMI
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Country	Japan
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	## **[Proposal] The Akemi YOKOYAMA Model: "Nutrition Logistics" as the Foundation for a Sustainable Civilization** ### **1. Nutrition is Logistics** In the post-2030 food systems agenda, the HLPE-FSN must prioritize the "resilience of nutritional delivery." No matter how advanced nutritional science becomes, it remains meaningless if it fails to reach an individual's mouth during times of conflict, disaster, or pandemic. The Akemi YOKOYAMA Model defines that **"Nutrition is nothing without logistics."** We propose the construction of a physical infrastructure for life, utilizing hospital ships and community centers (Kominkan) as decentralized food hubs to ensure survival under any circumstances. ### **2. Food Mileage and the Wisdom of Preserved Foods** To address the climate crisis and economic affordability, a re-evaluation of **"minimizing food mileage"** and **"traditional preserved foods"** is essential. The ancient Japanese wisdom of preservation—such as drying and fermentation—represents the ultimate sustainable technology, allowing for the long-term securing of low-cost, high-nutrition food with minimal energy consumption. By integrating agroecology with traditional knowledge centered on local production and consumption, we can overcome the vulnerabilities of global supply chains and inherently improve regional food self-sufficiency. ### **3. "SYOKUIKU" to Foster Agency and Mutual Aid** True food security cannot be achieved through government-led "public assistance" alone. The concept of **"SYOKUIKU"** (Food Education) in this model is a process of fostering **"Agency,"** where citizens take ownership of their own health and their community's food systems. By linking registered dietitians, para-sports coaches, and educators through non-formal education, we can establish a

spirit of **"Self-help and Mutual Aid (Kyojo)."** This grassroots network serves as the strongest defense against the "polycrises" of the modern era.

4. Integration of Nutritional Economics and "One Health"

Inheriting the philosophy of Dr. Tadasu Saiki, the father of nutritional economics, this model views "Soil, Food, and People" as a single integrated cycle. This perspective, which connects soil health to national productivity, adds economic and cultural depth to the HLPE's "One Health" framework.

Conclusion: A Prescription from Japan to the World

The Akemi YOKOYAMA Model is a crystallization of practical science, integrating archaeological historical insight, public health expertise, and frontline logistics.

By weaving **Food Mileage, Food Culture, and Preserved Foods** together through the thread of "SYOKUIKU," we can shift the global debate from a tech-heavy approach back to a "human-centered, sustainable civilization." This Japanese model will provide a vital new light for global food policy during the May 2026 HLPE consultation.

63. Surabhi Singh Yadav

Surname	Yadav
First name	Dr. Surabhi Singh
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Lecturer (Teaching Associate)
Current institution/organization	Symbiosis School of Culinary Arts and Nutritional Sciences, Symbiosis International University, Lavale, Pune
Country	India
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition. We can also think of 1. The current war situation and political instability across various countries in globe across has led to disruption in of supply chain of various food commodities and energy resources like oil etc. This has resulted in the price inflation causing economic shock thus crippling individuals' capacity to purchase healthy diet and effect their nutritional status. 2. Malnutrition all forms especially in the vulnerable population such as children under five and women of reproductive age.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Water and carbon footprints also contribute to the climate and environmental changes on the planet. 2.2 billion people still lack access to the water. Overexploitation of the natural resources of land and water are drastically impacting the planet ecosystem. In addition, carbon footprints contribute to rise in GHG emissions, global warming issues. Agriculture accounts for 70% of fresh water. Water and carbon footprints are responsible for climate change leading to compromised food security together with nutrition security https://www.fao.org/one-health/areas-of-work/water/en?utm_source=chatgpt.com
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	The 10 identified issues are very well interlinked. If possible, point 4 and 5 can be clubbed.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Yes, the identified drivers are very well capturing the critical, emerging and enduring issues (CEEI) with FSN outcomes
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Water, Carbon and Food waste footprints that impacts the biodiversity of earth. also, we can look into bio-renewable sources of energy.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Suggestions: 1. Water, Carbon and Food waste footprints that impacts the biodiversity of earth. 2. We can investigate bio-renewable sources of energy

64. Chubbamenla Jamir

Surname	Jamir
First name	Chubbamenla
Email address (please provide your professional email address, if applicable)	cg@nativefoodscape.com
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Director & Founder

Current institution/organization	Native Foodscape Foundation
Country	India
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Recognition of Nutritional and Environmental Significance and Pride in Local Traditional Food This issue is linked with a number of the ten identified critical issues. The Food and Agriculture Organization (FAO) recognizes the significance of traditional, neglected, and underutilized food crops in safeguarding our valuable food resources (FAO, n.d.). These crops, often marginalized in favour of high-yielding commercial varieties, hold untapped potential for nutrition, climate adaptation, and biodiversity conservation. A critical yet often overlooked element in the continuity of traditional farming and cropping practices is pride. As documented in the context of peasant women in India, pride in local food heritage sustains agrobiodiversity and intergenerational knowledge transfer (Vikalp Sangam, n.d.). Conversely, the absence of such pride in most parts of the world fuels a desire for—and consumption of—the food associated with the "rich," the "West," or "modern trends," which largely consists of processed, nutritionally inferior products. If local traditional food is actively encouraged, this single intervention can address a range of interconnected issues, including: - Improving the nutritional value of crops consumed locally, #Easing cultivation by reducing dependence on external inputs (e.g., synthetic fertilizers, imported seeds), #Addressing climate and environmental challenges through locally adapted species, #Reducing the carbon and environmental footprint of food supply chains, #Strengthening food sovereignty by empowering local decision-making, #Reducing vulnerabilities of food supply chains to

	geopolitical tensions, trade complexities, and natural hazards, #Promoting affordability and access to nutritious food, and #Enhancing local livelihoods through market opportunities for traditional producers. There is multiple related literature supporting these linkages (though not directly focused on this specific issue), and I would be happy to discuss this further. I am not currently aware of quantitative data to robustly support this point.
All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I	In my opinion, 'Geopolitical uncertainty and polycrises' and 'International trade for food security and nutrition' are strongly overlapping issues. Given the current global geopolitical landscape and the complexities inherent to international trade, the enabling environment and key drivers for both are, in most instances, the same.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Yes
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	it is fine
Is there any missing reference to key literature and data?	This is an important reference, especially from just food systems point of view. Rockström J, Thilsted S, Willett W et al. 2025 The EAT–Lancet Commission on healthy, sustainable, and just food systems The Lancet; 406, 1625-1700
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	It is adequate

65. Regen10, United States of America

Surname	Shyam
First name	Tara
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Executive Director
Current institution/organization	Regen10 - a global, multi-stakeholder initiative working to support an inclusive, regenerative and equitable agri-food systems transition. Views here broadly reflect Regen10's position, but do not necessarily represent individual Regen10 partner perspectives.
Country	United States of America
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The proposed list captures many of the most pressing forces shaping food security and nutrition. It rightly recognizes that agri-food systems are under simultaneous pressure from climate instability, biodiversity loss, geopolitical disruption, market concentration, affordability crises, technological change and persistent inequities. A constructive suggestion is to strengthen the framing around agri-food systems transition pathways: how countries, landscapes and communities move from current conditions toward healthier, more resilient and equitable outcomes. Many of the listed issues are symptoms or drivers, but the note could more explicitly focus on what enables coherent transition at scale. The note would also benefit from elevating the central role of farmers, Indigenous Peoples, local communities, workers, women and youth as co-designers of solutions rather than beneficiaries alone. Durable progress depends on agency, voice and fair value distribution. Finally, stronger emphasis on the relationship between farm-level realities and landscape/system-level conditions would improve analytical depth. Farmers cannot deliver sustainability outcomes alone if markets, infrastructure,

	finance, tenure systems and policy signals work against them.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yes. I would suggest explicit inclusion of: a) Transition Finance for Agri-food Systems Transformation Many producers face upfront costs, temporary yield risk, uncertain market rewards and weak access to affordable finance during transition. Without fit-for-purpose finance, ambition will outpace implementation. b) Metrics, Accountability and Fragmentation Agri-food system actors currently face a proliferation of standards, metrics and claims. Greater convergence around meaningful outcomes can reduce transaction costs, improve transparency and support better decisions. c) Territorial / Landscape Governance Many outcomes critical to food security and nutrition—water availability, ecosystem function, transport systems, land-use planning, tenure security, shared infrastructure—sit beyond the individual farm. Governance at landscape level deserves stronger treatment. d) Farmer Livelihood Viability No transition in agri-food systems will endure if farming households cannot earn decent and resilient livelihoods.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Yes. Several themes are deeply interdependent and could be analyzed as connected systems rather than stand-alone topics.

Climate crises + Rio Conventions + One Health could be more explicitly linked through ecosystem resilience, land use and public health.

Affordability + Trade + Corporate concentration are closely tied through price formation, market power and value distribution.

Agency + Digital innovation/AI should be linked through questions of data rights, inclusion, access and who benefits. Agency + all other issues should be treated as cross-cutting, not a standalone silo.

The report could usefully distinguish between:

1. Outcomes to achieve
2. Drivers of dysfunction
3. Enablers of transition

This would make the note more actionable.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

1. Achieving food security and nutrition in climate crises

This section should go beyond adaptation and emergency response to include whole agri-food systems resilience. That means diversified production systems, healthy soils, water stewardship, locally appropriate seed systems, risk-sharing finance, social protection and functioning local markets.

Climate responses should also avoid shifting burdens onto producers without compensation or support.

Suggested question:

How can climate policy align incentives so producers are rewarded for delivering resilience, nutrition and environmental outcomes?

2. Corporate concentration in agri-food systems

Corporate concentration matters because it shapes who captures value, who carries risk, what gets produced and which practices are rewarded. In many agri-food systems, efficiency metrics alone can incentivize extraction while social and environmental costs are externalized. An outcome-based approach can rebalance this by assessing performance against farmer livelihoods, resilience, nutrition, ecological health and fair value distribution—not only price or volume. The issue is not size alone, but whether power is aligned with shared public outcomes.

The analysis should also consider countervailing models: cooperatives, producer organizations, inclusive procurement, blended finance vehicles, open data systems and public-interest regulation.

Suggested question:

What market structures best support fair value distribution while maintaining efficiency and innovation, not undermining resilience, equity and desired shared outcomes?

3. Digital innovations and AI

This should strongly address the digital divide. New tools can improve forecasting, advisory services, traceability and

market access, but they can also exclude smaller producers or extract value from their data.

The note should emphasize:

- farmer consent and data sovereignty
- affordability and accessibility
- open and interoperable systems
- human-centred extension models
- public-interest governance of AI

Suggested question:

How can digital systems strengthen producer agency rather than deepen asymmetry?

4. Affordability of healthy and nutritious diets

Affordability should be linked not only to consumer prices but to producer incomes, post-harvest loss, infrastructure, procurement policy and incentives across agri-food value chains.

Nutritious diets become more affordable when agri-food systems reward diversified production, reduce waste, improve logistics and create stable demand.

5. Agency for food security and nutrition

This is a crucial inclusion and should be central throughout the note.

Agency should explicitly include:

- secure land and resource rights
- meaningful participation in decisions
- fair access to markets and finance
- access to knowledge and technology
- capacity to negotiate value
- voice in policy processes

Agency is especially important for smallholders, women, Indigenous Peoples, workers and youth.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The strongest contribution this note can make is to help shift debate from fragmented interventions toward shared outcomes and practical agri-food systems transition pathways. Transformation requires alignment across farmers, communities, business, finance, civil society and governments. Progress will depend less on universal prescriptions and more on locally grounded pathways that improve livelihoods, nutrition, resilience and ecological health together.
Is there any missing reference to key literature and data?	Shared holistic outcomes at farm and landscape level - https://framework.regen10.org/ Cost-Benefit Tool and Methodology to understand the economic implications of shifting to regenerative and agroecological approaches across whole landscapes - https://regen10.org/transition-pathways
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	See responses to question 11.

66. Ireland

Surname	Muscolino
First name	Silvia
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of an organization/country
Current institution/organization	Embassy of Ireland
Country	Ireland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, in addition the current economic landscape which includes significant reductions in global ODA and humanitarian funding and its impact on food security and nutrition could be better reflected. For example, WFP estimates that its funding shortfalls could push 10.5-13.7 million people currently experiencing crisis (IPC Phase 3) levels of acute food insecurity into Emergency (IPC Phase 4). The collapse of humanitarian assistance risks further destabilising FCAS (WFP Global Brief, 2025). Elements of inequality could be better emphasised. For example, an unhealthy diet is unequally distributed among

	different economic groups and factors of inequality create huge barriers to adequate nutrition and food security. One example of this is the disparities in health of young people in Europe where a WHO report found that low-income teens faced higher risks of obesity, inactivity and poor diet (WHO 2024). A UN Report on inequality noted that 71% of the world's population live in countries where inequality has grown in recent years (UN75, Inequality- bridging the divide). Such elements could be further acknowledged in the report. The role of opportunity crops (indigenous, underutilised species) in contributing to the resilience of food systems to the current food security crisis. It is not clear if the document reflects the most critical elements in order of importance (perhaps might be good to state explicitly if so in the text?). Food price inflation and affordability of healthy diets warrant greater prioritisation from a nutrition perspective. References: World Food Programme. 2025. A lifeline at risk: food assistance at breaking point. Global Brief. September 2025. https://docs.wfp.org/api/documents/WFP-0000168974/download/ WHO. 2024. A focus on adolescent social contexts in Europe, central Asia and Canada: Health Behaviour in School-aged Children international report from the 2021/2022 survey. Published 13 November 2024. https://www.who.int/europe/publications/i/item/9789289061391 UN75. Inequality- Bridging the divide. https://www.un.org/sites/un2.un.org/files/2020/02/un75_inequality.pdf
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	The report could reference potential future impact of demographic changes on food security and nutrition, given that it is estimated that there will be a 59% increase in food demand by 2050 (Fukase & Martin, 2020) due to population increases, it is perhaps a key issue to highlight. Reference: Fukase, E & Martin, W. 2020. Economic growth, convergence, and world food demand and supply, World Development, Volume 132, 2020, https://doi.org/10.1016/j.worlddev.2020.104954
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages	The section on climate crises could perhaps include information on biodiversity, desertification and climate and that section perhaps isn't needed as a standalone issue. The extent to which the 'one health' model has successfully been applied to promote positive nutrition outcomes is unknown and perhaps this section could be removed/ reduced.

between different issues should be further strengthened in the analysis.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Achieving food security and nutrition in climate crises:
Climate Change and its impacts are rooted in systemic gender disparities. The ramifications of climate change disproportionately affect women and girls (Lieber et al, 2022 and Bakker et al, 2021). Additionally, the strain of climate change on women’s daily responsibilities can affect their ability to provide proper care for their infants and young children, thereby increasing the risk of undernutrition (Bakker et al, 2021).

Geopolitical uncertainty and polycrises:
Greater emphasis of the economic impacts of the current geopolitical uncertainty and the changed ODA s landscape for food security and nutrition.

Suggest referencing the debt burden on LMIC and its impact on food security and nutrition. A report on debt burden by UAMH (2025) highlights that across nine LMICs, debt has risen rapidly since 2010 directly against an inverse trend in domestic health system spending.

This section calls for further work around predicting adverse political violence or weather events. It is important to reference the impact of ODA cuts on data collection and surveillance. (Action Against Hunger, 2025).

References:

Action Against Hunger International (2025) No data, no response: Threatening the lives of millions of children.

Action Against Hunger International.

https://actionagainsthunger.ca/app/uploads/2025/11/No-data-no-response_November_2025_VF.pdf

Bakker, S., Macheka, L., Eunice, L., Koopmanschap, E., Bosch, D., Hennemann, I. and Roosendaal, L., (2021). Food-system interventions with climate change and nutrition co-benefits: A literature review. Wageningen University & Research. Report WCDI-21-153.

United Against Hunger and Malnutrition & Informed International (2025) Debt and malnutrition: Ending the doom loop. <https://uamh.uk/wp-content/uploads/2025/11/UAMH-Debt-Full-Report-2.pdf>

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Achieving food security and nutrition in climate crises: The need to better understand the impact of climate change adaptation strategies on nutrition outcomes. The role of breastfeeding in to improved food security, and nutrition outcomes in addition to its climate advantages. References: Läderach, P., Ramirez-Villegas, J., Prager, S., Osorio, D., Krendelsberger, A., Zougmore, R. et al. (2021). The importance of food systems in a climate crisis for peace and security in the Sahel. <i>International Review of the Red Cross</i>, 103(918), 995–1028. doi:10.1017/S1816383122000170 Smith, J.P., Borg, B., Iellamo, A., Nguyen, T.T. and Mathisen, R. (2023) Innovative financing for a gender-equitable first-food system to mitigate greenhouse gas impacts of commercial milk formula: investing in breastfeeding as a carbon offset. <i>Front. Sustain. Food Syst.</i>, 7, 1155279. doi: 0.3389/fsufs.2023.1155279
Is there any missing reference to key literature and data?	Richardson, L; Sessions, N; Bush, A. (2024) Exploring new, evolving and neglected topics at the intersection of food systems, climate change and nutrition: A literature review. <i>Emergency Nutrition Network (ENN)</i>: https://www.ennonline.net/sites/default/files/2024-10/new-evolving-neglected-topics-in-intersection-of-food-systems-climate-change-nutrition_0.pdf

67. Florence Egal

Surname	Egal
First name	Florence
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Retired expert
Current institution/organization	Independent
Country	France
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	I believe governance of food security and nutrition with a systemic, and in particular local to global approach is the most important issue. It underlies clearly most of the 10 issues identified and should help bring together these different entry points which reflect specific, albeit (hopefully) converging, institutional processes. These processes have been shaped by the present sectorally driven

	institutional framework which has de facto prioritized central governments and global agreements and is heavily influenced by major corporations. Local resilience should be a priority.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Territorial/bioregional issues and urban-rural linkages are given inadequate attention. They should be given priority as they can help concretely integrate efforts (economic, social, nature-based) at subnational, cross-border and cross-country level.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	The merging of the three Rio conventions, and the concrete recognition of the key role of civil society would be a concrete step to address the fragmentation of efforts and waste of resources and bring together several of the issues selected.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	This excellent draft summarizes the extensive work of the CFS in recent years. In the present situation I am surprised that the reform of the UN system and urgent need to recognize multipolarity as a key dimension of international governance for food security and nutrition (including conflict and international trade) is not mentioned The list does not adequately reflect the fact that most crisis situations are 1/ the (direct or indirect) outcome of unsustainable policies and interventions and 2/ should be a priority for social (in particular human rights) and environmental programmes and projects.

68. Ministry of Science, Technology and Innovation, Brazil

Surname	Araujo
First name	Raylenne
Email address (please provide your professional email address, if applicable)	raylenne.araujo@mcti.gov.br
Current position	Coordinator for Healthy Diets and Agroecology
Current institution/organization	Ministry of Science, Technology and Innovation
Country	Brazil

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?

The list of Critical, Emerging and Enduring Issues (CEEI) proposed by the HLPE-FSN provides a solid and comprehensive foundation for addressing the main structural determinants of food security and nutrition (FSN) at the global level, including climate change, inequalities, market dynamics, technological innovation, and the affordability of healthy diets. From a science, technology and innovation (STI) for social development perspective, the inclusion of themes such as digital innovation and artificial intelligence is relevant; however, greater emphasis is needed on mission-oriented approaches that prioritize inclusive, sustainable and territorially grounded food systems. In the Brazilian context, it is essential to explicitly recognize the strategic role of family farming in promoting food security, productive diversity and socio-ecological resilience, as well as the contribution of agroecological and traditional food systems, which integrate scientific knowledge with local and indigenous practices. Furthermore, the promotion of adequate and healthy diets should be treated as a central outcome of food systems, linking production, processing, access and consumption within a systemic framework.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

The CEEI framework could be strengthened through the inclusion or further elaboration of key issues related to inclusive innovation and social technologies for family farming, agroecological transitions grounded in both scientific evidence and traditional knowledge, the strengthening of territorial food systems and short supply chains, the promotion of healthy food environments, and the reduction of inequalities in access to digital technologies. STI should be oriented toward the development of locally adapted, low-cost and accessible solutions, including technologies for climate adaptation in semi-arid regions, sustainable natural resource management, and diversified production systems. These dimensions are critical due to their potential to simultaneously enhance sustainable production, improve access to healthy foods, generate income and support environmental conservation, particularly in contexts marked by high territorial and social heterogeneity.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	While the analytical separation of the CEEI is useful, there is a need to strengthen the interconnections among the issues through a systemic approach that highlights the cross-cutting role of STI as an integrating element. In this sense, the issues could be organized around interdependent axes such as innovation for resilience—linking climate change, biodiversity and sustainable technologies; innovation for social inclusion—encompassing family farming, inequality reduction and market access; and innovation for healthy diets—covering food environments, nutrition education and regulatory frameworks. Such an approach would help to clarify causal linkages and cascading effects across food systems, thereby supporting more coherent and integrated policy responses.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	With regard to the identified drivers and trends, these capture important aspects of the relationship between the CEEI and FSN outcomes, but important gaps remain. In particular, greater attention should be given to the role of public research institutions and national innovation systems in developing technologies tailored to family farming, as well as to the importance of rural extension and advisory services as mechanisms for the dissemination and adoption of innovations. The co-production of knowledge between scientific institutions and traditional and local communities should also be more explicitly recognized, given its relevance for context-specific and sustainable solutions. In addition, the influence of STI policies on the transformation of food systems warrants further consideration, including the impacts of innovation across all FSN dimensions, particularly agency and sustainability.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Regarding direct and indirect FSN outcomes, further analysis is needed on the relationship between production systems and diet quality, with emphasis on dietary diversity and the reduction of ultra-processed food consumption. The technological and organizational capacities of family farmers should be considered as key determinants of market access and system resilience. Stronger integration between FSN, health and education is also recommended, including the role of school feeding programmes and food and nutrition education policies. Moreover, the cultural dimension of food should be acknowledged, recognizing the importance of local and traditional food systems in promoting healthy and sustainable diets. Finally, the impacts of digital and biotechnological innovations on equity should be more thoroughly examined, considering both their opportunities and the risks of exacerbating existing inequalities.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

While the guiding questions proposed are appropriate for structuring the report, they could be further strengthened by incorporating STI-related dimensions for social development. In particular, it would be useful to include questions addressing how science, technology and innovation can be effectively oriented toward inclusive and sustainable food systems; what barriers and opportunities exist for the adoption of innovations by family farmers; how to integrate scientific and traditional knowledge systems; which governance models best support social innovation in food systems; and how to assess the impacts of innovation on diet quality and equity. The inclusion of these elements would contribute to a more implementation-oriented, evidence-based and solution-driven report.

69. Policy Studies Institute and Addis Ababa University, Ethiopia

Surname	Nigussie
First name	Yirgalem
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Researcher
Current institution/organization	Policy Studies Institute and Addis Ababa University
Country	Ethiopia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, but it misses local/ indigenous knowledge and dynamic political economy /landscape both at local and global level
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	local/ indigenous knowledge and dynamic political economy /landscape; the justification includes access to food and nutrition is significantly affected by culture, traditions highly characterized by indigenous knowledge and political practices impacting beneficiary/donor relationships
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	strengthening the interlinkage is more important ; the list encourages multidisciplinary interaction and cooperation

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	I would suggest building strong Monitoring, Evaluation, Learning and Accountability (MEALY) system would help to increase the level and quality of expected outcomes and enhancing local actor engagement and strengthening capacities are key issues
Is there any missing reference to key literature and data?	Local data to contextualize interventions and maximize the return to investment

70. Egypt

ملاحظات حول المسودة الأولية، تقرير فريق الخبراء (FSN-HLPE) حول القضايا الحرجة والناشئة والمستمرة للأمن الغذائي والتغذية، في الدورة الرابعة والخمسين للجنة الأمن الغذائي والتغذية، كمساهمة أولية في تطوير برنامج عمل لجنة الأمن الغذائي والتغذية الجديد.

- أهم النقاط الجوهرية التي يمكن التركيز عليها في الخطاب الرسمي وذلك بناء على مسودة (OV)

1- القدرة على الصمود في وجه التغيرات المناخية ونُدرة المياه:

الملاحظة: تضع المسودة ندرة المياه وتدهور التربة كقضايا حرجة ومستمرة، وتحدد بشكل صحيح تغير المناخ كقضية حرجة ارتفاع درجات الحرارة الجفاف الفيضانات، تغير أنماط هطول الأمطار). كلها عوامل تؤثر على الإنتاجية الزراعية، وأنظمة الثروة الحيوانية، ومصائد الأسماك. واستقرار الإمدادات الغذائية. ومع ذلك، هناك حاجة إلى تركيز أكبر على الابتكار الوراثي وتربية المحاصيل خصيصاً التي تتحمل الحرارة والملوحة.

الاستشارة المقترحة: يجب التركيز على أهمية دعم مراكز البحوث الزراعية الوطنية في مجال البحوث الزراعية التطبيقية لاستنباط أصناف محاصيل استراتيجية كالقمح والذرة ذات دورة النمو القصيرة والمقاومة للإجهاد الحراري والملوحة التكيف مع الظروف المناخية القاسية). ويدعم هذا التعليق توجه المسودة نحو تعزيز مرونة النظم المروية والمطرية، والذي يعد أمراً حيوياً لاستدامة الإنتاج واستقرار الأمن الغذائي في مناطق مثل شمال أفريقيا والشرق الأوسط.

2- تعزيز مرونة النظم الغذائية ضد الصدمات الاقتصادية:

الملاحظة: تناقش المسودة أثر الأزمات العالمية (مثل النزاعات والأوبئة على أسعار الغذاء العالمي والأمن الغذائي والتغذية، حيث يؤدي عدم اليقين الجيوسياسي إلى تعطيل الاستثمار والإنتاج في الزراعة والغابات ومصائد الأسماك، ويؤثر على سياسة التجارة الدولية.

الاستشارة المقترحة: الدعوة إلى تعزيز السيادة الغذائية الإقليمية من خلال التكامل في البحوث الزراعية بين الدول لضمان استمرارية سلاسل التوريد وقت الأزمات.

3- معالجة الفجوة التكنولوجية:

الملاحظة: تشير المسودة إلى أن الابتكار الرقمي والذكاء الاصطناعي قضايا كاشطة يمكن أن تحسن كفاءة النظم الغذائية بدءاً من استخدام المدخلات على مستوى المزرعة والتنبؤ بالمخاطر، وصولاً إلى تحسين الخدمات اللوجستية، وخوارزميات التسعير، وتسويق الأغذية وصولاً للمستهلك، لكنها تحذر من مخاطر زيادة عدم المساواة وتشويه البيانات الغذائية. لذا يجب التأكيد بشكل أكبر على دور "نظم التتبع الذكي" في الحد من تسرب القيمة من السلاسل، لا سيما في نظم الأغذية المدعومة.

الاستشارة المقترحة: التأكيد على ضرورة دعم الرقمنة الشاملة التي تصل الصغار المزارعين الإشارة إلى خبرته في تطوير منظومات التتبع الذكي لخفض شرب الغذاء في سلاسل القيمة، وخاصة نظم الغذاء المدعم، كنموذج لربط التكنولوجيا بالعمليات اليومية للمزارع، والتعامل مع القضايا الحرجة والناشئة بشكل متكامل مما يحسن كفاءة الإنتاج الزراعي.

تعزيز الشفافية في توزيع السلع الاستراتيجية اعتماداً على توظيف الأدوات الرقمية لخلق نظام واضح. قابل للتتبع، ومقاوم للفساد أي كل عملية تصبح مرتبة وقابلة للمراجعة بما يضمن وصول الغذاء إلى الفئات الأكثر احتياجاً، مع خفض خسائر ما بعد الحصاد والهدر الاقتصادي، والاعتماد على تحليل البيانات لتقليل الهدر.

4- استقرار التجارة الإقليمية:

الملاحظة: من أهم القضايا الحرجة اضطراب سلاسل الإمداد الإقليمية مما يؤثر بشكل واضح على الأمن الغذائي العالمي.

الاستشارة المقترحة: إنشاء ممرات تجارية إقليمية وتقليل الاعتماد على مسارات أحادية، بالإضافة إلى إنشاء منصات إقليمية لمشاركة بيانات التجارة اعتماداً على الشفافية في التعامل لذا من المهم التوصية بتوقيع اتفاقيات تجارة غذائية مستقرة، وإنشاء نظام الإنذار المبكر للأزمات وذلك من خلال توحيد السياسات الجمركية بين الدول مما يعمل على تقليل تقلبات الأسعار ويخفض زمن عبور السلع مما يساهم في الحد من الاضطرابات وتقليل مخاطر التصدير لذا فإن الاستثمار في البنية التحتية اللوجستية والرقمية، إلى جانب بناء القدرات المؤسسية، يمثل ركيزة أساسية لتحقيق نظام تجاري إقليمي أكثر مرونة واستدامة.

5- العلاقة بين الصحة الواحدة والنظم الغذائية المستدامة:

الملاحظة: في ظل التدهور البيئي وتغير المناخ والمخاطر الصحية العالمية بعد الصحة الواحدة من أهم مقومات الحياة على الإنسان والحيوان والبيئة المحيطة بهم.

الاستشارة المقترحة: الربط الكامل بين صحة الإنسان والحيوان والبيئة فهي نظام واحد مترابط يؤثر كل جزء فيه على الآخر، وذلك عن طريق التكامل بين القطاعات طب بشري، بيطري والبيئي من طريق الدمج في نظام موحد لمنع المرض قبل حدوثه بدلاً من علاجه بعد انتشاره أي مواجهة التحديات الصحية العالمية بالإضافة إلى وضع سياسات موحدة لمكافحة الأمراض وتبادل البيانات بين القطاعات بشكل فوري، بالإضافة لنشر ثقافة الصحة الوقائية.

6- حيازة الأراضي ومصايد الأسماك والغابات في سياق الأمن الغذائي الوطني :

الملاحظة: أن من دواعي تثبيط الاستثمارات طويلة الأجل في استصلاح الأراضي غياب أمن الحيازة.

الاستشارة المقترحة: (الاعتراف القانوني بالحيازة العرقية) أي يتعين على الدول مواءمة تشريعاتها للاعتراف بحقوق الأراضي الجماعية للشعوب الأصلية وصغار المنتجين، إدماج مؤشرات الحيازة في المساهمات الوطنية (ربط خطط المناخ الوطنية بمقاييس واضحة لنسبة الأراضي التي يحكمها السكان المحليون بأمان قانوني) المعرفة من يملك الأرض ومن لا يملكها، ودعم صغار المزارعين وخفض النزاع على الأراضي، آليات تظلم مستقلة توفير مسارات قانونية فعالة لمعالجة النزاعات الناتجة عن تدخل السياسات البيئية مع حقوق الوصول للموارد.

أخيراً، تشكل الأسئلة الرئيسية المطروحة في تقرير فريق الخبراء رفيع المستوى (HLPE-FSN) خريطة طريق استراتيجية وتوجيهية لصناع السياسات ولجنة الأمن الغذائي العالمي بهدف تحويل النظم الغذائية، بحيث تتجاوز الحلول الفنية لتعالج التحديات الهيكلية العميقة. وتركز هذه الأسئلة بشكل أساسي على كيفية تحقيق اتساق وتكامل في السياسات عبر قطاعات الغذاء، الزراعة، التجارة، البيئة، والمناخ لتفعيل إطار الصحة الواحدة واتفاقيات ريو الثلاث. ويمكن تقديم حلول عملية قابلة للتنفيذ عن طريق دمج التكنولوجيا في كل مرحلة، تعزيز التكامل الإقليمي، الربط بين القضايا الحالية والمستقبلية.

71. Shamba Centre for Food & Climate, Switzerland

Surname	Mouyal
First name	Natalie
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Communications Manager
Current institution/organization	Shamba Centre for Food & Climate
Country	Switzerland
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	We welcome the addition of corporate concentration in food systems (Issue #6) in the list. As the text correctly highlights, corporate concentration has become a structural feature shaping food systems. Competition regulators, both at the national and regional levels, offer a compelling pathway to tackle corporate concentration. Unfortunately, many countries in Africa lack sufficient regulatory institutions and enforcement capabilities. A recent review of 48 sub-Saharan African countries reveals that 22 lack national competition laws or institutions while many of the remaining 26 are underfunded and understaffed. Without robust enforcement mechanisms,

anti-competitive behaviour remains unchecked. This results in extreme levels of concentration in agrifood markets, driving up food insecurity and poverty. (Source: Buthelezi, T. Hammadi, M. Roberts, S. Smaller, C. (2023). Empowering African food producers and agricultural enterprises through stronger competition law and policy. Shamba Centre for Food & Climate, Geneva, Switzerland.)

For this reason, the CFS can provide a space to consider policy responses that include

1. Understanding the role of competition regulators and how support for strong competition laws, policies, and institutions at the continental, regional, and national levels can help reduce hunger and malnutrition.
2. Increasing market transparency and data availability by supporting market observatories and research institutions to generate independent, data-driven insights that inform policy reforms.

Regarding the issue of the affordability of healthy and nutritious diets (#9), we welcome the inclusion of market concentration as one of the key supply side drivers. For this reason, the topic of excessive margins earned by corporations should be addressed in the key questions.

The persistent food price inflation experience by most low and middle-income countries after the COVID-19 pandemic, and in some cases continue to experience, illustrates market dysfunction given that input costs and commodity prices have fallen back to pre-COVID levels. Research has shown how seller's inflation is possible in highly concentrated and uncompetitive markets where large firms set the prices (see Weber, Isabella M and Wasner, Evan. (2026). Sellers' Inflation, Profits and Conflict: Why can Large Firms Hike Prices in an Emergency?). A recent inquiry into the poultry market in Zambia by the Competition and Consumer Protection Commission highlights that large firms earned excessive margins on the sale of poultry meat to consumers with prices more than 20% higher than they would have been in competitive markets between July 2021 and 2023 (Competition and Consumer Protection Commission (CCPC). (2025). Report on the Commercial Broiler Poultry Market Inquiry (redacted version)).

For this reason, the key questions should address the role of excessive margins earned by corporations in driving up food prices.

Is there any missing reference to key literature and data?	References to consider: Buthelezi, T. Hammadi, M. Roberts, S. Smaller, C. (2023). Empowering African food producers and agricultural enterprises through stronger competition law and policy. Shamba Centre for Food & Climate, Geneva, Switzerland Nsomba, G., Roberts, S., Tshabalala, N., Manjengwa, E. (2022b). Assessing agriculture & food markets in Eastern and Southern Africa: an agenda for regional competition enforcement. CCRED African Market Observatory Working Paper. Roberts, S. (2023). Competition, trade, and sustainability in agriculture and food markets in Africa. Oxford Review of Economic Policy, 39(1), pp. 147–161.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	See response to question 11

72. Extraordinary Secretariat to Combat Poverty and Hunger, Brazil

Surname	Silva
First name	Ellen
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	International Advisor
Current institution/organization	Extraordinary Secretariat to Combat Poverty and Hunger
Country	Brazil
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The proposed list captures a set of highly relevant and timely challenges affecting FSN at the global level. Overall, the issues identified by the HLPE-FSN reflect key structural pressures currently affecting global food systems, including climate change, geopolitical instability, market dynamics, and technological transformations. This systemic framing is a strong foundation for advancing integrated approaches to FSN. However, while the selection of issues is pertinent, the analysis could be further strengthened. In particular, there is room to deepen the recognition that the challenges affecting FSN are not only technical or sector-specific, but also fundamentally political and distributive in nature. Inequalities and governance dynamics play a central role in shaping how food systems function and

	who benefits from them, and these dimensions could be more explicitly and consistently integrated across the analysis. In this regard, reinforcing the political economy perspective underpinning the identified issues would enhance the analytical depth of the note and better reflect the complexity of FSN challenges across diverse contexts.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	While the list of issues is comprehensive, there are 2 key dimensions that could be further elaborated or more explicitly integrated into the framework. First, urban food systems, including the specific dynamics of urban and peri-urban areas and informal settlements, deserve greater attention. Rapid urbanization is reshaping food environments, consumption patterns, and access to food, particularly in contexts marked by high levels of inequality. Evidence shows that more than 55% of the global population currently lives in urban areas, a figure projected to reach nearly 68% by 2050, making urban contexts increasingly central to food security and nutrition outcomes (HLPE, 2024). In many countries, including large middle-income countries such as Brazil, urbanization processes are closely associated with the expansion of peripheral areas, where populations often face structural barriers to accessing adequate, healthy, and affordable diets. These dynamics are compounded by labor informality, income instability, and unequal access to infrastructure and services, which are key drivers of urban food insecurity (Frayne et al., 2022). In parallel, urbanization is also associated with significant dietary shifts, including increased consumption of ultra-processed foods and rising rates of diet-related non-communicable diseases (Zhong et al., 2021). Despite its relevance, the urban dimension appears to be underrepresented in the current draft. The concept of urbanization is only marginally mentioned, and urban food systems are not explicitly addressed as a cross-cutting or standalone issue. Given the demographic trends and the growing concentration of food insecurity in urban areas, this gap limits the ability of the framework to fully capture contemporary FSN challenges. Expanding the analysis of urban and territorial food systems would therefore be critical to strengthen the note.

Second, public governance and state capacity should be more prominently addressed as a cross-cutting and enduring issue. Effective governance is central to the design, coordination, and implementation of policies across all CEEI. This includes intersectoral coordination, regulatory capacity, policy coherence, and the ability to respond to complex and overlapping crises. In the current draft, references to public governance appear only sporadically and are not treated as a central analytical dimension. However, governance challenges, such as fragmented institutional arrangements and limited coordination across sectors, are widely recognized as major barriers to effective food systems transformation. Evidence indicates that food system policies are often highly fragmented across sectors such as agriculture, health, trade, and environment, leading to inefficiencies and unaddressed trade-offs (OECD, 2021). As such, governance should not be treated as a secondary or implicit factor, but rather as a core issue that underpins all other themes identified in the note.

Moreover, food systems transformation is inherently political and depends on state capacity, institutional arrangements, and the ability to manage competing interests and priorities (Leeuwis et al., 2021). Countries with weaker governance structures often face greater challenges in responding to food system shocks and ensuring policy coherence, which directly affects FSN outcomes (FAO, 2025). Strengthening the treatment of governance would also align with a growing body of literature emphasizing the role of institutions and public policy in shaping food systems outcomes.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

In particular, greater emphasis could be placed on the role of structural inequalities as a cross-cutting driver connecting multiple issues. Inequalities related to income, territory, gender, and social conditions shape how different populations experience food insecurity and interact with food systems. These structural dimensions underpin dynamics related to affordability, access, agency, climate vulnerability, and exposure to shocks, and could be more consistently reflected across the different thematic areas.

Some issues could also benefit from being more explicitly combined or jointly analyzed, particularly where there are areas of overlap or accumulated work in existing multilateral processes. For instance, stronger integration between international trade and corporate concentration would help capture how global market structures shape food environments and access, while also avoiding fragmentation in the treatment of closely related dynamics. Similarly, environmental dimensions such as climate change and the Rio Conventions could be more tightly connected, ensuring coherence with already established international frameworks and avoiding potential duplication.

Finally, from a policy perspective, reinforcing the interlinkages between issues would also allow for a stronger recognition of the importance of structural and integrated policy responses. Efforts to address food insecurity and malnutrition require not only sector-specific interventions, but also comprehensive strategies to reduce poverty and inequalities. This includes strengthening social protection systems, expanding access to basic services, and reinforcing national institutional capacities. Highlighting these elements would help balance the current emphasis on environmental dimensions with a more explicit consideration of the social dimension of sustainable development.

Overall, strengthening these interconnections would contribute to a more coherent and policy-relevant analytical framework, better aligned with the complexity of food systems and supportive of inclusive and context-sensitive responses.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

This contribution focuses on CEEI 2: Achieving food security and nutrition in climate crises, given its central relevance to current global challenges and its detailed treatment in the draft. The drivers and trends identified in the text provide a strong and comprehensive foundation for understanding the linkages between climate change and FSN outcomes. The draft effectively captures multiple pathways through which climate change affects FSN, including impacts on agricultural productivity, food supply stability, food environments, livelihoods, and the nutritional quality of food. It also appropriately highlights the role of extreme weather events, environmental degradation, and greenhouse gas emissions, as well as the compounding effects of conflict and geopolitical instability. These elements collectively contribute to a robust framing of climate change as a systemic risk to FSN.

Importantly, the text acknowledges that climate change acts as a threat multiplier, exacerbating existing vulnerabilities and inequalities, and recognizes the disproportionate burden faced by countries that have contributed least to global emissions. This is a critical dimension and strengthens the overall analytical coherence of the section.

However, while the environmental and production-related drivers are well developed, the analysis could be further strengthened by more explicitly incorporating social and policy-related mediating factors that shape FSN outcomes. In particular, the role of structural inequalities, including income disparities, territorial inequalities, and unequal access to service, could be more consistently integrated as key determinants of how climate impacts translate into food insecurity and malnutrition.

In addition, although the text refers to the need for institutional mechanisms to protect food security during climate-induced crises, the role of social protection systems could be more explicitly and centrally addressed. Instruments such as food assistance and public procurement programs are critical in mitigating the impacts of climate shocks, especially for vulnerable populations, and represent an essential link between climate-related drivers and FSN outcomes. Strengthening this dimension would enhance the policy relevance of

	the analysis and better reflect the range of available response mechanisms. Furthermore, the discussion could benefit from a broader consideration of country contexts. While the focus on low-income countries is justified given their high vulnerability, climate-related risks and their implications for FSN are increasingly affecting a wider range of countries, including middle-income countries with significant internal inequalities. Expanding the analysis to reflect these dynamics would improve its inclusiveness and applicability. Finally, the section already acknowledges the importance of examining the political economy of subsidies, incentives, and financial flows. This is a particularly valuable entry point that could be further developed to strengthen the understanding of how policy choices shape both vulnerability and resilience within food systems.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Across several sections, the analysis places strong emphasis on production, environmental pressures, and systemic risks. While these dimensions are essential, the pathways through which these drivers translate into household-level food access could be more explicitly developed. In many contexts, food insecurity is less a result of insufficient food availability and more closely linked to income constraints, price volatility, and structural barriers that limit access to adequate and healthy diets. In this regard, the role of poverty as a central determinant of food insecurity could be more consistently integrated into the analysis. Economic vulnerability shapes how individuals and households experience shocks, whether climate-related, economic, or geopolitical, and directly influences their ability to access food. Strengthening this dimension would help clarify the mechanisms through which broader systemic drivers affect FSN outcomes.

Is there any missing reference to key literature and data?	While the draft draws on a solid body of literature, there are opportunities to further strengthen the evidence base. In particular, the analysis could benefit from a stronger inclusion of literature and data on poverty (0 references), inequality (2 references), and their direct relationship with FSN outcomes. There is also scope to deepen the use of literature on public governance, policy coherence, and state capacity, especially in relation to the design and implementation of integrated food systems policies. The inclusion of evidence on food environments and dietary patterns could also be strengthened. In this regard, approaches such as the NOVA classification, developed and applied in Brazil, provide important insights into the role of (ultra)processed foods and their implications for nutrition and public health. Finally, diversifying the sources of evidence incorporating more research produced in the Global South, which can provide context-specific insights and contribute to a more balanced and representative knowledge base.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	No major additions are suggested. The existing questions provide a good framework to support a comprehensive and balanced analysis across the different CEEI.

73. Ministry of Agriculture, Jordan

Surname	Khreesha
First name	Ibtihal
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Deputy Representative to UN agencies
Current institution/organization	Ministry of Agriculture
Country	Jordan

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?

The issues identified by the HLPE-FSN provide a comprehensive and relevant overview of the key challenges affecting food security and nutrition globally. The focus on food systems transformation, climate change, and geopolitical instability is particularly important.

However, the analysis could be strengthened by better reflecting regional specificities, especially in countries that are highly dependent on food imports or face natural resource constraints. A more context-specific approach would improve the relevance of the analysis.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Yes. One important issue that should be further emphasized is water scarcity, particularly in arid and semi-arid regions, where it directly affects agricultural productivity and food availability.

Another key issue is food import dependency, which exposes countries to global market volatility and external shocks.

In addition, unequal value distribution in food systems should be considered, as small-scale producers often do not receive fair income, which affects rural livelihoods and long-term sustainability.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	While the issues are presented separately for analytical clarity, their interconnections should be more explicitly addressed. For example: - Climate change is closely linked to biodiversity loss and land degradation - Geopolitical instability directly affects trade flows and food price volatility - Digitalization interacts with corporate concentration through control over data and markets - The “One Health” approach provides an important integrative framework, linking human, animal, and environmental health, and highlighting the interdependencies between food systems and public health In particular, the One Health perspective is highly relevant in the context of climate change, as environmental degradation and shifting ecosystems can increase the risk of zoonotic diseases, disrupt food production, and affect food safety and nutrition outcomes. Strengthening the integration of the One Health perspective would support a more holistic understanding of the relationships between disease risks, food safety, environmental sustainability, and food security. A systems-based analytical framework would further help to capture these complex interlinkages.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The identified drivers are generally relevant, but some important aspects could be further strengthened: - Structural dependence on food imports - Demographic dynamics, including youth disengagement from agriculture - Natural resource constraints, particularly water scarcity These factors significantly influence food security outcomes, especially in vulnerable regions.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The draft could further elaborate on: - The role of income inequality in limiting access to healthy diets - The impact of food price inflation on dietary quality - Socio-economic barriers affecting vulnerable populations

	These aspects are essential to fully understand FSN outcomes.
Is there any missing reference to key literature and data?	The draft is well supported by existing literature. However, it could benefit from: More region-specific data and case studies Evidence from low- and middle-income countries Additional data on water scarcity and food import dependency
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	The proposed questions are relevant and useful. However, additional questions could be considered: How can countries reduce vulnerability to external shocks while maintaining trade benefits? What governance mechanisms can address power imbalances in food systems? How can regional cooperation strengthen food system resilience?

74. Rural Women's Assembly, South Africa

Surname	Andrews
First name	Mercia
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Regional Coordinator of the Rural Women's Assembly (Southern Africa)
Current institution/organization	Rural Women's Assembly (Southern Africa)
Country	South Africa
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	• Overall, we think that the most important issues have been mentioned, but we identified omissions in each, if the goal is to indeed lead to structural transformation in favour of those experiencing hunger. The 1966 UN ICESCR has not succeeded in its goal in 60 years and hunger has increased. Thus CFS 54 needs to be explicit on the kind of structural changes sought, given the power inequalities and conflicting interests at play. • There is no historical and regional contextualisation, a critical and enduring issue - most of the vulnerable “fragile value chains” are in the Global South. The fact that Sub-Saharan Africa is one of poorest world regions is not accidental, and is now also one of the most vulnerable to climate change. Increasing hunger is having profound and long-lasting impacts on our societies and future generations. Sub-Saharan Africa was food secure prior to colonialism –

when scarcity occurred it was transitory, not a result of mal distribution of resources; slave records suggest that Africans were “well nourished, strong and of regular stature”. Colonisation replaced higher nutritious local staples with maize and cassava due to higher calorific content, faster growth and lower labour requirements. Post-independence agriculture systems, policies and trade were imposed by western “experts” to create dependency on food imports. Similar patterns remain: part of our struggles to find new development paths and escape traps of national external debts.

- An enduring issue is the invisibility of women as agents of change. In the Global South, inspired by ecological and peace movements and feminist intersectionality on gender, race, class, and justice, women are often at the forefront of resistance to extractivist capitalist and patriarchal projects, in defence of threats to their territories and livelihoods.

References:

- Bjornlund V, Bjornlund H, van Rooyen A. (2022) Why food insecurity persists in sub-Saharan Africa: A review of existing evidence. *Food Security*. 2022;14(4):845-864. doi: 10.1007/s12571-022-01256-1. Epub 2022 Feb 3. PMID: 35136455; PMCID: PMC8812363
- Feeney J. K. (2023) Biodiversity conservation under green extractivism and armed neoliberalism in Colombia. <https://journals.librarypublishing.arizona.edu/jpe/article/5495/galley/5587/view/>
- Kelleher F. (2019) Why the world needs an African feminist future. <https://africanarguments.org/2019/03/why-world-needs-african-ecofeminist-future/>
- Moseley W. G. (2024) Decolonising African Agriculture – Food security, agroecology and the need for radical transformation. <https://library.oapen.org/handle/20.500.12657/93363>

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

9-a) Omission of how to address contesting forms of land tenure at play: People in the Global South have historically have had a different relationship to their commons, contrasting with western notions of private ownership, imposed on the colonised world. These different forms of tenure coexist, but not always comfortably. Land, water, ocean and natural resource grabs are again on the increase, ignoring FPIC (UNDRIP), leading to dispossession, increasing hunger, conflicts and often to cross border migrations, within and from the Global South.

References:

- IPES-Food 2024. Land Squeeze: what is driving unprecedented pressures on farmland and what can be done to achieve equitable access to land? <https://ipes-food.org/report/land-squeeze>;
- The Oaklands Institute (2025) CLIMATEWASH – The World Bank’s Fresh offensive on land rights. www.oaklandinstitute.org; c) World Forum of Fishers Peoples. <https://wffp-web.org/about-us/>

9-b) Omission of No compliance with ILO Conventions along the “supply chains” - an enduring issue: “value” is extracted “upwards” or “downwards” towards those with more power and “outwards” through extraction of surplus across sites of production/ distribution are enduring issues. “Upwards” extraction refers to extraction of labour power across each “food systems” node - low wages and precarious work render farm and agricultural workers, especially women workers, workers in transport nodes and in “uberised” food deliveries, invisible and disposable. Hunger is made invisible, as it increases among the increasing number of direct and extended family dependants. Thus, reference needed to ongoing efforts for a “UN Treaty” to dismantle corporate power.

Reference: Global Policy Forum (2025). UN negotiations caught between corporate lobby and the struggle for global justice. Report on the eleventh session of the intergovernmental working on “UN Treaty”.

9-c) The climate crisis and achieving food security and nutrition: calls for reparations - an enduring issue: Omission of non-compliance by rich countries to allocate public funds to fulfil responsibilities to compensate the Global South for damages. Proposals to use private capital to fulfil the gap enhance corporate interests. We suggest that the CFS 54 session will reinforce the 25 March 2026 UN’s Resolution, in response to the African Union (AU)’s call for the enslavement of Africa be declared the greatest crime against humanity, for historical reparation and justice, as well as

	technology transfer for those still experiencing racial discrimination and exclusion. Structural transformation need to lead to Transformative Resilience so as to bounce forwards. We concur that it is important to understand the slow adoption of agroecology for adaptation. Given the interlinkages between most of the issues, we expand on this in reply to question 10. References: • CFS HLPE -FSN Report #20 Draft version 0/10 February 2025. https://www.globalpolicy.org/en/publication/un-negotiations-caught-between-corporate-lobby-and-struggle-global-justice • Climate Home News (2026) Funding gap threatens next round of IPCC climate science reports, chair warns. https://www.climatechangenews.com/2026/04/01/funding-gap-threatens-next-round-of-ipcc-climate-science-reports-chair-warns/ • UN resolution urges reparations for slavery’s ‘historical wrongs’. https://news.un.org/en/story/2026/03/1167199#:~:text=The%20resolution%20emphasised%20%E2%80%9Cthe%20trafficking,structure%20the%20lives%20of%20all
All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I	10-a) Climate change and slow adoption of agroecology: In Africa the latest CAADP Strategy (2026-2035) does not adopt agroecology (AE). In SADC less than half of the total contributions by Member States for RAIP (Regional Agricultural Investment Plans) contribute to AE. IPES-Food (2020) indicates that 85% of agricultural research projects by one of the major funders are for industrial agriculture (3% for AE), and research institutions in the Global North receive most Ag4RD funds. To avoid confusing messages, it is important for the CFS 54 to define terms used such as ‘climate-resilient’ and ‘climate-smart’ (p.9). If referring to CSA, adopted at COP28, it has been rejected since COP 21 by movements defending AE, as “green washing” and capture by agribusiness. If the CSA is making recommendations for different models of production, this needs to be clearly stated. A parallel rejection of the “blue economy” is made by fishers’ people - “greenwashing” by monoculture mangroves and aquaculture. We concur with the need to “relook at the political economy of subsidies, to protect climate-affected small producers: but what type of subsidies? Our members, practicing feminist AE, report ongoing pushes for adopting GM seeds and chemical fertilisers, a threat likely to continue through CAADP and recommendations by AGRA and the World Bank.

References:

- AGRA - The Hub for Agricultural Policy Action (HAPA) Initiative.
<https://agra.org/the-hub-for-agricultural-policy-action-hapa-initiative/>
 - CAADP Strategy and Action Plan: 2026-2035 (Building Resilient and Sustainable Agrifood Systems in Africa), January 11, 2025, Kampala, Uganda.
<https://au.int/en/documents/20240229/4th-caadp-biennial-review-report-20125-2023>.
 - IPES-Food (2020). Money flows: what is holding back investments in agroecological research for Africa?
https://www.ipes-food.org/_img/upload/files/Money%20Flows_Full%20report.pdf
 - Partnership for Social Responsibility Alliance (PSA) (2024). Agroecology in Southern Africa
https://www.google.com/search?q=AGROECOLOGY+IN+SOUTHERN+AFRICA%3A+FINANCING+THE+TRANSITION&oq=AGROECOLOGY+IN+SOUTHERN+AFRICA%3A+FINANCING+THE+TRANSITION&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRiPAjIHCAIQIRiPATIBCDE0NzNqMGo3qAIAAsAIA&sourceid=chrome&ie=UTF-8
- 10-b) Food security and nutrition and the Biodiversity Rio Convention: an enduring issue. On “breeding of both staple and underutilised crops adapted to harsh climates”, there is omission of 2021 UN ITPGRFA, rooted in the 1993 CBD, and ongoing disputes between the G77 & Global North countries and agri-business, which came to a head in November 2025 (meeting in Peru). Restrictions on patenting of “seeds” have allegedly been breached - digitalisation of DNA sequences in open access databases opens the doors for privatisation and monetisation of all “seeds”. Beyond ITPGRFA, farmers’ rights as per 2018 UNDROP, are increasingly under attack - the Global South under pressure to adopt seed laws that criminalise farmers’ seeds and adhere to UPOV 1991, as investment pre-conditions.
- #### References:
- IISDO Earth Negotiations Bulletin, GB 11 Final – Vol. 9, No. 880 Summary of the Eleventh Session of the Governing Body of the ITPGRFA: 24-29 November 2025.
<https://enb.iisd.org/plant-genetic-resources-food-agriculture-itpgrfa-gb11-summary>
 - Third World Network, Sahabat Alam and African Centre for Biodiversity (2025). The Plant Treaty and the proposed amendments: What every farmer needs to know.
<https://acbio.org.za/seed-sovereignty/the-plant-treaty-and->

	the-proposed-amendments-what-every-farmer-needs-to-know/
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	11-a) On looking for AGENCY indicators, they must be assessed from local to global levels - for what, by whom, how agency is being constrained or violently repressed, in both organised, formal and informal food networks in rural and urban areas, whether producing and/or selling food, marching against rising food prices, demanding justice, land and water, etc. • The Text critically omits the ICARRD+20 held in Colombia (February 2026). The final declaration requests it to be taken to the CFS and other UN relevant bodies of the UN. The Draft omits to acknowledge the AGENCY of international alliances such as La Via Campesina and the IPC, an alliance of an estimated 300 million small-scale food producers from the Global South. These alliances emerge from decades of organising activism, implementing alternatives, lobbying and resistance. The IPC committed to take forward an inclusive 21st- century agrarian reform beyond land redistribution - Redistribution, Recognition, Restitution and Regulation, to encompass forests, oceans, rivers, grazing land and migratory routes. • Engagement is uneven - with policy makers it happens at all levels but our experiences indicate that most consultations are token, decisions made ahead. The same applies to global governance structures such as the UN and the CFS, decisions perceived as shaped by a capitalist controlled “food system” - a challenge for the CFS 54 to correct this perception. Successes such as endorsing of AE by FAO resulted from years of worldwide campaigns, but under constant threats of co-optation and side-lining. References: • La via Campesina. Indigenous Peoples and social movements reaffirm unity and support to ICARRD+20 organisers, but reject the Conference Declaration. https://viacampesina.org/en/2026/02/indigenous-peoples-and-social-movements-reaffirm-unity-and-support-to-icarrd20-organisers-but-reject-conference-declaration/ 11-b) Conflicts, food dependency on imports: monopolised and politically manipulated trade - the connection to chemical fertilisers- an enduring issue • Repeated “food crises” – the 200-2008 financial crash, the Russia-Ukraine conflict, and ongoing USA war on Iran - expose the vulnerability of dependency on trade and coordination of input chains. Unexpected disruptions are not due only to climate events and local conflicts but from food being used as a weapon of war and political subjugation

	through sanctions. Delivery disruptions of chemical fertilisers threaten food security in most countries, lead to hunger and social instability. Thus, the challenge to the CFS to answer: a) why knowing the devastating effects of these fertilisers on our environments, biodiversity, global warming and food security, is this model being imposed on millions of independent small-scale producers self-reliant on soil fertilisation and despite AE being recommend by UN Special Rapporteurs on the right to food? Farmers' voices need representation – campaigning over years for “agriculture out of the WTO”, food out of bilateral and trade agreements, EU farmers on the streets opposing MERCOSUR, etc. There is relentless pressure for African farmers to increase the usage of chemical fertilisers while Africa's “agricultural growth over the past two decades doubled from 2000 to 2021 and its agricultural sector became the fastest-growing globally” (CAADP), while hunger in Africa is on the increase. Who is benefiting? • An enduring omission is for national food reserves to remain under State control to minimise food speculation, especially during unpredictable emergencies and disasters. This will help to reclaim food sovereignty, allow public accountability and prevent elite capture. References: CAADP (reference under reply to question 10).
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	12-a) Digital innovations in agriculture- emerging and enduring issues • We already mentioned the threat of digitalisation of DNA sequences by private breeders and being published on website databases. Our organisation does not have capacity to respond to “How” to ensure accountability, but research by IPES-Food's (2026 February report) concluded “farming by algorithm is not the future”, recommending a change in the innovation narrative. Already in 2024, they warned that the major push to digitize land registers in the Global South is “feeding financial markets with data and exacerbating land grabs” [reference in 9a)]. The Alliance for Food Sovereignty in Africa (AFSA) states that while digital technologies hold some opportunities to connect farmers movements, biotechnologies have emerged as a new form of colonisation, lead to deskilling, debt, widen the skills and technological divide. Others warn about data extraction, land and water grabs, digital sale of lands illicitly acquired, and the reclassification of communal lands in land registries as individual property titles, to be used as collateral and sold to private buyers. References: • Alliance for Food Sovereignty in Africa (AFSA) (2025). PAN-

AFRICAN declaration on the future of biodigital technologies in food and agriculture - October 10, 2025.

<https://afsafrika.org/blog/pan-african-declaration-on-the-future-of-biodigital-technologies-in-food-and-agriculture/>

- IPES-Food (2026). Head in the Cloud: challenging the digital takeover of farming.

<https://ipes-food.org/wp-content/uploads/2026/02/HeadInTheCloud.pdf>

12-b) One Health: a framework promoting what model of production? Agroecological or industrial? A critical and enduring issue.

- The Drat lists One Health proposals that on a “first reading” one finds difficult to disagree with: e.g. “risks spanning human health, animal health and welfare, ecosystems and food security are driven by current production and consumption patterns”; One Health “supports more coherent policies and investments that simultaneously protect health, eliminate inequities, sustain ecosystems and ensure stable, nutritious food supplies”; Plant health challenges, declining genetic diversity and increasing global reliance on just a few species of staple crops, etc. However, other statements, alert us to be careful: “Coordinated, global intellectual and financial investments are needed in climate-resilient and nutrition sensitive agriculture, livestock, fisheries and aquaculture.... Etc”

- Thus, some critical questions: a) How did the listed risks arise? b) What changes will be made to the dominant production model known to be causing these problems? c) What will be the role of the dominant corporates and agri-business? d) Which alternatives production models will be supported? e) How will AE be supported to ensure human, animal and ecosystems health? f) How will land dispossession and land grabs be addressed? g) Who are the main funders of One Health framework programmes in various countries?

- The One Health framework has been critiqued: failing to address the “colonial capitalist logics” and reinforcing the system associated with the spread of infectious diseases, particularly zoonotic diseases. Climate change will exacerbate these problems but are NOT the root causes. Uncritical embracing of One Health will fail structural transformation towards AE, and a betrayal of millions of food producers across the world.

- Reference: Ceddia M.G., Boillat S. and Jacobi Johanna (2024). The Lancet Planetary Health; Transforming food systems through agroecology: enhancing farmers’ autonomy for a safe and just transition / Vol, 8, Issue 11, November

	2024, pages e958-e https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(24)00234-1/fulltext965
Is there any missing reference to key literature and data?	We included all references used in the sections above.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Yes

75. Physicians Association for Nutrition (PAN International), Switzerland

Surname	Alessandrini
First name	Roberta
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Director of the Dietary Guidelines Initiative (DGI)
Current institution/organization	Physicians Association for Nutrition (PAN International)
Country	Switzerland

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Proposed additional CEEI: Redirecting public finance and procurement towards sustainable, healthy, and equitable food systems

Public expenditure represents one of the most powerful and yet consistently underutilised levers available to governments for reshaping food systems towards better health, environmental sustainability, and social equity. Two instruments in particular, agricultural subsidies and public food procurement, have a direct and well-documented influence on both food production and consumption patterns, and their reform is essential to achieving FSN outcomes at scale. Their omission from the current list of CEEIs represents a significant gap, given the magnitude of public funds involved and the breadth of their systemic impact.

Globally, agricultural subsidies continue to flow disproportionately towards the livestock sector, which according to FAO accounts for approximately 12% of global GHG emissions. This misalignment between public spending and public health and environmental goals has been extensively documented. A landmark analysis published in *Nature Food* estimated that over 80% of global agricultural subsidies are potentially harmful to human health or the environment, or both. The perpetuation of these incentive structures not only entrenches emissions-intensive production systems but actively undermines the economic viability of more sustainable alternatives. Redirecting agricultural support towards plant-forward value chains — encompassing fruits, vegetables, legumes, whole grains, nuts — would create economic conditions more conducive to both dietary transitions and emissions reduction. Complementary fiscal measures, including the reduction of VAT on nutritious foods such as fruits, vegetables, whole grains, and legumes, can further lower the cost of healthy eating for consumers, particularly those in lower-income groups for whom price remains the primary barrier to dietary quality.

Public food procurement, encompassing school canteens, hospitals, care homes, prisons, and other publicly funded catering settings, represents a largely untapped opportunity for food systems transformation. As acknowledged in the dialogues leading to the UN Food Systems Summit, procurement holds considerable potential to shape both what is produced and who produces it, by establishing

standards for healthy, nutritious, sustainably sourced, and locally procured food, and by directing purchasing power towards smallholder farmers, family enterprises, and small and medium-sized food businesses.

The evidence base supporting this lever is growing. Research on school meal programmes indicates that well-designed interventions can be associated with substantial health benefits, including reduced risk of childhood obesity, while simultaneously cutting food-related environmental impacts, including food waste, by up to half. Brazil's National School Feeding Programme (PNAE) stands as an internationally recognised model. Its legislative requirement that a minimum of 30% of federal funds be spent on products from family farming has simultaneously improved child nutrition, supported smallholder livelihoods, and strengthened local food economies.

Hospitals represent an equally strategic but often overlooked setting. A groundbreaking scoping review found that the provision of plant-rich meals in hospital settings can improve patient health outcomes while significantly reducing food-related greenhouse gas emissions. Plant-forward dietary patterns have also gained substantial attention in the preventive medicine literature for their association with reduced risk of cardiovascular disease, type 2 diabetes, and certain cancers — conditions that together represent a major and growing burden on public health systems.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

The paragraph on “One Health” as an integrating framework for food security and nutrition” should further expand on AMR risks, one of the world’s ten leading global health threats. This section should call explicitly that the excessive use of antibiotics in livestock farming poses a biosecurity risk and affects human and planetary health. Directly relevant to the question of One Health is the question of foodborne illnesses and zoonotic spillover—in which pathogens cross the animal–human species barrier—accounts for 60% of emerging or new infectious diseases in humans. Both AMR and zoonotic diseases highlight the importance that addressing global health threats starts from how we produce our food and what we decide to eat. Supporting sustainable protein diversification can represent a way to reduce the incidence of biosecurity risks, while promoting healthier dietary patterns that can also address the rising incidence of NCDs.

The drivers and trends identified under this CEEI would benefit from a more explicit and prominent treatment of antimicrobial resistance (AMR) and zoonotic disease spillover, two of the most consequential biosecurity threats of our time with direct and well-documented links to food systems and FSN outcomes.

AMR is recognised by the WHO as one of the ten leading global health threats, yet its connection to food production practices remains insufficiently reflected in policy discourse. The excessive use of antibiotics in livestock farming is a primary driver of AMR development and transmission, with implications that extend well beyond animal health to encompass human health and planetary health more broadly. This is not a peripheral risk: it threatens the continued efficacy of medicines that underpin modern healthcare systems and that populations in food-insecure contexts are least equipped to replace.

Equally critical is the question of zoonotic disease spillover which already accounts for approximately 60% of emerging and new infectious diseases in humans, and the conditions that drive it — intensive livestock production, biodiversity loss, habitat encroachment, and weak biosurveillance systems — are themselves closely intertwined with food system dynamics.

Taken together, AMR and zoonotic diseases make a compelling case for a central argument that the One Health section should state explicitly: addressing global health

	threats must begin with how we produce our food and what we choose to eat. Food systems are not merely a backdrop to these risks — they are a primary site of their generation and, crucially, of their prevention. In this context, supporting sustainable protein diversification offers a policy pathway that is both responsive to these biosecurity risks and aligned with broader FSN objectives. Reducing dependence on intensive animal production, through greater dietary inclusion of plant-based proteins, can lower the conditions under which AMR develops and zoonotic spillover occurs, while simultaneously promoting dietary patterns associated with reduced incidence of non-communicable diseases. This convergence of benefits makes protein diversification a strong candidate for inclusion among the actionable recommendations under this CEEI, and one that illustrates the integrative potential of the One Health framework at its best. Reference: Recommendations to address the shortfalls of the EAT–Lancet planetary health diet from a plant-forward perspective - The Lancet Planetary Health
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	The paragraph on food affordability references ultra-processed foods (UPFs), noting that "nutrient-dense foods, particularly fruits, vegetables, and animal source foods are subject to price volatility and remain less affordable food categories, whilst ultra-processed foods are often cheaper and the increase in their consumption contributes to the rise of non-communicable diseases in all regions of the world." While this observation is valid, the topic warrants a more nuanced treatment. Food processing has long been integral to our food systems. Techniques such as cooking, baking, pasteurisation, fermentation, and chilling serve essential purposes: they improve taste, texture, safety, and nutritional value — for instance through fortification — while extending shelf life, reducing food waste, and meeting the convenience demands of modern lifestyles. Today, the overwhelming majority of

products we consume are processed in some form, and it is difficult to imagine contemporary food systems without them.

That said, ultra-processed foods have come under increasing scrutiny, particularly due to their association with non-communicable diseases. However, UPFs are frequently treated as a monolithic category of unhealthy products, when in fact foods classified as ultra-processed vary considerably in their nutritional composition, dietary roles, and potential health impacts. Treating the category as homogeneous risks oversimplifying complex dietary realities and undermining the precision that effective policy requires.

Processing level and nutritional composition are two sides of the same coin — each offering a partial picture that only becomes meaningful when considered alongside the other. Sound policy must therefore account for both dimensions simultaneously, rather than relying on processing classification alone, in order to accurately capture the varying health risks associated with different UPFs and calibrate regulatory responses accordingly.

In the specific context of food affordability, policy efforts should prioritise expanding access to minimally processed, nutritious, and culturally appropriate foods. At the same time, while promoting nutrient rich whole foods, policies should put in place regulatory measures addressing the consumption of foods high in fat, sugar, and salt (HFSS) which are harmful regardless of the level of processing. For instance, policy measures targeting such food groups in Chile, through mandatory health warning labelling, have proven effective in incentivising industry food reformulation and in reducing the consumption of unhealthy foods. Indeed, a blanket approach to UPFs risks overlooking the reality that some products within this category may support dietary adequacy in contexts shaped by affordability constraints, limited availability of fresh foods, and time poverty. Effective and equitable policy must be sensitive to these trade-offs.

Reference: Ultra-Processed Foods and Human Health: A Systematic Review and Meta-Analysis of Prospective Cohort Studies - ScienceDirect
 Chile Provides A Convincing Case For Mandatory Warning Labels On Processed Food - Health Policy Watch

76. Global Agricultural Productivity Initiative, United States of America

Surname	Agnew
First name	Jessica
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Director
Current institution/organization	Global Agricultural Productivity Initiative at Virginia Tech
Country	United States of America
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The GAP Initiative affirms the substantive scope of the ten CEEIs and recognizes the evidence base supporting each. The list reflects the interconnected systemic challenges facing food security and nutrition (FSN) globally and in specific contexts. We offer the following observations. Across the ten issues, CEEI 4 (Geopolitical uncertainty and polycrises) stands out for the specificity and rigor of its analysis. Its clear articulation of knowledge gaps, causal mechanisms, and the distinction between anticipatory and reactive intervention sets a standard of analytical precision that the remaining issues would benefit from matching. Several CEEIs use broad or aspirational language where specific, implementation-oriented framing would strengthen the analysis. The recurring gap across multiple CEEIs is the absence of concrete examples of both policy frameworks and — critically — implementation frameworks that translate principles into practice. Knowing which governance arrangements, incentive structures, and institutional configurations have actually worked, in which contexts, is the actionable question. The note identifies many of the right principles but does not consistently move from principle to practice. A second cross-cutting observation is the note's inconsistent treatment of the word 'productivity.' In several CEEIs, 'productivity' is used without definitional precision, risking conflation with output or yield growth. Total factor productivity (TFP) — the ratio of all agricultural outputs to all agricultural inputs — is a distinct concept with different policy implications. The distinction matters: output growth achieved through land expansion or input intensification can increase production volumes while worsening resource efficiency and environmental sustainability. TFP growth, by contrast, generates more output from the same or fewer resources. The note's framing on page 5 — that 'policies focused solely on increasing productivity may undermine environmental sustainability or dietary quality' — may

	inadvertently reinforce a false trade-off between productivity and sustainability when what is actually being described is the risk of output-oriented or yield-oriented policies that rely on input intensification. This distinction should be made explicit throughout. Third, the note's characterization of certain issues as 'emerging' warrants scrutiny. Several challenges described as emerging — digital concentration, geopolitical disruption, climate shocks — are more accurately described as rapidly evolving, enduring, or intensifying challenges for which the mechanisms of impact on FSN are becoming better understood. This reframing carries policy significance: it shifts the analytical focus from monitoring new phenomena to accelerating responses to known but fast-moving threats.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Sustainable Agricultural TFP Growth as a Cross-Cutting Analytical Lens The GAP Initiative recommends that sustainable total factor productivity (TFP) growth be embedded explicitly as a cross-cutting analytical framework and system-level performance indicator throughout the note, particularly across CEEIs 1, 2, 7, and 9. TFP is not a sectoral sub-theme; it is the most direct available measure of whether food systems are converting resources into food more or less efficiently over time — and therefore whether food systems transformation is working. Current global TFP growth averaged just 0.76% annually between 2014 and 2023, less than 40% of the 2.03% required to sustainably meet mid-century food security demands without expanding agriculture's land and resource footprint (Fuglie, 2025; USDA ERS). In low-income countries — where food insecurity is most acute — TFP growth was -0.56% annually during the same period, meaning output growth (2.64% annually) was driven almost entirely by land expansion (1.65% annually) and input intensification (1.50% annually). In Sub-Saharan Africa, TFP averaged 0.38% annually while land expansion drove the majority of output growth. This trajectory directly accelerates the land conversion, input pollution, and ecosystem degradation the note correctly identifies as critical FSN threats. The supply-side cost reduction of TFP growth passes through value chains to lower consumer food prices — a structural mechanism for improving affordability that complements but is distinct from demand-side social protection. Value Chain Pull as a Missing Dimension in the Climate and

	Food Systems Sections The note's treatment of food system transformation and climate adaptation focuses heavily on crop-level and production-level interventions without adequately addressing the value chain conditions that drive or inhibit adoption and sustained productivity growth. Transitioning to culturally acceptable, resilient, and nutritious foods from diverse crops — as proposed in CEEI 2 — requires not only agronomic and technology solutions but market demand signals and value chain infrastructure that make diverse production economically viable for producers at all scales. A producer-centric agricultural knowledge and innovation systems (AKIS) approach, which ensures that knowledge and tools reach producers at all scales through demand-responsive extension and advisory services, is largely absent from the note's analysis. Cultural Role and Value of Food as a Missing Dimension in Affordability Analysis The affordability analysis in CEEI 9 addresses the economic determinants of diet access comprehensively but does not address the cultural role and value of food as a dimension of nutritional outcomes. Strategies to improve affordability of nutritious diets must account for cultural acceptability as a co-determinant of dietary uptake: price reductions for foods that are not culturally valued or trusted do not automatically translate into improved nutrition outcomes. An additional question for CEEI 9 should ask how investments in sustainable and resilient food systems can improve affordability of healthy diets while maintaining their cultural role and value.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	CEEs 1, 2, and 9: A Shared Supply-Side Productivity and Implementation Gap CEEs 1 (food systems transformation), 2 (climate crises), and 9 (diet affordability) address the supply-side determinants of food system performance but lack a shared outcome indicator and a shared implementation logic. TFP growth can be used to accomplish both: it measures whether climate adaptation investments are translating into efficiency gains or simply compensating for losses through additional resource use, and whether food systems transformation is delivering sustainable output gains or relying on input intensification. The note would be strengthened by making TFP growth an explicit performance benchmark across all three CEEs, alongside the nutrition, equity, and environmental metrics already present. The implementation gap is equally important. Across CEEs

1, 2, and 3 in particular, the note identifies governance principles, policy coherence aspirations, and rights-based frameworks without providing examples of governance arrangements, incentive structures, or institutional configurations that have demonstrably translated these principles into practice. A useful addition across these CEEIs would be systematic attention to which implementation frameworks have worked, in which political-economy contexts, and through which mechanisms — including how nutrition-oriented policies have been positioned within political and economic alignment processes where sectoral interests are entrenched.

CEEIs 5 and 6: Trade and Corporate Concentration — Value-Added Products and Market Access

The linkage between CEEI 5 (trade) and CEEI 6 (corporate concentration) is appropriately acknowledged but could be strengthened in two specific dimensions. First, the trade analysis focuses heavily on commodity flows while underweighting the role of value-added agricultural products — where nutrition, income, and trade benefits are most significant for producers in low- and middle-income countries. Intentional policy design to avoid commodity gluts while increasing supply of nutritious, value-added foods is a critical complement to trade liberalization. Second, the access of smaller producers and enterprises to international markets — not only the rules governing large commodity flows — deserves explicit attention as a trade governance question.

CEEI 7 and CEEI 2: Digital Innovation and Climate — Evidence Base and Outcome Metrics

The linkage between digital innovation (CEEI 7) and climate adaptation (CEEI 2) is addressed through AI's role in early warning systems but should extend to TFP measurement. AI-enabled analytics platforms that translate agricultural productivity trends into actionable policy and investment guidance — particularly for policymakers in low- and middle-income countries — represent an underserved but high-impact application at the intersection of these two CEEIs.

CEEI 8 and Other CEEIs: Scope of One Health

Key question 3 within CEEI 8 (One Health) — on reversing declining crop genetic diversity and increasing reliance on a small number of staple crops — is more directly relevant to CEEIs 1 or 2 than to One Health as defined. Crop genetic diversity is fundamentally an agricultural production and food systems question; its connection to human-animal-plant-environment health integration, which is the core of

	One Health, requires more explicit framing to justify its placement within this CEEI.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	CEEI 1 — Advancing the Post-2030 Development Agenda through Food Systems Transformation The food systems transformation framing is substantively sound and appropriate as the opening CEEI. The GAP Initiative offers the following targeted inputs: First, the note's framing that 'policies focused solely on increasing productivity may undermine environmental sustainability or dietary quality' requires clarification. This risk applies to output-oriented or yield-oriented policies that pursue production growth through land expansion or input intensification — not to TFP-driven productivity growth, which, by definition, generates more output from the same or fewer resources. TFP growth and environmental sustainability are complementary objectives. The post-2030 policy framework will be better served by policies explicitly oriented toward TFP growth rather than by conflating productivity with output volume. Second, the analysis of integrated policy approaches would benefit substantially from concrete examples. The note correctly identifies fragmented governance and siloed policies as structural barriers but does not identify specific governance arrangements, incentive structures across sectors, or groupings of actors that have demonstrably addressed these barriers in practice. The question is not only whether integrated frameworks exist in principle but how they are operationalized when competing sectoral interests and entrenched political economy dynamics are at play. Nutritious foods, in particular, need to be positioned within political and economic alignment processes — not merely asserted as priorities. Third, the note's framing of 'emerging challenges' such as technological disruption, geopolitical dynamics, and climate-induced shocks as 'emerging' understates how rapidly these forces are intensifying and how well-documented many of their FSN effects already are. These are rapidly evolving challenges with known but fast-moving mechanisms, not newly discovered phenomena. Fourth, the bullet point on leveraging science, technology, and innovation should explicitly address the risk of misinformation about food systems, food choices, and the safety and efficacy of agricultural technologies — a rapidly growing constraint on informed food system governance and consumer agency. Fifth, the bullet on 'supporting diversified, resilient, and sustainable production systems, including agroecological

approaches' is broad to the point of being unclear. What it means to 'support' agroecological approaches in practice requires specification: which strategies, at which scales, through which policy mechanisms, with what evidence of FSN impact? The note should either provide that specificity or acknowledge the evidence gaps that prevent it.

CEEI 2 — Achieving Food Security and Nutrition in Climate Crises

CEEI 2 provides a substantive treatment of climate change's impacts on food systems and FSN. The GAP Initiative offers the following inputs:

The claim that elevated atmospheric CO₂ concentrations reduce concentrations of key micronutrients in staple crops is an important finding but may warrant more careful qualification regarding the magnitude and conditions under which it applies. The practical significance of this pathway relative to other climate-nutrition pathways should be assessed against the broader evidence base, and the evidence review should draw a clear distinction between yield changes — which measure output per unit of a single input — and productivity changes, as the two have different sustainability implications.

The section on production technologies and practices correctly identifies the need for climate-resilient systems but is heavily crop-focused. Livestock, fisheries, and aquaculture production systems — which are critical sources of nutrient-dense animal-source foods and livelihoods for millions of producers — receive insufficient attention in the transition framework. The diversity of important production tools extends well be

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

The GAP Initiative recommends elaborating three FSN outcome dimensions not fully developed in the current draft:

Economic access through productivity-driven cost reduction: The note adequately addresses income, wages, and social protection as demand-side determinants of food access. The supply-side contribution of TFP growth — its capacity to reduce unit production costs and retail food prices structurally, without ongoing subsidy expenditure — deserves equivalent treatment.

Environmental sustainability as a co-benefit of TFP growth: The note presents environmental sustainability and agricultural production primarily as a trade-off requiring management. TFP growth, by definition, reduces environmental burden per unit of food produced by generating more output from the same or fewer resources. Sustaining and accelerating TFP growth — particularly in regions currently dependent on land expansion — is a structural mechanism for simultaneously improving FSN outcomes and reducing agriculture's environmental footprint.

Cultural value of food in affordability and nutrition outcomes: As noted under CEEI 9, cultural acceptability is a co-determinant of dietary uptake that is currently absent from the note's affordability and utilization analysis. Food system interventions that improve physical and economic access to nutritious foods without addressing their cultural role risk generating limited FSN impact.

Is there any missing reference to key literature and data?	GAP Initiative (2025). GAP Report™ 2025: The TFP Growth Frontier — Plateaus and Progress in Agricultural Productivity Growth. Virginia Tech CALS Global. www.globalagriculturalproductivity.org GAP Initiative (2024). GAP Report™ 2024. Virginia Tech CALS Global. [Regional spotlight on South Asia's TFP growth leadership and the policy and investment conditions behind it.] GAP Initiative (2023). GAP Report™ 2023: Every Farmer, Every Tool. Virginia Tech CALS Global. [Framework for analyzing access and adoption barriers to productivity-enhancing tools at all scales of production.] Searchinger, T., Waite, R., Hanson, C., et al. (2019). Creating a Sustainable Food Future. World Resources Institute. [Establishes sustainable productivity growth as the most effective single strategy for simultaneously achieving production and environmental goals in food systems.] Nelson, G. C., & Fuglie, K. (2022). Capital investment is the key lever for agricultural productivity growth in Sub-Saharan Africa. <i>Nature Food</i>, 3, 671–681. [Identifies the structural investment gaps driving TFP stagnation in the region where food insecurity is most acute.] Fuglie, K. (2025). International Agricultural Productivity. USDA Economic Research Service. [The most comprehensive publicly available global TFP dataset, providing country, regional, and global TFP trends from 1961 to 2023, disaggregated by income group. Updated annually. Primary source for the GAP Index.]
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	The GAP Initiative finds the key questions for several CEEIs to be adequate, with CEEI 4 providing the strongest model. We recommend the following additions and modifications: CEEI 1 • What monitoring frameworks and outcome metrics — including TFP growth — are needed to assess whether food systems transformation is generating sustainable efficiency gains rather than output growth driven by land expansion or input intensification? • What documented examples exist of implementation frameworks — not only policy frameworks — that have successfully positioned nutrition, sustainability, and equity objectives within political and economic alignment processes where competing sectoral interests are entrenched? CEEI 2 • The current key question 2 ('How to identify synergies between technological innovation and people-centred approaches?') should be replaced with a more specific question: 'What evidence exists on the conditions under

which climate-adaptive technologies generate equitable TFP and nutrition gains across different scales of production, and what role do demand-responsive knowledge and extension systems play in enabling sustained adoption?'

- An additional question should address: 'How can TFP growth serve as a primary performance indicator for climate adaptation investments in agriculture, enabling distinction between interventions that restore and improve production efficiency from those that compensate for climate losses through additional resource use?'

CEEI 5

- How can CFS support more intentional planning for complementarities between producing and importing countries to avoid commodity gluts while expanding the production and trade of nutritious, value-added foods?
- How can CFS support governments in creating effective market access for smaller producers and enterprises in international trade in nutritious food products?

CEEI 9

- How can investments in sustainable and resilient food systems improve affordability of healthy diets while maintaining their cultural role and value?
- Key question 8 should be broadened beyond climate shocks to address price volatility from all structural drivers, with climate shocks addressed as one important category alongside geopolitical disruptions, speculative activity, and supply chain fragility.

CEEI 10

- Question 4 — on identifying policies and institutional arrangements that strengthen agency — is the most analytically actionable of the five questions and should be prioritised for evidence synthesis in any HLPE-FSN report on this topic.
- An additional question should address: 'In what contexts has enhanced agency over food choices led to nutritionally suboptimal outcomes, and what governance, education, and information-environment conditions are necessary to ensure that agency enhancements translate into improved nutrition security?'

A Cross-Cutting Question for All Ten CEEIs

- How can total factor productivity (TFP) growth — disaggregated by region, income group, and production system — be systematically incorporated as a performance indicator for food systems transformation within CFS monitoring frameworks, complementing nutrition, environmental, and equity metrics?

77. World Vegetable Center, India

Surname	Madhavan Nair
First name	Ramakrishnan
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Global Plant Breeder - Legumes
Current institution/organization	World Vegetable Center
Country	India
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The issues identified are comprehensive.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	It would be good to include the role of plant-based protein and plant-based meat alternatives.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	What is the future of plant-based meat alternatives? How is it going to replace animal foods?

78. University of Wollongong, Australia

Surname	Kent
First name	Katherine
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Public Health Nutritionists
Current institution/organization	We are the Nutrition and Dietetics team at the University of Wollongong, representing academic staff, researchers, and undergraduate and postgraduate students across public health nutrition, clinical nutrition, dietetics, and food systems research. Our work spans teaching, research, and community engagement, with a strong focus on food security, equitable access to healthy diets, sustainable food systems, and evidence-informed policy. As educators and future practitioners, we are committed to strengthening nutrition policy and ensuring food systems support health, equity, and wellbeing across communities. Contributors include: Amy Lo Surdo, Jade Bray, Elouisa O'Brien, Stephanie Palmiotto, Indiana Gosson, Giuliana Duarte, Natalie Lopresti, Aisling Kehoe, Leung Yi Lun, Dr Cassandra Nikodijevic, Professor Kelly Lambert, Dr Katherine Kent - among others.
Country	Australia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutr	Yes, we broadly support the ten issues identified. We feel they capture many of the major pressures shaping food security and nutrition globally and in the Australian context, particularly including climate change, geopolitical instability, corporate concentration, food affordability, and agency. However, we suggest the framing would be strengthened by placing agency at the centre of the analysis rather than treating it as one discrete issue. In discussing the 10 issues identified, we continued to see the issue of constrained agency, inequity and power asymmetries underpinning all themes. We believe agency underpins all other dimensions of food security because as public health nutritionists in Australia, we observe that people and communities cannot achieve healthy, sustainable and culturally appropriate diets if they lack power over the structural determinants of health like food environments, income, housing, transport, food labelling, local planning, procurement, and policy decisions. We agree that agency should not be

understood simply as individual choice, but as the distribution of power across food systems, including community voice, lived experience in policymaking, Indigenous food sovereignty, and the ability of public institutions to regulate food environments and redistribute power.

In Australia, poorly distributed agency is evident in growing household food insecurity (1 in 8 households), supermarket dominance (Coles/Woolworths duopolies) that undermines food security of our food supply chain, clustering of unhealthy food outlets (food swamps of multiple fast food outlets including near schools), misleading food labelling (health halos misleading consumers due to inadequate food regulation), inadequate social protection (not enough money to buy food, below the poverty line), and limited mechanisms for genuine lived experience involvement in decision making and policy. This includes weak acknowledgement of the agency held by corporate actors, poor co-design processes for national, state and local policies, and most concerning, the failure of the referendum vote for the Australian Voice to Parliament, which would have provided stronger Indigenous perspectives to policymakers.

We continue to see food insecurity predominantly framed as an issue of individual responsibility rather than systems failure. In public health nutrition, too much blame is placed on individuals for “poor choices” while too little attention is given to the socioecological systems that shape those choices. As a country, we spend very little on prevention and primary prevention compared with downstream treatment. This needs to change. Yet, the challenge is how we shift responsibility back to systems, rather than continuing to place it on individuals.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

The draft note could more clearly define the role of the Committee on World Food Security (CFS) in operationalising these issues. We feel this includes convening interdisciplinary stakeholders, setting normative guidance on governance and equity, and strengthening accountability through globally aligned monitoring systems and indicators for food security and nutrition. We suggest adding or more clearly elaborating on some key issues within the draft note.

First, the actual mechanisms for food governance and accountability should be strengthened. In Australia, food security sits in everybody’s interest, but in nobody’s responsibility. Food does not fit neatly within one government department—it is interdisciplinary and falls through the cracks. The Department of Agriculture, Fisheries and Forestry leads the national food security strategy despite food insecurity being equally about housing, income, education, transport and health. We need stronger cross-portfolio accountability—arguably even a Ministry of Food. How can this draft note point to possible solutions? In relation to this, the potential of local and regional food system resilience should be elevated, including the role of food policy groups in building community agency. This should span concepts like local food production, urban agriculture, Indigenous food knowledge, interdisciplinary food hubs, the power of public procurement, and community-led and community-owned food infrastructure. These are not peripheral issues, we argue that they are critical resilience infrastructure that improve food security, sustainability and community agency.

Second, as public health nutritionists we argue for the elevation of the issue of food regulation, including that issues about food labelling should be more explicit. Consumers cannot exercise agency when labels obscure information or when companies use health and nutrition claims to create misleading health halos. Within the Australian context, we argue this is especially important for people with specific health needs, such as kidney disease, and for parents choosing commercial infant and toddler foods. Food regulation must better limit misleading claims and prioritise public health over commercial interests.

This is related to our thoughts about food literacy and practical food skills, and the idea that these should be recognised as public infrastructure, not only individual responsibility. Australians lack strong food literacy,

including skills in cooking, growing, eating seasonally and understanding food systems. Food literacy should include not only cooking skills, but growing food, seasonal eating, understanding food production, and reconnecting with producers and place. Growing food has become a lost skill and a lost art, reducing both food literacy and healthy decision-making. We argue the draft note should explore how concepts like school food education and school food programmes (which Australia lacks), could improve food literacy for Australians across generations. The draft note could explain how school food programmes, community gardens, food hubs and shared food spaces should be recognised for these broader benefits. They improve nutrition, but they also strengthen belonging, food literacy, local economies and community agency. These social functions of food are central to long-term food security and should not be treated as secondary outcomes.

The power of public procurement is another major missed opportunity. Institutional food systems across aged care, hospitals, prisons and schools represent significant leverage for improving both nutrition and sustainability, yet this remains underdeveloped in policy. As public health nutritionists we also here is also a need for stronger reference to food composition research and independent dietary intake monitoring, including for food insecurity. In Australia these monitoring systems are infrequent, slow and are unable to drill down to regional areas which are at higher risk

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Yes—while separating the issues is useful for analysis, several of the themes are so closely connected that treating them independently risks missing the systems nature of food security and nutrition. We recommend a stronger systems framing where agency sits at the centre, food systems transformation is the operational pathway, affordability is linked to corporate power, climate is linked to trade and geopolitical instability, and One Health provides the overarching interdisciplinary framework.

At the centre, Agency for food security and nutrition (10) should be positioned as the central organising concept, rather than as one issue among many. Agency determines whether people, households, communities and governments have the power, resources, voice and decision-making capacity to shape food systems. Without agency, progress on affordability, sustainability, resilience or healthy diets cannot be achieved. Agency is not simply individual choice—it includes community voice, lived experience in policymaking, Indigenous food sovereignty, and the ability of public institutions to regulate food environments and redistribute power. Advancing the post-2030 Development Agenda through food systems transformation (1) should be directly linked with Agency (10), as food systems transformation cannot occur without stronger agency across sectors and scales. Transformation requires interdisciplinary governance, cross-sector collaboration, and the capacity for communities and public health systems to influence decisions currently dominated by commercial and political interests.

A second grouping should bring together Corporate concentration in food systems (6) and Affordability of healthy and nutritious diets (9). Affordability is not simply a matter of food prices; it is shaped by corporate concentration, supermarket dominance, food marketing, retail monopolies, misleading food labelling, local planning decisions, and broader determinants such as housing, income adequacy, transport and time poverty. These issues should be analysed together as part of economy, markets and power dynamics.

Affordability is too narrow a term on its own. In Australia, a healthier meal can often cost significantly more than ultra-processed foods despite containing simple, minimally processed ingredients—for example, one student in this group noted a blueberry muffin priced at \$5 compared with simple rice paper rolls priced

at \$13. This demonstrates that affordability is shaped by food environments and corporate systems, not simply food prices.

This is further complicated because people without vested interests are often excluded from decision-making tables in Australia. Corporate concentration is therefore not only an economic issue but an agency issue—those most affected by food insecurity are often least represented in decisions about food systems.

A third grouping should combine Achieving food security and nutrition in climate crises (2), Food security and nutrition, and the three Rio Conventions (3), Geopolitical uncertainty and polycrises (4), and International trade for food security and nutrition (5). These should not be treated as separate risks because climate change, biodiversity loss, land degradation, geopolitical instability and trade disruption all interact to shape food production, access, prices and resilience. Climate and political instability are inseparable drivers of food insecurity and require a shared systems lens.

We also see “One Health” as an integrating framework for food security and nutrition (8) as a cross-cutting framework rather than a standalone issue. One Health helps connect human health, environmental sustainability, biodiversity, animal health and food systems governance, and should underpin analysis across all themes rather than sit separately.

Finally, Digital innovations and artificial intelligence (AI) (7) should be framed as an enabling tool rather than a primary driver. Digital systems can strengthen monitoring, transparency

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Partially. The drivers and trends identified are relevant, but the links to food security and nutrition outcomes need to be more clearly operationalised. The draft identifies important issues, but it is often unclear what these mean in practice or how governments should respond.

The concept of affordability is too narrow and risks being interpreted only as food price. Affordability should be linked more clearly to structural determinants outside of the food systems like income adequacy, housing, transport, rural and remote access, clean water, and the practical cost of preparing healthy food within globalised food systems. In rural and remote Australia, access to safe drinking water remains a food security issue, and healthy diets cannot be separated from income security and social protection.

Corporate concentration should also be examined through local food environments lens, where the consumer meets the reality of this issue, not only global supply chains. In Australia, supermarket duopolies, fast-food outlet density, unhealthy food marketing targeting children, and weak planning controls directly shape what food is available and normalised. These are everyday manifestations of corporate power that influence food security outcomes, particularly in low income communities across our country,.

The agency section should be integrated throughout each section. Food insecurity is too often framed as personal failure rather than systems failure. Greater attention is needed on explaining the mechanisms of how lived experience governance, Indigenous food sovereignty, and the ability of communities can be harnessed to influence food environments and policy decisions.

We also argue that digital innovation should be framed as supportive rather than transformative on its own. Technology can strengthen monitoring and accountability, but it should not distract from the structural reforms already known to improve food security. For example, an app is not the answer to improving dietary intake where income, local governance and community power are missing.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Yes. The note should place greater emphasis on indirect outcomes such as dignity, social connection, cultural food practices, mental health, food literacy, community resilience and trust in food systems. We observe as public health nutritionists that food insecurity is not only about insufficient food intake; but across our communities it also affects shame, stress, family wellbeing, education and participation in community life, including for children. Affordability should also be linked to geography and income security. In some rural and remote communities in Australia, safe drinking water is less accessible than bottled soft drinks, making unhealthy choices structurally rational rather than individually irresponsible. Social protection payments must also be part of the discussion, as healthy diets cannot be achieved without income above the poverty line.
Is there any missing reference to key literature and data?	From an Australian perspective, the note would benefit from stronger reference to food insecurity monitoring gaps, local food environment evidence about food swamps, Indigenous food sovereignty scholarship, and public health nutrition literature on the socioecological determinants of diet. Relevant Australian examples include rural and remote food affordability, supermarket concentration, food insecurity among university students, the lack of school food programmes.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

We suggest the following additional questions aligned to the CEEI:

- 10. Agency for food security and nutrition
 - How can lived experience be embedded in decision-making beyond consultation processes?
 - How can Indigenous food sovereignty be recognised and operationalised within national food systems?
 - How can communities be supported to influence the food environments that shape daily food choices?
- 1. Advancing the post-2030 Development Agenda through food systems transformation
 - How can cross-portfolio accountability be strengthened across agriculture, health, education, housing and social services?
 - What governance mechanisms can ensure food security is not fragmented across sectors?
 - What workforce capabilities are needed to deliver food systems transformation across sectors?
 - How can education and training systems support the development of interdisciplinary professionals able to address complex food system challenges?
- 6. Corporate concentration in food systems & 9. Affordability of healthy and nutritious diets
 - How can policy move beyond food price to address the structural drivers of affordability?
 - What regulatory and planning tools can governments use to improve food environments, including food labelling, marketing and outlet density?
 - How can local governments be better enabled to shape healthy food environments?
- 7. Digital innovations and artificial intelligence (AI) for healthy, sustainable, and equitable food systems
 - Who owns and governs food systems data, and who benefits from digital innovation?
 - Do digital tools reduce or reinforce existing inequities and concentration of power in food systems?

79. National Fund for Educational Development, Brazil

Surname	Bandoni
First name	Daniel
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Coordinator of Food and Nutritional Security for the Brazil National School Feeding Program
Current institution/organization	National Fund for Educational Development
Country	Brazil
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The list is quite interesting, but it fails to address key issues such as food production, short supply chains, local production, family farming, and the concentration of agricultural input production. Without directly addressing these topics, other issues—such as affordability—remain unaddressed.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Resilience in food production. Promoting family farming and short food production and distribution chains has a significant impact on all these issues. It is also essential to discuss the transition of the production system toward reduced use of pesticides and reduced dependence on commodities.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Yes, topics such as geopolitical uncertainty and international trade in relation to food security and nutrition should be combined into a single topic.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	Do the identified determinants and trends fully reflect the relationship between each CEEI and outcomes in food security and nutrition (FSN)? Partially; the themes are important, but some are generic, and it is unclear how they might impact food security and nutrition. In particular, the theme “Digital innovations and artificial intelligence (AI)” should not be a theme in its own right, as these are tools and do not directly address the main theme.

80. Groupe de Recherche et d'Expertise en Développement Durable (GREDD), Benin

Surname	TCHIGO
First name	Expédit
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Executive Director
Current institution/organization	Groupe de Recherche et d'Expertise en Développement Durable (GREDD)
Country	Benin
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	These issues take into account the current challenges to food security. However, the intensity of these challenges varies from one area to another.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yes, The neglect of certain indigenous cultures in food security
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Yes, some can be grouped together for the effectiveness of interventions
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	RAS

81. Malk Elbasyouny

Surname	Elbasyouny
First name	Malk
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Food Safety Researcher and Nutritionist
Current institution/organization	Dr Fruita Academy/African Postgraduate Students
Country	Egypt
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Overall, I believe the proposed list of Critical, Emerging and Enduring Issues (CEEI) by the High Level Panel of Experts on Food Security and Nutrition provides a strong, timely, and comprehensive overview of the major drivers affecting food security and nutrition globally. The selected issues appropriately reflect the complexity of current food systems, including climate change, geopolitical instability, digital transformation, corporate concentration, and affordability of healthy diets. Also They capture key systemic pressures shaping food security and nutrition outcomes at the global level, and they are highly relevant for informing future policy directions under the Committee on World Food Security framework. However, while the list is strong at the global level, I believe that its relevance for specific vulnerable contexts particularly in the Middle East and conflict-affected regions could be further strengthened. In these settings, food insecurity is not only driven by global trends but also by structural fragility, weakened governance systems, and prolonged instability that directly disrupt food access, availability, and affordability. Therefore, I would emphasize that while the identified issues are highly relevant, their impacts are not evenly distributed across regions and population groups. A stronger integration of structural inequality, fragility, and the lived realities of vulnerable populations would further enhance the policy relevance of the framework, especially for low-resource and crisis-affected contexts. In conclusion, the CEEI list is highly relevant and well-structured, but its analytical power would be strengthened by a clearer reflection of contextual inequalities and differentiated impacts across regions.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	One important issue is digital and functional literacy in food systems and food trade. The ability of farmers, small traders, and food system actors to effectively use new technologies (such as digital platforms, AI tools, and e-trade systems) strongly influences their productivity and market access. Low literacy and limited digital skills can exclude vulnerable groups from benefiting from innovation and may widen existing inequalities in food systems. Another critical issue is the fragility of small-scale manufacturers and traders within food supply chains. Small businesses play a central role in food availability and local markets, especially in developing and conflict-affected contexts. However, they are highly vulnerable to shocks such as price volatility, supply chain disruptions, and regulatory changes, which can directly affect food access and stability.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Yes, I believe the issues are strongly interlinked, and while presenting them separately is useful for analysis, the linkages between them should be further strengthened in the framework.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Overall, I believe the drivers and trends identified in the ten CEEI are broadly relevant and do capture many of the key global forces affecting food security and nutrition (FSN) outcomes. The framework is strong in linking major systemic issues such as climate change, geopolitical uncertainty, digital transformation, corporate concentration, and affordability of healthy diets to FSN outcomes.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	First, diet quality and nutrition outcomes should be emphasized more explicitly as direct FSN outcomes. It is not only about food availability, but also about whether people can access affordable, diverse, and nutritious diets. The growing burden of malnutrition, including both undernutrition and overweight/obesity, reflects this imbalance in many contexts. As well as the stability of food access over time, this should be highlighted.
Is there any missing reference to key literature and data?	More use of FAO, World Bank, and IPC reports would help better support the links between food insecurity and fragile or conflict-affected contexts, where hunger is most concentrated.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

Overall, I believe the list of guiding questions for each CEEI is generally adequate and provides a solid structure for developing the report. The questions already cover important dimensions such as drivers, trends, FSN outcomes, and relevant evidence.

83. Salvatore Barillà

Surname	Barillà
First name	Salvatore
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Research Associate
Current institution/organization	Newcastle University
Country	United Kingdom of Great Britain and Northern Ireland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Global food security is still yet to be reached. The CFS should consider the issue of global food security, focusing on the role of international trade in ensuring food security, engaging with normative questions like the reform of the multilateral trading system, as well as the (post)exceptionalism of agricultural issues in international trade. This debate is situated within the wider international discussion on food security, climate resilience, and state responsibility.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	New and updated rules on how to adapt and mitigate negative impacts from climate change need to be addressed, investigating the new roles of international trade institutions in the fight against climate change. The WTO has a mandate on agriculture trade. However, members need a new rulebook to navigate new challenges like climate change and the new geopolitical order, reflecting the role of emerging powers in global economic governance. The geopolitical order at the time of the creation of the WTO has changed, and new challenges require different and updated rules for the multilateral trading system.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	International trade issues and food security should be more focused. There should be a more specific attention to the new geopolitical context, including how tariffs are affecting food security. In addition, there should be a clarification on the impact of multilateral, regional, and bilateral trade on food security.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Multilateral trade issues and the linkages with WTO should be further explored.

84. Maysoun Mustafa

Surname	Mustafa
First name	Maysoun
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Board member
Current institution/organization	Crops for the Future
Country	Sudan
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes - comprehensive list of issues that are critical, emerging and enduring for food security and nutrition.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	The consultation would benefit from further elaboration of several gaps that represent critical, emerging and enduring issues with significant implications for food security and nutrition. Blue foods The role of blue foods within today’s food systems, although addressed across the identified issues, represents a critical issue for food security that could benefit from being identified as a distinct issue. They contribute essential nutrients, offer healthy alternatives to terrestrial meat and help reduce dietary environmental footprints, all of which influence the availability, access and stability of food. Their role in supporting just economies and livelihoods under a changing climate further highlights its importance for vulnerable populations. Additionally, there is a need to map

environmental threats to understand how changing conditions impact the resilience and sustainability of blue foods into the future.

Critical minerals

Critical minerals constitute an issue for food security as fertiliser supply, particularly potash, directly shapes availability and stability of food production. This strategic importance of access to fertilisers is increasingly recognised amid geopolitical pressures that shape global trade today. On the other hand, the role of critical minerals in energy transition and AI also impacts on food systems. Extraction of minerals increasingly required for green energy represents an emerging threat whose impacts on food systems are becoming more visible. Water pollution from mining has contributed to issues including declining fish stocks and livestock illnesses, while reduced water availability for crops and farm animals further undermines local food security. These combined effects show both the direct and indirect influence of critical minerals on food and nutrition outcomes.

Bridging knowledge systems

The marginalisation of Indigenous and Local Knowledge and other traditional knowledge systems is another critical issue that could benefit from being addressed. It weakens the evidence base needed to support sustainable and culturally grounded food systems, directly affecting the agency and resilience of vulnerable populations. The importance of these knowledge systems for food security, climate adaptation and decision making is gaining wider recognition. Many Indigenous Peoples are working to maintain, strengthen or revitalise these systems, and there is an increased recognition of the need to transition away from industrial models, and relearn traditional practices.

85. Hlamalani Mabasa

Surname	Mabasa
First name	Hlamalani
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Director
Current institution/organization	Pan African Development Alliance
Country	South Africa
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes, all the highlighted issues are critical, especially Affordability of healthy and nutritious diets to ensure food security and nutrition in South Africa where the country produces more than sufficient food, yet food insecurity at household level is extremely high - over 50% in some rural areas, and stunting for children under five remains at 28% and over 30% in some rural districts. Increasing fuel prices and geopolitical conditions impact availability of food at household levels.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	No, the listed issues cover critical elements of food and nutrition security. Additional issues like knowledge can be expanded under One Health
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	I am happy with the 10 listed, however, if necessary, 5 and 6 could be combined since they both speak to trading.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Affordability is key considering the climate changes, the geopolitical environment that impact transportation and food prices. In some of the developing economies where poverty continues to impact the vulnerable individuals, we continue to see high rates of undernutrition, micro-nutrient malnutrition and poor pregnancy outcomes. To reduce hunger and malnutrition, affordability must be addressed.

86. New Zealand

Surname	Wietheger
First name	Anne
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Counsellor Primary Industries
Current institution/organization	New Zealand Embassy Rome
Country	New Zealand
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The list is a good mix between critical issues (climate crises, geopolitical tension) and enduring 'background' issues that warrant a closer look.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Of particular interest is the chapter on 'International trade for food security and nutrition'. At the start of the chapter, it notes that international trade should not be considered inherently beneficial or harmful for FSN but that effects will vary by context and depend on domestic production and market structures (and policy settings, I would add). While this is a good starting point, the rest of the chapter seems to primarily focus on the negative impacts of trade and generally tells a one-sided story. This is neither warranted nor helpful, particularly for a document that is the evidence base for potential policy discussions.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	International trade for food security and nutrition- as above, I suggest that the topic should be discussed in a more balanced way to be helpful for a potential constructive discussion.
Is there any missing reference to key literature and data?	International trade for food security and nutrition- - Trade Dimensions of Food Security OECD (https://www.oecd.org/en/publications/trade-dimensions-of-food-security_5js65xn790nv-en.html) - The State of Agricultural Commodity Markets 2024 - WTO MC12 Ministerial Declaration on the Emergency Response to Food Insecurity (2022) - Agricultural trade and markets OECD (https://www.oecd.org/en/topics/policy-issues/agricultural-trade-and-markets.html) - Agricultural Outlook (https://www.agri-outlook.org/)

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

International trade for food security and nutrition- again, I would hope the questions could be framed a bit more neutrally going forward; – for example the first question could be reframed to 'how can CFS support countries ... to harness the role of international trade to better deliver FSN etc.'. Likewise, question two could be framed to ask how CFS can facilitate inclusive and effective value chains to deliver FSN, rather than assuming that transnational corporations can only play a negative role in food trade... '

87. Naomi Hull

Surname	Hull
First name	Naomi
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	RN, MPH (Nutrition), PhD Candidate
Current institution/organization	I am not speaking on behalf of an organization.
Country	Australia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	While many of those issues are important, another issue of importance is the food security of infants and young children. This issue is missing.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Infants and young children should be added as a distinct issue and elaborated on, given the specific needs of this population under 3 years old.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	The food security of infants and young children, and in particular breastfeeding of infants is an issue that cuts across all the issues listed but as I said above could also be an issue on its own. Breastfeeding is central to global food security, for the very youngest - under six months of age it is an equalizer, protecting the infant from the effects of poverty and strengthening health.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

No, they do not specify infants and young children.

88. Sandipan Baksi

Surname	Baksi
First name	Sandipan
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Director
Current institution/organization	Foundation for Agrarian Studies
Country	India
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The list of issues is quite comprehensive

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

We will focus on the Issue number 7, "Digital innovations . . . food systems," of the HLPE-FSN note:

Q4 under this Issue seems to assume that a particular type of production and knowledge system is more culturally and environmentally appropriate, and that digital technologies should support such a system. Framing the question in this way narrows its scope. In my opinion, the question should rather be "How can digital innovations and AI support more productive, and environmentally sustainable agricultural production, in a manner that also enhances the incomes/profitability of the producers?" This should perhaps begin with studies on "The possible (and actual) impact of digital innovations and AI on agricultural production (crop productivity, profitability of producers, environmental sustainability) in different parts of the world."

The questions seem to build on an assumption that digital innovations and AI technologies have already adopted (even in developing countries). This may be far from the reality. In my opinion, the foremost questions to enquire into are: i. "what is the current status of the reach and use digital innovations and AI based technologies in agriculture and food systems in different parts of the globe?." ii. "What are the prerequisites for ensuring better and equitable access to these technologies, and their absorption in the process of production and distribution?" These questions are particularly pertinent for the developing economies where the low penetration of technologies in general has been a long concern. The rural settings in these contexts often suffer from severe lack of physical and digital infrastructure as well as severe illiteracy. The lacuna is particularly stark among small and marginal producers, workers, women, and persons from marginalized communities. The HLPE-FSN note touches on these concerns in the last paragraph in page 25, but there is no specific question around the issue.

Is there any missing reference to key literature and data?

With regard to the Issue number 7, "Digital innovations . . . food systems," of the HLPE-FSN note:

i. These technologies are new, and developing at a rapid pace. A number of research articles that have come out in the last few years do not find a mention in the HLPE. It will be useful to include the more recent scholarship in the field, especially given the fact that the field (both in terms of the technologies, its actual use in production, and the corresponding regulatory/policy framework) is changing rapidly.

ii. There is a marked difference in the level of usage of these technologies between the developed, and the developing world. In case of the developing economies, we are yet to objectively understand the reach and penetration of these technologies on the ground. The interest in the developed world on the other hand is more about studying the impact of these technologies. This debate/comparison should come out clearly in the HLPE-FSN note. The note currently appears to draw more on the literature that pertains to the developed world.

89. República Argentina

Surname	República Argentina
First name	República Argentina
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	República Argentina
Current institution/organization	República Argentina
Country	Argentina
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Argentina considera que la lista de cuestiones críticas, emergentes y persistentes (CEEI) identificadas por el HLPE-FSN refleja, en términos generales, los principales desafíos que afectan la seguridad alimentaria y la nutrición a nivel global. No obstante, se estima importante enfatizar algunos aspectos: Con respecto al punto 1. Avanzar en la Agenda post-2030. Argentina deja asentada la posición de nuestro país con respecto a los ODS. Acerca del punto 5 Comercio internacional. Argentina coincide sobre la importancia de trabajar en la contribución

del comercio internacional para la seguridad alimentaria y la nutrición. El comercio es una herramienta clave para asegurar la disponibilidad de alimentos y la estabilidad de precios, facilita la transferencia de alimentos desde los países con excedentes a los países con déficits, promoviendo el desarrollo agrícola y rural y contribuyendo al logro de la seguridad alimentaria y la mejora de la nutrición para todos. No obstante, creemos necesario trabajar para un comercio agrícola internacional libre de incentivos y subsidios distorsivos, cuyo impacto negativo se ve agravado por la proliferación de barreras sanitarias, fitosanitarias y técnicas que no se basan en evidencia científica y de la aplicación de altos aranceles de importación (que en muchos casos superan el 100%).

En cuanto al concepto de repurposing agricultural subsidies, Argentina considera necesaria una reforma estructural de las reglas actuales para reorientar las políticas agrícolas hacia los desafíos globales contemporáneos. No obstante, observamos con preocupación la proliferación de medidas ambientales unilaterales por parte de países importadores que pretenden ejercer jurisdicción sobre los procesos productivos de los países exportadores. Ciertas economías desarrolladas están instrumentalizando la agenda ambiental para imponer restricciones comerciales, tales como ajustes en frontera, prohibiciones y derechos adicionales. Estas acciones buscan "equiparar" los costos de la transición ambiental, trasladando la carga financiera a los países exportadores. Sostenemos que estas medidas no son la solución; los desafíos globales requieren soluciones coordinadas, multilaterales y basadas en fundamentos científicos sólidos, respetando las legislaciones nacionales y las realidades locales. Solo atendiendo a estos reclamos históricos en materia de ayuda interna y acceso a mercados, podremos hacer frente a la extrema volatilidad de precios y proponer a nuestros pueblos dietas inocuas, saludables y nutritivas. Creemos que para fomentar un comercio más equitativo que integre a los agricultores de PED y cumpla el rol de asegurar alimentos de calidad, es imperativo que el CSA promueva una mayor transparencia en las medidas ambientales. Esto evitará que dichas normativas actúen como barreras comerciales encubiertas o subsidios distorsionantes que comprometan el acceso a alimentos de calidad.

Sobre el punto 6. Corporate concentration in food systems. Argentina sostiene que el desarrollo económico y la

	seguridad alimentaria no están determinados por el tamaño de las empresas, sino por la capacidad de innovación, la inversión y el conocimiento que cada actor aporta al sistema. consideramos que este no debería ser un punto prioritario para el trabajo del CSA, o al menos, el enfoque no debería ser punitivo ni sesgado contra el sector privado, y podría centrarse en cómo eliminar trabas burocráticas y regulatorias para generar oportunidades para que todos los actores, independientemente de su envergadura, puedan acceder a recursos, capacidades y mercados. Sobre el punto 8 Una Salud, Argentina reafirma que es un instrumento voluntario que los países aplican en el marco de sus prioridades y en concordancia con su normativa interna y el trabajo del CSA puede contribuir a mejorar la aplicación del enfoque "Una Salud" para identificar sinergias e incentivando la cooperación de la FAO con los miembros que lo soliciten.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Argentina considera que en el punto 7 deberían incorporarse otras innovaciones tecnológicas además de las digitales y la inteligencia artificial. La ciencia y la innovación impulsan un crecimiento agrícola eficiente, inclusivo y resiliente, que permite aumentar la producción de alimentos a nivel global, ejemplos de estas innovaciones incluyen la biotecnología, los bioinsumos y la bioenergía, como también los sistemas de riego tecnificados, el monitoreo digital de cultivos, la fertilización inteligente y otras herramientas de precisión permiten mejorar el desempeño de los sistemas productivos bajo esquemas de intensificación sostenible. De este modo, no solo contribuyen a un abastecimiento estable de alimentos para los mercados internos y externos, sino que fortalecen la resiliencia de la producción frente a eventos climáticos y otras fuentes de incertidumbre. El documento también debería profundizar el concepto de la necesidad de diferenciar las realidades y evitar la adopción de un enfoque único. Si bien se identifican algunas referencias —por ejemplo, en el punto 2, donde se señala que los impactos del cambio climático son mayores en agroecosistemas frágiles y en países de bajos ingresos con limitada capacidad de adaptación—, este enfoque no se desarrolla de manera suficiente y sistemática a lo largo del texto. Deseamos hacer énfasis en la necesidad de considerar integralmente todos los enfoques orientados al desarrollo de una producción agroalimentaria más eficiente,

resiliente y sostenible.

En un escenario global complejo, donde los mercados agroalimentarios pueden verse afectados por conflictos geopolíticos, crisis alimentarias y crecientes exigencias comerciales y ambientales, los desafíos para garantizar la seguridad alimentaria y nutricional son cada vez mayores. Frente a ello, resulta fundamental impulsar sistemas productivos capaces de aumentar la producción de alimentos de manera sustentable, mejorando simultáneamente la eficiencia en el uso de los recursos naturales.

En este contexto, el cuidado de los recursos naturales — especialmente suelo y agua— debe constituirse en una de las principales herramientas de la producción agropecuaria moderna.

En Argentina, este enfoque encuentra bases sólidas en una agricultura reconocida por su competitividad y sustentabilidad, consolidada como referente en innovación tecnológica aplicada al sector. El proceso de incorporación de tecnologías ha sido significativo y transformador, contribuyendo a mejorar la productividad, la eficiencia y el desempeño ambiental de los sistemas productivos.

All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I

Si bien Argentina reconoce que existen interrelaciones entre las distintas cuestiones, considera apropiada su presentación separada a efectos de garantizar un análisis claro y equilibrado de cada temática.

Si se quiere hacer alguna propuesta o poner ejemplos podrían ser:

Innovación Tecnológica (punto 7) y Cambio Climático (punto 2): con hincapié en la adaptación, la biotecnología para introducir mejoras en el manejo de suelos y el agua, prácticas como, por ejemplo, la agricultura de precisión, reducen la vulnerabilidad de la producción agrícola frente a eventos meteorológicos. La combinación entre eficiencia productiva, incorporación de tecnologías y gestión sustentable de los recursos permite reducir vulnerabilidades, sostener la capacidad productiva en el tiempo y favorecer la estabilidad y la resiliencia de los sistemas agropecuarios en el largo plazo.

Comercio (punto 5) y Accesibilidad a Dietas Sanas y Nutritivas para garantizar la Seguridad Alimentaria y la Nutrición (punto 9): Argentina coincide en que la volatilidad de los precios representa una amenaza significativa para la seguridad alimentaria global, por lo que considera necesario mantener y desarrollar herramientas como el AMIS. Estamos de acuerdo en avanzar en una actualización de los instrumentos del CFS sobre volatilidad de los precios, para una mejor contribución a la seguridad alimentaria.

90. ProVeg International, Germany

Surname	Gallani
First name	Valentina
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Health and Nutrition Manager
Current institution/organization	ProVeg International
Country	Germany

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutr

The issues identified capture broad systemic risks, but the draft misses several critical levers for achieving Zero Hunger. Most notably, it fails to name the systemic resource inefficiency of the livestock-dominated food system. Animal agriculture occupies 40% of global cropland for feed but provides only 18% of calories and 37% of protein, with up to 96% of protein lost in conversion. Large-scale diversion of human-edible crops like soy (77%) and cereals (over 33%) to livestock drives "artificial" scarcity and double the GHG emissions of plant-based foods. To address this, the EAT-Lancet Commission 2.0 (2025) emphasizes a Just Transition framework that centers social equity, ensuring livestock farmers are not left behind but are provided policy and financial pathways to transition into regenerative plant-protein production. While animal-sourced foods can be nutrient-rich in targeted interventions, a shift toward plant-rich diets can reduce food-system emissions by 48% and support 10.2 billion people. Achieving this requires dismantling fiscal distortions, as 87% of current agricultural support is harmful; these funds must be realigned toward sustainable whole foods.

Another critical omission in the draft is the lack of nuance regarding Ultra-Processed Foods (UPF). The current draft frequently adopts the NOVA classification, identifying all UPFs as a uniform threat to health—particularly in low- and middle-income countries (LMICs)—due to poor nutritional characteristics and aggressive marketing. While it is correct that many highly processed items (high in salt, sugar, and saturated fats) can contribute to the "triple burden" of malnutrition, the generic use of "UPF" without a clear, evidence-based definition is problematic.

The NOVA classification is not a helpful tool in the context of food security, as it prioritises the extent of processing over the nutritional density and resource efficiency of the final product.

Systems such as NOVA classify nutritious, affordable foods—such as pre-packaged, fortified wholemeal bread—as ultra-processed. Meanwhile, bread from a bakery, which is often more expensive and not necessarily wholegrain, is typically classified as merely processed.

This runs counter to established nutrition science and raises important concerns around affordability.

A nuanced approach is essential because food processing offers critical benefits for food security that are currently overlooked:

Enhancing food safety, Extending shelf life and preventing waste, Improving accessibility and affordability.

	Food waste is a critical failure of the current food system that is insufficiently addressed in the draft. While one in 11 people globally suffers from undernourishment, roughly one-third of all food produced for human consumption is lost or wasted globally. This inefficiency happens during every stage of the food system: it's not only a waste of food, but also the land, water, labour, and energy used to produce it. In 2022 alone, approximately 1.05 billion tons of food were wasted, generating 8–10% of global greenhouse gas emissions and an estimated \$1 trillion annual economic cost. From a food security perspective, this waste is a primary driver. Wasting a third of the output means we are depleting the finite natural resources required to feed a growing population, which is expected to reach 10 billion by 2050. It's therefore important to frame food waste not merely as a management issue, but as a resource-efficiency crisis.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	While addressing the structural drivers of food insecurity—most notably social inequality and lack of access to resources—remains the primary priority, the current draft lacks explicit recognition of protein diversification as a vital lever for achieving food security and nutrition within planetary boundaries. We acknowledge that in specific contexts and targeted nutrition interventions, animal-sourced foods can provide essential nutrient density to improve individual health outcomes. However, to meet the goal of "Zero Hunger" for a population of 10.2 billion by 2050, the global community must adopt a science-based vision that promotes diversifying the solutions, specifically by scaling plant-rich dietary patterns alongside sustainable livestock practices. Adopting a plant-forward food system offers critical, multi-dimensional benefits currently missing from the analysis: Mitigating resource scarcity and emissions: Plant-rich dietary patterns can reduce food-system emissions by approximately 48% and enable the world to feed 10.2 billion people by 2050 while staying within four key planetary boundaries. Addressing systemic vulnerability: The current global food system is dangerously fragile, with 75% of human food intake derived from only five animal and 12 plant species. Increasing agrobiodiversity—specifically through the expansion of nutrient-dense legumes, fungi, and ancient grains—improves nutrition, enhances soil health, and builds resilience against the climate-related shocks identified in Issue 2. Reducing the burden of disease: Diversifying protein sources directly addresses the "triple burden" of malnutrition by

reducing public health costs associated with diet-related non-communicable diseases (NCDs). Dismantling fiscal distortions: Achieving this transition is currently hindered by global agricultural support, where 87% of subsidies are considered harmful to health and the environment. Realigning these funds to prioritise sustainable, plant-based proteins and whole foods is a critical policy requirement for making healthy diets affordable.

By framing protein diversification as a necessary complement to existing systems, the HLPE-FSN can support a Just Transition that addresses both global resource limitations and the localised nutritional needs of vulnerable populations. Even though incremental improvements in livestock management are necessary, there is a need to adopt a transparent, science-based vision for the global protein transition. Without a dedicated focus on diversifying protein sources (including legumes, fungi, wholegrains, and fermented alternatives), the goal of "Zero Hunger" remains unattainable under current climate conditions and the structural resource limitations of animal agriculture.

The dialogue within the Note must distinguish between "junk food" UPFs and nutrient-dense, fortified processed foods that are essential for food security. While the EAT–Lancet Commission discourages the consumption of highly processed foods, its 2025 update explicitly recognises that while items like biscuits and chips should be limited, other highly processed foods—such as wholegrain bread, canned legumes, fortified flours, or infant formula—play a vital role in healthy, sustainable diets and stable nutrient delivery. Categorising all these as "highly processed" under systems like NOVA is inaccurate and potentially misleading, as assuming a food is unhealthy simply because of its processing level ignores its actual nutritional density and environmental impact. We urge the HLPE-FSN to adopt a new classification system that evaluates nutritional characteristics alongside processing. Furthermore, the statement in Issue 9—which groups animal-source foods as "nutrient-dense" while broadly blaming UPFs for non-communicable diseases (NCDs)—is misleading. Current evidence clearly shows that red and processed meats are directly correlated with increased cancer risk and mortality,.

All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I

Issues regarding Climate Crises (2), One Health (8), and Affordability (9) are fundamentally unified through the interface of dietary shift and a Just Transition. When these issues are analysed in isolation, the global community overlooks the "hidden costs" of our food systems—estimated at \$10 trillion USD in externalised environmental and health burdens. While planetary health explores the relation of human and environmental well-being, the One Health approach adds the essential third dimension of animal health, as food systems sit at the center of the human–animal–environment interface. Currently, the intensification of animal agriculture to meet rising global demand presents significant health challenges, including Antimicrobial Resistance (AMR), where livestock are leading consumers of antibiotics, and foodborne illness, which affects 600 million people annually, causing \$110 billion in economic losses. Furthermore, roughly 60% of emerging infectious diseases are zoonotic, and high livestock density combined with habitat encroachment increases the likelihood of spillover events. The actual draft failed to address this part of the One Health approach.

A comprehensive cost-benefit analysis of food choices must account for these risks, particularly as corporate concentration (6) and the dominance of global entities can dictate the flow of international trade (5), creating a fragile system where the failure of major industrial players could trigger systemic collapse. To transition toward a more resilient food system that reduces greenhouse gases by up to 70% and land use by 75%, the 4th Note could consider adopting a Just Transition framework that realigns a portion of the 87% of harmful agricultural support toward nutrient-dense legumes and sustainable protein diversification to make healthy diets affordable. Rather than leaving producers behind, policy should offer financial and technical pathways for livestock farmers to transition into regenerative agriculture or high-value plant-protein crops, building long-term economic resilience together with the protection of vulnerable groups. Reducing reliance on the inefficient "Feed-to-Food" cycle would stabilise grain markets and provide a structural buffer against the geopolitical shocks and polycrises identified in Issue 4. Moreover, increasing investments in alternative proteins could potentially create up to 83 million jobs by 2050. By integrating One Health as a core evaluative component, the CFS can move from reactive crisis management to the proactive design of a healthy, equitable, and sustainable global food system.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Partially, while the draft identifies climate change as a major threat, it predominantly frames food systems as a victim rather than a primary contributor, missing the critical link between industrial animal agriculture, which drives roughly 70% of deforestation and 14.5% of global emissions, and the long-term destabilisation of food security and nutrition (FSN) outcomes. Although we currently produce enough to feed 10 billion people by 2050, the structural diversion of 40% of global cropland to livestock feed and 13% to biofuels, combined with the waste of one-third of all food produced, creates an artificial scarcity that undermines global food availability and stability. Furthermore, the trend of labelling all ultra-processed foods (UPFs) as a uniform health threat through the NOVA classification fails to recognise the essential role of healthy, processed whole foods—such as canned legumes, pre-packaged whole-wheat bread, and fortified flours—in providing shelf-stable, safe, and bioavailable nutrients in fragile contexts. Finally, the "One Health" framework is incomplete without explicitly addressing intensive animal farming as the root driver of antimicrobial resistance and zoonotic spillover risk, which act as catastrophic indirect threats to the resilience of food systems and human health.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Yes, the "Feed-to-Food" inefficiency must be further elaborated as a structural utilisation failure, where using arable land to grow livestock feed instead of protein crops for direct human consumption creates a nutrient gap. Shifting to plant-rich diets and diversifying protein sources—including pulses, fungi, and fermentation-derived proteins—could feed an additional 4 billion people by bypassing this inefficient cycle. Furthermore, the draft should address the significant economic benefits of this shift: moving away from a livestock-dependent model allows farmers to transition from a high-risk, resource-heavy sector to a more diverse range of protein crops, turning a perceived risk into an opportunity to build long-term economic resilience and income stability. Additionally, technological innovation in alternative proteins offers nutrient-dense, shelf-stable options that enhance the "stability" and "utilisation" dimensions of FSN without the environmental threat.

Is there any missing reference to key literature and data?

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Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	On protein diversification (which, for now, is not a topic of the Note) How can the 'Agency' of nations be strengthened to redirect land and water resources away from feed-crop production for livestock toward the direct production of human-consumable plant-based proteins? What are the specific FSN benefits of a 'Protein Diversification' strategy that prioritises vegetables, fruits, pulses, whole-wheat grains, nuts, and fungi? How can the protein diversification impact the land and water use, and the footprint of the diet, while being nutritionally adequate? On subsidies and affordability What fiscal mechanisms can be used to rebalance the price

of nutrient-dense foods versus low-nutrient-dense foods to improve long-term affordability?

How do current agricultural subsidies for animal-source foods increase their affordability despite their environmental weight, and prevent the market entry of more sustainable, local and plant-based options?

On UPF nuance and utilisation

How can dietary guidelines and trade standards distinguish between ultra-processed products that are nutrient-poor (e.g., soda) and those that are nutrient-dense, fortified, and environmentally superior?

In regions with high micronutrient deficiencies, what is the role of fortified food staples in ensuring the 'Utilisation' pillar of food security? Fortified foods are ultra-processed, so how can we include them in a dialogue of a healthy, affordable and sustainable diet?

On One Health and political crises

What are the projected global FSN savings if a One Health approach prioritised a transition toward plant-rich diets to preemptively reduce the risks of antimicrobial resistance (AMR) and zoonotic diseases? Together with a possible decrease in public health costs of chronic metabolic and cardiovascular diseases?

To what extent does the global reliance on grain-fed livestock reduce the 'Stability' of the food system during geopolitical shocks (as the one we are experiencing right now)? Could a shift to direct plant-protein consumption provide a relief against the collapse of the food system?

On farmers transition

How can governments redesign agricultural policies to support farmers in diversifying their income and to offer them economic security through the protein diversification pathways?

91. Agroecology and Food Sovereignty Alliance (AFSA), Australia

Surname	Lenique
First name	Antoine
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	General Coordinator
Current institution/organization	Agroecology and Food Sovereignty Alliance (AFSA)
Country	Australia
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The issues identified by the HLPE-FSN present a solid overview of the important drivers of food security and nutrition globally. However, AFSA would like to highlight two points around the cross-cutting issues of structural issues in food systems, and how food sovereignty can also serve as a frame to reimagine food systems at global, regional, national, and local levels. Despite the HLPE not wanting to create silos, their treatment as discrete themes risks reproducing the very fragmentation the report seeks to overcome. Climate change, biodiversity loss, land degradation, trade regimes, corporate concentration, digitalisation, and community agency are not parallel challenges; they are structurally interdependent. You cannot meaningfully discuss agroecology, agency, or equitable food systems without simultaneously addressing the corporate and geopolitical forces that shape land access, market power, input dependency, and policy space. Likewise, conversations on climate adaptation or the Rio Conventions become incomplete when they do not explicitly confront the economic and political interests that determine whose lands are protected, whose are commodified, and whose knowledge systems are marginalized. By separating issues such as corporate concentration, trade, climate, and agency into different Sections, the Draft Note risks obscuring the power relations that bind them. This limits the ability of policymakers to understand why transformative approaches, including agroecology, territorial markets, Indigenous governance, and rights-based frameworks, plus more inclusive, democratic and equitable governance structures, struggle to gain traction. Addressing structural inequities, embedding accountability mechanisms, and conducting power analyses across all issue areas is essential if the HLPE is to support honest, coherent, and actionable policy guidance for food system transformation. AFSA would add that food sovereignty itself provides a

	unifying framework through which these structural challenges in the food system can be understood and prioritised. The right to food cannot be fully realised without addressing the ability of people and communities to define their own food systems. Equally, while we recognise the addition of ‘agency’ (Section 9), greater emphasis is also needed on colonial legacies and ongoing forms of extractivism that shape food systems in many contexts, including Australia, as well as on the role of public policy, public investment, and collective institutions in countering corporate capture and market dependency. Without these additional dimensions, the list of issues risks treating symptoms rather than confronting the root causes of food insecurity and malnutrition.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Reflecting from a domestic level in Australia, there are two issues we would like to see added to or elaborated in the CEEI. i) TRANSPARENT AND PARTICIPATORY ACCOUNTABILITY AND GOVERNANCE MECHANISMS At the national level in Australia, accountability in food systems governance is often shaped by agribusiness and corporate influence. This has created significant barriers to the adoption, implementation, monitoring, and protection of CFS policy products - such as the Voluntary Guidelines on the Progressive Realisation of the Right to Adequate Food in the Context of National Food Security. While the Draft Note identifies corporate concentration, trade, and agency as separate themes, it does not fully address the extent to which national governance structures - underpinned by neoliberal paradigms - determine whether CFS guidelines are meaningfully adopted or actively sidelined by the national government . As such, there is an opportunity for the HLPE Draft Note to consider the impact of neoliberal paradigms on food systems governance at global and national levels, and how shifting to rights-based and food sovereignty paradigms can support transparent, participatory, and equitable food governance to ensure food and nutrition security for all. The situation in Australia illustrates this emerging global challenge highlighted in the HLPE Draft Note. The establishment of a National Food Council - dominated by big agribusiness and food industry voices - has raised concerns about transparency, conflict-of-interest safeguards, and the exclusion of small-scale farmers, Indigenous Peoples, and civil society voices. This mirrors patterns seen in many countries, where export-oriented agricultural models and consolidated corporate power limits democratic participation and

weakens the domestic uptake of rights-based food system policies. This governance gap has direct implications for the CFS. The effectiveness of policy instruments such as the Voluntary Guidelines on the Responsible Governance of Tenure Land, Fisheries and Forests, the Voluntary Guidelines on the Right to Food, and the Voluntary Guidelines on Food Systems and Nutrition depends on national-level accountability, monitoring, and public oversight. In the context of ongoing FAO reforms and current challenges in the multilateral system, the role of national food governance bodies in supporting transparent and participatory food system governance, as well as the risks posed by corporate capture of such bodies, constitutes a critical and emerging issue that could strengthen the preparation of the CFS MYPoW 2027-2030.

ii) COLONIAL LEGACIES AND FIRST NATIONS' RIGHTS AND VOICE

A critical and enduring issue that warrants explicit inclusion is the impact of colonial legacies and ongoing colonial political and economic structures on food systems, particularly for Indigenous Peoples. In Australia, contemporary food insecurity and malnutrition cannot be separated from histories of dispossession, the disruption of Indigenous food systems, and legal and governance frameworks that continue to privilege extractivism, export-oriented agriculture, and capital accumulation over Indigenous sovereignty and custodianship. First Nations peoples have sustained diverse, climate-resilient food systems for millennia, grounded in Country, relational governance, and reciprocal responsibility. Yet current agrifood, conservation, and trade policies routinely marginalise Indigenous land governance, food economies, and knowledge systems, while constraining self-determination and agency. Addressing food security without confronting these structural continuities risks perpetuating injustice. Recognising and supporting Indigenous food sovereignty, land rights, and governance is therefore fundamental to realising the right to food and to any genuinely transformative, rights-based food system agenda.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Sections 2 and 3 address closely interlinked drivers of food insecurity including climate change, biodiversity loss, and land degradation, and could be linked as a way to also address the fragmentation of policy spaces that the HLPE seeks to overcome. Climate impacts cannot be separated from the ecological degradation and governance failures addressed under the Rio Conventions; together, they shape all six dimensions of food security and nutrition. Merging the Sections, without losing the importance of both climate and the Rio conventions, would allow the report to present a unified systems analysis and avoid duplication, while strengthening the coherence of recommendations across climate, biodiversity, land, and food systems.

Both Sections already converge on similar solutions: diversified and resilient production systems, secure tenure, rights-based governance, and the need to repurpose harmful subsidies. AFSA notes the mention of agroecology in Section 2, as a holistic approach that enhances climate adaptation, biodiversity, and soil restoration. Emphasising the role of agroecology and principles of food sovereignty also supports the cross-cutting objectives of the three Rio Conventions while supporting the right to food.

Accountability with relation to the Rio Conventions, and across CFS policy instruments, can strengthen the collective approach and support multilateral development. This then supports the national implementation, monitoring, and reporting that further strengthens the collective uptake of CFS policy instruments to address climate and ecological challenges, and improve both nutrition and environmental food system outcomes.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

We appreciate the opportunity to share our inputs on the ten CEEI listed, and have provided an in-depth response to Q11 & Q13 via email.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

We emphasise the need for the HLPE to address the interconnected crises of climate change, biodiversity loss, land degradation, conflict, and corporate concentration through a coherent, rights-based, and accountable food systems approach; one that centres agroecology, food sovereignty, and democratic governance as essential pathways forward.

Is there any missing reference to key literature and data?

We appreciate the opportunity to share our inputs and have provided an in-depth response to Q11 & Q13 via email.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

- Q. How do export-oriented and corporate-dominated food systems structurally undermine food sovereignty, dietary quality, and agency at national and household levels?
- Q. How can Indigenous food systems, knowledge, governance, and sovereignty be recognised and supported as central pillars of post-2030 food systems transformation?
- Q. How do ‘false solutions’ in agriculture (e.g. carbon markets, climate-smart intensification) risk reinforcing land concentration, corporate control, and Indigenous dispossession, and how can rights-based, agroecological alternatives be prioritised?
- Q. How can Indigenous food systems, land governance, and stewardship practices be recognised and supported as central climate adaptation strategies for food security and nutrition, including in settler-colonial contexts such as Australia?
- Q. How can the VGGT, Indigenous sovereignty, and FPIC be operationalised within Rio Convention implementation to ensure climate and conservation actions do not undermine food security and land rights, including in settler-colonial contexts such as Australia?
- Q. How can strengthening domestic food sovereignty and local production reduce vulnerability to geopolitical shocks compared to reliance on globalised supply chains?
- Q. How can the CFS effectively reshape international trade rules to better protect domestic food systems, farmer and indigenous livelihoods and support the adequate right to food (rather than entrench export orientation, corporate concentration and dependence on volatile Global markets?)
- Q. How does corporate concentration across land, water, finance, and food markets undermine Indigenous land rights, small-scale farming, and national food security, and how can public policy reverse these trends?
- Q. What governance and accountability mechanisms are needed to prevent corporate capture of land and food systems, including through strengthened tenure protections, conflict-of-interest safeguards, and rights-based food system governance?
- Q. How can data governance and AI regulation ensure small-farmer and Indigenous data sovereignty, transparency, and accountability, while preventing the reinforcement of corporate concentration and control over food systems?
- Q. How do digital technologies and AI shape power, control, labour, ownership, and social relations in food systems—and do they reinforce or undermine food sovereignty principles?

- Q. What public, cooperative or other digital infrastructures can be promoted that support the autonomy and existing knowledge of agroecology, Indigenous food systems, and small-scale farmers, rather than extractive, profit-driven models?
- Q. What policy options exist to support access and affordability of traditional and Indigenous foods?
- Q. How to enhance group or collective empowerment and agency to progress the realisation of the right to adequate food, and support food and nutrition security?

92. Agroecology and Food Sovereignty Alliance (AFSA) – Extended Version

Prepared by:

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We thank the High Level Panel of Experts (HLPE) of the Committee on World Food Security for the UN FAO (CFS) for initiating an inquiry into Critical, Emerging and Enduring Issues (#4). AFSA welcomes the opportunity to provide a written submission, as well as all further opportunities to participate, via the Civil Society and Indigenous Peoples Organisation (CSIPM) in development of the Critical, Emerging and Enduring Issues (#4). We hope the HLPE of the CFS will facilitate robust and meaningful stakeholder engagement across all aspects of the agricultural and food sector, prioritizing the voices of First Peoples, rights holders and those with lived experience within our food system.

About the Agroecology and Food Sovereignty Alliance (AFSA)

The Agroecology & Food Sovereignty Alliance (AFSA) is a farmer- and First-Peoples-led civil society organisation working for socially just and ecologically sound food and farming systems. We centre the voices of First Peoples, small-scale food producers, and local communities in decision-making.

AFSA connects small-scale producers for farmer-to-farmer knowledge sharing, advocates for fair access to local markets and infrastructure, and pushes for scale-appropriate regulation at all levels of government.

We are part of a strong global food sovereignty movement through our membership in La Vía Campesina, Urgenci, and the IPC for Food Sovereignty, and we support the Australasian delegate to the Civil Society and Indigenous Peoples' Mechanism at the UN.

Our vision is for agroecology-oriented farms to thrive, producing nutritious food through short, fair supply chains that protect human and planetary health. This includes recognising and promoting First Peoples' knowledges and custodianship of Country, and committing to decolonial futures for food and agriculture.

Context

AFSA welcomes the call for submissions on the Zero Draft of the Critical, Emerging and Enduring Issues (CEEI) for the HLPE of the CFS. Since the previous note in 2022, the global context has

shifted dramatically, and our understanding of food system challenges must reflect these broader geopolitical, ecological, and technological transformations. What happens at the macro level—conflict, economic instability, climate disruption, and corporate consolidation—inevitably cascades down to the micro level, shaping the daily realities of farmers, First Peoples, workers, and communities on the frontlines of food systems.

The 2022 CEEI note was released in the shadow of the COVID-19 pandemic, at a moment when the war in Ukraine was only beginning and digital technologies were rapidly expanding across food systems. By 2026, the global landscape has become even more volatile; these issues are ‘enduring’. Conflicts have deepened, humanitarian crises have multiplied, and geopolitical tensions have intensified. As AFSA and allied organisations have documented, global power struggles increasingly play out through food and agriculture: fertilizer markets manipulated during conflict, commodity corridors disrupted or weaponised, and sanctions regimes that restrict access to essential inputs for farmers. These dynamics expose how deeply food systems are entangled with imperialist geopolitical interests, replicating the process of colonial dispossession, and how these costs of crisis are disproportionately borne by small-scale producers, workers, and communities, not by the corporations or governments that shape global trade and finance. The weakening of multilateral institutions and the erosion of international norms around human rights and the use of food in conflict further undermine the world’s ability to respond collectively to these challenges.

These global patterns are mirrored in Australia. AFSA has long challenged the highly consolidated, corporate, industrial food and agriculture sector in Australia, which continues to dominate production, processing, and retail, while an export-driven agricultural model prioritises global commodity markets over domestic food security. Despite Australia’s status as a major food exporter, many households struggle to access affordable, nutritious food, a contradiction rooted in structural inequities and policy choices. Corporate concentration in the supermarket sector has enabled unfair trading practices, downward pressure on farmgate prices, and

environmental and labour concerns, all of which undermine the resilience and fairness of the food system. Recent national policy processes, including the establishment of a National Food Council, have been criticised by civil society for privileging agribusiness interests and excluding the voices of small-scale farmers, Indigenous Peoples, and community food system actors. At the same time, ongoing failures to uphold the rights, sovereignty, and cultural value of First Nations peoples continue to weaken the foundations of a just and sustainable food system.

It is within this global and national landscape that AFSA, with the support of the Food Connect Foundation, submits its response to the Zero Draft. We emphasise the need for the HLPE to address the interconnected crises of climate change, biodiversity loss, land degradation, conflict, and corporate concentration through a coherent, rights-based, and accountable food systems approach; one that centres agroecology, food sovereignty, and democratic governance as essential pathways forward.

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?

The issues identified by the HLPE-FSN present a solid overview of the important drivers of food security and nutrition globally. However, AFSA would like to highlight two points around the cross-cutting issues of structural issues in food systems, and how food sovereignty can also serve as a frame to reimagine food systems at global, regional, national, and local levels. Despite the HLPE not wanting to create silos, their treatment as discrete themes risks reproducing the very fragmentation the report seeks to overcome. Climate change, biodiversity loss, land degradation, trade regimes, corporate concentration, digitalisation, and community agency are not parallel challenges; they are structurally interdependent. You cannot meaningfully discuss agroecology, agency, or equitable food systems without simultaneously addressing the corporate and geopolitical forces that shape land access, market power, input dependency, and policy space. Likewise, conversations on climate adaptation or the Rio Conventions become incomplete when they do not explicitly confront the economic and political interests that determine whose lands are protected, whose are commodified, and whose knowledge systems are marginalized.

By separating issues such as corporate concentration, trade, climate, and agency into different Sections, the Draft Note risks obscuring the power relations that bind them. This limits the ability of policymakers to understand why transformative approaches, including agroecology, territorial markets, Indigenous governance, and rights-based frameworks, plus more inclusive, democratic and equitable governance structures, struggle to gain traction. Addressing structural inequities, embedding accountability mechanisms, and conducting power analyses across all issue areas is essential if the HLPE is to support honest, coherent, and actionable policy guidance for food system transformation.

AFSA would add that food sovereignty itself provides a unifying framework through which these structural challenges in the food system can be understood and prioritised. The right to food cannot be fully realised without addressing the ability of people and communities to define their own food systems. Equally, while we recognise the addition of 'agency' (Section 9), greater emphasis is also needed on colonial legacies and ongoing forms of extractivism that shape food systems in many contexts, including Australia, as well as on the role of public policy, public investment, and collective institutions in countering

	corporate capture and market dependency. Without these additional dimensions, the list of issues risks treating symptoms rather than confronting the root causes of food insecurity and malnutrition.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Reflecting from a domestic level in Australia, there are two issues we would like to see added to or elaborated in the CEEI. These include i) transparent and participatory accountability and governance mechanisms, and ii) colonial legacies and First Nations rights and voice. i)TRANSPARENT AND PARTICIPATORY ACCOUNTABILITY AND GOVERNANCE MECHANISMS At the national level in Australia, accountability in food systems governance is often shaped by agribusiness and corporate influence. This has created significant barriers to the adoption, implementation, monitoring, and protection of CFS policy products - such as the Voluntary Guidelines on the Progressive Realisation of the Right to Adequate Food in the Context of National Food Security. While the Draft Note identifies corporate concentration, trade, and agency as separate themes, it does not fully address the extent to which national governance structures - underpinned by neoliberal paradigms - determine whether CFS guidelines are meaningfully adopted or actively sidelined by the national government¹²³. As such, there is an opportunity for the HLPE Draft Note to consider the impact of neoliberal paradigms on food systems governance at global and national levels and how shifting to rights-based and food sovereignty paradigms can support transparent, participatory, and equitable food governance to ensure food and nutrition security for all. The situation in Australia illustrates this emerging global challenge highlighted in the HLPE Draft Note. The establishment of a National Food Council - dominated by big agribusiness and food industry voices - has raised concerns about transparency, conflict-of-interest safeguards, and the exclusion of small-scale farmers, Indigenous Peoples, and civil society voices. This mirrors patterns seen in many countries, where export-oriented agricultural models and

¹Chester, L. (2010) Actually Existing Markets: The Case of NeoliberalAustralia, Journal of Economic Issues, 44:2, 313-324, DOI: 10.2753/JEI0021-3624440204

² Iles, A. (2020): Can Australia transition to an agroecological future? Agroecology and Sustainable Food Systems, DOI: 10.1080/21683565.2020.1780537

³ Lockie, S. 2009. 'Agricultural Biodiversity and Neoliberal Regimes of Agri-Environmental Governance in Australia', Current Sociology, May 2009, Vol. 57(3): 407–426

consolidated corporate power limits democratic participation and weakens the domestic uptake of rights-based food system policies.

This governance gap has direct implications for the CFS. The effectiveness of policy instruments such as the Voluntary Guidelines on the Responsible Governance of Tenure Land, Fisheries and Forests, the Voluntary Guidelines on the Right to Food, and the Voluntary Guidelines on Food Systems and Nutrition depends on national-level accountability, monitoring, and public oversight. In the context of ongoing FAO reforms and current challenges in the multilateral system, the role of national food governance bodies in supporting transparent and participatory food system governance, as well as the risks posed by corporate capture of such bodies, constitutes a critical and emerging issue that could strengthen the preparation of the CFS MYPoW 2027-2030.

iii) COLONIAL LEGACIES AND FIRST NATIONS' RIGHTS AND VOICE

A critical and enduring issue that warrants explicit inclusion is the impact of colonial legacies and ongoing colonial political and economic structures on food systems, particularly for Indigenous Peoples. In Australia, contemporary food insecurity and malnutrition cannot be separated from histories of dispossession, the disruption of Indigenous food systems, and legal and governance frameworks that continue to privilege extractivism, export-oriented agriculture, and capital accumulation over Indigenous sovereignty and custodianship. First Nations peoples have sustained diverse, climate-resilient food systems for millennia, grounded in Country, relational governance, and reciprocal responsibility. Yet current agrifood, conservation⁴, and trade policies routinely marginalize Indigenous land governance, food economies, and knowledge systems, while constraining self-determination and agency. Addressing food security without confronting these structural continuities risks perpetuating injustice. Recognizing and supporting Indigenous food sovereignty, land rights, and governance is therefore fundamental to realizing the right to food and to any genuinely transformative, rights-based food system agenda.

⁴ Büscher, B. & Fletcher, R. 2020. The Conservation Revolution: Radical Ideas for Saving Nature Beyond the Anthropocene, Bloomsbury

All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I

Sections 2 and 3 address closely interlinked drivers of food insecurity including climate change, biodiversity loss, and land degradation, and could be linked as a way to also address the fragmentation of policy spaces that the HLPE seeks to overcome. Climate impacts cannot be separated from the ecological degradation and governance failures addressed under the Rio Conventions; together, they shape all six dimensions of food security and nutrition. Merging the Sections, without losing the importance of both climate and the Rio conventions, would allow the report to present a unified systems analysis and avoid duplication, while strengthening the coherence of recommendations across climate, biodiversity, land, and food systems.

Both Sections already converge on similar solutions: diversified and resilient production systems, secure tenure, rights-based governance, and the need to repurpose harmful subsidies. AFSA notes the mention of agroecology in Section 2, as a holistic approach that enhances climate adaptation, biodiversity, and soil restoration. Emphasising the role of agroecology and principles of food sovereignty also supports the cross-cutting objectives of the three Rio Conventions while supporting the right to food.

Accountability with relation to the Rio Conventions, and across CFS policy instruments, can strengthen the collective approach and support multilateral development. This then supports the national implementation, monitoring, and reporting that further strengthens the collective uptake of CFS policy instruments to address climate and ecological challenges, and improve both nutrition and environmental food system outcomes.

Inputs on the CEEIs outlined in Draft 0

I. SECTION 1: Transformation of food systems post-2030

Drivers, Trends, and their impacts on FSN Outcomes

AFSA acknowledges in the HLPE report the recognition that food system and nutrition failures are systemic and multidimensional, rather than sectoral or technical. Further, the recognition that power imbalances, corporate concentration and governance issues often drive food system outcomes, and that food systems are linked and independent with nutrition, climate, livelihoods, health and biodiversity outcomes. This section, however, does not sufficiently critique export-oriented agricultural models; capital accumulation is promoted over people and ecological health, and people's production and access to culturally sensitive, safe, nutritious food. Additional

recognition needs to be made of the neoliberal policy frameworks (market realisation, deregulation, financial realisation), and how they constrain governments in food security and nutrition policy. The use of farmers as stakeholders rather than rights holders and system builders emphasises this. Export- oriented food systems undermine diets, livelihoods, Indigenous food systems and policy space, casting farmers as victims not rights-holders; without confronting colonial power, capital accumulation and corporate capture, transformation becomes technocratic.

Additional Questions:

- Q. How do export-oriented and corporate-dominated food systems structurally undermine food sovereignty, dietary quality, and agency at national and household levels?
- Q. How can Indigenous food systems, knowledge, governance, and sovereignty be recognised and supported as central pillars of post-2030 food systems transformation?

II. SECTION 2: Food Security and Climate Crises

Drivers, Trends, and their impacts on FSN Outcomes

The role climate change has played in multiplying the risks and challenges for food security and nutrition in Australia resonates with aspects referenced in Section 2. In such a large country, we relate to how this impacts groups and regions differently, with climate shocks disrupting production, supply chains, food availability and livelihoods. At an international level, Australia's fossil fuel exports also drive global climate change, often felt in countries in the Global South. AFSA would recommend the reframing of climate events not as external shocks, but as consequences of industrial, export-oriented food systems that are major drivers of emissions and ecological degradation. The point should also be made that industrial plantation agriculture (e.g. palm oil) not only contributes to higher emissions, but severely damages ecosystem integrity, undermining their capacity to cope with climate extremes (e.g. massive landslides in Sumatra and Sri Lanka after heavy rains). Current policy settings risk reinforcing corporate concentration, land dispossession, and the marginalisation of small farmers and Indigenous People's rights to the country.

AFSA would like to see additional emphasis on the potential indirect outcome of poorly designed climate responses that reinforce 'False Solutions,' framed around market-based mechanisms, productivity gains and carbon sequestration. These will only further entrench the corporate concentration of our agricultural sector and undermine people's right to food, land and water. AFSA believes that greater attention on how agroecology and Indigenous knowledge and land management practices can support biodiversity, resilience, and ecological sustainability while supporting nutrition and social equity outcomes.

Key References:

- Yunkaporta, Tyson. 2019. Sand Talk: How Indigenous Thinking Can Change the World, The Text Publishing Company, Australia.
- Graham, M. & M. Brigg. 2021. Relationalist ethical impulse amidst colonial violence. <https://arts.unimelb.edu.au/indigenous-settler-relations-collaboration/resources/videos/relationalist-ethical-impulse-amidst-colonial-violence>

- Maddison, S. 2019. The Colonial Fantasy: Why White Australia Can't Solve Black Problems. Allen & Unwin.

- Grey, S. & Patel, R. 2014. Food sovereignty as decolonisation: some contributions from Indigenous movements to food system and development politics, Agric Hum Values (2015) 32:431–444 DOI 10.1007/s10460-014-9548-9.

Additional Questions:

- Q. How do 'false solutions' in agriculture (e.g. carbon markets, climate-smart intensification) risk reinforcing land concentration, corporate control, and Indigenous dispossession, and how can rights-based, agroecological alternatives be prioritised?

- Q. How can Indigenous food systems, land governance, and stewardship practices be recognised and supported as central climate adaptation strategies for food security and nutrition, including in settler-colonial contexts such as Australia?

III. SECTION 3: The Three Rio Conventions

Drivers, Trends, and their impacts on FSN Outcomes

Section 3 identifies climate, biodiversity loss, and land degradation as interconnected threats to food and nutrition security, however AFSA believes this insufficiently addresses how colonial land tenure, extractive development, and weak implementation of the Voluntary Guidelines on Responsible Governance of Tenure shape outcomes. In Australia, Indigenous land governance and food systems remain marginalised despite delivering proven biodiversity, climate, and nutrition benefits. Stronger attention to rights, tenure, and accountability is needed, particularly where the Australian Government pays so little attention domestically to CFS frameworks and policy products, UN Declaration on the Rights of Indigenous Peoples, and other multilateral products.

Key References:

- FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. <https://doi.org/10.4060/cc0639en>

- International Planning Committee for Food Sovereignty (IPC) (2023) People-centred assessment of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the context of food security and poverty eradication: Asia and the Pacific. Rome: International Planning Committee for Food Sovereignty. Available at: https://www.foodsovereignty.org/wp-content/uploads/2023/11/SSF-Guidelines_Report_AP_web.pdf

Additional Questions:

- Q. How can the VGGT, Indigenous sovereignty, and FPIC be operationalised within Rio Convention implementation to ensure climate and conservation actions do not undermine food security and land rights, including in settler-colonial contexts such as Australia?

IV. SECTION 4: Geopolitical Uncertainty and Multiple Crises

Drivers, Trends, and their impacts on FSN Outcomes

At the time of writing, the Australian Government is mobilising its National Cabinet in order to address the supply chain disruptions occurring through the conflict in the Middle East. The resilience of our food, fuel and input supply chains is directly linked to conflict, geopolitical instability and polycrises; in turn, they are driving food and security outcomes, price volatility and the cost of farming livelihoods. Reliance on fossil fuel-intensive, globalised food and supply chains, particularly for countries that are import and export dependent, and the risks this poses for marginalised communities, requires more emphasis in the Draft Note. Equally, accountability mechanisms and acknowledgement that globalised, centralised food systems magnify geopolitical shocks, seen with the energy and price volatility in the current Strait of Hormuz blockades. Greater attention is needed on how decentralised, localised and people-oriented food systems can support food sovereignty, reduce fossil fuel dependency, and challenge the dominance of export-oriented, corporate- controlled food system models.

Key References:

- IPES-Food (2025) Fuel to fork: What will it take to get fossil fuels out of our food systems? Brussels: International Panel of Experts on Sustainable Food Systems. Available at: <https://ipes-food.org/report/fuel-to-fork/>

Additional Questions:

- Q. How can strengthening domestic food sovereignty and local production reduce vulnerability to geopolitical shocks compared to reliance on globalised supply chains?

V. SECTION 5: International Trade

Drivers, Trends, and their impacts on FSN Outcomes

This Section reinforces the Australian Government's approach to agriculture, where international trade is central to our industrial agriculture, export agenda, and reflects Australia's long-standing support for multilateral trade frameworks such as the WTO. AFSA finds this framework troublesome, as research shows that trade liberalisation, export-orientation, and market concentration systematically undermine domestic food security, dietary quality, and farmer viability, as has been seen increasingly since the 1990s in Australia. In the words of McMichael, 'food sovereignty emerged as the antithesis of the corporate food regime and its (unrealized) claims for "food security" via the free trade rules of the World Trade Organization (WTO)⁵.

Where food security is concerned with ensuring peoples' right and access to food, it fails to consider the social, political and ecological dimensions of corporate-driven food systems. Through the lens of food security, techno-optimism informs the increasing digitalisation of agriculture and

⁵ IPC (International Planning Committee on Food Sovereignty). 2015. "Report of the International Forum for Agroecology, Nyéléni, Mali, 24-27 February 2015." < <https://www.foodsovereignty.org/wp-content/uploads/2015/02/Download-declaration-Agroecology-Nyeleni-2015.pdf> > accessed 5/6/21.

rise of genetically-modified organisms (GMOs), causing further social and ecological destruction and particularly impacting smallholders and Indigenous Peoples' land across the world.

AFSA challenges the framing that trade is neutral or a necessary mechanism for 'stability', rather than a political system that reinforces existing power inequities and either ignores or marginalised people's human rights. Particularly, the WTO Agreement on Agriculture has been a significant barrier to realizing the right to adequate food, and further constrains the state to effectively support localised, agroecological, and food sovereignty aligned principles. Another negative consequence of free trade is to privatise biodiversity (e.g. through patents on seeds), increasingly making it illegal for First Peoples and farmers to save, exchange or modify seeds from so-called protected varieties⁶. As such, any assessment and formulation of policy responses related to international trade by the CFS must be grounded in human rights, to adequately address entrenched power imbalances within the global trade system that creates barriers to the realisation of the right to adequate food.

Key References:

Edelman, M. 2024. Peasant Politics of the Twenty-First Century: Transnational Social Movements and Agrarian Change, Cornell University.

Additional Questions:

Q. How can the CFS effectively reshape international trade rules to better protect domestic food systems, farmer and indigenous livelihoods and support the adequate right to food (rather than entrench export orientation, corporate concentration and dependence on volatile Global markets?)

VI. SECTION 6: Corporate Concentration

Drivers, Trends, and their impacts on FSN Outcomes

AFSA commends the HLPE for identifying corporate concentration as a structural driver shaping food systems and nutrition outcomes through market power, value capture, and its influence over food policy. However, this analysis needs to be deepened in order to highlight how concentration is produced, protected through trade rules deregulation, financialisation, and domestic policy choices, like with the Food Policy Council and its corporate focus in Australia. Corporate capture, and its links with land and resource governance, commodification of resources and the broader financialization of the agricultural landscape also erodes Indigenous Peoples' rights and land tenure, and small holder farming systems⁷. This needs to be reinforced in this Section.

In Australia, corporate dominance across retail, agricultural inputs, land, water, and processing markets reinforces export-oriented production and marginalises less powerful actors in the food system. Export-focused agricultural policy, consolidation of meat processing, and prioritisation of global markets over domestic resilience are driving the closure of local abattoirs, concentrating

⁶ Alianza Biodiversidad & GRAIN (2021) UPOV: the great seeds robbery. Barcelona: GRAIN. Available at: <https://grain.org/system/articles/pdfs/000/006/644/original/El%20gran%20robo-ENG-6MAR.pdf>

⁷ International Conference on Agrarian Reform and Rural Development +20 (ICARRD+20) (2026) Final declaration of the Second International Conference on Agrarian Reform and Rural Development. Cartagena de Indias, Colombia, 24–28 February. Available at: <https://www.foodsovereignty.org/wp-content/uploads/2026/02/DECLARACION-GOBIERNOS.pdf>

power among multinational corporations and sidelining small-scale farmers, regional economies, and public food security goals. This dynamic is reinforced by growing foreign ownership and contract farming models that lock farmers into dependent relationships with processors and exporters. As access to abattoirs declines, farmers face higher costs, reduced autonomy, longer transport distances, animal welfare concerns, and diminished capacity to supply local markets, weakening rural livelihoods and community resilience⁸.

Given these significant challenges, AFSA would like to see the CEEI highlight how food sovereignty offers a pathway to confront these power imbalances by reclaiming control over infrastructure, markets, and decision-making, supporting decentralised processing, localised supply chains, and democratic governance of food systems (as also outlined in the ICARRD +20 Declaration).

Key References:

- Office of the United Nations High Commissioner for Human Rights (OHCHR) (2025) UN experts urge binding accountability for agribusiness to safeguard peasants' rights and global food security. Press release, 16 October. Available at: <https://www.ohchr.org/en/press-releases/2025/10/un-experts-urge-binding-accountability-agribusiness-safeguard-peasants>
- IPES-Food (2023) Who's tipping the scales? The growing influence of corporations on the governance of food systems, and how to counter it. Brussels: International Panel of Experts on Sustainable Food Systems. Available at: <https://www.ipes-food.org/report/whos-tipping-the-scales/>
- Jonas, T. (2025) Where have all the abattoirs gone? How export is hurting local farmers. Australian Food Sovereignty Alliance (AFSA), 15 April. Available at: <https://afsa.org.au/where-have-all-the-abattoirs-gone-how-export-is-hurting-local-farmers/>

Additional Questions:

- Q. How does corporate concentration across land, water, finance, and food markets undermine Indigenous land rights, small-scale farming, and national food security, and how can public policy reverse these trends?
- Q. What governance and accountability mechanisms are needed to prevent corporate capture of land and food systems, including through strengthened tenure protections, conflict-of-interest safeguards, and rights-based food system governance?

VII. SECTION 7: AI and Digital Innovations

Drivers, Trends, and their impacts on FSN Outcomes

This section outlines the growing role of AI and digital technologies in shaping food systems, with claimed benefits for productivity, logistics, marketing, and governance. Organisations such as the Action Group on Erosion, Technology and Concentration (ETC Group), which monitors the impacts

⁸ Jonas, T. (2025) Where have all the abattoirs gone? How export is hurting local farmers. Australian Food Sovereignty Alliance (AFSA), 15 April. Available at: <https://afsa.org.au/where-have-all-the-abattoirs-gone-how-export-is-hurting-local-farmers/>

of emerging technologies on biodiversity, agriculture, and human rights, warn that new high-risk technologies - from synthetic biology to geoengineering - are increasingly promoted as solutions to climate change, hunger, and biodiversity loss, while precaution, social impacts, and equity are sidelined in the rush to deploy technocratic fixes⁹.

Rather than accepting these narratives, AFSA calls for a more critical framing of digitisation in food and agricultural systems. Digital technologies and AI are not politically neutral: ownership of data, platform monopolisation, and proprietary technologies tend to reinforce corporate concentration and deepen power asymmetries. In Australia, digital agriculture is largely driven by agribusiness and financial interests, often with insufficient safeguards to protect Indigenous data sovereignty, community control, and autonomy.

AFSA highlights how digitisation can exacerbate exclusion, dependency, and surveillance, particularly for small-scale farmers and Indigenous communities, through control over data, infrastructure, and decision-making systems. The largely unregulated expansion of AI, evident explicitly in conflict settings, demonstrates how these technologies can be deployed asymmetrically, creating real and immediate risks. In agriculture, weak accountability around AI threatens to accelerate land consolidation, erode traditional knowledge systems, and reshape food environments, while data extracted from Indigenous lands and practices can be appropriated in ways that undermine self-determination.

The material footprint of digitalisation further compounds these harms. Resource extraction to support digital infrastructure, including mining, energy production, and battery manufacture, increasingly competes with farmers and Indigenous peoples for land, water, and energy. In Australia, the rapid expansion of data centres intensifies pressure on scarce resources and drives continued investment in fossil-fuel energy systems. Claims that technology can “feed the world” obscure the reality that enough food is already produced to feed an estimated 11 billion people, and that small-scale producers supply around 70 percent of the world’s food using just 30 percent of agricultural land. As digitisation and AI are imposed across food systems without meaningful participation or consent, they must not displace food sovereignty approaches but be constrained by strong safeguards that protect collective decision-making, Indigenous and community control, and democratic governance of technologies and data.

Key References:

ETC Group (2022) Cashing in on the climate crisis through agricultural digitalisation: Emerging cases in Indonesia, Malaysia and the Philippines. Montréal: Action Group on Erosion, Technology and Concentration. Available at: <https://www.etcgroup.org/content/cashing-climate-crisis-through-agricultural-digitalisation>

⁹ ETC Group (2022) Cashing in on the climate crisis through agricultural digitalisation: Emerging cases in Indonesia, Malaysia and the Philippines. Montréal: Action Group on Erosion, Technology and Concentration. Available at: <https://www.etcgroup.org/content/cashing-climate-crisis-through-agricultural-digitalisation>

● IPES-Food (2026) Head in the cloud: Challenging the false promise of digital agriculture and cultivating innovation from the ground up. Brussels: International Panel of Experts on Sustainable Food Systems. Available at: <https://ipes-food.org/report/head-in-the-cloud/>

Additional Questions:

- Q. How can data governance and AI regulation ensure small-farmer and Indigenous data sovereignty, transparency, and accountability, while preventing the reinforcement of corporate concentration and control over food systems?
- Q. How do digital technologies and AI shape power, control, labour, ownership, and social relations in food systems—and do they reinforce or undermine food sovereignty principles?
- Q. What public, cooperative or other digital infrastructures can be promoted that support the autonomy and existing knowledge of agroecology, Indigenous food systems, and small-scale farmers, rather than extractive, profit-driven models?

VIII. SECTION 8: “One Health” as an integrating framework for food security and nutrition

Drivers, Trends, and their impacts on FSN Outcomes

On the surface, One Health seeks to supplement ‘the germ theory of disease with an ecosystemic theory: that the health of organisms in the field is relational (Zinsstag et al. 2015)’ (Wallace et al. 2019, 222). Yet, while the recent move to bring the UN Environment Programme (UNEP) into a Quadripartite with the World Health Organisation (WHO), FAO and World Organisation for Animal Health (WOAH) to better anchor One Health initiatives in ecosystem-based approaches is welcome, the approach still fundamentally fails to examine the circuits of capital on which novel zoonoses and antimicrobial resistant (AMR) bacteria are hitching an ever-speedier ride (Wallace 2016; 2021). This failure to examine the role of ownership, concentration, trade, infrastructure, and supply chain length has to date delivered little more than disease emergence and alarming increases in AMR (IPES Food 2020; Dentico et al. 2022). When seeking to integrate One Health as a framework for food security and nutrition, attention should be focused on the role of upstream, holistic, and relational prevention measures.

Key References:

- Jonas, T., Trethewey, B. Agroecology for Structural One Health. *Development* 66, 238–244 (2023). <https://doi.org/10.1057/s41301-023-00385-0>

IX. SECTION 9: Affordability of healthy and nutritious diets to ensure food security and nutrition

Drivers, Trends, and their impacts on FSN Outcomes

The focus on affordability of health and nutritious diets to ensure food security and nutrition is a critical and enduring issue, and AFSA commends the HLPE for including this in the CFS MYPoW 2027-2030. There is an opportunity to strengthen this section by interlinking with other key issues identified, including international trade and climate crises. International trade is a key driver impacting access to healthy diets. The proliferation seen over the last two decades in trade of ultra processed foods (UPFs) negatively impacts access and affordability to fresh, healthy, and nutritious

foods, and is a key driver globally and in Australia to the burden of multiple diet-related chronic diseases. The increased trade and consumption of UPFs have also displaced traditional and Indigenous diets - which typically are higher in fresh, nutritious foods. When exploring policy options to reduce inequalities in relation to the accessibility and affordability of healthy and nutritious diets, emphasis also needs to be placed on ensuring access to traditional foods and diets.

Key References:

- FAO. (2024). The State of Agricultural Commodity Markets 2024 - Trade and nutrition: Policy coherence for healthy diets.
- HLPE. (2023). Reducing inequalities for food security and nutrition. CFS HLPE-FSN. <https://www.fao.org/3/cc6536en/cc6536en.pdf>
- Monteiro C, Louzada M, Steele-Martinez E et al. Ultra-processed foods and human health: the main thesis and the evidence. The Lancet, 2025; 406, 2667-2684

Additional Questions:

- Q. What policy options exist to support access and affordability of traditional and Indigenous foods?

IX. SECTION 10: Agency for food security and nutrition

Drivers, Trends, and their impacts on FSN Outcomes

As identified in the Draft Note, agency is essential for the realization of the right to adequate food, and as such remains a key issue affecting food security and nutrition. The adoption of agency as the sixth pillar of food security represents a positive step towards consolidating understanding of the different dimensions of food security, however additional focus of other key and interrelated human rights principles could strengthen this section. In line with the PANTHER principles, a focus on empowerment and agency would further address structural inequities and power imbalances. A stronger emphasis on empowerment would support Question 3 and Question 4, particularly when identifying policies and institutional arrangements to enhance participation, voice, control, and decision making by groups whose agency and empowerment within food systems is constrained - such as Indigenous peoples, women, youth, elderly, and people with disabilities. Identified policy measures and institutional arrangement should also focus explicitly at enhancing group and collective empowerment and agency, not just at the individual level.

Key References:

- FAO. (2014). The right to food within the international framework of human rights and country constitutions. Food and Agriculture Organization of the United Nations. <https://openknowledge.fao.org/server/api/core/bitstreams/1250819b-1f3e-4731-ae44-59e7c2fc37dd/content>

- **FAO. (2024). Realizing the right to food in a changing world - The Right to Food Guidelines: 20 years on and beyond. Food and Agriculture Organization of the United Nations.**
<https://doi.org/10.4060/cd3573en>

Additional Questions:

- **Q. How to enhance group or collective empowerment and agency to progress the realization of the right to adequate food, and support food and nutrition security?**

CONCLUSION

In conclusion, AFSA emphasizes that addressing food security and nutrition requires confronting the structural drivers that shape food systems in Australia, and globally. Export-oriented policies, corporate concentration, weakened public accountability, the ongoing violence and dispossession of colonial legacies, and the continued exclusion of First Nations peoples, civil society, and small-scale farmers continue to undermine food system resilience, equity, and sovereignty. These challenges cannot be treated as isolated or technical problems; they are rooted in power relations that determine whose knowledge counts, whose land is valued, and whose interests are prioritized in policy and governance processes.

This moment presents a vital opportunity for the CFS to confront the power imbalances, corporate concentration, and colonial legacies that underpin food system failures. The CFS can and must stand firm and be bold if it seeks to maintain relevance as the global platform for food governance, deepening its commitment to democratic, inclusive participation. This must center First Nations, civil society, small-scale food producers, and those on the front line of food systems, not stakeholders. Doing so strengthens the legitimacy and effectiveness of the CFS to address structural injustice and resist corporate and geopolitical capture, instead guided by human rights, robust accountability, and ensuring global food governance serves peoples and communities.

93. UN-Nutrition, Italy

Surname	Mahy
First name	Lina
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Consultant and focal point for CFS issues
Current institution/organization	UN-Nutrition
Country	Italy
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	We consider that the proposed list of ten Critical, Emerging and Enduring Issues (CEEI) is well balanced, timely and highly relevant. It appropriately reflects the major structural, systemic and forward-looking challenges affecting food security and nutrition, and provides a sound basis for guiding the future work of the CFS and the HLPE-FSN. However, the document is very long and could be streamlined to improve readability. Given the strong interlinkages among the issues,

	there is considerable repetition that could be reduced. It would be valuable to make clearer reference to the (extended) UN Decade of Action on Nutrition across all the CEEIs, particularly in light of the role assigned to the CFS through the multiple United Nations General Assembly resolutions, the most recent one being A/RES/79/276. Explicitly linking relevant CEEI to this mandate could strengthen coherence with existing global commitments on food security, nutrition and food systems and reinforce the strategic positioning of the CFS within the broader UN system. We would also welcome greater reflection on how the proposed work will ultimately contribute to shaping the post-2030 development agenda. Making this forward-looking contribution more explicit for each of the CEEI, would further enhance the relevance of the CEEI workstream.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Proposed additional CEEI: Re-regulating food systems for food security and nutrition: fiscal and market governance to make healthy diets affordable The role of regulation and fiscal policy in shaping food security and nutrition (FSN) outcomes constitutes a critical, emerging and enduring issue. Regulatory and fiscal frameworks directly influence all dimensions of food security, particularly access, availability, utilization, agency and sustainability, as well as States’ ability to respect, protect and fulfil the human right to adequate food. Yet, despite their centrality, these policy tools are increasingly constrained by deregulation trends, corporate concentration, trade pressures and fiscal austerity. A growing body of evidence demonstrates that well-designed regulatory measures, including food standards, marketing restrictions, front-of-pack labelling, public procurement rules, competition policy and subsidy reform, alongside progressive and nutrition-sensitive fiscal policies, can improve access to healthy diets, reshape food environments, address power asymmetries in food systems and expand fiscal space for nutrition-relevant investments. At the same time, many countries face declining policy and regulatory space to act in the public interest, often limiting their capacity to safeguard health, equity and accountability in food systems, and to fulfil human rights obligations without undue commercial influence. This tension makes the issue enduring, given the long-standing reliance on market-driven approaches that frequently overlook equity, affordability and rights;

emerging, as deregulation pressures, trade constraints and fiscal consolidation intensify in the context of climate shocks, health crises and geopolitical instability; and critical, because the affordability of healthy diets, the quality of food environments and effective accountability mechanisms are now central determinants of FSN outcomes across all income settings.

Addressing this issue is therefore essential to strengthen food system governance, protect and reclaim regulatory space, ensure accountability, and enable coherent, equitable and rights-based policy responses in the post-2030 context. A dedicated CEEI on this theme would examine how smart regulation and fiscal policies can improve FSN outcomes by reshaping food environments and correcting structural power imbalances in markets and governance. It could cover, inter alia: food standards; restrictions on the marketing of unhealthy foods; front-of-pack labelling; public procurement rules; competition and antitrust policy; subsidy reform; and trade-related regulatory space, alongside taxation, tax governance and tax justice. The theme could also consider corporate tax accountability and transparency, including mechanisms such as public country-by-country reporting, and the documented scale of global corporate tax abuse estimated at approximately US\$350 billion annually given its direct implications for national fiscal space and public investment in food security, nutrition and health systems. Strengthening fiscal and regulatory governance in food systems is thus not only a technical issue, but a core question of equity, accountability and democratic governance.

Fiscal policy matters not only as a source of revenue for public services and nutrition-relevant systems, but also as a tool for repricing (shifting incentives towards healthier and more sustainable foods) and redistribution (protecting low-income and vulnerable groups). One useful analytical framing reflected in the supporting material is the “5 Rs of tax” (Revenue, Redistribution, Repricing, Representation and Reparations), which highlights taxation’s broader role in governance, accountability and social contracts.

<https://www.who.int/publications/i/item/9789240049543>
<https://taxjustice.net/reports/the-state-of-tax-justice-2024/>

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

We consider that all ten proposed Critical, Emerging and Enduring Issues (CEEI) are important and, on their own, merit dedicated attention. Together, they provide a comprehensive and balanced articulation of the breadth of challenges affecting food security and nutrition, and each addresses a distinct entry point for analysis and policy action.

That said, if constraints require consolidation, some limited merging could be considered. In particular, CEEI 6 (Corporate concentration in food systems) and CEEI 10 (Agency for food security and nutrition) could be brought together under a broader focus on good food systems governance, as both address power asymmetries, accountability, agency and the conditions under which different actors can meaningfully influence food system outcomes.

Similarly, CEEI 3 (Food security and nutrition, and the three Rio Conventions) and CEEI 8 (One Health as an integrating framework) could potentially be combined, given their shared emphasis on policy coherence across sectors and on bringing environmental, health and food system agendas together. While they approach integration from different institutional and conceptual angles, both seek to overcome siloed governance and to address interlinked risks through more holistic frameworks.

Finally, we would recommend that the overarching theme of CEEI 1 (Advancing the post-2030 Development Agenda through food systems transformation) be treated as a cross-cutting lens rather than as a stand-alone topic only. The post-2030 perspective is relevant to and should inform the framing and analysis of all CEEIs.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

While the proposed CEEIs are clearly grounded in food security and nutrition (FSN), stronger and more systematic integration of overweight, obesity and diet-related noncommunicable diseases (NCDs) would further enhance their relevance and analytical completeness. Several of the proposed CEEIs already make explicit and appropriate reference to these forms of malnutrition. In particular, CEEI 1 (Advancing the post-2030 Development Agenda through food systems transformation) explicitly acknowledges the coexistence of undernutrition and diet-related noncommunicable diseases, highlighting structural failures in food environments and food utilization and referring to the multiple burdens of malnutrition. CEEI 5 (International trade for food security and nutrition) addresses the role of trade, food environments and the global spread of ultra-processed foods in shaping dietary patterns and contributing to rising obesity and NCDs. CEEI 6 (Corporate concentration in food systems) discusses the influence of market concentration, food processing, retail and marketing practices on unhealthy diets and diet-related noncommunicable diseases. CEEI 7 (Digital innovations and artificial intelligence) also considers how digital marketing, pricing and recommendation systems may shape food environments and dietary choices, with implications for obesity and NCD risk. CEEI 8 (One Health as an integrating framework) explicitly links unhealthy dietary patterns to noncommunicable diseases and broader human, animal and environmental health outcomes. Finally, CEEI 9 (Affordability of healthy and nutritious diets) directly addresses the substitution of affordable ultra-processed foods for healthier options and the associated rise in overweight, obesity and NCDs.

However, other proposed CEEIs, particularly those addressing climate crises, geopolitical uncertainty, and the Rio Conventions, tend to focus primarily on food availability, access and resilience, with more limited or implicit consideration of how these drivers also shape diet quality, dietary patterns and nutrition-related health outcomes. Given the scale and severity of overweight, obesity and diet-related NCDs globally, this represents an important gap that could be addressed more systematically across the full set of CEEIs.

The evidence base strongly supports the need for this stronger integration. According to the World Health Organization (WHO), in 2022 more than 2.5 billion adults worldwide were overweight, of whom approximately 890 million were living with obesity. Adult obesity has more

	than doubled since 1990 and continues to rise in nearly every country, including low- and middle-income countries, alongside persistent undernutrition. Childhood and adolescent overweight and obesity are also increasing rapidly, with over 390 million children and adolescents aged 5–19 years affected globally. At the same time, noncommunicable diseases are the leading cause of death globally, accounting for approximately three-quarters of all deaths worldwide. Cardiovascular diseases, cancers, diabetes and chronic respiratory diseases dominate global mortality patterns, with diet-related risks, including overweight and obesity, among the most important modifiable drivers. WHO estimates indicate that NCDs are responsible for around 41 million deaths each year, underscoring their central relevance to FSN outcomes rather than treating them as a separate health concern. These trends demonstrate that food systems increasingly shape FSN outcomes not only through hunger and undernutrition, but also through excess calorie intake, poor diet quality, and the proliferation of unhealthy food environments. Strengthening the explicit treatment of overweight, obesity and diet-related NCDs across all CEEIs would therefore support a more comprehensive, balanced and forward-looking understanding of FSN and better reflect the multiple and intersecting burdens of malnutrition faced by countries at all income levels.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The only item that could benefit from further elaboration is urbanization. As populations shift from rural to urban areas, impacting availability and affordability of health diets, dietary patterns undergo significant changes. While urbanization can improve access to a wider variety of foods through markets and supply chains, it can also increase dependence on inexpensive, calorie-dense, nutrient-poor foods, contributing to malnutrition in all its forms. Income inequality in cities further complicates this, as low-income populations may live in “food deserts” with limited access to fresh and nutritious options. Additionally, rapid urban growth can strain infrastructure, affecting food distribution, storage, and safety, water supply, sanitation services, etc. increasing health risks. On the other hand, urban agriculture and improved logistics can help strengthen local food systems if properly supported. Further elaborating on these links would provide a clearer picture of how urbanization directly influences food security and nutritional outcomes across different populations now and in the future.

Is there any missing reference to key literature and data?

The Lancet Series on UPFs (2025)

Red and processed meat in the context of health and the environment: many shades of red and green. Information brief. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO

UNEP, UNDP, FAO (2021). A Multi-Billion-Dollar Opportunity: Repurposing agricultural support to transform food systems

The EAT-Lancet Commission on healthy, sustainable, and just food systems (2025)

The Lancet Series on the Double Burden of Malnutrition (2019)

The UN Decade of Action on Nutrition work programme

Strengthening Nutrition Action (2018). A resource guide for countries based on the policy recommendations of the Second International Conference on Nutrition (ICN2). FAO, WHO, 2018

<https://www.who.int/news/item/27-05-2025-world-health-assembly-re-commits-to-global-nutrition-targets-and-marketing-regulations>

<https://knowledge.unicef.org/child-nutrition-and-development/protecting-children-unhealthy-food-marketing-toolkit-spotlight-digital-environments>

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

In addition to framing the work under each Critical, Emerging and Enduring Issue (CEEI) from a post-2030 perspective, we suggest that several cross-cutting dimensions be systematically integrated across all topics.

First, it is important that all forms of malnutrition, including undernutrition, micronutrient deficiencies, overweight, obesity and diet-related noncommunicable diseases, are explicitly considered under each CEEI. Addressing food security and nutrition comprehensively requires moving beyond siloed approaches and ensuring that analyses capture the multiple and coexisting burdens of malnutrition that affect countries at all income levels.

Second, while acknowledging that knowledge gaps remain across many of the proposed issues, there is already a substantial body of evidence to justify and inform policy action. For this reason, it would be important for the work under each CEEI to place strong emphasis on operationalization, implementation pathways and policy relevance, so as to avoid the exercise becoming primarily theoretical or descriptive in nature.

In this context, and for each of the CEEIs, we suggest explicitly referencing existing global, regional and national commitments, including resolutions, declarations, voluntary guidelines, and legally binding instruments, to which States and other stakeholders have already committed in the relevant policy area. Doing so would strengthen accountability, enhance policy coherence, and help anchor future analyses and recommendations in agreed frameworks and obligations.

Taken together, these dimensions would help ensure that the CEEIs support not only deeper analysis, but also action-oriented, rights-based and accountable responses to food security and nutrition challenges in the post-2030 development landscape.

94. SWISSAID, Switzerland

Surname	Ajena
First name	Francesco Maria
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Agroecology Advisor
Current institution/organization	SWISSAID
Country	Switzerland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The ten issues identified in the V0 draft represent a substantive and broadly sound selection. Several of them (corporate concentration, affordability of healthy diets, the post-2030 agenda, and agency) address structural drivers of food insecurity rather than symptoms alone, which is the right analytical level for a note of this nature. Two observations on the overall framing: • The ten issues are presented as co-equal concerns, when in practice some function as root causes of others. Corporate concentration (issue 6) is not only a problem in itself: it directly conditions the affordability of healthy diets (issue 9), the digital governance agenda (issue 7), and the failure to reform trade rules (issue 5). The analytical architecture would be strengthened by making these causal relationships explicit (for example through a diagram or a brief opening section that distinguishes structural drivers from their downstream manifestations) rather than treating each issue in parallel. • The post-2030 framing (issue 1) risks remaining diagnostic without engaging the conditions of transformation. The draft correctly identifies fragmented governance and siloed policies, but it does not yet name the concrete mechanisms through which entrenched interests reproduce that fragmentation: principally the capture of public agricultural budgets and the design of trade rules. Without this, the post-2030 section describes the impasse without specifying the levers that could shift it.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Subsidies in agrifood systems: reforming the dominant incentive architecture

Public support to agriculture is one of the largest discretionary expenditures in many national budgets, yet its alignment with food security, nutrition, and environmental objectives remains weak or actively perverse. Governments spend an estimated US\$470 billion per year on farm subsidies; a 2021 UN assessment found that 87% are harmful to people and the planet, and farmers receive only around 35 cents of real value per public dollar spent. In the EU, the Common Agricultural Policy commands roughly €54 billion per year, with about 80% flowing directly or indirectly to industrial agriculture.

The structure works systematically against SDG 2, SDG 3, SDG 13, and SDG 15. Small-scale family farmers require approximately US\$443 billion per year to adapt to climate change (a sum that could be financed by redirecting currently harmful subsidies, complemented by tax reform and debt cancellation). Reform has stalled for over a decade not for lack of evidence but for political-economic reasons: short electoral horizons and entrenched constituencies prevent governments from realigning support, even where their own commitments depend on it.

The High-Level Panel for a Just Rural Transition, launched in April 2025 in Ankara and chaired by former Costa Rican President Carlos Alvarado Quesada, aligns former heads of state, UN bodies, development banks, and African policy networks around a final report for COP31. Turkey, as COP31 host, has embedded food–water–energy linkages in its action agenda and formally engaged with the Panel creating a multilateral moment to which CFS could anchor complementary work, particularly on protecting food-insecure populations during transition. Moreover, the fertiliser price shock from the Iran conflict has made the vulnerability of subsidy-dependent systems visible in real time, opening space to reframe public support as transitional rather than permanent.

National precedents demonstrate feasibility. England's post-Brexit transition (redirecting support to environmental outcomes) shows the shift is politically achievable. Livestock numbers have fallen, tree-planting has increased. Farm incomes have held stable and nearly three-quarters of farms have diversified. Malawi pays farmers for soil-health

improvements, showing conditionality is operable in smallholder-dominated systems. Nigeria, conversely, continues to invest in maize value chains in regions where maize will not be viable within a decade illustrating the mismatch between political cycles and climate-adaptation horizons.

The SOFI 2022 recommendation to repurpose food and agricultural policies has not been translated into CFS policy instruments. An HLPE-FSN report could provide the evidence base for voluntary guidelines on agricultural public support aligned with FSN and sustainability objectives, positioning CFS to contribute substantively to the post-COP31 agenda.

FAO et al., SOFI 2022: Repurposing food and agricultural policies to make healthy diets more affordable
FAO, UNDP, UNEP (2022). Repurposing agricultural policies and support

Gautam, M., Laborde, D., Mamun, A., Martin, W., Piñeiro, V. and Vos, R. (2022). Repurposing Agricultural Policies and Support. World Bank and IFPRI

Clapp, J. et al. (2025). Corporate concentration and power matter for agency in food systems. Food Policy, 134, 102897

Proposed key questions

1. What is the current alignment between public agricultural support and FSN objectives across different income levels and regions, and what reform pathways are available without regressive impacts on food-insecure populations who currently benefit from price support?
2. How can subsidy reform processes be sequenced and governed to protect vulnerable smallholders, tenant farmers, and informal food-system workers during transitions?
3. What institutional mechanisms can create the political conditions for subsidy reform?

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Four linkages might deserve stronger analytical treatment in the full report:

- The V0 draft correctly cross-references trade rules and corporate concentration, but the analysis could go further: corporate concentration is partly a product of the trade-liberalisation architecture itself, which has historically created more space for transnational corporations than for smallholder-supportive domestic policies. The treatment of subsidies in issue 5 also connects directly to the new issue proposed in Q9.
- Climate adaptation for food systems cannot be financed at scale without redirecting existing harmful subsidies. The climate-finance gap and the subsidy-reform agenda are structurally linked both converge on the question of who pays for what, and in whose interest. Issue 2 mentions repurposing subsidies but does not connect this to the financing architecture needed for adaptation.
- The affordability section identifies market concentration as a supply-side driver of food prices, but the connection could be developed further. The dominance of a small number of firms in food processing and retail enables artificial price-setting and the expansion of ultra-processed products at the expense of nutritious alternatives.
- AI and digital tools may accelerate existing concentration in seeds, inputs, and retail. The report could examine what governance conditions allow digital tools to be applied in agroecological and smallholder contexts without reinforcing industrial lock-in.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

On issue 1 (post-2030 food systems transformation). The treatment of fragmented governance and siloed policies is accurate and well-developed. The draft correctly notes that fragmentation reflects "competing policy objectives and entrenched sectoral interests." What is underweighted is the mechanism through which entrenched interests reproduce fragmentation: principally the capture of public agricultural budgets and the design of trade rules.

On issue 2 (climate and food security). The observation that subsidies in high-income countries "often favour a small number of staple crops that are climate sensitive rather than more diverse, nutritious and climate-resilient options" is a key insight that should be developed more fully. The current subsidy architecture creates a double climate vulnerability: it locks producers into climate-sensitive cropping patterns, and it depletes the fiscal space that would otherwise be available for adaptation finance. Localising seed systems, advancing comprehensive soil-health approaches, and reducing reliance on synthetic fertiliser should be treated as climate-

	adaptation priorities, not only as agroecological ones. On issue 6 (corporate concentration). One addition: the productivist narrative (specifically the claim that industrial concentration is necessary to "feed the world") functions as ideological cover for the consolidation of corporate power and deserves explicit treatment. The evidence is clear that hunger is driven by poverty, inequality, and political-economy failures rather than insufficient production capacity. Naming this narrative and tracing its institutional carriers would strengthen the analysis. On issue 9 (affordability of healthy diets). The draft covers demand-side constraints and supply-side factors with appropriate depth. What is underemphasised is the food environment dimension: food choice is dictated primarily by what is cheap, convenient, and socially normal, not by individual willpower or nutritional awareness. Behavioural change at scale requires structural interventions that reshape the choice architecture: making sustainable options more accessible, affordable, and socially normal. Ultra-processed foods are cheaper partly because of the subsidy architecture described in Q9. A mandatory global regulatory framework for UPFs, comparable to the FCTC in tobacco control, has been proposed by The Lancet and deserves mention as a policy option. On issue 3 (Rio Conventions). The treatment of tenure security as a cross-cutting enabler is well-argued. One addition: the note could more explicitly connect the financialisation of land to the tenure-security agenda. Financial investment in farmland is a growing driver of tenure insecurity that operates through legal channels, and it sits at the intersection of all three Rio Convention agendas. The VGGT framework was not designed to address this phenomenon explicitly, and the full report could examine how it might be applied or extended.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	• The affordability of healthy diets depends not only on food prices but on real wages and incomes throughout the food system. Conditions among agricultural workers, processing workers, and informal traders are a direct determinant of both income-side food access and the quality of food produced. The documented link between subsidy receipts and labour exploitation suggests this is not a peripheral concern and warrants treatment across multiple CEEI, not only in issue 9. • The note addresses gender in the context of climate vulnerability and One Health, but the gender dimension of agency (issue 10) is developed through individually-focused examples rather than structural analysis. The constraints

	that condition women's agency in food systems (land rights, legal status, access to finance, social norms) deserve more systematic treatment, particularly given that the gender gap in land ownership is a documented driver of food insecurity.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	The key questions across the ten CEEI are generally well-formulated. Two dimensions you might want consider adding: • Most questions are framed as technical or evidence questions (how to design, what evidence exists, which interventions work). Fewer questions directly address the political constraints on action. For issues 1, 5, 6, and the proposed new issue on subsidies, an additional question of the form "what governance and accountability mechanisms can shift the political-economy conditions that currently block transformation?" would strengthen policy relevance. Recommendations that do not engage with the conditions of their own feasibility tend to remain aspirational. • For issue 10, the key question on measurement is well-posed. An additional dimension: what would it mean to operationalise agency at the policy level rather than only at the household level? Specifically, what indicators of collective agency are available, and what would progress look like? This connects to the broader question of democratic accountability in food systems.

95. Ministry of Agriculture, Food Sovereignty and Forests, Italy

Surname	Li Vecchi
First name	Damiano
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Director General
Current institution/organization	MASAF - Ministry of Agriculture, Food Sovereignty and Forests
Country	Italy
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The proposed list of selected critical, emerging and enduring issues provides a coherent overview of the main drivers affecting food security and nutrition at global, regional and national levels. The identification of issues reflects well the increasing complexity, interconnections and systemic nature of food systems, as well as the differentiated impacts across contexts. Overall, the issues identified by HLPE-FSN can be considered among the most relevant for informing future policy discussions within CFS. At the same time, some topics

	referenced in the list could benefit from further analytical clarification and contextualization, in order to better support evidence-based and policy-relevant deliberations.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Yes. One additional topic deserving attention is the role of food sovereignty as an analytical approach through which States and local actors can strengthen domestic and territorial food systems in the context of global trade, external shocks and policy interdependencies. Food sovereignty has increasingly been referenced in national and regional policy debates as a way to address concerns related to resilience, protection of healthy, traditional and culturally appropriate diets, sustainable livelihoods for food producers, and coherence between trade, agricultural and food policies. This term is increasingly used to reflect underlying structural challenges affecting food security and nutrition, including exposure to global market volatility, climate-related shocks and supply chain disruptions. This concept intersects with several enduring and emerging drivers already identified in the draft (at page 19), notably international trade, food systems governance, resilience and inequalities. We underline that this topic has been discussed also in a multilateral forum such as the 2024 G7 Agricultural Ministers’ Meeting and reflected in the relating Communiqué. However, there is not yet a shared and internationally acknowledged definition of this term. A focused examination by HLPE-FSN could help clarify how food sovereignty relates to existing food security and nutrition frameworks, policy coherence objectives and multilateral commitments, drawing on available academic literature and country-level policy experiences. Such work would support informed and evidence-based policy dialogue within CFS.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	With regard to the CEEI on international trade for food security and nutrition (item 5), the drivers and trends identified capture many relevant dimensions, but some links to FSN outcomes could be further strengthened. In particular, the concept of food sovereignty is mentioned but not defined, nor systematically analysed in relation to FSN outcomes. Given that several Member States increasingly refer to food sovereignty as an approach to strengthen domestic and territorial food systems, protect healthy, traditional, and culturally appropriate diets and enhance resilience to external shocks, a clearer definition of this term would be advisable. Further analysis could help clarify how

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	different interpretations of food sovereignty relate to FSN, policy coherence and multilateral trade commitments. The proposed questions are generally adequate to guide the development of HLPE FSN reports. However, for the CEEI on international trade for food security and nutrition (item 5), an additional analytical dimension should be considered. While food sovereignty is mentioned in the narrative, it is not reflected in the guiding questions. Given that several Member States increasingly refer to food sovereignty, an additional question could explore how this term is understood and operationalized in different contexts, and how it relates to FSN outcomes, policy coherence and existing multilateral commitments. This would help clarify its relevance within the CFS analytical framework.

96. Cirad, France

Surname	Caron
First name	Patrick
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Cirad senior researcher, Agropolis International president
Current institution/organization	Cirad
Country	France
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The selection of the ten issues is broadly appropriate and well aligned with current global risk dynamics, particularly in its recognition of structural drivers (power, governance, markets with a specific focus on rights), compounded shocks (climate, conflict, polycrises), and system-level interactions across food systems. However, the draft still leans more strongly toward systemic diagnosis than toward the lived, distributional, and place-based consequences for and action to promote FSN, which is a core concern that SPSIs seek to address (connecting across scales, disciplines, knowledge systems, sectors etc). In several cases, issues affecting productivity, sustainability, and inclusion are named but not consistently traced to concrete FSN outcomes, particularly for small-scale producers, informal workers, women, youth, Indigenous Peoples, and low-income consumers. A further gap is the insufficient attention to resilience as an organising principle across the ten issues. The CEEI framework would be strengthened by explicitly recognising that the 10 issues do not operate independently; they

interact as compounding vulnerabilities. The CEEI note would benefit from a cross-cutting resilience lens that traces how each issue — if unaddressed — deepens systemic fragility, and how progress on each contributes to a food system capable of absorbing, adapting to, and transforming under stress.

In addition, one of the key lessons of Nexus Action - Montpellier Process first steps is the huge gap and paradox between the many food systems initiatives that are taking place in all countries and that show promise, and the general perception that the desired transformation is not happening with the necessary speed, depth and scale. This raises the challenges of learning from these initiatives and of stimulating the arrangements that are needed to connect micro, meso and macro transformation processes. Country-level experience is rich: Brazil's cross-sectoral Food Systems and Climate Framework, Tanzania's National Steering Committee anchored in the Prime Minister's Office, and Switzerland's 2030 transformation pathway all demonstrate that coherent, multi-actor governance can produce measurable progress. The CEEI note should draw more systematically on this evidence base as a source of transferable learning on what institutional arrangements make the HOW work. To learn from the many on-going innovative initiatives that are taking place in many countries, Nexus Action - Montpellier Process is documenting the processes at specific local and national levels and can provide such material.

Navigating transformation requires dialogue to unlock disagreements. Consensus-driven institutions are unlikely to come to action solutions whereas dialogue-driven processes propose breakthrough potential. Risky safe spaces are required to do so, as promoted by the Nexus Action - Montpellier Process, i.e. spaces to take risk and build collective intelligence, particularly on controversial, politicised and polarised issues (e.g. agrifood trade). Therefore, and as suggested in the framing, SPSIs could be considered a supplementary issue per se or a cross-cutting concern, and then further mentioned when presenting most of the issues. In addition to bringing evidence, expertise and knowledge, academic communities could actually be engaged in structuring such risky safe spaces and facilitate dialogue towards policy coherence and cross sectorial governance as suggested by the Nexus Action - Montpellier Process.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Throughout the CEEI note we have observed suggestions and analysis that focus on the WHY of FSN, the WHAT (the ten issues and a breakdown of these) but rarely the HOW. Unless we focus on the HOW of food systems transformation where knowledge, policy and society all have integrated and vital roles to play, our concern is that given today’s high level of uncertainty, poor resilience, fragmented responses, and polarised interests, progress on healthy, sustainable and just food systems will be limited.

Food systems are structurally fragile and increasingly exposed to compounding external shocks. Recent experience — from the 2007–08 food price crisis, to the COVID-19 pandemic, to the Russia-Ukraine conflict — illustrates how disruptions originating outside food systems can rapidly cascade into food insecurity, economic stress, and social instability. Critically, these crises have repeatedly revealed not only a lack of resources, but a failure of the institutional, knowledge, and governance processes that should enable coordinated responses. It is this gap — between available evidence, policy capacity, and societal engagement — that fragmented responses and deepened vulnerability. Resilience cannot be built through technical or financial interventions alone: it requires sustained investment in the HOW of transformation, in the interfaces that connect knowledge, policy and society, and in the institutional arrangements that allow food systems to anticipate, absorb and adapt to shocks. This is why the HOW deserves more explicit attention in the CEEI framing, alongside the WHAT and WHY that the current draft addresses.

Effective Science-Policy-Society Interfaces (SPSI) lie at the heart of each of the ten issues, and could even be regarded as a “critical” issue given how ineffective and/or fragmented these interfacing spaces currently are. These interfaces also weave into each of the issues presented, shifting the analysis to recognise the connected dynamics across i) the plurality of knowledge, ii) the trade-off and synergies of a policy process where power is central and iii) social engagement in transformation that is dependent on trust, relevance and legitimacy.

SPSIs, when effective, are more than procedural mechanisms. They may be understood as part of the resilience architecture of food systems itself. Food systems that cannot integrate diverse knowledge, translate and value

	evidence into contested policy spaces, or maintain trust across actors under stress struggle to respond when shocks arrive. In this sense, the fragmentation and weakness of current SPSIs may be a contributing factor to the vulnerability patterns described above, not simply a governance gap to be addressed separately. Investing in more effective SPSIs and food system resilience are deeply connected. The CEEI would benefit from making this connection explicit.. CFS-HLPE has a clear vocation to promote, enable and collaborate with effective SPSIs as well as support further and urgently needed learning that intentionally includes policy and frontline food systems actors. Nexus Action - Montpellier Process (NAMP) is available and eager to articulate this dynamic understanding of effective SPSIs at CFS54 (e.g., with the presence of Patrick Caron, Claudia Martinez, Nadia Sitas, and Juan Lucas Restrepo).
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	More specifically, we would like to share the following suggestions regarding some of the 10 proposed critical and emerging issues. 1- Advancing the post-2030 Development Agenda through food systems transformation The challenge is not necessarily a lack of science, but weak interfaces linking global evidence with national decision-making and local practice. Productivity, sustainability, and inclusion are discussed abstractly, without engaging how knowledge is translated into contested policy spaces. SPSIs could contribute to: ● Strengthen co-production mechanisms where scientists, policymakers, producers, and civil society jointly define transformation priorities. ● Surface value conflicts (e.g. efficiency vs inclusion) rather than assuming consensus. We suggest CFS-HLPE explicitly position food systems transformation as an SPSI challenge, requiring iterative deliberation, not linear evidence transfer. In addition, as suggested by NAMP, cross-sector expertise could be promoted by inviting global experts panels such as

IPCC, IPBES, OHHLEP to work with the HLPE-FSN.

2- Achieving food security and nutrition in climate crises

Climate science does not consistently inform locally legitimate adaptation strategies. Policy responses often bypass Indigenous, local, farmer, and community knowledge systems.

SPSIs can contribute and integrate climate science with Indigenous and experiential knowledge, enabling context-appropriate adaptation pathways.

They can also improve policy credibility, especially in politically sensitive adaptation and mitigation choices. We suggest to frame climate-FSN failures as failures of inclusive knowledge integration, not only of financing or capacity.

4- Geopolitical uncertainty and polycrises: how to predict and prevent impacts on food security and nutrition

Crisis responses are most often technocratic, with weak societal ownership and consultation of affected and vulnerable social groups. SPSIs can connect early-warning science with local intelligence, social networks, and informal food systems. They support trust-building in crisis contexts where state legitimacy may be weak. They should be considered as mechanisms for bridging anticipatory science and socially grounded response.

Focus on anticipation is extremely relevant in a context of uncertainty with increasing importance of the unknown. However, and for the same reason, the interest of prediction is limited. History shows that the future never takes place as predicted or as a continuation of trends. Trends are useful to help thinking about and explore plausible and possible futures, about those which are desired and those which are unacceptable. We thus suggest to consider foresight rather than prediction, and call upon research to provide methodological plurality and guidance, with the challenge to strengthen anticipatory capacity.

5- International trade for food security and nutrition

The trade issue is underdeveloped from a resilience perspective. The Russia-Ukraine and Iran crises make visible

the systemic risk of concentrated trade dependencies — a small number of crops and inputs, produced in a limited set of exporting countries, exposes global food security to single geopolitical shocks. Resilient trade architecture requires diversification of sources, strengthened regional trade systems, and emergency coordination mechanisms. The CEEI should engage with what trade policy for resilience — not merely for efficiency or market access — looks like institutionally.

We suggest that CFS-HLPE should better consider the way hidden costs can be taken into consideration, in particular to repurpose subsidies. Food systems generate at least USD 12 trillion in hidden social, economic, and environmental costs annually, against a market value of approximately USD 10 trillion. The system's true costs now exceed its output. This framing should be central to the trade issue, as it provides the economic rationale for repurposing agricultural subsidies away from commodity crops and toward sustainable, diverse, and nutritious food production. Brazil's Constitutional Amendment and Decree No. 11,936/2024, which exempts basic food basket items from tax while applying higher rates to ultra-processed products, offers a concrete example for aligning fiscal policy with resilience and nutrition goals.

We suggest that the CEEI engage with the governance architecture needed to make trade policy for resilience operational at the international level. One of the risks of introducing sustainability and health criteria into trade frameworks is that they become a source of fragmentation or, worse, a vehicle for disguised protectionism. Multilateral efforts to establish common global standards — such as proposals for a Codex Planetarius that would extend Codex Alimentarius logic to environmental and social criteria — deserve consideration in the CEEI as mechanisms for ensuring that sustainability-aligned trade rules are transparent, predictable and equitable. Without such architecture, resilience-oriented trade reform risks being captured by the interests of the most powerful trading blocs rather than serving the food security and nutrition goals the CEEI seeks to advance.

7- Digital innovations and artificial intelligence (AI) for healthy, sustainable, and equitable food systems

Digital systems are introduced faster than societal

deliberation can keep pace. Evidence is often produced by private actors with limited transparency. SPSIs can support anticipatory governance of digital tools in food systems. They provide spaces to test social acceptability, ethics, and unintended FSN impacts before scale-up.

Digital tools can strengthen food system resilience — through improved supply chain analytics, early warning systems, and smallholder market access — but they can also concentrate power, deepen exclusion, and create new dependencies that amplify vulnerability. The issue should ask not only what digital tools can do for food systems, but who controls them, who benefits, and what happens when they fail or are captured by private interests.

Youth-focused agri-tech hubs in Kenya and Tanzania, fostering smart storage solutions and nutrient-rich food processing while linking young entrepreneurs to markets, illustrate how digital innovation can be anchored in local agency rather than external dependency. Digitalisation should be treated as a governance issue with support from SPSIs, not only as a technological one.

10- Agency for food security and nutrition

This issue could be considered an umbrella one: developing evidence and analysis, achieving understanding and progress on all other issues is dependent on “agency”. This is the most overlooked and underinvested of all issues, despite decades of recognition. This invites us to consider the role of SPSIs, and to review and adapt them to explore and contribute to improved agency.

Agency represents resilience as a lived reality. Nearly half the world's population does not meet minimum standards in relation to their rights to adequate food, a healthy environment, and decent work, while the richest 30% drive more than 70% of food-related environmental impacts. This structural inequality is not only a justice concern but a resilience concern — systems in which the majority of actors are excluded from decision-making may be less able to mobilise the collective intelligence and distributed action that resilience requires.

In addition, agency is discussed normatively, but not operationalised through institutional interfaces. SPSIs are themselves institutional expressions of agency. Inclusive SPSIs enhance voice, legitimacy, and accountability, directly

	linking agency to FSN outcomes. Finally, we suggest CFS-HLPE explore opportunities and pathways to close the gaps between local, national, and global agency.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	As suggested earlier, we suggest to explicitly refer to the need to involve academic communities in the framing of critical and emerging issues and to explore pathways to strengthen intentional SPSIs as a way to address cross sectorial and cross scales FSN related challenges. NAMP is available to contribute.
Is there any missing reference to key literature and data?	In connection with the Nexus Action - Montpellier Process (https://sites.google.com/view/montpellierprocess/home), we would suggest the following references: Caron, P., Ferrero de Loma-Osorio, G, Ferroni, M., Lehmann, B., Mettenleiter, T. C. & Sokona, Y. Global food security: pool collective intelligence. Nature 612, 631 (2022). https://doi.org/10.1038/d41586-022-04471-0 Caron Patrick, Louafi Selim (collab.), DeClerck Fabrice (collab.), Harding Amanda (collab.), Daguet Ellie (collab.). 2025. Breaking the ‘scaling-up’ stalemate. Perspective (65) : 1-4. https://doi.org/10.19182/perspective/37910 Caron Patrick. 2025. A renewed interest in controversies. Nature Food, 6 : 121-122. https://doi.org/10.1038/s43016-025-01120-3 Rockström J., Thilsted S. H., Willett W. C., Gordon L., J., Herrero M., Hicks C. C., et al., 2025. The EAT–Lancet Commission on healthy, sustainable, and just food systems. The Lancet, Vol. 406, No. 10512, P1625-1700 EAT-Lancet Commission on Healthy, Sustainable, and Just Food Systems. Summary For and With Policymakers (2025). Alliance of Bioversity & CIAT / Scaling Up Nutrition Movement. https://eatforum.org/wp-content/uploads/2026/03/2025-EATLancet_Summary-for-and-with-Policymakers.pdf FAO. Guidance on National Science–Policy Interfaces for Agrifood Systems 0 (FAO, 2024); https://doi.org/10.4060/cd3125en Te Wierik, S., DeClerck, F., Beusen, A. et al. Identifying the

	safe operating space for food systems. Nat Food 6, 1153–1163 (2025). https://doi.org/10.1038/s43016-025-01252-6
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	see previous answers

98. Panama

Surname	Lewis
First name	Estefani
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Alternate
Current institution/organization	Permanent Mission of Panama
Country	Panama
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Panama considers that the issues identified by the HLPE-FSN provide a comprehensive and relevant overview of the main structural challenges affecting food security and nutrition (FSN), particularly in the current context of increasing polycrises. The focus on food systems transformation (p.5), climate change (pp. 8–9), trade and uneven outcomes (pp. 19-20) and governance fragmentation appropriately reflects the systemic nature of FSN challenges. However, Panama notes that an important dimension could be further strengthened across the analysis: the equitable distribution of value and fair incomes for producers. While the draft recognizes inequalities and power asymmetries within food systems, it does not explicitly address how these translate into income disparities along value chains and their implications for FSN outcomes. From our perspective, ensuring that producers—particularly small-scale and family farmers—can achieve dignified livelihoods is a fundamental condition for sustainable and resilient food systems. As highlighted in Panama’s proposal, inadequate remuneration not only affects rural livelihoods but also poses structural risks to food systems by discouraging production and generational renewal.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of	Panama suggests that equitable distribution of value and fair incomes for producers should be considered as a critical cross-cutting issue. This issue is critical because:

why they are “critical”, together with relevant literature and data.	• It directly affects rural poverty and livelihoods • It influences the long-term sustainability of agrifood systems • It shapes incentives for production, resilience, and generational continuity Despite progress in productivity and efficiency, many producers do not receive remuneration proportional to their risk and contribution, which can increase vulnerability and weaken FSN outcomes Panama therefore recommends that this dimension be more explicitly integrated into the HLPE analysis, particularly in relation to: • food systems transformation • trade • climate resilience
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Panama considers that the issues should remain distinct, but their interlinkages should be more explicitly articulated, particularly regarding economic dimensions. In particular, stronger linkages could be made between: • food systems transformation (p.5) and economic sustainability • climate resilience (pp. 8–9) and income stability • agency (p.7) and producers’ economic participation Panama suggests that the analysis could better reflect how distributional outcomes across value chains influence FSN, reinforcing the systemic nature of the issues.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The draft captures key drivers such as climate change, policy fragmentation, and economic volatility. However, Panama considers that drivers related to unequal value distribution and income instability could be further elaborated. In particular, it would be useful to deepen analysis on: • structural inequalities affecting producers’ returns • limited access to markets and information • constraints on producers’ participation in value chains These elements are critical for understanding how FSN outcomes are shaped not only by production but also by how value is distributed within food systems.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Panama suggests that the draft could further elaborate the role of economic viability of producers as a key FSN outcome. While the draft addresses availability, access, and nutrition, less attention is given to: • stability of producers’ incomes • sustainability of livelihoods Ensuring fair and stable incomes is essential for maintaining production over time and strengthening resilience, particularly in vulnerable rural contexts

Is there any missing reference to key literature and data?	Panama suggests strengthening references and evidence related to: • income disparities within agrifood value chains • the relationship between producer incomes and FSN outcomes • the role of producer organizations and market access This would complement existing HLPE analysis on inequalities and resilience.
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	The questions are broadly adequate, but Panama suggests incorporating additional dimensions related to: • fair remuneration for producers • value distribution along value chains • participation of producers in market and trade processes These additions would help guide the analysis toward more inclusive, resilient and sustainable food systems, in line with existing HLPE evidence and CFS policy work.

99. Federal Ministry of Agriculture, Food and Regional Identity, Germany

Surname	Chatelain
First name	Carla
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Administrative officer
Current institution/organization	Federal Ministry of Agriculture, Food and Regional Identity We are sending the Inputs / Comments on behalf of the German Federal Government
Country	Germany

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

Proposed additional key issue: Water Tenure

Water tenure (understood as the relationship between individuals or groups and water resources, whether defined by statutory or customary arrangements) is a foundational but under-addressed dimension of water governance. As articulated by the Food and Agriculture Organization (FAO, 2024), water tenure focuses on how different users access, use, and control water resources, and how these relationships are embedded in social, legal, and institutional systems. It encompasses both formally recognized rights and informal or customary practices, which remain highly relevant in many rural contexts but are frequently unrecognized or insufficiently protected.

Addressing water tenure is critical for achieving multiple global policy objectives. First, it is intrinsically linked to the human right to water: without secure and enforceable access arrangements, the realization of this right remains constrained. Second, water tenure plays a decisive role in food security. Increasing climate variability and water scarcity amplify the need for secure, equitable, and predictable water access, which in turn enables investment in irrigation and water infrastructure, reduces conflicts among user groups, and strengthens agricultural productivity. Third, water tenure contributes to climate resilience. Adaptation measures, such as increased water abstraction for irrigation, directly interact with existing water use arrangements; where these are insecure or unclear, efficiency gains and long-term adaptation investments are undermined.

Moreover, water tenure is central to social inclusion. The recognition of customary and informal rights enhances participation in decision-making processes, particularly for marginalized groups, including indigenous communities, pastoralists, and women. Integrating water tenure considerations within the Water-Energy-Food-Ecosystems Nexus further enables more coherent and efficient resource governance, supporting progress across SDGs 2, 6, 7, and 13. Conversely, fragmented approaches that separate land and water governance risk weakening both systems, despite their inherent interdependence.

Despite its systemic relevance, water tenure remains insufficiently integrated into national policies, legal frameworks, and international processes. Current governance approaches often decouple water rights from land tenure or overlook informal practices, thereby limiting their effectiveness and increasing vulnerability to conflict and exclusion. There is clear added value in embedding

water tenure more explicitly in sectoral dialogues, policy advisory processes, and global frameworks related to food security, climate resilience, and sustainable resource management.

Emerging international efforts underscore both the relevance and the momentum of this issue. The FAO has advanced the topic through dedicated analytical work and global dialogue formats, including contributions under the Water Action Agenda. Initiatives such as the “Scale What” project further highlight the need to identify, scale, and institutionalize effective governance solutions, including those addressing water tenure. These processes provide a robust evidence base and actionable insights, which should be leveraged. In this context, it is recommended to explicitly reference and build upon FAO-generated data, analytical outputs, and ongoing global dialogues on water tenure. Elevating water tenure as a key issue within the CFS Multi-Year Programme of Work would close a critical governance gap, strengthen coherence across sectors, and enhance the effectiveness of global efforts to achieve food security, climate resilience, and equitable access to water.

100. Hannah Kamano

Surname	Kamano
First name	Dr. Hannah
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Senior Research Scientist
Current institution/organization	Kenya Industrial Research & Development Institute
Country	Kenya
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	yes, the list is comprehensive and encompassing current challenges.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	However, the policy and governance aspects can be included as well. Policy and governance dont just influence food security; they often determine wether people eat or not. Amartya Sen's famous observation: "there is no such thing as an apolitical food problem". Droughts trigger crises, but government action/inaction determines severity. Global study of 120 countries 2000-2022, found insecurity persists due to 'weak governance, economic instability and cimate vulnerabilities" Nature, 2024 - Global study 120 countries: Gap between policy formulation and implementation must close via multisectoral collaboration
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	The way they are is okay
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	Yes, they are
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	none, this is adequate
Is there any missing reference to key literature and data?	The reference list suffices
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	This is okay

101. Newcastle University, United Kingdom of Great Britain and Northern Ireland

Surname	Long
First name	Graham
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	University Sustainability Committee - lead for research; Senior Lecturer in Politics (submission on behalf of a range of scholars from across the University)
Current institution/organization	Newcastle University
Country	United Kingdom of Great Britain and Northern Ireland
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	We felt this question is connected to question 10 (see comments there too). Given governance issues of policy coherence, fragmentation, and participation emerge as a common challenges across multiple critical issues, this seems to pose a question of whether these should be critical/enduring issues in their own right? Issue 3 - focused on the Conventions - seems framed in a slightly different way to others. Perhaps these conventions and questions of coherence - could be integrated across other issues (e.g. UNFCCC in the context of climate, issue 2). Relatedly, there is no specific issue squarely on planetary boundaries/environmental sustainability/ecology (beyond climate) and FSN . It might be, reflecting the continued critical importance of such themes, that these should merit an “issue” of their own. As it is, the relationship between FSN and biodiversity - as an example - is addressed indirectly, via the lens of “policy coherence to better integrate food security and nutrition in the implementation of the three Rio Conventions”. The content across these issues is, perhaps inevitably, quite high level and general. Recognising the specificities of particular contexts is important to more detailed analysis of these challenges and solutions. Deltas, for example, are complex socio-ecological systems vital to FSN but uniquely vulnerable to a combination of threats. There’s general language around “fragile” socio-ecological systems, but it is striking how little emphasis there is on a more detailed outline of compounding threats, or on the interface between water and FSN (e.g., as a crude indication, is it correct to say

	“ocean” “coast” “freshwater” are not found in the document?). Perhaps these critical intersections, and interlinkages with other SDGs, could be identified more clearly in the document. It is noticeable that this question asks about “specific contexts” - but (understandably) the CEEI document feels quite general. Emphasising contextual diversity more strongly would recognise that the same drivers (e.g. trade exposure, market concentration, climate stress) generate different FSN outcomes depending on political, socio-ecological, and institutional contexts. It also invites a question about the place of local context and governance in potential solutions. In our city, the Council has recently launched a strategy addressing FSN and its broader societal impacts (https://democracy.newcastle.gov.uk/documents/s214507/UPDATED%207752-PS-Newcastle%20Council%20DPH%20Report%20amended%20Jan%202026.pdf). The role of local governance, and vertical policy coherence between national and local governance, could be considered in the document to a greater extent.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	A useful gap to strengthen across Issues 5, 6 and 10 is the role of SMEs and producer-linked enterprises as food-system governance actors, not only as market participants or standard-takers. The draft already discusses trade, concentration, power asymmetries, and small-scale producers, but could more explicitly consider how SMEs positioned within agri-food value chains can either transmit top-down pressures from lead firms or help adapt standards and practices to local realities. Evidence from agri-food value chains suggests that SMEs can contribute to standard-setting, standard-adapting, producer relationships, and locally grounded implementation of sustainability and FSN objectives, but only where they have sufficient agency, finance, and room for dialogue with lead firms.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

It is striking how some challenges and issues cross-cut - e.g. fragmented governance, participation, human-right based approaches. The draft could strengthen cross-cutting framing and analytical dimensions that help shape FSN outcomes. These appear, e.g., across trade, concentration, climate, biodiversity, and digitalisation, but they could more consistently be identified as a (shared) structural challenge. Policy volatility and political cycles, which may affect the durability of FSN interventions, might be considered to a greater extent.

Issues 5, 6 and 10 could be more explicitly connected through the role of SMEs and producer-linked enterprises in value-chain governance. International trade and corporate concentration shape not only prices, supply, and market access, but also who captures value, who has voice in standard-setting, and whether local firms can adapt global requirements to local realities. This would strengthen the link with agency, since SMEs and producer-linked enterprises often sit between lead firms and producers and may either reproduce asymmetric governance pressures or help create more locally grounded and inclusive food-system practices.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Issue 5: International trade for FSN & Issue 6: Corporate concentration in food systems

From the perspective of food systems governance, the analysis could be strengthened by making it more explicit how markets themselves are structured and governed. Two aspects could be further developed in both Issue 5 and 6: the active role of public policy in shaping markets and the role of standards and coordination mechanisms. First, trade patterns and concentration levels are not only market outcomes but the result of regulatory choices, procurement systems, standards recognition, and competition frameworks. These governance dimensions directly influence FSN outcomes but remain somewhat implicit in the draft. Second, sustainability standards, certification systems, and contractual arrangements play a major role in structuring participation in trade and value chains, often with significant implications for inclusion/exclusion and bargaining power.

Building on the discussion of standards and coordination mechanisms in Issues 5 and 6, the draft could say more about the limits of private standards, audits, and certification systems as tools for improving FSN-related outcomes. Research on SMEs in agri-food value chains suggests that tighter lead-firm governance through

standards and audits does not automatically produce more meaningful sustainability or decent-work outcomes. In some cases, it can encourage superficial compliance, impose audit burdens, or leave little room for local adaptation. SMEs with stronger relationships with producers and more space to adapt practices to context may be better placed to address root causes of social and environmental problems. This suggests that corporate concentration should be analysed not only through market share, but also through lead-firm governance, standard-setting power, audit burdens, and the extent to which SMEs and producers have meaningful voice. The analysis of trade could also be sharpened by considering where value is added and retained within food value chains. The draft already addresses domestic production capacity and regionalized trade, but could further ask whether food-producing countries and local SMEs can move beyond raw material supply into processing, branding, and higher-value activities where this is feasible and sustainable. This matters for FSN because local value addition can support decent work, youth employment, income generation, and resilience, while limited value capture can mean that participation in global food trade does not translate into stronger livelihoods or improved food access.

Issue 9 is critical, but the document has not really outlined how a 'healthy' diet could become affordable. This issue has been identified by the World Food Bank as a major hurdle, and practical solutions and barriers need to be identified. Particularly the issue of production of affordable nutrient-rich foods has not been adequately addressed in the document, as the main objectives referenced are around price, wages, subsidies and policies addressing market reforms, school feeding and ultra-processed foods. Production, particularly of fruit and vegetables, that are affordable to local communities with low socioeconomic resources were one of the key findings of the WFP. This will need a multitude of action points beyond the current identified issues (see additional key questions below).

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Issue 5 & Issue 6

Long-term resilience could be further considered as a FSN outcome in the context of agency and participation. This could help demonstrate how trade and concentration affect FSN outcomes beyond short-term price or supply effects, and reinforce the links between economic structures, governance arrangements, and nutrition outcomes over the long term.

Both trade regimes and highly concentrated food systems shape who has decision-making power, voice, and scope for meaningful participation in food systems. Evidence shows that small-scale producers, family farmers, and workers often experience reduced bargaining power and limited influence over standards, prices, and market access under conditions of asymmetric trade relations and market concentration. These dynamics affect not only incomes and livelihoods, but also dietary diversity, food utilisation, and the social sustainability of food systems (HLPE, 2018; FAO et al., 2023). Making these links more explicit would help connect Issues 5 and 6 with Issue 10 on agency, and highlight that FSN outcomes are shaped not only by material access to food, but also by governance and power relations. While the draft notes the risks of volatility and shocks, further attention could be given to how trade dependence and concentration influence the capacity of food systems to adapt and recover over time. Research indicates that highly concentrated value chains and reliance on a limited number of suppliers, firms, or trade corridors can amplify vulnerability to price spikes, geopolitical disruptions, and climate-related shocks (OECD, 2020; HLPE, 2021). Conversely, more diversified and territorially embedded food systems have been shown to support resilience, learning, and stability, with positive implications for FSN, particularly in crisis contexts.

Relevant References:

HLPE (2018). Multi-stakeholder partnerships to finance and improve food security and nutrition.

HLPE (2021). Impacts of COVID-19 on food security and nutrition.

FAO, IFAD, UNICEF, WFP & WHO (2023). The State of Food Security and Nutrition in the World.

OECD (2020). Building Back Better: A sustainable, resilient recovery after Covid-19

Is there any missing reference to key literature and data?

Issues 5 & 6

Maybe add a small number of well-established bodies of literature and datasets that deepen understanding of power, governance, and distributional effects in food systems.

Additional references could help situate trade not only as a channel for food availability, but as a governance system shaping vulnerability and resilience. For example, political economy studies of trade and food security show that trade outcomes are mediated by domestic institutions, public procurement, and policy space, rather than trade openness alone.

Clapp, J., 2015. Distant agricultural landscapes. *Sustainability Science*, 10(2), pp.305-316.

Clapp, J., 2024. Countering corporate and financial concentration in the global food system. In *Regenerative farming and sustainable diets* (pp. 187-193). Routledge.

These references could help deepen the analysis of SMEs, local value creation, value capture, standards, and lead-firm governance in agri-food value chains. They are particularly relevant to the links between trade, corporate concentration, agency, decent work, and long-term FSN resilience.

Sinkovics, N., Sinkovics, R.R. & Archie-Acheampong, J. Small- and medium-sized enterprises and sustainable development: In the shadows of large lead firms in global value chains. *J Int Bus Policy* 4, 80–101 (2021).
<https://doi.org/10.1057/s42214-020-00089-z>

Archie-Acheampong, J. (2024). SDG 8 and the Case for Local Value Creation in Africa's Food Value Chains. In: Sinkovics, N., Sinkovics, R.R., Boussebaa, M., Fletcher, M. (eds) *International Business and SDG 8*. The Academy of International Business. Palgrave Macmillan, Cham.
https://doi.org/10.1007/978-3-031-46802-5_18

Issue 9:

WFP - Fill the nutrient gap:

[https://www.wfp.org/publications/fill-nutrient-gap#:~:text=The%20Fill%20the%20Nutrient%20Gap%20\(FN G\)%20analysis%20helps%20decision%2D,education%20to%20enhance%20nutrition%20outcomes.](https://www.wfp.org/publications/fill-nutrient-gap#:~:text=The%20Fill%20the%20Nutrient%20Gap%20(FN G)%20analysis%20helps%20decision%2D,education%20to%20enhance%20nutrition%20outcomes.)

	For Issue 6, maybe engage more explicitly with competition and market-power analyses in agri-food systems documenting rising concentration in input, processing, trading, and retail segments. Research on buyer power and monopsony effects, especially in relation to farmers' incomes, price transmission, and dietary diversity could also be helpful, for example: IPES-Food. 2017. Unravelling the Food–Health Nexus: Addressing practices, political economy, and power relations to build healthier food systems. The Global Alliance for the Future of Food and IPES-Food. IPES-Food 2023 Activity Report
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?	To reflect question 1 in "specific contexts", as asked above - some content could be added that addresses the manifestation of these issues in different contexts (e.g. a table or boxes that linked these insights to different socio-ecological systems or country contexts) or some "key questions" could be added addressing the need to explore and develop context-sensitive answers. on these issues Potential further questions for particular themes: Issue 5 How do public policies and regulatory frameworks actively shape trade patterns and their implications for food security and nutrition, beyond market openness or restrictions? Under what conditions does international trade enhance resilience and stability in food systems, and when does it increase vulnerability to shocks (e.g. price volatility, geopolitical crises, climate extremes)? How do domestic food policies (such as public procurement, reserve systems, or support for local markets) interact with international trade to shape FSN outcomes? How do institutional capacity and governance quality mediate the impacts of trade on food security across different country contexts? Issue 6 What role do public policies, regulatory frameworks, and standards-setting processes play in enabling, stabilising, or countering corporate concentration in food systems? Under what conditions does concentration undermine or enhance food system resilience, particularly in the face of economic, climate, or geopolitical shocks? What alternative governance arrangements (e.g. public

procurement, participatory certification, cooperative or hybrid models) demonstrate potential to mitigate the negative FSN impacts of concentration?

How do concentration dynamics interact with international trade patterns to reinforce or reduce inequalities in food systems?

How do lead-firm governance practices, private standards, audits, and certification systems affect the ability of SMEs and producers to contribute meaningfully to food security, nutrition, decent work, and sustainability? How can SMEs and producer-linked enterprises be given greater voice in standard-setting, market governance, procurement systems, and value-chain decision-making, rather than being treated only as standard-takers or compliance subjects?

Issue 9

How can nutrient-rich food be made available to (socioeconomically) deprived communities?

What are the policies needed to put in place to encourage local economies to produce more fruit and vegetable production at affordable prices?

What nutritional education would need to be put in place to encourage more nutrient-rich food consumption in affected population groups?

How can food production and decision making be made more gender-sensitive?

What are the key food groups that would need to be addressed to obtain a sustainable nutritious food system that is affordable?

102. UN Academic Impact SDG 2 Hub

Surname	Long
First name	Graham
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Newcastle University as vice-chair for Research, UNAI SDG 2 Hub (on behalf of SDG 2 Hub co-chairs and vice-chairs).
Current institution/organization	UN Academic Impact SDG 2 Hub
Country	United Kingdom of Great Britain and Northern Ireland

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	This is perhaps more of a question of how best to address the (inevitable) overlap and interrelation between the issues (see q10 below)
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	The inadequacy of M&E systems in terms of capturing the dynamism of food systems - for example changes in consumer food choices or knowledge and understanding of consumer behaviour that constitute healthy diet choices - could be acknowledged to a greater extent, either as an issue or within/across issues 1, 3, 8 and 9. Systems are dynamic, yet data and evaluation methods are often static resulting in misalignment with strategies that contribute to food systems transformation.
All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the l	Governance fragmentation and policy coherence emerges as a “core issue” across multiple “critical” issues. It might be that Issue 1 could be reworked a little to focus on the need for policy coherence and systems thinking, using examples of the Conventions, so that the content of issue 3 had a little more space to address a human rights-based approach and land tenure as a specific concern. A human rights approach is mentioned at multiple points - perhaps, again, this could be drawn out as an issue of its own or highlighted and interlinked (e.g. to reinforce the importance of agency (issue 10)). If the list of issues is not reworked (appreciating there will always be overlaps and any organising structure comes with costs and benefits) an introduction, summary or conclusion could stress the interlinkages and highlight crosscutting challenges and actions (and this might help to identify priority actions, given the extensive set of key questions identified).

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Issue 1 - language on the need for an “integrated systems approach”, the imperative of systemic transformation and “policy coherence” is appropriate. This section correctly presents the continuance of silos and fragmented governance as something that needs to change - “addressing these challenges will require integrated approaches” (p6).

However, there has been consensus on the need for policy coherence, indivisibility, integrated systems approach etc since 2015, reflected in the language of the 2030 Agenda itself and across scholarship since, so this is not a new “requirement” - yet fragmentation persists, . Also despite this consensus, perhaps it could be fairly observed that the detail of such a systems approach - the form(s) it should take, how it works as an approach to managing synergies and tradeoffs etc., has received less attention?

These (arguable) gaps - between consensus and practice, and between high-level concept and detail - prompt pressing questions (and issue 1 does not yet seem to have a subheading for “key questions”, unlike the other issues?):

- What, if anything, needs to change in the content and approach of the post-2030 agenda in order to spur or facilitate this transformation?
- What does this transformation look like in detail, in terms of institutions and processes of governance?
- How (as an approach to evaluation and decision-making) does a food systems approach guide management of synergies and tradeoffs? If using the language of tradeoffs, what tradeoffs would it make, reframe, or avoid?
- What are the ‘bright spots’ and good practice from the SDGs era that should form the basis for future learning?

Issue 9 - the document should identify practical solutions and barriers around the affordability of a ‘healthy’ diet. Particularly, production of affordable nutrient-rich foods should be addressed within this issue alongside price, wages, subsidies and policies addressing market reforms, school feeding and ultra-processed foods.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Not a specific FSN outcome, but given that anticipatory action and governance is referenced at various points, more focus could be given to what good anticipatory governance (and future-focused governance generally) might look like, e.g. in the context of the 2024 UN Pact for the Future and Declaration on Future Generations (Pact for the Future - United Nations Summit of the Future | United Nations)

Is there any missing reference to key literature and data?

Issue 1: reflecting comments above, there is perhaps scope to recognise a bit more of the existing thinking about integration and indivisibility in the 2030 Agenda:

Independent Group of Scientists appointed by the Secretary-General, Global Sustainable Development Report 2023: Times of crisis, times of change: Science for accelerating transformations to sustainable development, (United Nations, New York, 2023)

Long, G., Censoro, J. & Rietig, K. The sustainable development goals: governing by goals, targets and indicators. Int Environ Agreements 23, 149–156 (2023)

OECD-collated evidence on challenges for policy coherence reflects some of the proposed key questions discussed above:

Policy coherence for sustainable development | OECD - <https://www.oecd.org/en/topics/policy-coherence-for-sustainable-development.html>

Issue 9: could recognise and engage with WFP's Fill the Nutrition Gap approach and materials:
[https://www.wfp.org/publications/fill-nutrient-gap#:~:text=The%20Fill%20the%20Nutrient%20Gap%20\(FN%20G\)%20analysis%20helps%20decision%20education%20to%20enhance%20nutrition%20outcomes](https://www.wfp.org/publications/fill-nutrient-gap#:~:text=The%20Fill%20the%20Nutrient%20Gap%20(FN%20G)%20analysis%20helps%20decision%20education%20to%20enhance%20nutrition%20outcomes)

103. Youth Policy Board, World Food Forum, Italy

Surname	1. Tataridas , 2. Morales Ancajima
First name	1. Alexandros, 2. Valeria Clara
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	We are submitting on behalf of the Youth Assembly of the World Food Forum Global Youth Action Initiative, hosted by the Office of Youth and Women at the Food and Agriculture Organization of the United Nations.
Current institution/organization	Youth Policy Board, World Food Forum
Country	Italy

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutr

Although we recognize the breadth of the impacts of these ten issues, we would like to highlight the issue of increasing urbanization and land or rural abandonment observed in many parts of the world. This phenomenon is linked to multiple crises and interconnected challenges, such as climate change, biodiversity loss, disruptions in supply chains, and inequalities, among others. Young people point to this issue in numerous contexts and call for policies at all relevant levels that both make rural livelihoods sustainable and advance the resilience and transformation of food systems.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

We would like to propose authors to consider further the role of youth as drivers of change to achieve transitions and transformations of agrifood systems both at the local and global levels. Youth play a crucial role in supporting common efforts and taking action across scales to prevent, overcome or mitigate the impact of critical, emerging and enduring issues. It is estimated that globally 1.3 billion young people are between the ages of 15 and 24, while around 85% live in low- and lower-middle-income countries (FAO. 2025. The status of youth in agrifood systems. <https://doi.org/10.4060/cd5886en>). Especially for CEEI 2 on climate crises, we would like to highlight that rural youth, particularly in traditional and protracted-crisis agrifood systems, face greater food insecurity.

Generational renewal and intergenerational exchange could be highlighted across several existing CEEIs as key areas for investment, intervention, and policy action, supporting both the entry and long-term retention of younger generations within food systems.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

CEEI 2 and CEEI 8 are analytically distinct, but the linkages between them could be further strengthened. Climate change is a major driver of many environmental health challenges addressed in One Health. And at the same time, the OH framework offers a systems-based approach to address the interconnected impacts of the climate crisis on food security and nutrition.

Ultra-processed foods (UPFs) are discussed in several CEEIs, such as CEEI 5, 6 and 9. However, their role as a key factor in food system change could be made clearer in the analysis. UPFs are linked to changes in eating habits, market control, and global food environments. They are also important in conversations about the nutrition transition and the increasing issue of malnutrition. Moreover, new discussions in One Health-related forums have begun to examine UPFs in relation to dietary, environmental, and food system risks. This approach shows the potential for better coordination among policies on nutrition, food safety, and environmental governance.

The linkages between CEEI 2, 3, and 5 could be further strengthened with regard to the use of underutilized crops. Strengthening market support for these crops could enhance agrobiodiversity and dietary diversity, contributing to improved food security and nutrition outcomes, particularly when coupled with shorter supply chains, amidst interconnected challenges and crises.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

Comment on the 2nd CEEI on achieving food security and nutrition in climate crises:
Based on our analysis on the nexus of biodiversity, food, and nutrition, we have evidence from youth that “Transitioning to culturally acceptable, resilient, and nutritious foods from diverse crops” also requires positive changes in food supply chains, food environments, and consumer behaviour to create enabling conditions for adoption of good practices and contribute in achieving long-term FSN outcomes. We invite authors to elaborate more on the Theory of Change (FAO. 2021. Climate change, biodiversity and nutrition nexus – Evidence and emerging policy and programming opportunities. Rome. <https://doi.org/10.4060/cb6701en>) and, in particular, p.17 where this nexus is explored and it is stated “If biodiversity within and across terrestrial, marine and other aquatic ecosystems is protected and promoted as the foundation for healthy diets through agroecological, people-centred approaches, then a wider range of sustainable production systems (agriculture, forestry and fishery) will be incentivized; as a result a variety of safe and nutritious foods will be made more accessible and affordable throughout the year.”.

Is there any missing reference to key literature and data?

Unless elsewhere mentioned, we noticed that there is a missing reference to a systems approach in transforming agrifood systems (FAO 2025. Transforming food and agriculture through a systems approach. Rome. <https://doi.org/10.4060/cd6071en>). This could be first mentioned in the first CEEI about the post-2030 Development Agenda.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

In CEEI 3 on FSN and the three Rio Conventions, we would like to emphasize that youth and women are consistently under-represented in decision-making spaces. Regarding the third question, we encourage authors to explicitly mention the meaningful role and participation of youth and women in climate, biodiversity, and land restoration policies.

In CEEI 4 on geopolitical uncertainty and polycrises, we would like to suggest an explicit reference to children, youth and women to the second question and how these groups are affected “Which groups of people are particularly affected by losses of FSN as a result of geopolitical uncertainty?”

In CEEI 5 on International trade for food security and nutrition, the first question could be reformulated to explore policy responses to not only avoid increasing malnutrition, environmental degradation, and social inequalities, but in fact, reduce them through cross-sectoral interventions.

In CEEI 6 on corporate concentration in food systems, we suggest adding the young and women farmers beyond small- and medium scale producers in question 3.

104. DKA, Austria

Surname	Bueck
First name	Philipp
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Thematic Desk Officer Food and Agriculture
Current institution/organization	DKA Austria
Country	Austria
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	DKA Austria broadly agrees that the CEEI identified by the HLPE-FSN address major global drivers of food insecurity. However, it is important to stress that the dominant industrial food systems itself is a root cause of vulnerabilities connected to the CEEIs listed. Agroecological, peasant and Indigenous food systems on the other hand are sustainable and have proven their resilience during recent critical market shocks such as COVID19. It is important for the next CFS MYPOW to stress the importance of a paradigmatic shift towards sustainable, resilient food systems based on people's agency, territorial markets and agroecology. Related to this, it is important to highlight power

	asymmetries and corporate market concentration as central areas of concern across issues. Given the rise in armed conflicts, the HLPE-FSN should also highlight the concurrent erosion of respect for human rights and international humanitarian law in multiple conflict contexts (e.g., Darfur, Gaza, Lebanon, Iran, Ukraine). The report should draw attention to practices that undermine food security and nutrition, including the use of hunger as a weapon of war, impediments to the delivery of food and humanitarian assistance to civilians, and disruptions or attacks affecting food trade and infrastructure, as well as value chains. It should emphasize the obligations of conflict parties to protect civilians, facilitate safe and sustained humanitarian access, and safeguard food-related assets and supply routes.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	DKA Austria does not propose entirely new key issues, but underscores the following issues: Corporate concentration and power imbalances in food systems, which undermine resilience, equity and access to nutritious food. The need to strengthen human rights-based approaches, including States’ obligations and accountability mechanisms. People’s agency and participation, esp. regarding women, youth, children and Indigenous Peoples’ agency. Due to the aging of smallholder farmers globally DKA Austria would particularly like to stress the need for policy measures in support of youth and young farmers, addressing issues such as access to land, targeted extension services and youth agency in agricultural government programmes and policy, farmer-led knowledge systems as well as farmer-led science and innovation appropriate to the needs of young farmers. Agroecology based on the 13 Principles of Agroecology and 10 Elements of Agroecology should be stressed as a key transformative framework for the next MYPOW, not just as one amongst many production technique or technical approaches.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	As mentioned earlier, the role of the dominant industrial food system itself as a key driver of food security vulnerability and the need for a paradigmatic shift towards agroecology based on the agency of local food system actors in territorial markets is cutting across different critical issues. In the face of climate change and the biodiversity and land degradation crises, as well as global market shocks as experienced during COVID19, the war on Ukraine or the blockade of the Strait of Hormuz, the key twin challenge of global food systems currently is to sustainably decarbonize

	while also becoming more resilient to global trade shocks. Agroecology based on local agency and territorial markets presents the key solution across the key issues. Climate change, biodiversity loss and natural resource degradation should be analyzed together with land tenure and seed systems with particular recognition for the diverse situations in Indigenous territories.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	In the section on agency there is a need to more comprehensively address the role of youth, especially regarding the transformative agency young farmers and food system actors hold in the transition towards agroecological food systems to deliver stable FSN outcomes under stress: Youth should be identified a transformative actor, not merely a vulnerable group. Youth-led agency in food system transitions toward diversified, agroecological systems creates innovation, strengthens resilience and stabilizes the local supply and access to food and livelihoods. Strengthening youth agency in the text acknowledges that the long-term sustainability of FSN depends on the active participation and leadership of the next generation in reshaping food systems.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The aspect of youth agency and leadership should be further elaborated, particularly regarding the promotion and implementation of agroecology as a core pathway to address the multiple and overlapping crises (e.g. climate change and biodiversity loss, conflict-related disruptions of value chains and trade networks, corporate concentration and widening inequalities). This matters for FSN outcomes, because: Youth are disproportionately affected by food insecurity and face rising vulnerability: FAO reports that food insecurity among youth increased from 16.7% to 24.4% between 2014–16 and 2021–23, underscoring that youth are increasingly experiencing acute FSN impacts (FAO 2025). Young people make up a disproportionate part of the agrifood sector workforce, making youth inclusion directly relevant to income security, access to food, and resilience: Globally, 44% of working youth rely on agrifood systems for employment (vs. 38% of working adults, FAO 2025). Youth are widely recognized as agents of change in the transformation of food systems—through production, processing, services, and consumption—yet they face structural barriers to resources and decent work that can constrain both adoption and scaling of sustainable practices.

Is there any missing reference to key literature and data?	FAO (2025), The Status of Youth in Agrifood Systems, Url: https://openknowledge.fao.org/items/5f0cec17-98b7-4d74-9cb1-6ea829b7d920 IPES Food (2025), Fuel to Fork: What will it take to get fossil fuels out of our food systems?, Url: https://ipes-food.org/report/fuel-to-fork/ IPES Food (2026), Head in the Cloud: Challenging the false promise of digital agriculture and cultivating innovation from the ground up, Url: https://ipes-food.org/report/head-in-the-cloud/
Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated	How are youth recognized as rights-holders and decision-makers (not only beneficiaries) in the governance of food systems and the agroecological transformation? What institutional mechanisms ensure meaningful youth participation in policy making, budgeting as well as the implementation of the agroecological transition? Through which pathways does youth-led transformation based on agroecology improve availability, access, utilization and stability of food security — especially under compound shocks?

105. Ministry of Foreign Affairs, Brazil

Surname	Andrade de Souza
First name	Luiz Eduardo
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Alternate Permanent Representative of Brazil to FAO
Current institution/organization	Brazil/Ministry of Foreign Affairs of Brazil
Country	Brazil
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	This submission is made on behalf of the Brazilian government. Brazil would like to stress the indispensable role of the HLPE as a platform to foster discussions on key issues affecting food security and nutrition and the importance of translating HLPE's inputs into actionable and concrete response options to tackle persistent and structural challenges that undermine FSN. The list proposed by HLPE-FSN addresses key issues for food and nutrition security, both at the global level and in national and territorial contexts. From Brazil's perspective, issues 9. Affordability of healthy and nutritious diets to ensure food security and nutrition and 7. Digital innovations and artificial intelligence (AI) for healthy, sustainable, and equitable food systems would

benefit the most from further work by the HLPE and would keep the momentum of existing workstreams under the CFS MYPoW. Both topics could stimulate cross-sectoral engagement, in a manner complementary to previous HLPE products and other outputs developed by FAO, and help countries address data and evidence gaps.

Studies on the structural causes that affect the cost of healthy diets and the increase in the prices of food, inputs, energy, and fertilizers are of particular interest to the Brazilian government. A dedicated report on Item 9 (affordability) could also address the social and economic impacts of supply policies, as well as the strengthening of local and regional food production and distribution circuits.

In this sense, affordability should be treated as a priority. The current food crisis demonstrates that hunger, food insecurity, and all forms of malnutrition persist not only due to insufficient production, but also because of structural inequalities, poverty, price instability, income concentration, unhealthy food environments, among other factors.

Given the priority of affordability, the issue of the climate crisis should also occupy a central position. It is no longer possible to discuss regular and permanent access to adequate and healthy food without considering the impacts of climate change on production, prices, availability, nutritional quality, food supply, and territorial resilience. The IPCC recognizes that climate impacts affect food systems, livelihoods, health, water, and ecosystems, with disproportionate effects on vulnerable populations.

Another highly relevant issue is corporate concentration in food systems, which influences prices, supply chains, availability of healthy foods, consumption patterns, marketing, public policymaking, and power asymmetries. This agenda should be more strongly connected to trade, digitalization, economic affordability, agency, and governance.

Digitalization and artificial intelligence should also be addressed not only as technological opportunities, but as dimensions of power. Digital platforms, delivery apps, algorithmic systems, consumption data, and new forms of advertising can reshape food environments, influence choices, increase or reduce inequalities, and create new

	economic dependencies for producers, consumers, and small businesses.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	We suggest strengthening or making explicit the following cross-cutting issues: First, democratic governance and social participation. Achieving food security and nutrition requires institutions capable of coordinating policies across sectors and levels of government, with effective social participation, transparency, safeguards against conflicts of interest, and accountability mechanisms. Second, food environments and healthy diets. Economic affordability should be analyzed together with availability, advertising, information, regulation, public procurement, food supply systems, school feeding, and protection against the expansion of ultra-processed foods. Third, power asymmetries and conflicts of interest. This issue appears indirectly in corporate concentration, trade, and digitalization, but should be treated as a standalone dimension or as a cross-cutting lens.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Throughout the analysis, we have noticed that the draft note has placed an emphasis on the environmental dimension of sustainable development. Though Brazil acknowledges the relevant interlinkages between the environmental dimension and FSA, we would highlight the need to maintain coherence with the 2030 Agenda for Sustainable Development, which recognizes the importance of a balanced approach towards its dimensions – social, environmental and economic. Building on previous CFS policy products and latest multilateral developments, including under relevant environmental fora (e.g. UNFCCC and its Paris Agreement and relevant COP-30 outcomes, such as the Belém Declaration on Hunger, Poverty and People-Centred Climate Action), Brazil would encourage further reflection on the social and economic dimensions, in particular the role of inclusive social protection systems as a key pillar to eradicate poverty and to achieve food security and nutrition. We would also suggest making groupings and connections more explicit, as follows. Affordability should directly engage with climate crisis, trade, corporate concentration. Corporate concentration should be analyzed together with trade, digitalization, affordability, and agency. Digitalization/AI should be connected to market concentration, data governance, advertising, delivery platforms, food retail, and influence over food choices.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Post-2030 agenda

The post-2030 agenda must recognize that SDG 2 will not be achieved without structural changes in food systems. It is necessary to go beyond sectoral targets and advance toward integrated policies on food security, climate, health, social protection, agriculture, food supply, and territorial development.

Climate crisis

The climate crisis must be treated as a central determinant of food security and nutrition. It affects production, productivity, prices, logistics, stocks, farmers' income, nutritional quality of food, and regularity of supply. Its impacts are more severe for poor populations, Indigenous peoples, traditional communities, family farmers, women, and children.

Rio Conventions

The Rio Conventions should be linked to food systems transformation, especially through integration between climate, biodiversity, desertification, ecosystem restoration, agroecology, sociobiodiversity, and the right to food.

Geopolitics and polycrises

Conflicts, wars, economic shocks, health crises, debt, inflation, and trade instability directly affect prices, imports, fertilizers, energy, and humanitarian flows.

Trade

Further attention should be given to the interlinkages between trade and its impacts on food security, food sovereignty, productive diversity, price stability, import dependency, and the availability of healthy foods.

Corporate concentration

Concentration in seeds, inputs, processing, retail, digital platforms, and advertising influences what is produced, distributed, promoted, and consumed. It also affects the ability of states to regulate markets and protect the public interest.

Digitalization and AI

Digitalization can support monitoring, logistics, traceability, and public policies, but it can also increase inequalities, data concentration, technological dependency, and personalized food advertising, especially targeting children and adolescents.

	One Health The One Health approach is essential, but it should incorporate adequate and healthy diets, sustainable food systems, biodiversity conservation, and zoonosis prevention. Affordability This should be the structuring issue, as already detailed above.

106. ETC Group, Mexico

Surname	Villa Arias
First name	Maria Veronica
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Campaigner and Researcher, ETC Group
Current institution/organization	ETC Group, www.etcgroup.org
Country	Mexico
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The issues are well identified but in general the analysis as it reads in the current draft lacks aspects related to actors or factors that contribute to the problems. Specifically, responsibility of private interests and how to make them accountable.

All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.

Linking the 3 UN Conventions is very important. Specially during 2025, the Nyéléni Process and the Climate Convention COP30 linked the agendas for Food and Agriculture and Climate Justice. However in the draft the proposed actions pro-secure tenure must include a critique of the carbon market initiatives and the compensation schemes promoted as conservation tools. Collective or social land tenure must be championed above individual possession of parcels. When talking about nutritious food we need to talk about limiting the power of corporations in the distribution of ultra processed foods.

Issues 5. International trade for food security and nutrition, and 6. Corporate concentration in food systems - could be linked but most importantly, the impossibility of acquiring information from the traders' inventories and big corporations revenues must be addressed as it has impacts in all the aspects this draft tackles. Retrieving data from small - scale agriculture if of course important, considering the concerns and precautions about the use of digital tools and proceses mentioned by Civil Society organizations (specially the CSIPM Data Working Group), but likewise the panel must insist that the corporate world provides information about their grain inventories, profits, licence agreements, subsidiaries, etc.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

On point 5. International trade for food security and nutrition, The grain traders' unchecked, oligopoly power requires profound structural changes across food systems. Governments must crack down on commodity speculation and profiteering and close the loopholes that allow giant commodity traders to act as shadow financial institutions. Corporations with vested interests in agriculture and food should be excluded from policy and governance negotiations on food and climate.

To fight against grain hoarding and speculation that endanger food security, grain traders must be required to disclose the location and inventories of grain reserves, as well as the movement of internationally-traded food commodities.

It is imperative to dismantle corporate power by diversifying, decentralizing and democratizing food production and trading systems, including fortifying and shortening the links between producers and consumers at the local and regional levels (i.e., strengthening territorial markets). Food governance must be rooted in Food Sovereignty, where local food system actors hold decision-making power.

ETC Group, December 2025, Green Traders, Greed and Oligopoly Power

<https://www.etcgroup.org/content/grain-traders-greed-and-oligopoly-power-communique-120>

On point 8. "One Health" as an integrating framework for food security and nutrition, we consider that it becomes impossible to plan for a "one-health" approach without planning to restrict the power of corporations promoting ultra-processed foods from one side, and from the other, cultivating commodities with huge amounts of toxic inputs.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated?

Insisting here in our first answer:

The issues are well identified but in general the analysis as it reads in the current draft, lacks aspects related to actors or factors that contribute to the problems. Specifically, responsibility of private interests and how to make them accountable.

107. World-Transforming Technologies, Brazil

Surname	Kremer
First name	Gaston
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Executive Director
Current institution/organization	World-Transforming Technologies
Country	Brazil
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The themes selected by the HLPE-FSN — including Food Systems Transformation (Item 1), Climate Crises (Item 2), and Agency (Item 10) — are fundamental and well-aligned with the challenges observed in Brazil and across the Global South. From WTT's perspective, working at the intersection of science, technology, innovation, and agroecological transition, these issues reflect real and urgent priorities. However, we note that the framework would benefit from a stronger emphasis on the territorial dimension of food systems, as well as on the role of local, community-driven knowledge systems as both drivers and solutions in food security and nutrition (FSN) outcomes. The issues are correctly identified but must be addressed with greater recognition of the diversity of food system actors — particularly family farmers, indigenous peoples, quilombola communities, and traditional peoples — who are often frontline innovators and knowledge producers, not merely beneficiaries of external interventions.

Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.

1. Mission-Driven Innovation as a Framework for Systemic Change

While the draft addresses digital and technological innovation (Item 7), it is fundamental to introduce the concept of Mission-Driven Innovation (Mazzucato, UCL Institute for Innovation and Public Purpose, WP2024-17). This approach is crucial because it proposes structural changes rather than incremental improvements, focusing on co-production between scientists, farmers, and communities. Innovation policy, in this framing, must be directional and inclusive — oriented toward solving defined societal challenges such as hunger eradication and climate adaptation. In Brazil, this framework is reflected in emerging instruments such as the PNPIAF (Decree 12.287/2024), which creates mechanisms to integrate research promotion, public procurement, territorial credit, and knowledge networks in a single virtuous cycle.

2. Desertification and Territorial Adaptation in Dryland Regions

Arid, semi-arid, and dry sub-humid regions across Latin America — such as Brazil's Northeast and Minas Gerais, the Semi-arid Chaco (Bolivia, Paraguay, Argentina), the Central American Dry Corridor, and the Semi-arid Lara-Falcón in Venezuela — are experiencing an accelerated process of desertification, intensified by prevailing food production models. In these territories, it is essential to recognize and value the innovative processes that have emerged as fundamental experiences for climate adaptation, offering inspiration for new models of food production and distribution in areas vulnerable to desertification. These territories must be treated not as areas of deficit, but as innovation hubs generating low-cost, place-based solutions. Relevant references include: European Parliament EPRS Briefing on Desertification (2020); UNCCD; and peer-reviewed literature on dryland agroecosystems. Additionally, we emphasize the importance of including recent multilateral milestones as key practical channels for financing and sharing solutions in the Global South: the BRICS Action Plan 2025–2028 for Agricultural Cooperation, and the Global Alliance against Hunger and Poverty (launched at the G20 under Brazil's presidency), which bring concrete diplomatic and financing architecture for systemic transformation based on socially and environmentally adapted agri-food systems.

All the issues are interlinked, however, for the purpose of analysis and focus they have been presented separately. Please let us know if in your view some of the issues could be combined, or if the I

In our view, the linkages between Issue 6 (Corporate Concentration), Issue 7 (Digital Innovations and AI), Issue 9 (Affordability and Local Food Systems), and Issue 10 (Agency) should be significantly strengthened by adopting a broader, more inclusive definition of Innovation. While the draft correctly identifies the need to leverage science, technology, and innovation (STI) while addressing risks related to equity and governance, these issues are currently linked primarily through a "high-tech" or digital lens. We suggest that the analysis would benefit from recognizing Innovation as a Local Daily Process — as articulated in "Peasants and the Art of Farming" (Practical Action Publishing) — which allows for stronger integration of the following dimensions:

Innovation beyond "hard technique": Innovation is not merely about digital tools or AI. It is a process that sprouts from the daily life and conviviality of farmers as they face territorial challenges — including new ideas for work organization and the optimization of local resources.

Addressing power asymmetries (Issues 6 & 10): When innovation is understood as a locally and socially produced process, it becomes a tool for Agency, enabling farmers to reduce dependence on centralized corporate inputs (seeds, agrochemicals), thereby addressing power asymmetries through local autonomy and territorial technologies.

Supporting agroecological production: Agroecological systems are most resilient when innovation is understood as the co-production of knowledge between scientific, technical, and traditional wisdom, rather than the top-down application of external technologies.

Strengthening local and territorial food systems (Issue 9): By focusing on innovation that optimizes local resources and work organization, local food environments become more affordable and accessible — ensuring that STI is not an extractive process but one that reinforces local livelihoods.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

WTT's work highlights three areas where the link to FSN outcomes can be strengthened:

Broadening Innovation (CEEI 7): The current draft focuses heavily on digital tools and AI. A critical and underrepresented trend for FSN outcomes is innovation as a local daily process led primarily by traditional peoples and communities, indigenous peoples, quilombola communities, and peasant farmers. Recognizing this trend ensures that STI supports local autonomy rather than increasing technological dependence. Our publication "Transformações nos Sistemas Agroalimentares para um Brasil justo, sustentável e desenvolvido" (produced in the context of the 5th National Conference on Science, Technology and Innovation — 5ª CNCTI) demonstrates the gaps in Brazil's STI financing ecosystem when it comes to reaching these actors.

Territorial Technologies (CEEI 2 & 3): Regarding climate and the Rio Conventions, the link to FSN outcomes should explicitly include low-cost territorial technologies. Practical examples, such as technologies for greywater reuse and rainwater harvesting in the Brazilian Semi-arid region, demonstrate how local innovation directly mitigates food production losses caused by the climate crisis. These technologies are already being deployed by grassroots agroecological movements but remain peripheral in STI policy frameworks.

Knowledge Co-production: The link between trends and FSN outcomes is most effective when it captures the co-production of knowledge — the synergy between scientific, traditional, and local wisdom. This is a fundamental driver for "Agency" (CEEI 10) that moves people from being passive consumers to active contributors to food systems. Brazil's experience with sociotechnical networks in the Semi-arid region and in agroforestry systems offers concrete evidence of this model's impact.

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	We recommend further elaboration on the indirect FSN outcomes related to the erosion of agrobiodiversity and regional food cultures. Accelerated homogenization of food systems — driven by corporate concentration and the expansion of ultra-processed food — undermines nutritional diversity, food sovereignty, and cultural identity. These outcomes are directly connected to the loss of local seed systems and traditional food practices, which are also key components of climate resilience. The CEEI analysis should make explicit the feedback loop between biodiversity loss, dietary impoverishment, and food system fragility. Additionally, the FSN dimension of the rural youth exodus — driven by the lack of economic opportunities and recognition within agroecological and family farming systems — deserves further attention as both a structural driver of food insecurity and a threat to the continuity of territorial food cultures.
Is there any missing reference to key literature and data?	Mazzucato, M. (2024). Mission-Driven Innovation. UCL Institute for Innovation and Public Purpose, WP2024-17. Van der Ploeg, J.D. (2013). Peasants and the Art of Farming. Practical Action Publishing. PNPIAF — Brazil's National Program for Research and Innovation for Family Farming and Agroecology (Decree 12.287/2024). BRICS Action Plan 2025–2028 for Agricultural Cooperation. Global Alliance against Hunger and Poverty (launched G20, 2024). Planetary Boundaries Science Lab (2025) — on the status of planetary boundaries. European Parliament EPRS Briefing on Desertification in Latin America (2020). Manifesto por Métricas Socioterritoriais de CT&I — Esocite and Latmétricas (Chile, 2023; Campinas, 2024). WTT (2025). Agroecologias do Brasil: Desafios e Oportunidades — on gaps in Brazil's innovation financing ecosystem for agroecology and family farming.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

We suggest the following additional guiding questions:

CEEI 10 (Agency): What is the role of institutionalized social participation mechanisms — such as National Councils (CONSEA, CNAPO, CONDRAF in Brazil) — in ensuring that agri-food systems are aligned with ecological transformation and the public interest? How can these models be scaled or adapted in other national contexts?

CEEI 7 & 1 (Innovation and Food Systems Transformation): How is innovation shaped by territorial processes, and what roles do local organizations and communities play in fostering and sustaining innovation within specific territories? How can STI policy frameworks be redesigned to recognize and finance locally produced innovations rather than privileging only codified, high-tech solutions?

CEEI 6 & 9 (Corporate Concentration and Affordability): What financing instruments and governance mechanisms can support the scaling of territorial food systems without reproducing the concentration dynamics that currently characterize global agri-food supply chains?

108. IFF Chamber, United States of America

Surname	Nomsonh
First name	ThankGod
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Director
Current institution/organization	IFF CHAMBER
Country	United States of America
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	Yes
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Yes, the linkages between food and the broad scope of economic development

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Yes

109. Food and Agriculture Organization of the United Nations (FAO)

The proposed list of ten critical, emerging, and enduring issues covers issues with a profound influence on one or more of the dimensions of food security and nutrition (FSN), including the main structural drivers and challenges affecting FSN across contexts. They target different perspectives of agrifood systems transformation. For example, ‘Agency’ issue looks more closely at actors, power dynamics and processes that influence how agrifood systems perform; issues like ‘climate crises’ and ‘Rio Conventions’ look more closely at environmental aspects, while ‘One Health’ and ‘Digital innovations’ address the intersection of technology and FSN outcomes. Overall, the Zero Draft provides a solid and forward-looking foundation for guiding the CFS work programme and supporting coherent, rights-based and collaborative responses to FSN challenges in an increasingly complex global context.

To further enhance its policy relevance, FAO suggests several more specific observations organized around the HLPE guiding questions, for its consideration going forward.

A number of relevant cross-cutting issues affecting several CEEI that could be more strongly integrated and elaborated are also suggested.

Current institution/organization	Food and Agriculture Organization of the United Nations (FAO)
Country	Italy
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	A key strength of the draft is that it recognizes FSN outcomes as being shaped not only by production and markets, but also by governance, conflict, climate risks, technology, trade, corporate concentration and unequal power relations across food systems. In particular, the inclusion of agency, corporate concentration, geopolitical uncertainty and fragmented governance reflects an important recognition of power, inequality and political economy dynamics. At the same time, framing should better reflect how these issues are experienced differently across regions, countries, rural and urban contexts, and among different social groups. Fast-growing income inequalities within and among countries, and the concentration of wealth in the hands of a few, are strongly affecting food security and nutrition at different levels. The current approach remains somewhat aggregate and does not sufficiently show who is most affected, where, and why. Stronger differentiation is needed regarding small-scale producers, pastoralists, fishers,

	Indigenous Peoples, women, rural workers, migrants and low-income consumers, whose exposure to climate shocks, insecure tenure, weak public services, market concentration and exclusionary institutions is often structurally distinct. The note would also benefit from more explicit recognition that the inclusiveness of transformation matters as much as its direction. A transition that improves productivity while deepening inequality, dispossession, precarious labour, unpaid care burdens or exclusion from decision-making cannot be considered successful from an FSN perspective. Sections 2 (on climate) and 4 (on geopolitical uncertainty and polycrises) in particular would benefit from a sharper focus on uneven exposure to shocks, unequal access to risk-management instruments, and the risk that mitigation, adaptation and crisis responses may reinforce existing hierarchies if they are not explicitly designed with equity and rights in mind. Highlighting concrete examples, including on gender equality and women’s empowerment, would also help demonstrate what inclusive and equitable transformation looks like in practice and identify pathways that improve FSN outcomes for marginalized groups in different contexts.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	One issue that could be added (or elaborated more across the document) is <i>increasing water scarcity</i> as it strongly affects the functioning of agrifood systems and food security and nutrition outcomes. Rising incomes and urbanization lead to increased water demand from industry, energy and services. Increases in population and income, combined with changes in consumption patterns result in increased demand for food, feed and water (PCC, 2019¹⁰). Approximately 1.2 billion people, or about one-sixth of the global population, live in agricultural areas with severe water constraints. (SOFA, 2020¹¹). It is estimated that 171 million ha – more than 60 percent of irrigated croplands – are under high or very high levels of water stress (SOLAW 2025¹²).

¹⁰ IPCC (Intergovernmental Panel on Climate Change). 2019. Summary for Policymakers. In: P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D.C. Roberts, P. Zhai et al., eds. Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

https://www.ipcc.ch/site/assets/uploads/sites/4/2019/12/02_Summary-for-Policymakers_SPM.pdf

¹¹ FAO. 2020. The State of Food and Agriculture 2020. Overcoming water challenges in agriculture. Rome. <https://doi.org/10.4060/cb1447en>

¹² FAO. 2025. The State of the World’s Land and Water Resources for Food and Agriculture 2025 – The potential to produce more and better. Rome. <https://doi.org/10.4060/cd7488en>

Globally, agriculture is the dominant sector in terms of freshwater withdrawals, representing 72 percent of total freshwater withdrawals (UN-Water, 2023¹³) and food demand is projected to climb by 50% by 2050 compared to 2012 (WASAG - The Global Framework on Water Scarcity in Agriculture). While overall growth in water withdrawal is slowing, agricultural water withdrawal continues to rise, reflecting the continuous increase in areas under irrigation. The rapid rise in levels of water withdrawal over the past decades has resulted in a growing number of regions becoming subject to increased water stress. To satisfy the needs of a growing and increasingly wealthy world population with changing diets (including more meat) and meet the increased demand for feeds and other agricultural products – accompanied by growing quantities of convenience food and, most likely, more food waste at the consumer level – agriculture will require more water than it currently uses.

Water scarcity is also strongly interconnected with several other CEEI elaborated in the Note. For example, extreme weather events causing highly impactful floods and droughts have become more likely and/or more severe due to climate change. Extreme climate events contribute to the increased likelihood and severity of the impact of droughts (especially agricultural and hydrological droughts) in many regions, and drought risks are projected to increase in many regions, increasing economy-wide risks. A large share of climate adaptation interventions (~60 percent) are shaped in response to water- related hazards and involve water interventions (irrigation, rainwater harvesting, soil moisture conservation) (IPCC, 2022). Irrigation helps stabilize and increase crop yields and is often a preferred strategy for risk reduction, but irrigation is also associated with a range of adverse outcomes, including groundwater overextraction and additional pressure on already scarce water resources.

Globally, 10 percent of the most water-stressed basins account for 35 percent of global irrigated calorie production. Food production is at risk in these basins and beyond, due to changes in the hydrological components of climate change (i.e. rainfall patterns and evapotranspiration requirements). Climate change also affects freshwater ecosystems, fish and other aquatic populations that have low buffering capacity

¹³ UN-Water, 2023. Blueprint for Acceleration: Sustainable Development Goal 6 Synthesis Report on Water and Sanitation 2023

and are sensitive to climate-related shocks and variability (FAO, SOLAW 2025).

FAO would also like to recommend strengthening several cross-cutting dimensions throughout the Note.

- First, accountability and access to justice should be made more explicit. While accountability is mentioned in the draft, there is limited attention to the mechanisms through which rights-holders can claim their rights, access remedies, and hold both public and private actors accountable. This includes judicial and quasi-judicial mechanisms, grievance systems, monitoring frameworks and legal empowerment.
- Second, the draft should address climate justice and just transition in agrifood systems more directly. Extreme climate events are not only a biophysical challenge but also a distributional and political one. Greater attention is needed to who bears the costs of transition, who receives support, whose knowledge counts, and how mitigation efforts interact with rural development priorities, especially in low- and middle-income countries. This would help the analysis better capture the implications of decarbonization, carbon markets, nature-based solutions and subsidy reforms for different categories of rural people.
- Third, intersectional inequalities in rural areas should be more explicitly addressed. While gender and marginalization are acknowledged, the draft does not yet fully capture how inequalities related to gender, age, class, indigeneity, ethnicity, disability, migration status and location intersect to shape food insecurity and people's ability to participate in and benefit from food systems transformation. Within this cross-cutting perspective, stronger attention should be given to gender equality and women's empowerment. These are under growing pressure due to policy backlash, discrimination, rising gender-based violence, and reduced participation of women in leadership and decision-making. At the same time, women and adolescent girls continue to face high levels of malnutrition, persistent dietary inequalities and rising anemia rates, with serious maternal and intergenerational consequences. Women's distinct nutritional needs across the life course, together with their disproportionate unpaid care burdens, directly shape FSN outcomes and agricultural productivity. Gender equality should therefore be treated not only as a rights issue, but as

a foundational condition for resilient, inclusive and sustainable food systems.

Furthermore, while some aspects related to inequalities and concentration of power and markets are mentioned in the key issues outlined in the draft, the rapid increase in income inequalities and concentration of wealth should be integrated and addressed more directly. The 2023 HLPE report #18 is a good reference and this OECD webpage.

- Fourth, the role of misinformation and disinformation. Given the high and increasing penetration of social media across all contexts including in LIC and resource limited setting, how the international community addresses the growing challenge of misinformation/disinformation is critical for shaping food security/nutrition in the future. Without sufficient time to conduct a literature search, I cannot provide a list of relevant sources but a review could be conducted accompanied by a thoughtful reflection.

- Fifth, the importance of family farming. Family farming constitutes a principal pathway through which systemic drivers translate into food security and nutrition (FSN) outcomes. For instance, under Section 2 (Achieving food security and nutrition in climate crises) family farms represent roughly 90% of farms globally, are a primary transmission channel from climate shocks to FSN outcomes, so impacts on family farmers rapidly propagate into availability, access and stability dimensions of FSN. In Section 6 (Corporate concentration in food systems), family farmers are among the most affected actors: concentration can shape markets, technology/innovation agendas and governance frameworks, with potential consequences for farmers' livelihoods and the diversity and sustainability of food systems—thereby indirectly affecting FSN. In Section 7 (Digital innovations and artificial intelligence (AI) for healthy, sustainable, and equitable food systems), family farmers/smallholders should be treated as a key equity benchmark: smallholders contribute a significant share of food production, and equity/justice risks in AI deployment are explicitly flagged for smallholders. The FSN promise of digital/AI depends on equitable adoption and avoiding a deepened digital divide; otherwise, benefits accrue to already advantaged actors while smallholders face new dependencies (data access, platform power, exclusion);

Also, in Section 9 (Affordability of healthy and nutritious diets to ensure food security and nutrition), affordability is

shaped by both consumers purchasing power and the cost/availability of diverse nutritious foods. Family farmers matter on both sides of the equation: they influence the supply and local availability of diverse nutritious foods, and their own livelihoods determine food access for rural households—critical given that 2.6 billion people could not afford a healthy diet in 2024. Family farmers are pivotal for supplying diverse foods locally and for rural incomes; when their margins are squeezed (inputs, markets, shocks), diet affordability worsens.

- Finally, the Note could articulate, more explicitly, implementation pathways and clarify the role of responsible private sector engagement, in line with CFS principles and FAO’s Strategy for Private Sector Engagement 2026-2030. Additional attention could be given to the role of small and medium-sized enterprises (SMEs) in agri-food systems, considering their contribution to food availability, distribution and employment, particularly in developing countries. Closely linked to this, blended finance and other innovative financing mechanisms remain critical to addressing investment gaps and supporting inclusive food systems transformation.

In Section 1 (Food systems transformation), further clarity on operationalisation at country level would be useful, including the respective and complementary roles of governments, the private sector, UN agencies, civil society, Indigenous Peoples, and farmers’ organizations in joint implementation. In Section 2 (climate crises), stronger articulation of coordination mechanisms across sectors and partners would enhance the potential for achieving tangible food security and nutrition outcomes. Highlighting the role of the private sector in climate adaptation and mitigation through innovation, investment, and resilient value chains would strengthen the effectiveness and reach of proposed actions.

In Section 4 on geopolitical uncertainty and polycrisis, reinforced coordination among humanitarian, development, and private sector actors would support more timely, risk-informed, and efficient responses. Leveraging private sector capacities, including logistics, finance, and data, could further enhance preparedness and response efforts, while ensuring alignment with humanitarian principles and long-term resilience objectives.

In Section 9 on affordability of healthy and nutritious diets, while the drivers are well identified, additional focus on implementation experiences and scalable partnership

	models would be valuable. In particular, stronger emphasis could be placed on integrated approaches linking social protection, public procurement, and local markets with private sector actors. Such approaches have demonstrated effectiveness in improving diet affordability, accessibility, and sustainability. These six dimensions could be taken as analytical lenses that run across all ten issues and strengthen the overall framework.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	The biodiversity crisis would merit to be addressed more thoroughly throughout the report, due to its significant impact and potential for food security and nutrition. As it currently stands, the Section 2 somehow undermines the importance of Section 3 as the three Rio issues are interconnected to a degree where they cannot be addressed separately. Climate change is both a direct driver and outcome of biodiversity loss and soil degradation and should be addressed together through agrifood systems actions/solutions. Furthermore, the three issues under the Rio Conventions are wider in scope than just implementing the Conventions - e.g. the biodiversity-related Conventions, of which CBD is a part of along with the International Treaty on Plant Genetic Resources for Food and Agriculture and International Plant Protection Convention (ITPGRFA and IPPC both housed in FAO). HLPE could thus consider merging the Sections 2 and 3 under the following heading: “Sustainable food security and nutrition: addressing biodiversity loss, desertification and climate change”. This new section could focus on 3 subheadings: (1) climate change; (2) biodiversity loss; and synergies between the Rio Conventions. Beyond this suggestion, the linkages between the ten CEEI should be strengthened more explicitly. The current structure is useful for analytical clarity, but several issues are deeply interconnected in practice and should be treated as such. In particular, stronger links should be made between climate change, biodiversity loss, land degradation and tenure, as these form a coherent cluster affecting livelihoods, resilience and resource control. Trade, corporate concentration and digitalization should also be more clearly connected, since together they shape power asymmetries, value distribution and control over markets and infrastructures across food systems. The connections between geopolitical uncertainty, climate shocks and affordability should likewise be more

	explicitly articulated, especially in relation to rural poverty, wages, care burdens and diet quality. The <i>inclusion of agency</i> is a strength of the draft. At the same time, its analytical treatment would be stronger if agency were woven more systematically throughout the analysis, as a cross-cutting dimension linked to participation, representation, accountability and procedural justice, rather than being addressed primarily as a separate theme. A right-to-food perspective would provide a useful framework for integrating these interconnections in a coherent way. Finally, <i>One Health</i> is a systems approach which directly speaks to the issues identified in Section 1 on food systems transformation. It should be cross referenced as one of the types of integrated policy frameworks in bullet point right at the bottom of page 6 and preferably in the main text of Issue 1 as well
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The drivers and trends identified are broadly relevant, including climate change, conflict, market distortions, technological change, inequality and power asymmetries. However, the analysis should go further in showing how these drivers translate into FSN outcomes through structural and institutional mechanisms. In particular, policy choices and state actions should be recognized not only as responses to food insecurity, but also as drivers of FSN outcomes. Public budgets, subsidies, trade policies, regulation, social protection systems, labour regimes and tenure governance all shape exposure to risk, the distribution of benefits, and who is left behind. The draft would also benefit from deeper attention to structural determinants such as unequal land distribution, exclusionary credit systems, weak labour regulation, regressive subsidy regimes, and biased climate and environmental finance. These mediate the impacts of broader drivers and often shift risks and costs onto small-scale producers, rural workers and low-income consumers, while concentrating benefits and decision-making power elsewhere. Finally, the analysis should move beyond treating countries as the main unit of analysis. Many of the most acute agrifood inequalities are territorial and subnational, including those between commercial and subsistence zones, irrigated and rainfed areas, core and peripheral regions, and formal and informal labour segments. Bringing this territorial lens more clearly into the discussion would make the analysis more policy-relevant.

Section 9 Affordability of healthy and nutritious diets to ensure FSN

The note could elaborate more on the relationships between food insecurity, unaffordability of a healthy diet, and nutrition outcomes. 2025 SOFI report can be useful in this regard: "Economic access to food is a key dimension of food security. People who are unable to afford even a least-cost healthy diet are likely experiencing some level of food insecurity, which can compromise the quality of their diet. Inadequate diets, in turn, play a critical role in shaping nutritional outcomes" (p. 28). Also, Section 1.3 in the 2018 SOFI report discusses the multiple burden of malnutrition and pathways between food insecurity (based on the FIES) and various forms of malnutrition, including undernutrition as well as overweight and obesity.

Section 5 International trade for food security and nutrition

The issue is appropriately identified as a critical, emerging and enduring issue and the Note rightly highlights relevant linkages between trade and other critical issues, particularly geopolitical uncertainty and polycrises. Trade is both affected by such dynamics and serves as a key transmission channel for shocks, policies and structural changes that influence all dimensions of FSN. In an increasingly interconnected global food system, disruptions in one region can rapidly propagate through trade flows, affecting food availability, access and stability elsewhere. While these linkages are acknowledged, they could be further strengthened and more systematically articulated across the Note.

At the same time, the treatment of international trade as a critical issue could be more balanced. While the Note effectively highlights risks and trade-offs, including vulnerabilities to external shocks, policy disruptions, structural dependencies and market concentration, comparatively less emphasis is placed on the well-established and evidence-based contributions of trade to FSN outcomes.

A large body of evidence, including FAO's flagship publication [*The State of Agricultural Commodity Markets*](#) (SOCO), clearly shows that an open, predictable and transparent trading system is essential for achieving food security and nutrition. Beyond addressing structural and temporary food deficits, trade is a foundational component of modern food systems. It contributes to the efficient allocation of resources across

regions and enables the spatial redistribution of food from surplus to deficit areas, thereby strengthening global food system functioning.

Evidence indicates that, on average, more than 20 percent of global dietary energy supply is sourced from internationally traded food, with significantly higher shares in many import-dependent countries. This underscores the critical role of trade in ensuring food security, particularly in countries with limited natural resources, land or water constraints. In the context of increasing climate variability and geopolitical uncertainty, trade also functions as a stabilizer – key risk management and adaptation mechanism, enabling countries to cope with localized production shocks and supply disruptions. By facilitating access to food from diverse sources, trade enhances resilience at both national and global levels.

Conversely, disruptions to trade – whether due to conflict, logistical constraints, or policy measures such as export restrictions – can exacerbate price volatility, reduce affordability, and increase food insecurity, particularly in import-dependent countries. These dynamics highlight the dual nature of trade – while it is essential for FSN, its benefits depend critically on how it is governed and how the shocks are managed. In this context, policy coherence is essential to maximize the positive contributions of trade while addressing its risks. Coordinated and mutually supportive policies across trade, agriculture, nutrition, environment and social protection are needed to ensure that trade contributes effectively to the availability, accessibility and affordability of healthy diets, while minimizing negative externalities.

It is thus important that the Note gives more analytical attention to these dimensions, as they are central to improving FSN outcomes and enhancing resilience in an increasingly uncertain global context. Strengthening this balance would enhance the analytical robustness of the Note and better reflect the evidence base, while supporting more nuanced and policy-relevant discussions within the CFS.

Finally, the section could elaborate on the important aspect of direct foreign investment. The SOCO 2024 report suggested that international trade was not as important for highly processed foods high in fat, sugar, and salt as might be

	predicted given the statistics on the nutrition transition in countries around the world. One reason for this is the importance of Direct Foreign Investment of companies that produce such products domestically in countries and thus this highly processed foods are not part of the global food trade.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	The draft should broaden its treatment of FSN outcomes beyond availability and affordability. More attention should be given to the <i>adequacy of food</i>, including nutritional quality, safety, cultural acceptability and sustainability. The dimension of stability over time should also be strengthened, especially in the context of recurring shocks and polycrisis. The analysis should further address <i>dignity and agency</i>, recognizing people not as passive recipients of support, but as rights-holders who participate in shaping food systems. This should be linked to questions of voice, representation and procedural justice, including who participates in climate, trade, investment and digital governance processes, and how excluded constituencies are able to organize and be heard. The draft should also give greater attention to the <i>distributional outcomes of climate and technological change</i>, including their effects on income distribution, wealth concentration, land control, labour conditions and unpaid care. In addition, intergenerational effects deserve more explicit treatment, given the long-term implications of climate change, land degradation and conflict for youth opportunities, asset transfers and the future social contract in rural areas. <i>Gender equality and women's empowerment</i> should also be more clearly reflected in the analysis of FSN outcomes, especially under climate and conflict stressors. Women and girls often experience disproportionate income losses during shocks, which can reduce their agency and intensify harmful coping strategies, including reduced food intake, asset depletion and intra-household inequality in food consumption. Climate-induced water insecurity and displacement can further increase unpaid care burdens, limit access to services and livelihoods, and heighten risks to nutrition, health and safety. In conflict-affected settings, these pressures are often compounded, with women facing heavier and more unequal workloads that further constrain their empowerment and worsen FSN outcomes.

Section 1 Advancing the post-2030 Development Agenda through food systems transformation

The suggested Key actions (p. 6) combine general and high-level statements, specific technical asks (e.g. food environments) and those more specific critical actions – governance, integrated frameworks, managing power relations. It is recommended to make the list of key actions more targeted to the issue and to start with the following key action:

Investment in systemic infrastructure that creates the enabling conditions for food systems transformation. This includes: governance mechanisms for joint planning, managing power dynamics, and addressing conflict; processes to strengthen policy coherence; robust science–policy interfaces; capacity building for systems thinking; systems-based monitoring, evaluation, and learning; and budgetary allocation and funding incentives that encourage shared problem-solving and the achievement of common objectives.

Section 2 Achieving food security and nutrition in climate crises

The section focuses heavily on individual food production/products. The topic of *transitioning to healthy diets* warrants further elaboration. FAO suggests to highlight the interlinkages amongst public systems all impacted by climate change and necessary for food security and nutrition namely agrifood, water, social protection and health (see [FAO 2023](#)). Furthermore, FAO recommends including ‘biodiversity loss’ in relation to climate change as a driver of food security and/or malnutrition. Biodiversity loss and climate are part of a positive feedback cycle that reinforces and accelerates the other. Climate change drives biodiversity loss but biodiversity loss also worsens climate change, and negatively impacts the vital ecosystem functions and services necessary for sustainable agricultural production and food security and nutrition. For this reason, it should be clarified that the impacts of climate change on agrifood systems largely relate to a loss of biodiversity and/or ecosystem services and resilience.

Section 3 Food security and nutrition and the three Rio Conventions

The section should also underline the sustainable use of biodiversity. The CBD has 3 main objectives on (1) conservation; (2) sustainable use; and (3) sharing of benefits arising from genetic resources. Food security and nutrition

	are much more directly linked to objective 2 and 3 than to objective 1 of the Convention. In the example used in paragraph 2 of Section 3, the project could also contribute to biodiversity loss and the erosion of ecosystems services and resilience. Not all climate actions benefit biodiversity. The section should include a reflection on how healthy diets are a link/common supportive solution for biodiversity and climate crises (see FAO 2021).
Is there any missing reference to key literature and data?	The draft would benefit from stronger and more systematic reference to the FAO Voluntary Guidelines on the Right to Food (2004), which provide an important normative and policy framework for understanding FSN from a rights-based perspective. It would also benefit from more systematic use of disaggregated evidence, including by sex, age, wealth, tenure status, livelihood group and location. Throughout the note, examples and statistics should show more clearly who is benefiting from climate and digital investments, who is being excluded from social protection and risk-management mechanisms, and how land, labour and policy reforms affect different groups differently. More specifically, in relation to Section 1, the sentence: “Food systems are central to FSN as they encompass all actors, activities, and processes involved in food production, processing, distribution, consumption, and disposal, ensuring that food is available, affordable, safe, nutritious, and culturally appropriate (FAO, 2018)”, the correct reference should be FAO, 2021 Report of the Council of FAO – Hundred and Sixty-sixth Session: 26 April – 1 May 2021. Rome, CL 166/ REP. https://www.fao.org/3/nf693en/nf693en.pdf, and the sentence should reflect more the provided definition: <i>food systems encompass all components involved in the journey of food from farm to table – from when it is grown, fished or harvested to when it is processed, packaged, transported, distributed, traded, bought, prepared, eaten, disposed of and reused and all the people, activities, investments and choices that contribute to the production and delivery of these products.</i> (FAO. 2021). References to systems approach should cite: FAO. 2025. Transforming food and agriculture through a systems approach. This should be the case, for example, for the sentence: “A systems approach enables policymakers to identify synergies and manage trade-offs across agriculture,

health, trade, environment, social protection and other interconnected systems.” (p. 5), and the sentence “A core issue is the persistence of fragmented governance and siloed policies in addressing FSN” (p. 6). The same reference supports also the sentence at the bottom page 6 : “Without a coherent food systems approach, and without confronting the structural political and economic drivers that sustain fragmentation, these trends risk further entrenching food insecurity, nutritional inequities, and environmental degradation (HLPE, 2020, **ADD FAO, 2025**).

The reference to [FAO’s Unjust Climate report](#) (2024) would further strengthen the analysis, particularly in relation to the unequal impacts of climate change and the distributional implications of climate responses. In light of the gender dimensions highlighted above, the draft could also more explicitly reference the CFS Voluntary Guidelines on Gender Equality and Women’s and Girls’ Empowerment (2023), together with evidence on women’s and girls’ nutrition, care burdens, access to resources, and participation in decision-making.

Furthermore, all references to progress on SDG 2 and to statistics on hunger (prevalence of undernourishment), moderate or severe food insecurity, cost of a healthy diet and unaffordability of a healthy diet should cite as reference the most recent State of Food Security and Nutrition in the World (SOFI) reports. The first paragraph under Section 9 contains several inaccuracies in the narrative and references that need to be corrected.

[SOFI 2018 on Building climate resilience for food security and nutrition](#) could be added as a reference when discussing impact of climate change on food insecurity (Part 2 of the report) and when discussing the relationships between food insecurity, affordability of a healthy diet, and multiple forms of malnutrition (Section 1.3). Also, the Note could cite FAO 2023 report on [Climate action and nutrition. Pathways to impact](#).

In relation to Section 3, the following references could be consulted: [FAO. 2019. The State of the World’s Biodiversity for Food and Agriculture. J. Bélanger & D. Pilling \(eds.\). FAO Commission on Genetic Resources for Food and Agriculture Assessments](#).

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

Regarding the question about the "costs and benefits of ensuring agency in food systems", FAO suggests it be framed instead around the "challenges and opportunities of ensuring agency in food systems".

Beyond the existing questions, which are a useful starting point, FAO suggests also considering potential questions that are strongly framed around *how to implement* the relevant policies. This second perspective requires looking into who decides, who benefits, who bears the costs, and what accountability mechanisms are in place. To guide a stronger report, the questions should more explicitly incorporate governance, justice, participation and distribution. Additional guiding questions could include:

- How do proposed responses/solutions redistribute risks, costs and benefits across different social groups, territories and segments of agrifood systems?
- What mechanisms are in place to ensure the free, meaningful and informed participation of those most affected, including women, Indigenous Peoples, youth, landless workers and informal food system workers?
- How will climate, biodiversity and digital policies be coordinated with social protection, labour rights, rural services and territorial development so that poor rural households are not required to absorb additional risks without support?
- What safeguards, grievance mechanisms and accountability arrangements are needed to prevent maladaptation, dispossession, or the reinforcement of existing inequalities in the name of transformation?
- What is needed to get International Organizations to officially adopt "Agency" as a dimension of food security?
- Suggest a question regarding the importance of social protection for protecting, preventing, promoting and transforming healthy diets for all – including the most vulnerable – in the face of a changing climate.

Framing the questions more explicitly around these dimensions would help ensure that future work supports not only more action, but action that is fairer, more inclusive and more consistent with human rights commitments.

110. Private Sector Mechanism (PSM) – Extended Version

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?

PSM welcomes the HLPE-FSN effort to identify a concise set of CEEI. However, several issues central to food security and nutrition (FSN) outcomes are underdeveloped, particularly market functioning, transparency, logistics, and enabling environments.

These are the mechanisms through which shocks become crises. The issues identified by the HLPE—particularly climate risks, conflict, biodiversity loss, and trade disruptions—are indeed central to FSN outcomes.

The HLPE note references market concentration as a structural FSN risk. PSM stresses that concentration alone does not inherently imply reduced competition or negative FSN outcomes. Concentration indicators (HHI, CR4) are not harmonized across countries or sectors and cannot be used as proxies for FSN outcomes. Concentration metrics also cannot be interpreted without considering market contestability, entry barriers, regulatory frameworks, and the role of SMEs. FAO's evidence base consistently shows that what matters for FSN is not market structure but market functionality — how well markets transmit information, allocate resources, enable participation, and respond to shocks. Well-functioning markets with transparent rules, adequate infrastructure, and predictable policies can deliver affordability and stability across a wide range of structural configurations, whereas poorly functioning markets can generate volatility even in unconcentrated sectors.

FAO flagship reports do not identify market concentration as a primary driver of food insecurity; instead, they consistently highlight climate shocks, conflict, economic instability, logistics constraints, and trade policy uncertainty as the main determinants of FSN outcomes.

FAO's own evidence base shows that the key determinants of FSN outcomes lie in

market functioning, not market structure. For example:

- SOCO highlights the importance of predictable, rules-based trade and cautions against policy measures—such as export restrictions—that disrupt markets.
<https://www.fao.org/publications/soco/en/> (fao.org in Bing)
- SOFA 2021 demonstrates that infrastructure, logistics, and storage capacity determine how shocks cascade through agrifood systems.
<https://www.fao.org/documents/card/en/c/cb4476en> (fao.org in Bing)

• AMIS Market Monitor consistently shows that transparency, weather shocks, and trade policy uncertainty

shape market dynamics. <https://www.amis-outlook.org/market-monitor/en/> (amis-outlook.org in Bing)

- OECD-FAO Agricultural Outlook shows that economies of scale are essential for efficiency, investment, innovation, and food availability.

<https://www.fao.org/publications/oecd-fao-agricultural-outlook/en/> (fao.org in Bing)

Moreover, the consequences of regulatory complexity must also be considered: for example, developing a new crop protection product now takes over 12 years and costs more than \$300 million, disproportionately burdening smaller firms and limiting innovation access in low- and middle-income countries.

See also: World Bank (2024) Evaluation Insight Note: Agricultural Innovation and Technology in World Bank Projects | Independent Evaluation Group

A more balanced analysis would consider how enabling environments—such as science-based regulation, harmonized standards, transparent markets, and investment in innovation—can foster competition, resilience, and nutrition outcomes. PSM therefore recommends strengthening the treatment of market functioning, transparency, and enabling environments, which are more directly linked to FSN and provide policymakers with actionable, evidence-based guidance that prioritizes scalable solutions.

In strengthening the analysis, it is also important to reflect the diversity of production models and organizational forms that contribute to FSN across regions. Food systems include a wide range of actors—smallholders, SMEs, cooperatives, and larger enterprises—each of which can play a constructive role depending on context. In particular, farmer-owned cooperatives and other producer-led organizations are essential for enabling investment, improving efficiency, and supporting smallholder participation in markets. Likewise, larger-scale systems can contribute through innovation capacity, logistics, and resilience. A balanced, evidence-based framing should therefore avoid treating any single ownership structure as inherently positive or negative, and instead assess how different models, scales, and partnerships can contribute to FSN outcomes when supported by appropriate governance and enabling environments.

Innovation is not just digital and should be reflected throughout

The HLPE note identifies many important challenges for food security and nutrition, including climate risks, biodiversity

loss, conflict, trade disruptions, among others. At the same time, we recommend placing stronger emphasis on innovation-driven, sustainable productivity growth as a cross-cutting priority. Without improvements in yields, resource-use efficiency, and access to new technologies, it will be difficult to meet rising food demand, support better nutrition, and reduce the environmental footprint of agriculture.

- OECD-FAO Agricultural Outlook 2025-2034: “scenario analysis suggests options to eliminate undernourishment and to reduce direct agricultural GHG emissions by 7% below current levels by 2034. Achieving these dual outcomes would require a 15% agricultural productivity increase complemented by widespread adoption of emission-reduction technologies, while attaining a production level sufficient to eradicate undernourishment globally.” (p. 15)

- World Resources Institute, Creating a Sustainable Food Future, 2019: “Raise productivity. Increased efficiency of natural resource use is the single most important step toward meeting both food production and environmental goals. This means increasing crop yields at higher than historical (linear) rates, and dramatically increasing output of milk and meat per hectare of pasture, per animal—particularly cattle—and per kilogram of fertilizer. If today’s levels of production efficiency were to remain constant through 2050, then feeding the planet would entail clearing most of the world’s remaining forests, wiping out thousands more species, and releasing enough GHG emissions to exceed the 1.5°C and 2°C warming targets enshrined in the Paris Agreement—even if emissions from all other human activities were entirely eliminated.» (p. 1)

PSM recommends framing the note in a way that more clearly recognizes sustainable productivity and innovation as the enabling thread that links food security with climate and environmental goals. Strengthening this dimension would enhance the overall analysis and align it with SDG2 targets—particularly 2.3 on smallholder productivity and 2.4 on sustainable production. Importantly, this approach moves beyond a “food

systems versus environment” narrative and instead highlights win-win-win pathways— such as climate-smart crops, precision agriculture, resource-efficient inputs, and practices that preserve biodiversity—capable of delivering more food for a growing population on less land and with lower emissions.

PSM encourages the note to focus on outcomes rather than prescribing to specific practices. While the draft highlights

	agroecology, it is important to recognize that CFS policy products consistently refer to “agroecological and other innovative approaches,” reflecting the diversity of context-appropriate solutions endorsed by Members. There is no one-size-fits-all: production systems vary widely across agronomic, economic, and climatic contexts. We therefore recommend that the analysis emphasizes these outcomes, rather than privileging particular production models, practices, or ownership structures.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	The issues identified by the HLPE—particularly climate risks, conflict, biodiversity loss, and trade disruptions—are indeed central to FSN outcomes. PSM recommends complementing these with additional issues that FAO evidence shows are equally critical. A) Market functioning and transparency PSM recommends adding a cross-cutting issue on market functioning and transparency, which is currently referenced across several CEEI but not treated as a standalone driver. FAO’s evidence base consistently shows that market functioning — not market structure — determines how global shocks translate into food security and nutrition (FSN) outcomes. This issue is “critical” because: It determines how shocks are transmitted into domestic markets: FAO’s State of Food and Agriculture 2021: Making Agrifood Systems More Resilient demonstrates that logistics, storage, and infrastructure shape how climate, conflict, and economic shocks cascade through agrifood systems. https://www.fao.org/documents/card/en/c/cb4476en (fao.org in Bing) It shapes the affordability of nutritious diets: FAO’s Cost and Affordability of a Healthy Diet shows that transport costs, post-harvest losses, and market inefficiencies are major drivers of diet unaffordability — often more so than production constraints. https://www.fao.org/3/cc3010en/cc3010en.pdf (fao.org in Bing) It affects SME resilience and participation: FAO’s Value Chain Development work highlights that SMEs — which dominate processing, distribution, and retail in most countries — face structural constraints in finance, logistics, and market access. These constraints shape competition and market structure far more than concentration metrics.

It influences producers' access to inputs, credit, and markets: The OECD-FAO Agricultural Outlook shows that predictable markets, functioning input systems, and stable investment conditions are essential for productivity, diversification, and resilience.

It is more strongly linked to FSN outcomes than concentration: FAO's State of Agricultural Commodity Markets (SOCO) shows that trade policy, logistics, climate shocks, and infrastructure have far greater influence on price formation and access than market concentration. <https://www.fao.org/publications/soco/en/> (fao.org in Bing) For these reasons, PSM recommends elevating market functioning and transparency as a distinct CEEI. This would align the HLPE note with FAO's flagship reports and provide governments with more actionable policy levers. For these reasons, PSM recommends elevating market functioning and transparency as a distinct CEEI. This would align the HLPE note with FAO's flagship reports and provide governments with more actionable policy levers.

Enabling environment for agrifood SMEs and cooperatives While the draft discusses "corporate concentration," it does not address the constraints faced by SMEs, which FAO, IFAD, and SAFIN identify as essential for inclusive value chains, employment, and resilience. Strengthening SME participation is a core component of FAO's agrifood systems transformation agenda.

To complement this, PSM also encourages the HLPE to reflect the diversity of production systems and value chain actors that contribute to FSN across different contexts. Food systems include smallholders, SMEs, cooperatives, and larger enterprises, each of which can play a constructive role when supported by appropriate enabling environments. In particular, farmer-owned cooperatives and inclusive value chain models can strengthen market access, investment, and resilience for small producers. Recognizing this diversity—and assessing the contributions and constraints of different organizational forms in a balanced, evidence-based manner—would help ensure that the analysis captures the full range of pathways through which food systems can deliver improved nutrition, livelihoods, and sustainability outcomes.

Functioning of domestic markets and logistics systems

	FAO's SOFI and SOFA reports highlight that infrastructure, logistics, storage, and price transmission are central determinants of affordability and stability. These factors are not explicitly addressed in the draft but are essential for understanding how FSN outcomes evolve in both stable and crisis contexts. b) Access to innovation 1 - Smallholders and Global South countries often cannot obtain the technologies needed for sustainable productivity due to trade barriers and misaligned regulations. Open, science-based trade is a critical enabler for food security. OECD-FAO Agricultural Outlook 2025-2036: "Rising temperatures, shifting rainfall patterns, disruptions to ecosystem services, and more frequent extreme weather events are increasingly affecting agricultural yield trends. While some regions may benefit from longer growing seasons, others are becoming less suitable for cultivation. It is assumed that farmers will adapt by adjusting planting schedules, diversifying crop choices, and adopting integrated pest management strategies. However, the capacity to adapt remains uneven across regions. In this context, international trade plays a vital stabilizing role. By enabling the movement of food from surplus to deficit regions, trade helps buffer local production shocks, thereby supporting stability of both supply and prices." (p. 23) 2 - Without improved access to innovation, many countries will continue to face low productivity and high climate vulnerability, limiting their ability to strengthen food security and resilience. Designating this as a standalone CEEI would enable CFS to explore practical solutions such as harmonizing standards (including greater use of Codex references), strengthening national regulatory capacity, and facilitating the safe and timely introduction of appropriate technologies for smallholders. These measures directly support food availability, affordability, and resilience.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	PSM agrees that the ten CEEI are interlinked, but the current draft does not fully articulate how shocks propagate through markets, value chains, and food environments. The issues identified by the HLPE—particularly climate risks, conflict, biodiversity loss, and trade disruptions—are indeed central to FSN outcomes. Strengthening the linkages between them would enhance the analytical value of the report. FAO's evidence base shows that disruptions rarely occur in isolation; they cascade through logistics, trade, finance, and consumer access. Strengthen linkages between:

1. Climate shocks and logistics disruptions

FAO's Impact of Disasters on Agriculture shows that extreme weather affects not only production but also transport corridors, storage, cold chains, and port operations, which directly influence availability and prices.

2. Geopolitical fragmentation and input markets

AMIS Market Monitor demonstrates that sanctions, export restrictions, and shipping insurance costs affect fertilizer, fuel, and input markets, which then shape production decisions and affordability. In addition, geopolitical shocks increasingly damage agricultural land, infrastructure, and irrigation systems, underscoring the need to accelerate the restoration of war-ravaged agricultural areas to stabilize production and support FSN.

3. Macroeconomic instability and diet affordability

SOFI consistently shows that inflation, currency depreciation, and interest rate shocks reduce household purchasing power, affecting access to nutritious diets.

4. Digital transformation and inclusion

SOFA 2022: Digital Agriculture shows that digital tools can either expand or restrict market access depending on connectivity, data governance, and affordability.

5. One Health and risk management

FAO's One Health resources highlight how animal health, biosecurity, and AMR risks affect livestock value chains, perishables, and food safety.

6. Climate change (Issue 2) and Biodiversity / Soil Health / Rio Conventions (Issue 3):

These issues are all interconnected dimensions of environmental sustainability and could be analyzed together. Climate shocks—such as droughts and floods—and biodiversity loss or soil degradation jointly affect food production and resilience. The rapidly growing challenge of invasive species further compounds these pressures, compromising FSN and accelerating biodiversity loss and land degradation. At the same time, many solutions

generate co-benefits across multiple objectives, including climate-resilient crop varieties that support adaptation, soil health, and biodiversity. A combined “Environmental Change” section could help highlight these synergies and examine how to maximize them—for example, how climate-smart intensification can reduce pressure on forests, or how protecting ecosystems can strengthen climate resilience.

7. Trade (Issue 5) and Affordability/Nutrition (Issue 9): PSM strongly supports the inclusion of trade and recommends making the link to diet affordability and stability more explicit. Trade plays a critical role in moving food from surplus to deficit areas and in stabilizing markets over time. The HLPE analysis could therefore bring these issues together by examining how well-designed trade policies can help reduce price volatility and improve access to diverse, nutritious foods.

In addition, PSM encourages the HLPE to strengthen the linkages between trade, climate change, and nutrition outcomes. Trade plays a critical role in ensuring access to diverse and nutrient-rich foods, particularly in regions facing climate-related production constraints or limited natural resources. Recognizing regional comparative advantages and diverse production realities can help illustrate how well-functioning markets and predictable trade systems support affordability, stability, and improved diet quality. Similarly, the relationship between innovation, productivity, and sustainability could be more explicitly articulated: innovation drives productivity gains, which enhance resource efficiency and reduce environmental impacts per unit of output, thereby supporting both resilience and access to nutritious foods.

- OECD–FAO Outlook (ibid.): "The Outlook highlights that trade flows between net-exporting and net-importing regions are expected to increase as agricultural production and consumption become more geographically separated based on different comparative advantages and production capacities as well as food and feed demand developments. As a result, international trade will remain indispensable to the global agri-food sector. By 2034, 22% of calories consumed globally are expected to be traded across borders. Twenty years ago, this share was 17% but has remained stable at around 22% over the last ten years. Multilateral cooperation and a rules-based agricultural trade are essential to facilitating these trade flows, balancing food deficits and surpluses across countries, stabilising prices and enhancing food security, nutrition and environmental sustainability.» (p. 14)

	8: Innovation and technology (Issue 7) across all issues: PSM encourages the HLPE to avoid treating digitalization and AI in isolation and instead to mainstream technology as a means to achieve broader FSN, climate, and resilience goals. This also means looking beyond digital tools to reflect the full spectrum of innovation—agronomic and practice-based innovations, genetic improvement and breeding, biocontrol and chemistry, soil health and nutrient management, post-harvest and storage solutions, mechanization, and new business models among others. By connecting Issue 7 with the other CEEIs, the report can better illustrate how research, development, and new technologies contribute to FSN, while also addressing risks such as insufficient public R&D investment and unequal access to new solutions. Recommendation Rather than combining issues, PSM recommends adding explicit cross-issue linkage notes showing how disruptions in one domain (e.g., energy markets) propagate through transport, storage, processing, and retail to affect FSN. This approach aligns with FAO’s agrifood systems transformation framework and avoids siloed analysis.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The CEEI identified by the HLPE—particularly climate risks, conflict, biodiversity loss, and trade disruptions—are indeed central to FSN outcomes. Strengthening the treatment of key drivers would enhance the analytical value of the report. Across several CEEI, the HLPE analysis would benefit from a clearer articulation of how drivers affect markets, value chains, and enabling environments, not only production and consumption. Key drivers requiring stronger treatment: Regulatory and policy uncertainty FAO’s SOCO shows that export restrictions, sudden input bans, and unpredictable regulations are major drivers of price volatility and supply instability. Infrastructure bottlenecks SOFA 2021 demonstrates that port congestion, cold-chain gaps, and inadequate storage shape availability, losses, and affordability. Private investment conditions

The OECD-FAO Outlook highlights that access to finance, risk-sharing instruments, and predictable regulatory environments determine resilience, diversification, and innovation.

SME vulnerability

FAO's Value Chain Development work shows that SMEs — which dominate processing, logistics, and retail — face structural constraints that shape competition, market access, and food availability.

Corporate concentration and power asymmetries

The draft repeatedly attributes FSN challenges to concentration, e.g.:

“Identifying, analyzing, and addressing power asymmetries... corporate concentration, and governance.”

This framing risks overshadowing FAO evidence that market integration, investment, and innovation are essential for resilience (SOFA 2023). FAO literature does not identify concentration as a primary FSN driver. Instead, FAO emphasizes:

- trade openness and transparency as stabilizers (SOCO)
- logistics and storage as determinants of availability (SOFA 2021)
- private investment as essential for resilience (SOFA 2023)
- SME constraints, not firm size, as barriers to competition (FAO VCD) PSM recommends distinguishing between:
 - market failures vs. market functioning
 - competition issues vs. structural constraints
 - SMEs, cooperatives, and multinationals

PSM encourages a more balanced framing of Issue 6.

Presenting “family farms” and “corporations” as opposing forces oversimplifies the reality of today’s food systems and is not supported by FAO evidence. Many family farms operate within or alongside larger value chains, including through cooperatives, contract farming, and partnerships with agribusinesses. Corporate actors also play an important role in supporting family farmers’ access to innovation, improved seeds, crop protection, digital tools, finance, and markets, which can strengthen productivity and resilience. The draft repeatedly links FSN challenges to concentration, yet FAO literature

does not identify concentration as a primary driver of FSN outcomes. What matters is market conduct, the functioning of value chains, and whether scale efficiencies translate into benefits for producers and consumers. PSM therefore recommends distinguishing between market failures and market functioning, and between competition issues and structural constraints, while recognizing the complementary roles of SMEs, cooperatives, and multinationals. A more evidence-based approach would focus on ensuring that all farmers—especially smallholders—have access to the tools, knowledge, and market opportunities they need to thrive. Inclusive partnerships and well-tailored regulations can harness the strengths of both family farms and larger enterprises, creating an enabling environment where small producers access innovation on reasonable terms, new entrants can emerge, and competition policies address genuine abuses of market power without discouraging efficient scale.

In addition, PSM encourages the HLPE to strengthen the articulation of linkages between climate change, innovation, trade, and nutrition outcomes. Climate adaptation increasingly depends on practical, scalable innovations—such as improved genetics, feed efficiency, resource-use optimization, and climate-resilient production systems—that enable food systems to continue delivering safe, nutritious, and affordable foods under growing environmental stress. Similarly, international trade plays a critical role in ensuring access to diverse and nutrient-rich foods, particularly in regions facing climate-related production constraints or limited natural resources.

Acknowledging regional comparative advantages and diverse production realities can help illustrate how well-functioning markets and predictable, rules-based trade systems support affordability, stability, and improved diet quality. These linkages would help ensure that FSN outcomes remain central to the analysis and that the CEEI reflect the full range of pathways through which food systems contribute to nutrition, resilience, and sustainability.

Narrow framing of production models

The draft emphasizes agroecology as the primary pathway:

“promoting holistic agricultural approaches – such as agroecology...”

	PSM supports agroecology as defined by FAO’s multiple pathways framing, which includes: • sustainable intensification • regenerative agriculture • climate-smart agriculture • digital agriculture • improved inputs and technologies • Among other approaches This reflects FAO’s Agrifood Systems Transformation Framework and avoids privileging a single model. Framing agroecology within this broader set of approaches avoids privileging a single model and aligns with agreed CFS language on “agroecological and other innovative approaches.” Safeguards and “undue influence” language The draft calls for: “stronger safeguards against conflicts of interest and undue influence.” PSM supports safeguards for all actors but recommends avoiding language that could be interpreted as restricting private sector participation in multistakeholder governance, which is central to the CFS mandate and to the legitimacy of the platform.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	Urban and peri-urban food access SOFI highlights the growing importance of urban food environments for affordability and diet quality. Diet quality and nutrient adequacy, including access to diverse, nutrient-rich foods. Supply chain resilience SOFA 2023 shows that resilience depends on logistics, storage, processing, and input supply chains. Innovation adoption gaps FAO Digital Agriculture work shows that FSN outcomes depend on whether smallholders and SMEs can access and adopt innovations. Innovation is a key enabler of FSN, and the central role of sustainable productivity growth is currently underrepresented. More broadly, PSM encourages the HLPE to place greater emphasis on real-world constraints and practical bottlenecks, ensuring the analysis points toward actionable solutions. Many of the issues identified are

	well-recognized or still under debate, but they do not yet translate into actionable solutions that can be deployed quickly, at scale, and across diverse contexts. HLPE could add significant value by examining where the actual bottlenecks lie, why they persist, and what concrete steps could address them. This approach would help surface the real-life trade-offs policymakers face and support faster, evidence-based decision-making, which is where CFS can make the greatest contribution.
Is there any missing reference to key literature and data?	Several foundational FAO and CFS sources are not yet referenced in the draft but are essential for grounding the analysis in the existing evidence base. PSM recommends including: • AMIS Market Monitor (market transparency, stocks, trade flows) • FAO SOCO (trade, policy space, market integration) • FAO SOFA 2021 (resilience, risk transmission) • FAO SOFA 2022 (digital agriculture, inclusion) • SOFI (affordability, inequality, diet costs) • FAO Food Outlook (global supply/demand, logistics) • OECD-FAO Agricultural Outlook (medium-term projections) • FAO Food Loss and Waste Platform (post-harvest losses) • CFS VGFSN (2021) • CFS-RAI • VGGT • HLPE Reports (CFS) HLPE 12, 13, 14, and 15 provide foundational analysis on FSN, food systems, and sustainability and should be referenced for consistency with existing CFS guidance. • FAO Agrifood Systems Transformation Framework (2023) Provides FAO's overarching framework on multiple pathways, enabling environments, and system-level drivers of FSN. • FAO/WHO Guiding Principles on Sustainable Healthy Diets (2019) Offers authoritative guidance on diet quality, nutrient adequacy, and food environments. • FAO SOCO 2024 Updates evidence on trade, market integration, and policy space relevant to FSN outcomes. • FAO Investment Centre / AgrInvest analyses Highlight the role of private investment, finance, and risk-sharing mechanisms in strengthening resilience and market functioning. These sources would strengthen the evidence base on markets, trade, and enabling environments and align the HLPE note with existing CFS policy instruments.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

Strengthening several dimensions would enhance their ability to generate actionable, evidence-based guidance. PSM finds the questions broadly useful but recommends strengthening them to ensure that future HLPE work produces practical, implementable guidance aligned with FAO's agrifood systems transformation framework. Several CEEI would benefit from additional questions that explicitly address market functioning, enabling environments, investment conditions, and risk-management tools, which FAO identifies as central determinants of food security and nutrition (FSN) outcomes.

FAO flagship reports — including SOFA 2021 (resilience), SOCO (trade and markets), SOFI (affordability), and the OECD-FAO Agricultural Outlook — consistently show that FSN outcomes depend on how policies, markets, and value chains interact. To reflect this evidence, PSM recommends adding the following cross-cutting questions:

Cross-cutting additions for all CEEI

- How does this issue affect market functioning, trade flows, logistics, and price formation?
- What enabling-environment reforms (regulatory, infrastructure, finance, digital connectivity) are needed to address this issue?
- What role can responsible private investment play in scaling solutions, in line with CFS-RAI and FAO's agrifood systems transformation guidance?
- What risk-management tools (insurance, storage, diversification, early warning systems) are relevant for mitigating impacts?
- How do economies of scale and investment requirements influence resilience, innovation, and access?
- How can policies ensure that SMEs and cooperatives can participate effectively in value chains?
- Linkages between trade, innovation, and diverse production systems How can trade, innovation, and different production models be leveraged together to strengthen FSN outcomes, including affordability, resilience, and access to diverse, nutritious foods?

These additions would help ensure that the HLPE report moves beyond diagnosis toward actionable policy levers. Throughout: PSM encourages placing greater emphasis on scale and impact in the questions. Rather than focusing primarily on identifying critical issues, the report could invite respondents to highlight concrete, evidence-based solutions that have demonstrated effectiveness at national or global level, beyond isolated or anecdotal examples. The analysis

would also benefit from shifting some attention from conceptual framing toward real-life bottlenecks, implementation challenges, and the trade-offs countries face, and exploring practical ways to address them. Throughout: PSM also sees value in integrating a clearer focus on financing and implementation pathways. Experience shows that even strong recommendations can face challenges when resources or follow-through are limited. To strengthen the practical relevance of the questions, it may be helpful to invite reflection on how CFS and its Members can mobilize the investments and accountability mechanisms needed to advance these priorities effectively.

Issue-specific additions

Issue 1 – Post-2030 Transformation

- How can public policy and private investment be aligned to scale sustainable practices, infrastructure, and innovation?
- What governance mechanisms can support coherence across agriculture, trade, environment, and nutrition?

Issue 2 – Climate Crises

- How can climate finance and risk-management instruments (insurance, guarantees, blended finance) crowd in private investment for adaptation?
- What incentives can accelerate adoption of climate-resilient technologies and diversified production systems?

Issue 3 – Rio Conventions

- How can implementation of the Rio Conventions be aligned with tenure security, livelihoods, and food access, in line with VGGT and CFS policy instruments?

Issue 4 – Geopolitical Uncertainty

- How do geopolitical shocks affect input markets, logistics, and trade flows, and what mechanisms can reduce volatility?

Issue 5 – International Trade

- Under what conditions does trade enhance FSN, and how can transparency, predictability, and rules-based systems be strengthened?

- How can countries avoid the negative FSN impacts of export restrictions, as documented in SOCO?

Issue 6 – Corporate Concentration

- How can policy frameworks promote competition, innovation, and investment, while recognizing the role of large firms in R&D, logistics, and digital infrastructure? How can constraints faced by SMEs and cooperatives be addressed to improve market participation?

Issue 7 – Digital Innovation and AI

- How can digital tools be governed to ensure inclusive access, data protection, and fair competition, while enabling investment and scale?
- What digital public goods and interoperability standards are needed?

Issue 8 – One Health

- How can One Health approaches strengthen biosecurity, food safety, and risk management across livestock and perishable value chains?

Issue 9 – Affordability of Healthy Diets

- What policies can reduce logistics costs, post-harvest losses, and market inefficiencies, which FAO identifies as major drivers of diet unaffordability?

Issue 10 – Agency

- How can governance processes ensure meaningful participation of all actors — including SMEs, cooperatives, and private sector service providers — in line with CFS’s multistakeholder mandate?

111. Civil Society and Indigenous Peoples' Mechanism (CSIPM)

Introduction

The Civil Society and Indigenous Peoples Mechanism (CSIPM) thanks the HLPE-FSN for publishing this fourth note on Critical, Emerging and Enduring Issues (CEEI) relating to food security and nutrition. The CSIPM brings together peasants, Indigenous Peoples, small-scale food producers, workers, women, youth, fisherfolk, pastoralists, urban food-insecure consumers, NGOs, and landless communities, all committed to a transformation towards equitable and sustainable food systems.

This V0 draft offers a good and well-documented overview of current issues, and the CSIPM believes its analytical architecture can be strengthened by identifying and naming the deep structural causes of global food insecurity. This submission aims to complement, nuance - and at times challenge - the report's orientations, offering additional perspectives grounded in the field realities of CSIPM constituents. It is submitted in a spirit of constructive dialogue to strengthen the analytical ambition of the report.

This is also an opportunity to recognise and value the important and rigorous work of the HLPE-FSN, which constitutes a critical and independent pillar of the CFS evidence base.

The current HLPE-FSN work would seem to focus mainly on producing reports that inform policy recommendations and guidelines. But the CSIPM believes that the HLPE has a critical and under-utilised role to play in informing the full spectrum of the CFS's work – including platform dialogues, peer-to-peer learning, coordinating global responses to emerging crises and, crucially, the monitoring, uptake, and dissemination of CFS policy instruments at national and sub-national levels. HLPE evidence should animate these processes, not merely be published and cited. Strengthening this broader function of the HLPE is essential if the CFS is to translate evidence into real-world change for the most food-insecure communities. This CEEI Note should serve as a basis for those broader discussions. Some of the issues presented in the note could be developed in the form of discussion guides for platform dialogues rather than full-scale reports for policy negotiations.

A cross-cutting principle underpins all CSIPM inputs: food security and nutrition ultimately depend on political decisions made by states – on the setting of priorities, the design of public policies, and the allocation of resources. The CFS must therefore focus not only on 'what' needs to change, but on 'why' it has not changed, and 'who' benefits from the current system. It must also have the capacity to identify issues or processes driven by corporate entities and incorporated into government agendas, so as to distinguish genuine collective priorities from specific private interests. Only then can the CEEI note support policies that truly serve the public interest.

Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food

The issues identified by the HLPE-FSN broadly and accurately describe the manifestations of a global food system in deep crisis. Hunger, malnutrition, ecological degradation, and conflict are all recognised as central challenges affecting food security and nutrition. The CSIPM submission commends the recognition that food system and nutrition

security and nutrition, globally and in specific contexts?

failures are systemic and multidimensional, that power inequalities and corporate concentration drive unacceptable outcomes, and that food systems are interdependent with nutrition, climate, livelihoods, health, and biodiversity.

The framing of both “emerging” and “enduring” issues is a welcome step forward, as it acknowledges that many of these challenges are not new or temporary, but reflect long-standing structural dynamics that require systemic and political responses rather than stand-alone technical fixes. The report’s emphasis on more integrated and coherent interventions, rather than siloed approaches, is also important, as it draws attention to the trade-offs and synergies across sectors, that are often shaped by underlying political and economic priorities.

While the report captures the symptoms of the crisis well, it does not sufficiently identify or confront the deeper structural drivers that produce these outcomes. Mass hunger and food insecurity are not the result of system malfunction; they are structural products of a global food system shaped by unequal power relations, historical and colonial dispossession, and deliberate policy choices. Categories such as “low-income food-import-dependent countries” are presented as descriptive realities, yet they are the result of decades of structural adjustment programmes imposed by the IMF and World Bank, which dismantled public agricultural support, weakened food self-sufficiency, and reoriented local economies towards export production for external markets.

Similarly, corporate power concentration is framed as a “power asymmetry to be corrected,” which risks understating its systemic nature. Corporate power concentration in food value chains is not a marginal distortion but a defining feature of contemporary food systems, reinforced through trade liberalisation, financialisation, and corporate influence over policy processes. While the report recognises unequal power relations in access to and control over resources, and inequities in global trading systems, it does not fully examine how these power structures constrain states’ policy space, undermine tenure security, and limit the scaling up of transformative approaches such as agroecology, territorial markets, Indigenous governance systems, and rights-based food policies. Treating issues such as climate change, biodiversity loss, land degradation, trade regimes, corporate

concentration, digitalisation, and community autonomy as discrete themes risks reproducing fragmentation and obscuring the power relations that bind them together.

These limitations are particularly evident in contexts of protracted crisis. In Sub-Saharan Africa, West Asia, and South Asia, food insecurity is not primarily driven by abstract “multiple crises,” but by concrete and enduring realities: sovereign debt that erodes public agricultural budgets, large-scale land grabbing by domestic and foreign investors including states, extractive economic models, foreign occupation, and armed conflicts **fueled** by geopolitical interests. While the report briefly refers to the “use of food as a weapon of war” and “deliberate starvation,” these practices require much deeper treatment as enduring and worsening issues affecting food security and nutrition. In situations of settler colonialism, foreign occupation, and prolonged conflict, the **weaponization** of food is systematic, intentional, and foreseeable, forming part of broader strategies of dispossession, control, and displacement. Addressing food security in these contexts cannot be divorced from questions of international law, accountability, and impunity.

The report’s call to move from reactive humanitarian responses to more proactive approaches is important, but this shift will remain limited unless it includes sustained support for the rehabilitation of local agricultural systems, restoration of food production capacities, and investment in food sovereignty. Emergency assistance, while essential, cannot substitute for long-term public policies that rebuild domestic food systems under conditions of justice and self-determination.

The report should not only describe existing issues but actively make visible the contrasting perspectives and alternative frameworks that challenge its underlying assumptions.

Finally, the effectiveness of the CFS itself is shaped by these same structural power relations. Food security and nutrition ultimately depend on political will, public priorities, institutional coordination, and the allocation of resources through state budgets determined with social participation by national rights-holders. As such, the issues addressed within the CFS framework should **prioritize** structural matters linked to power, governance, and accountability.

	This includes examining the active transfer of power from governments to private entities and how corporate-driven agendas are incorporated into governmental priorities and CFS processes, among other multilateral spaces, often presented as collective solutions despite limited public legitimacy. Strengthening the capacity of the CFS and the CSIPM to identify, debate, and challenge these dynamics – both in negotiations and through the CFS’s platform and accountability functions – is essential if the CFS is to move from descriptive analysis to transformative impact. In sum, while the identified issues largely reflect the most important challenges affecting food security and nutrition, the report would be significantly strengthened by more explicitly naming and addressing the structural, political, and economic drivers that sustain them – particularly power imbalances, corporate influence, conflict, and the erosion of multilateral and human rights frameworks.
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	CSIPM has identified five issues we would like to see added to or elaborated in the CEEI. These include 1) Food Sovereignty, 2) Financialization as a Hunger-Producing Machine, 3) Invisible Agricultural Labor, and 4) Colonial Legacies and Their Persistent Impacts on Food Systems 5) Accountability mechanisms and impunity in global food governance 2.1 Food Sovereignty: A Deliberately Omitted Concept The term "food sovereignty" does not appear once in the document despite being widely discussed, debated and recognized by literature as an analytical and as a transformative framework (Mark Edelman, 2014; Saturnino M. Borras, Jr. and Jennifer C. Franco, 2010; Raj Patel, 2009; Philip McMichael; Olivier De Schutter; the Nyéléni Declaration, 2007). This is not an oversight: it is an ideological choice with analytical consequences. Since its first presentation on the global scene in 1996, food sovereignty has offered a framework for understanding a crucial distinction that "food security" obscures: the difference between a country that eats what it imports and one that produces - in the first instance - to satisfy domestic needs'. A country can achieve food security metrics by importing Ukrainian wheat and Brazilian soy while remaining in a state of total structural dependence and absolute vulnerability to geopolitical and climate shocks. The absence of food sovereignty is particularly notable at a moment when many governments—especially in Africa, but

not only, are increasingly invoking the concept in response to growing dependency on imported food and agricultural inputs (ever present in the wake of the crisis on food systems due to the Strait of Hormuz failures). While these governmental framings often differ from the rights-based and people-centered understanding advanced by social movements and civil society, they nonetheless reflect a shared recognition that dependency-driven food systems are unsustainable. Engaging explicitly with food sovereignty (and the two main different interpretations of it) would therefore be timely and strategic, allowing the CFS to clarify and anchor the concept within its normative frameworks rather than leave it open to dilution, co-optation or interpretation leading to more nationalism, protectionism and autarchy. This is closely linked to the equally significant omission of seed sovereignty, which remains absent from the document despite its foundational role in shaping farmers' autonomy, resilience, biodiversity and local food cultures.

The United Nations Declaration on the Rights of Peasants (UNDROP, 2018) recognizes the Right to Seeds for peasant and rural workers (Article 19). The HLPE-FSN report should make it a central framework of analysis and transformation, not a concept to ignore.

References: La Via Campesina, Nyéléni Declaration, 2007; UNDROP, UN Resolution A/RES/73/165, 2018.

2.2 Financialization of food as a Hunger-Producing Machine

Since HLPE's 2011 report on price volatility, financial speculation on agricultural markets has exploded. Hedge funds and agricultural commodity ETFs create price spikes unrelated to actual harvests and plunge millions of families into food insecurity overnight. The 2022 price crisis, largely amplified by speculation surrounding the conflict in Ukraine, is the most recent example. Regulating the financialization of food markets is a direct lever against hunger. Its absence from the CEEI note is a major omission.

References: UNCTAD, Commodities and Development Report, 2022; Ghosh J., "The unnatural coupling: Food and global finance," Journal of Agrarian Change, 2010.

2.3 Invisible Agricultural Labor

Who produces the world's food? Together with family farmers, our food is produced by agricultural workers who are often migrants, often undocumented, often women, in conditions of exploitation documented by the ILO and dozens of human rights organizations. The cocoa sector in Côte d'Ivoire, the greenhouses of Almería in Spain, the tea plantations of Assam: the global food chain rests on invisible

super-exploitation. Agricultural wages and working conditions must be recognized as important determinants of food security, not marginal concerns.

References: ILO, World Employment and Social Outlook, 2022; FAO, The Status of Women in Agrifood Systems, 2023.

2.4 Colonial Legacies and Their Persistent Impacts on Food Systems

An enduring issue that merits explicit inclusion is the impact of colonial legacies and ongoing colonial political and economic structures on food systems, particularly for Indigenous Peoples. Contemporary food insecurity in many regions of the world cannot be separated from histories of dispossession, disruption of Indigenous Peoples' food systems, and legal and governance frameworks that continue to allow and prioritize extractivism and export-oriented agriculture over indigenous sovereignty and stewardship.

Indigenous Peoples have sustained diverse, climate-resilient food systems for millennia. Yet agrifood, conservation, carbon-offset and trade policies regularly marginalize Indigenous land governance, food economies and knowledge systems, while constraining self-determination and autonomy. Addressing food security without confronting these structural continuities risks perpetuating injustice and reinforcing structural issues within food systems.

Two issues essential to any analysis of FSN are insufficiently addressed: the right to water, and land grabbing by foreign investment funds. Where water and land are privatised or captured, millions of small-scale producers – particularly Indigenous Peoples and those dependent on family and subsistence farming – lose the productive capacity that underpins food availability and access. Such processes favour industrial production models and concentrate resources in the hands of a few, further monopolising food markets and reducing productive diversity.

2.5 Accountability mechanisms in food governance

The note does not fully address how national governance structures, and the overarching logic of market liberalization, determine whether CFS guidelines are meaningfully adopted or actively sidelined. The establishment of national food councils in various countries seeks to respond to concerns about transparency, conflict-of-interest safeguards, and the systematic exclusion of small-scale farmers, Indigenous Peoples, and civil society,

	mirroring patterns seen globally where consolidated corporate power limits democratic participation and weakens the domestic uptake of rights-based food policies. These national accountability gaps, however, cannot be separated from a broader crisis of accountability in the international system itself. The deliberate use of starvation as a weapon of war in Gaza — documented by UN Special Rapporteurs and the subject of ICJ proceedings — represents the most extreme current illustration of a structural failure in which international norms are selectively enforced and geopolitical interests consistently override legal and human rights obligations. The credibility of CFS instruments depends not only on national-level uptake but on an international system capable of enforcing accountability. Without binding mechanisms and genuine political will to hold states responsible for violations, these instruments risk remaining aspirational rather than operational.
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	Despite the HLPE’s intention to avoid creating silos, separating issues such as corporate concentration, trade, climate, and agency into distinct chapters risks obscuring the power relations that bind them together. Climate change, biodiversity loss, land degradation, trade regimes, corporate concentration, digitalization, and community agency are not parallel challenges; they are structurally interdependent. Separating the issue without making a clear link, gives the impression that each problem has its own technical solution. Yet these problems share a common root that the report fails to name: the subordination of food systems to the main driving logic of private and commercial profit. The CSIPM sees some important links between sections that we wish to highlight: Link 1 — The political economy of resource grabbing: (Sections 5, 6, and financialization): Corporate concentration, international trade, and the financialization of food markets are facets of the same prism – who controls food resources (land, water, seeds, data, financial markets) and who captures their value. Treating them separately without clarifying this link, obscures the conclusion that this control must be challenged, not merely better regulated. Link 2 — Debt as a food weapon: geopolitics/multiple crises + sovereign debt + adjustment policies. Many “geopolitical” food crises are not natural disasters; they are the product of decades of economic conditionality that have destroyed Southern states’ capacity to invest in food-producing agriculture. This causal should be part of the analysis.

	Link 3 — Gender as structure, not as category: autonomy + unpaid reproductive labor + women's access to resources. The report treats gender as a "cross-cutting dimension," which effectively renders it invisible in each section. Feminist political economy shows that women's unpaid labor in food systems constitutes an invisible subsidy that sustains the food security of hundreds of millions of households. (References: Silvia Federici; Bina Agarwal; Naila Kabeer; FAO). Link 4 - Climate change and Rio Conventions: We also recommend strengthening the link between Chapters 2 and 3, which address the closely related drivers of food insecurity, climate change, biodiversity loss and land degradation, could usefully be merged to strengthen the systemic analysis. Climate impacts cannot be separated from the ecological degradation and governance failures addressed under the Rio Conventions framework. Both chapters already converge on similar solutions: diversified and resilient production systems, tenure security, rights-based governance and the need to redirect harmful subsidies.
Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?	The drivers identified are real and important, but the deeper, political-economic drivers that produce and reproduce them — financialization, colonial structures, debt, corporate capture of governance, and resources are underrepresented.
Is there any aspect of direct or indirect FSN outcome that should be further elaborated?	- Women's unpaid labor constitutes the hidden infrastructure of food systems. Studies show that rural women provide between 60 and 80% of subsistence food production in several regions of Sub-Saharan Africa, in addition to domestic processing and care work. This labor is entirely absent from food security indicators. Policies that improve production statistics without alleviating this burden simultaneously exacerbate gender inequalities. - Furthermore, the intergenerational effects of malnutrition deserve greater attention. Research in nutritional epidemiology shows that food deprivation during the first 1,000 days of life has irreversible effects on cognitive abilities and adult health, thereby perpetuating poverty from generation to generation. - The degree of farmer autonomy versus external dependency, measuring the balance between on-farm resources — saved seeds, organic inputs, local

	knowledge — and purchased external inputs such as proprietary seeds, agrochemicals, and credit. Drawing on <i>the lived experiences of peasants, looking at the</i> autonomy/dependency continuum, captures a structural dimension of food system vulnerability that is entirely absent from the current framework: the extent to which farmers retain control over their own productive base, or are locked into relations of dependency that transfer value upward and undermine long-term food security. <i>References: FAO/IFAD/WFP, Gender and Food Systems, 2023; Agarwal B., A Field of One's Own, 1994; Victora CG et al., "Maternal and child under nutrition," The Lancet, 2008; van der Ploeg, 2008</i>
Is there any missing reference to key literature and data?	CSIPM recommends inclusion of the following references, absent from the V0 draft: • Bina Agarwal, <i>A Field of One's Own</i>, Cambridge, 1994 — seminal work on gender, land rights and food security in South Asia. • Bernstein H., <i>Class Dynamics of Agrarian Change</i>, Fernwood, 2010 — agrarian political economy, an indispensable tool for analyzing inequalities in food systems. • Murphy S. (IATP) works on the financialization of agricultural markets — absent despite speculation being identified as a factor in volatility. • La Via Campesina, <i>Nyéléni Declaration on Food Sovereignty</i>, 2007 — reference text of the global peasant movement. • Van der Ploeg J.D., <i>The New Peasantries</i>, Earthscan, 2008 — analysis of contemporary peasant dynamics. • Scoones I. <i>Sustainable Livelihoods and Rural Development</i>, 2015 • UNCTAD, <i>Trade and Development Report</i>, 2023 — on the impact of debt and trade policies on Southern countries. • Experiences of agrarian reform in Brazil (MST), Bolivia and Kerala — documented cases of the link between tenure security and food security.

Is the list of questions identified for each CEEI adequate to guide the development of a report on the topic? Would you suggest any additional questions or dimensions that should be further elaborated

The guiding questions proposed for each CEEI would benefit from being broadened to ensure the resulting report engages with the structural dimensions of each issue, and not only with their governance and regulatory modalities. The following are offered as complementary questions to strengthen the analytical scope of the report:

On corporate concentration: What evidence exists on the effectiveness of public and collective governance models for strategic food system resources including seeds, patents, and agricultural data in advancing food security and nutrition outcomes, and what enabling conditions determine their viability?

On international trade: Under what policy and institutional conditions do multilateral trade rules constrain the capacity of lower-income countries to maintain or develop domestic food production systems, and what policy space reforms would best support food security and nutrition objectives?

On climate change: What does the available evidence show regarding the differentiated responsibilities of large-scale agro-industrial actors for food system emissions, and what accountability frameworks, including binding instruments, have demonstrated effectiveness in translating corporate responsibility into measurable FSN outcomes?

On geopolitics and multiple crises: What is the evidence on the long-term FSN impacts of international food aid modalities, and under what conditions do humanitarian interventions support, or inadvertently undermine, the rehabilitation of local food production capacities and food sovereignty?

On autonomy: What changes in property rights over land, seeds and water are necessary for peasant and Indigenous Peoples autonomy to be real rather than merely formal?

Reflections on Contributions by Section

Section 1: Post-2030 Food System Transformation

Q. i: Do the drivers and trends fully capture the link to food security and nutrition?

The HLPE's recognition that food system failures are systemic rather than sectoral is welcome, as is the acknowledgement that power inequalities, corporate concentration, and governance failures drive poor FSN outcomes. However, the section does not sufficiently critique export-oriented agricultural models and the promotion of capital accumulation over people's right to culturally appropriate, safe, and nutritious food.

Neoliberal policy frameworks – market liberalization, deregulation, financialization – and how they constrain governments' capacity to pursue FSN objectives must be explicitly acknowledged.

Without confronting colonial power structures, capital accumulation, and corporate capture, food system transformation risks remaining technocratic. Rural development must move beyond standardized, technocratic solutions and instead engage with diverse, context-specific livelihood strategies shaped by local knowledge, institutions, and power relations.

The report itself acknowledges that "synergies and trade-offs reflect underlying political priorities and power asymmetries, rather than neutral technical assessments" (p.5). This fundamental recognition should more fully structure the analysis of drivers, placing power relations at the center rather than in an annex.

Q. ii: Are there aspects of direct or indirect FSN outcomes to develop further?

CSIPM identifies two insufficiently developed dimensions:

The impact of sovereign debts on Southern states' agricultural investment and social protection capacity. The budgetary constraint imposed by external debt servicing directly deprives these states of the resources needed to invest in national food systems. This structural mechanism is more determinative of food security than any price volatility indicator.

The role of local and informal food systems. In many Southern contexts, informal food markets and community food systems provide bulk food access for vulnerable populations. **These systems remain largely invisible to the report's standard indicators.**

Q. iii: Missing bibliographic references?

The CSIPM recommends integrating:

- Bernstein H., *Class Dynamics of Agrarian Change*, 2010.
- Araghi F., "Global Depeasantization," *The Sociological Quarterly*, 1995.
- Akram-Lodhi A.H. and Kay C. (eds), *Peasants and Globalization*, Routledge, 2009.

Q. iv: Are the proposed questions adequate?

The text's proposals of integrated policies, subsidy reform, and inclusive governance are technically correct but analytically insufficient for three reasons:

- a) Policy integration without transformation of political priorities is meaningless. The report itself admits the problem is political, yet its solutions are purely technical proposals.
- b) "Inclusive governance" within an unequal framework reproduces inequality. Proposing inclusive governance mechanisms without transforming the power dynamics structuring those mechanisms amounts to inviting foxes to co-manage the henhouse more transparently.
- c) Subsidy reform runs up against political capture. Proposing to "redirect subsidies" is correct in principle. But the report does not explain why this has not been done despite 30 years of similar recommendations.

Section 2: Food Security and Climate Crises

Q. i: Do drivers and trends fully capture the link to food security?

Section 2 provides an excellent description of climate impacts on food but remains very insufficient on causes. Industrial agriculture and agro-industrial firms are responsible for one-third of global GHG emissions (cited p.5), yet no radical conclusions are drawn about the necessity of a break with the agro-industrial model.

The CSIPM also highlights that climate vulnerability dynamics are not socially neutral in their distribution: it is peasant agriculture, indigenous communities and rural women who bear the full brunt of climate impacts, while being least responsible for emissions and least endowed with adaptation resources.

Q. ii: Are there aspects to develop further?

CSIPM recommends developing the following:

Differentiated climate responsibility and climate debt. The report cites the fact that the 10 countries most affected by hunger account for only 0.08% of global emissions (p.8). This is a striking statistic, but the proposal that follows "adaptation, climate finance, resilience" does not draw the obvious political conclusion: rich countries have a climate debt to poor countries that far exceed existing voluntary mechanisms.

The capture of climate finance. Existing mechanisms (Green Climate Fund, GEF) are massively captured by intermediary states and large Northern NGOs, with "bankability" requirements that structurally exclude small producers and indigenous communities.

Q. iii: Missing bibliographic references?

The CSIPM recommends:

- Leach M. et al., *Dynamic Sustainabilities*, Earthscan, 2010.
- GRAIN, *Many Small Farms Feed the World*, 2014.
- Malm A., *Fossil Capital*, Verso, 2016.

Q. iv: Are the proposed questions adequate?

The report presents agroecology as one technical option among others. It does not say that large-scale agroecology is fundamentally incompatible with the model of large industrial farms oriented toward export. Agroecology "managed" by Bayer or Syngenta is not peasant agroecology.

The CSIPM recommends adding the following question: "What binding corporate accountability mechanisms for agro-industrial firms' GHG emissions could be established at the international level, and how can the CFS contribute to promoting them?"

Section 3: The Three Rio Conventions

Q. i: Do the drivers and trends fully capture the link to food security?

Section 3 provides a solid analytical framework on the interconnections between the three Rio Conventions and food security. CSIPM particularly supports the positioning of the right to food as a unifying framework and the central importance accorded to tenure security.

However, the report underestimates the conflictual dimension of Rio Convention implementation. Climate mitigation policies can be instrumentalized to create carbon offset markets for corporate benefit, while agricultural policies continue to subsidize emitting agro-industries. This is not incoherence; it is coherence with dominant interests.

Q. ii: Are there aspects of FSN outcomes to develop further?

CSIPM identifies a major gap: the differentiated impact of ecosystem conservation and restoration policies on communities that directly depend on them. Carbon sequestration or biodiversity conservation projects that restrict access to common resources can directly threaten the food security of peasant and indigenous communities, even if they meet the environmental objectives of the Conventions.

This dimension, mentioned in the report through the example of reforestation projects, should be further developed as a systemic risk inherent to Convention implementation without adequate rights-based safeguards.

Q. iii: Missing bibliographic references?

The CSIPM recommends:

- Kashwan P., *Democracy in the Woods*, Oxford UP, 2017.
- Borras S. Jr. et al., *Land Grabbing and Global Governance*, Routledge, 2012.
- Sikor T. & Lund C., "Access and Property," *Development and Change*, 2009.

Q. iii: Are the proposed questions adequate?

The VGGT are voluntary: that is their fundamental limitation. The report relies heavily on the VGGT as a reference framework. But the VGGT are, by definition, voluntary guidelines. In a context where states are under pressure from international land investors, their implementation remains largely cosmetic. Proposing to "operationalize" a non-binding instrument without proposing to make it bind is a self-refuting proposition.

FPIC (Free, Prior and Informed Consent) without a real right of veto is insufficient. In current international practice, FPIC is interpreted as a consultation process, not as a right of veto. Indigenous Peoples can be "consulted" and their objections ignored.

The CSIPM recommends adding the following question: "What legal and institutional modalities would be needed to make the VGGT binding, and how can the CFS advocate for this in international negotiations?"

Section 4: Geopolitical Uncertainty and Multiple Crises

Q. i: Do the drivers and trends fully capture the link to food security?

Section 4 offers a solid analysis of the mechanisms by which geopolitical uncertainty affects food security, notably through the concept of polycrises. The causes of armed conflicts by treating them as technically manageable disasters rather than political phenomena with identifiable actors responsible for them.

The conflicts in Sub-Saharan Africa and the Middle East that cause the most severe food crises are directly linked to the geopolitical and economic interests of external powers that the CFS, by its very structure, cannot name without politically disintegrating. This institutional limitation should be acknowledged rather than ignored.

Q. ii: Are there aspects of FSN outcomes to develop further?

The CSIPM recommends developing the analysis of food aid as an instrument of dependency. International food aid policies, notably in-kind food aid programs can perpetuate food dependencies in recipient countries rather than strengthening their local productive capacities. This critical dimension of humanitarian aid is absent from the report.

Furthermore, the role of food price volatility as a trigger for sociopolitical unrest deserves further development. The endogenous relationship between food insecurity and political instability is recognized in the report but insufficiently analyzed in its causal mechanisms.

Q. iii: Missing bibliographic references?

The CSIPM recommends:

- Patel R. & McMichael P., "A Political Economy of the Food Riot," *Review*, 2009.
- Clapp J., *Hunger in the Balance*, Cornell UP, 2012.
- Bush R., "Food Riots: The New Famine," *Global Change, Peace & Security*, 2010.

Q. iv: Are the proposed questions adequate?

The "triple nexus" depoliticizes the causes of conflicts. The humanitarian-peace-development concept treats armed conflicts as natural disasters to be technically managed. It obscures the question of who finances conflicts, who sells the weapons, and what economic interests they serve.

Proactive action without addressing structural causes remains insufficient. Proposing to "predict and prevent food security impacts" via early warning systems treats the symptom. The structural question is: why are some countries chronically in a state of food fragility despite decades of humanitarian aid?

Section 5: International Trade

Q. i: Do the drivers and trends fully capture the link to food security?

Section 5 describes trade inequalities without connecting them to colonial history and the international division of labor. "Low-income food-import-dependent countries" are presented as a neutral structural fact, whereas they are the product of structural adjustment policies imposed by the IMF and World Bank since the 1980s, which destroyed local subsistence agriculture.

The CSIPM also underlines the importance of analyzing value extraction mechanisms from South to North through global food trade. Unfavorable terms of trade for Southern producers, non-tariff barriers disguised as sanitary standards, and massive subsidies to Northern industrial agriculture constitute resource transfer mechanisms that the report does not explicitly name.

The topic should be expanded to cover the impacts of international trade on territorial food systems/markets, as suggested in the CFS policy recommendations on 'Connecting Smallholders to Markets'. It should include measures by which territorial food systems can be defended, such as market regulation and food stocks. A link could be made with the topic proposed by Panama regarding addressing the unequal division of value along the value chains, and ensuring fair prices for small-scale producers.

Q. ii: Are there aspects to develop further?

The role of bilateral free trade agreements deserves specific attention. These agreements, often negotiated outside the WTO multilateral framework, frequently include investor protection clauses (ISDS) that can constrain states' regulatory capacity in food policy matters. The weakening of national policy space to regulate food systems is a direct threat to food security.

Q. iii: Missing bibliographic references?

The CSIPM recommends:

- Clapp J., *Food* (2nd ed.), Polity Press, 2016.
- McMichael P., *Food Regimes and Agrarian Questions*, Fernwood, 2013.
- Bello W., *The Food Wars*, Verso, 2009.

Q. iv: Are the proposed questions adequate?

Codex Alimentarius reform without addressing its corporate capture is insufficient. Extensive research documents the capture of Codex by agro-industrial lobbies in standard-setting. Proposing to strengthen a captured instrument without addressing the capture itself reproduces the problem at greater scale.

The "food security box" is a proposal blocked for 20 years. It was proposed by India and other developing countries since the WTO's Doha round. It has been blocked for two decades precisely by wealthy nations. Reintroducing it without analyzing the power dynamics that have blocked it is a symbolic gesture.

The CSIPM recommends adding the question: "How do bilateral trade agreements and ISDS clauses limit governments' policy space to regulate their food systems in the interest of food security, and what reforms could restore this regulatory capacity?"

Section 6: Corporate Concentration

Q. i: Do the drivers and trends fully capture the link to food security?

Section 6 correctly identifies "power asymmetries" and "corporate concentration" as problems but treats them as technical variables to be corrected rather than as structural contradictions inherent

to agrarian capitalism. The repeated use of the term "policy coherence" implicitly assumes that states and multinationals share the same fundamental interests.

Q. ii: Are there aspects to develop further?

The contradiction between private ownership of the means of food production and the right to food is not addressed. Section 6 lists the harm caused by large firms while only proposing regulations and "safeguards," without ever questioning property rights over seeds, land or value chains.

The political influence of large corporations on food governance itself, including on the CFS, should be addressed explicitly. Institutional capture is mentioned in passing without drawing implications for CFS governance reform. Proposals for adequate Col mechanisms should be addressed.

Q. iii: Missing bibliographic references?

The CSIPM recommends:

- Howard P.H., *Concentration and Power in the Food System*, Bloomsbury, 2016.
- ETC Group, *Who Controls the Food System?* annual reports.
- Clapp J. & Isakson S.R., *Speculative Harvests*, Fernwood, 2018.

Q. iv: Are the proposed questions adequate?

Competition policy cannot solve what is allowed. Current concentration in the seed, agrochemical and food sectors was built precisely with the approval of competition authorities that authorized the mergers (Bayer-Monsanto, ChemChina-Syngenta, etc.). Proposing to better use the same institutional instruments that made this concentration possible implies an unanalyzed paradigm shift.

The absence of proposals for dismantling or nationalization is striking. Faced with concentration where four firms control 50–60% of the global seed market, the range of proposed policies runs from transparency to antitrust regulation. The question of dismantling oligopolies or placing strategic resources (seeds, genetic data, patents) in common as global public goods is never raised.

Section 7: AI and Digital Innovations

Q. i: Do the drivers and trends fully capture the link to food security?

Section 7 acknowledges the risks but remains fundamentally within a "good governance" framework for AI. It does not ask the fundamental question: who owns the agricultural data collected by digital platforms? Who captures the value created by the digitalization of agriculture? The section identifies "platform concentration" without proposing the nationalization or pooling of agricultural digital infrastructure.

Q. ii: Are there aspects to develop further?

CSIPM recommends developing the analysis of digital surveillance in conflict zones. The proposal to use "remote sensing, mobile phones and machine learning" to monitor food crises raises an

unasked ethical question: who controls this data? Its collection in conflict zones can serve military and security interests that directly contradict the protection of populations.

Furthermore, the impact of AI-based food recommendation systems on consumers' dietary choices should be further developed. These systems, deployed by dominant platforms, can massively steer consumption toward ultra-processed foods at the expense of healthy eating.

Q. iii: Missing bibliographic references?

The CSIPM recommends:

- Zuboff S., *The Age of Surveillance Capitalism*, PublicAffairs, 2019.
- Morozov E., *To Save Everything, Click Here*, PublicAffairs, 2013.
- GRAIN, *Digital Control: How Big Tech Moves into Food and Farming*, 2021.

Q. iv: Are the proposed questions adequate?

"Public digital infrastructure" without funding or binding mandate is insufficient. In the current context of budgetary constraints in Southern countries and the dominance of private Northern platforms, this proposal is disconnected from fiscal and political realities.

"Ethical AI" is a co-opted concept. This concept has been widely appropriated by large technology firms themselves (Google, Microsoft, Meta all have ethical AI charters) precisely to avoid binding regulation. Calling for "ethical AI principles" without proposing binding regulation with enforcement mechanisms reproduces this self-regulation model.

The "digital divide" treated as a technical rather than a power dynamic problem is reductive. The question is not simply access to technology but control over it and over the value it generates.

Section 8: Affordability of Healthy Diets

Q. i: Do drivers and trends fully capture the link to food security?

Section 8 provides a solid analysis of the financial affordability of healthy diets, with important data on the evolution of the Cost of a Healthy Diet (CoHD). However, the analysis of supply-side determinants remains insufficiently attentive to power dynamics in food value chains. The affordability crises is a symptom of a broader unequal economic system that produces vulnerabilities and hugely affect low income and marginalised populations in accessing nutritious food. Therefore, the discussion on affordability of healthy diets should indeed take into account structural economic inequalities including poor living wages, lack of social protection and employment challenges among other issues

The section addresses price volatility without sufficiently covering financialization. The main development since 2011 has been the explosion of financialization of agricultural commodity markets, hedge funds, agricultural ETFs, and futures markets used as financial instruments disconnected from real production. The report mentions "speculation" only in passing (p.33) without proposing the regulation of financial markets for agricultural commodities, which is nonetheless the most direct lever for reducing price volatility.

We critically need to discuss in depth the proliferation of unhealthy foods and diets and the increasing reliance on ultra-processed foods that are displacing freshly prepared and minimally processed foods. The industrial food system has and continues to play a huge role in determining and shaping what is available and affordable. Policies and regulations that prioritise high-calories, low nutrient crops; subsidisation for producers for commercial inputs, price subsidies, and trade policies and market interventions, that favor export-oriented crops and processed foods and the increased marketing and influence of highly processed, energy dense foods by corporations with minimal regulation, have resulted in the widespread of unhealthy diets to the detriment of health and environment. As a result, while many foods may be available in markets, healthy and sustainable diets that are; produced in harmony with nature and culture, respect and contribute to the realisation of peasants' and workers' rights, guarantee livelihoods and contribute to overall social justice, are often inaccessible or unaffordable to majority of populations compared to unhealthy foods and diets.

Q. ii: Are there aspects to develop further?

CSIPM recommends developing the analysis of agricultural minimum wages and food workers' rights as determinants of food affordability. Affordability of healthy food is fundamentally linked to wage levels. Policies of labor market deregulation in the agricultural sector, which keep wages at subsistence levels, are a structural factor of food insecurity that is insufficiently analyzed.

Q. iii: Missing bibliographic references?

- Patel R., *Stuffed and Starved*, Black Inc., 2007.
- Scrinis G., *Nutritionism*, Columbia UP, 2013.
- Winson A., *The Industrial Diet*, UBC Press, 2013.

Q. iv: Are the proposed questions adequate?

Social transfers without structural transformation treat food poverty as a problem of insufficient income rather than as the result of an economic structure that maintains billions of people at income levels incompatible with healthy eating. This is a legitimate short-term response but insufficient as a structural framework.

The CSIPM recommends adding the question: "What regulatory mechanisms for financial markets in agricultural commodities could reduce speculation-driven price volatility, and what role can the CFS play in promoting them?"

Section 9: Agency for Food Security and Nutrition

Q. i: Do drivers and trends fully capture the link to food security?

Agency was introduced by the HLPE as one of the pillars of food security and the inclusion of the concept of "agency" in the Note is very important.

However, its definition remains fundamentally liberal: it refers to the individual or collective capacity to make choices without analyzing the material conditions that make those choices

possible or impossible. Yet autonomy without transformation of property relations is a formal freedom without real substance.

A small, indebted farmer facing Cargill has no "agency," regardless of the quality of governance policies. Real agency presupposes specific material conditions: secure access to land, water and seeds; limited autonomy from external inputs controlled by oligopolies; capacity to access non-monopolistic markets.

Q. ii: Are there aspects to develop further?

The CSIPM recommends developing the collective dimension of autonomy through analysis of peasant social movements and producer organizations as vectors of collective empowerment. Agricultural cooperatives, producer associations and peasant movements constitute forms of collective organization that genuinely strengthen autonomy against market forces.

Furthermore, the relationship between food autonomy and food sovereignty merits explicit articulation. The individual and collective autonomy of food system actors can only be fully exercised if states and communities possess the sovereignty needed to define their own food policies.

Q. iii: Missing bibliographic references?

The CSIPM recommends:

- Sen A., *Development as Freedom*, Oxford UP, 1999.
- Nussbaum M., *Creating Capabilities*, Belknap Press, 2011.
- Agarwal B., *A Field of One's Own*, Cambridge UP, 1994.
- La Via Campesina, *Maputo Declaration*, 2008.
- Van der Ploeg

Q. iv: Are the proposed questions adequate?

The five questions proposed in section 10 of the report are relevant but insufficient. They focus on defining, measuring and strengthening agency without questioning the structural obstacles that make it impossible for most food system actors.

The CSIPM recommends adding the following questions:

- What property rights over land, seeds and natural resources are necessary for the autonomy of peasant and indigenous communities to be real rather than formal?
- How do peasant social movements and producer organizations contribute to strengthening collective autonomy against dominant market forces?
- What mechanisms to protect the rights of agricultural workers notably migrant workers and women are necessary to guarantee their autonomy within food systems?

Conclusion

The CSIPM acknowledges the HLPE-FSN CEEI Note as a serious and well-developed note that offers an honest assessment of the dysfunctions of the global food system. However, its proposals assume that the identified problems are governance failures correctable through better policies, rather than structural contradictions between fundamentally antagonistic interests.

CSIPM calls on the HLPE-FSN to:

- Integrate food sovereignty as a central analytical framework.
- Explicitly name the mechanisms of financialization of food markets and propose their regulation.
- Make invisible agricultural workers and their conditions visible as determinants of food security.
- Recognize colonial legacies as structural factors of contemporary food insecurity.
- Propose binding accountability mechanisms for agro-industrial corporations.
- Question property rights over strategic food system resources as a condition of real transformation.

These contributions are submitted in a spirit of dialogue and collective strengthening of the report's analytical architecture, so that it may be commensurate with the global food crisis it documents.

112. Civil Society and Indigenous Peoples' Mechanism (CSIPM) – North America Subregional, Canada

Surname	Smith
First name	Celeste
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of an organization
Current institution/organization	CSIPM North America subregional articulation
Country	Canada

Comments -

My top 5 picks among the proposed issues are 2, 3, 5, 6, and 7.

#6 - Corporate Concentration could be combined under the title “**Financialization of Food Systems**” so that the root causes can be addressed and the discussion can be expanded. The NFU has this as a priority in our ongoing efforts - land financialization being key.

Financialization of Food Systems (Beyond Corporate Concentration)

The document touches on this under Issue 6, but it deserves its own treatment. This includes:

- **Commodity speculation** — financial instruments and algorithmic trading are driving food price volatility disconnected from actual supply/demand fundamentals

- **Land as an asset class** — pension funds, sovereign wealth funds, and private equity are buying agricultural land globally, driving up costs for smallholders and displacing communities
- **Carbon and biodiversity credit markets** are displacing food production land, particularly in the Global South, with Indigenous and smallholder farmers bearing disproportionate costs
- **Debt-for-nature swaps** — increasingly used in climate finance but with poorly understood implications for food sovereignty
- **Insurance and risk markets** — the growing role of parametric insurance and financial risk tools in shaping who can afford to farm under climate stress

The key distinction from Issue 6 is that financialization is about **financial capital reshaping food systems**, not just corporate market power.

How it affects us on the ground, examples: NA Context:

- The document notes the top 4 firms control **50-60% of the global seed market** — this is felt daily by US and Canadian corn, soy, and canola farmers through seed pricing, licensing restrictions, and contractual obligations
- **Meatpacking concentration** — the top 4 beef packers control roughly 85% of US beef processing; the COVID-19 pandemic exposed how this concentration creates catastrophic vulnerability when even one plant closes
- **Grain trading** — the ABCD companies (ADM, Bunge, Cargill, Louis Dreyfus) dominate North American grain handling and export infrastructure, limiting farmer bargaining power
- **Retail concentration** — Walmart, Costco, Kroger, and a handful of others dominate grocery retail, exercising enormous buyer power that compresses margins throughout the supply chain
- **Platform concentration** — John Deere's data ownership model, where farmers generate agronomic data that Deere owns and monetizes, is a cutting-edge example of digital corporate concentration directly affecting North American farmers
- **The Right to Repair movement** among North American farmers is a direct manifestation of this issue — farmers cannot fix their own equipment without the manufacturer's permission

What's missing from the document?

My main concern? Water Security and Food Systems

Water (Security, Sovereignty) as a separate, critical NA issue:

Water is remarkably absent from this document despite being perhaps the most immediate physical constraint on food production. Missing dimensions include:

- Groundwater depletion — many of the world's most productive agricultural regions (India, US Great Plains, Middle East, North China Plain) are drawing down fossil aquifers at unsustainable rates
- Transboundary water conflicts — rivers shared between nations (Nile, Mekong, Indus, Colorado) are becoming sites of geopolitical tension, directly affecting food security
- Virtual water trade — countries effectively exporting water through food exports, depleting local water resources
- Water privatization — the commodification of water access disproportionately affects smallholders and marginalized communities
- Blue food systems — freshwater fisheries and aquatic food systems are severely understudied relative to their contribution to food and nutrition security, especially in Asia and Africa
- Water quality — agricultural runoff, chemical contamination, and microplastics in water systems affecting food safety and nutrition

This is a glaring omission given that water stress is projected to affect over 5 billion people by 2050.

The core argument for the HLPE-FSN submission:

Water security is not a sub-topic of climate adaptation — it is a distinct, urgent, and irreversible FSN crisis in North America that operates on a different timescale than most climate impacts. Climate change is probabilistic and gradual. Aquifer depletion is arithmetic and certain. The Ogallala will not recover in any human timescale regardless of what happens to global temperatures.

The five most critical governance gaps the HLPE-FSN draft note misses:

Transboundary water law reform. The Colorado River Compact, the Boundary Waters Treaty, and the Great Lakes Compact were all designed for a wetter climate. None have been updated for a post-climate-change hydrology. There is no international FSN framework that touches this.

Virtual water accounting in trade. When the US exports a tonne of wheat, it exports approximately 1,000 litres of embedded water — water that came, in many cases, from a fossil aquifer that will never recharge. This is an invisible subsidy to food-importing nations paid by the irreversible degradation of a non-renewable resource, and it is completely absent from trade and food security frameworks.

Just transition for farmers losing water. When the Texas Panhandle loses its last economically viable irrigation water — which is now a matter of when, not if — there is no international or domestic framework for what happens to those farming communities. The coal community transition analogy is imperfect but instructive: the water transition will affect more people, over a larger geography, with fewer alternative livelihoods nearby.

Indigenous water rights. Treaty-protected rights to specific water bodies and species — the Anishinaabe manoomin (wild rice) rights in the Great Lakes, Pacific salmon rights across the

Northwest, water rights in the Colorado basin — are legally distinct from general land tenure rights and require specific treatment in FSN frameworks. The HLPE-FSN note's treatment of Indigenous rights is entirely framed around VGGT land tenure, which does not capture these dimensions.

Aquifer exhaustion as a food system tipping point. The draft note addresses climate tipping points but not hydrological tipping points. Aquifer exhaustion is not a gradual decline — it is a step-change. When a well hits bedrock, the crop stops growing that season. That is a qualitatively different risk profile from gradual warming, and FSN early warning and anticipatory governance frameworks are not designed for it.

Global context?

The Era of "Global Water Bankruptcy"

While "water stress" is a common term, 2026 marks the formal shift into what scientists now call [Global Water Bankruptcy](#).

- **Irreversibility:** Unlike a drought, which is a temporary shock, "bankruptcy" refers to basins and aquifers (like the Ogallala in the US or the North China Plain) where use has surpassed a tipping point from which they cannot naturally recover.
- **Post-Crisis Management:** Governance is shifting from "saving water" to "insolvency management"—deciding which sectors (agriculture vs. urban vs. industry) will be permanently cut off as hydrological baselines fail.

What are the Structural / Systemic Gaps in the Document?

- **Food as a commons vs. commodity** — the tension between treating food as a human right and treating it as a tradeable commodity runs through the document but is never directly addressed as its own issue.
- **Debt, structural adjustment, and fiscal austerity** — IMF conditionalities and sovereign debt crises are forcing countries to cut food subsidies and social protection exactly when they are most needed. This political economy dimension is largely absent.
- **Militarization and arms spending** vs. food system investment — countries facing food insecurity are also often high military spenders or recipients of military aid; this trade-off is never raised.
- **Diaspora and migrant food insecurity** — people displaced across borders face unique and poorly documented food insecurity dynamics not covered under the conflict or trade sections.

113. Humundi, Belgium

Surname	François
First name	Grenade
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Advocacy Manager
Current institution/organization	Humundi
Country	Belgium
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	as the order is not a prioritization, it seems good to me
All the issues are interlinked, however, for the purpose of analysis and focus, they have been presented separately. Please let us know if, in your view, some of the issues could be combined, or if the linkages between different issues should be further strengthened in the analysis.	I would rather focus on Rio conventions and see the climate as an import sub-point of it, rather than a different issue.

Share your inputs on one or more of the ten CEEI listed. Are the drivers and trends identified fully capturing the link of each respective CEEI with food security and nutrition (FSN) outcomes?

Rio conventions : in terms of policy response, there is a strong focus on land tenure. For us it is clearly an important condition but not a sufficient one. There should be a specific focus on agroecology and its recognized principles to transform food systems in a way to fulfill the goals of the Rio Convention and the Right to food. This key solution is fundamental but is lacking in your draft. There should be a key question about it : How can agroecology and its principles be operationalised within the UNFCCC, CBD and UNCCD frameworks?

See : <https://www.humundi.org/articles/reconnaissance-agroecologie-dans-les-conventions-de-rio/>

Trade :

- Concerning the uneven playing field : It also remains uneven because the developing countries are lacking policy space in the WTO negotiations (and asking for more). Highly subsidies countries distort the market, but on the other hand developing countries are unable to put up tariffs barriers to protect themselves.

- On the para on the evolution of the rules-based trade order : We have to mention the blockade of the Doha round for development because this remains the main demand for many developing countries (like the African group). The tone here is pretty neutral and omits to point out North countries responsibilities in this impasse because it heavily impacts food security in developing countries.

- Mention of strategic grain reserves; dedicated to short term, emergency issues, a few days of consumption (for instance the ECOWAS food reserve). The draft should also mention buffer stock = more important stock, capacity to influence international markets by storing/releasing quantity of grains. At least, the two type should be distinguished. See : <https://www.humundi.org/articles/programmes-de-stocks-publics-alimentaires-et-omc/>

Is there any aspect of direct or indirect FSN outcome that should be further elaborated?

The impacts of ODA cuts on Food security and nutrition

114. Christopher Knight

Surname	Knight
First name	Christopher
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Planetary Health Postdoctoral Scholar
Current institution/organization	Stanford University, jointly sponsored by London School of Hygiene & Tropical Medicine
Country	United States of America
Share your feedback on the proposed list of selected critical, emerging and enduring issues (CEEI). Are the issues identified by the HLPE-FSN the most important issues affecting food security and nutrition, globally and in specific contexts?	The ten issues are well chosen. However, food safety could receive more attention in the draft. Given that unsafe food causes illness in an estimated 600 million people and 420,000 deaths annually (WHO, 2015), and that climate change will intensify these hazards, food safety warrants treatment as a cross-cutting concern linking CEEI #2 (climate crises), #8 (One Health), #9 (affordability), and #10 (agency).
Are there any other key issues that should be added and elaborated? If yes, please provide a justification of why they are “critical”, together with relevant literature and data.	Food safety should be elevated as a cross-cutting dimension across the note. The current global governance frameworks for food safety, the WHO Global Strategy and the Codex Alimentarius, are voluntary and lack dedicated funding or binding enforcement. Many low- and middle-income countries lack the infrastructure to implement them, and climate change is compounding the problem by increasing risks (FAO, 2020; UNEP and FAO, 2022). The right to adequate food is recognized in international law, but access to safe food is not explicitly guaranteed (Knight et al., 2025). Closing this gap will require reprioritizing resource flows from high-income to low- and middle-income countries, investing in cold storage, surveillance capacity, and ensuring that interventions are designed around culturally relevant food systems.
Is there any missing reference to key literature and data?	Knight, C. J., Burnham, T. L. U., Crowder, L. B., Eurich, J. G., Franz, N., Golden, C. D., & Micheli, F. (2025). Safe food: A human right amid climate change. <i>Science</i>, 389(6757), 1099. FAO. (2020). Climate Change: Unpacking the Burden on Food Safety. UNEP and FAO. 2022. Sustainable food cold chains: Opportunities, challenges and the way forward. Nairobi, UNEP and Rome, FAO.