



HLPE
*High Level
Panel of Experts*

The background of the lower half of the page is a photograph showing a variety of food items. There are several white bags filled with different types of grains or seeds. Next to them are several bowls containing various food items, including black seeds, orange-colored round items, and green items. A person's hand is visible in the bottom right corner, holding a green bag. The text 'PROCEEDINGS' is overlaid on this image in a large, bold, blue font.

PROCEEDINGS

HLPE-FSN Report on Preserving, strengthening and promoting Indigenous Peoples' food and knowledge systems and traditional practices for sustainable food systems

COLLECTION OF CONTRIBUTIONS RECEIVED

19 June 2026

Background

The High Level Panel of Experts on Food Security and Nutrition (HLPE-FSN) of the Committee on World Food Security (CFS) is developing a report on Preserving, strengthening and promoting Indigenous Peoples' food and knowledge systems and traditional practices for sustainable food systems.

As part of the note development process, the HLPE-FSN invites members and participants of CFS as well as the broader public to provide input, suggestions, and comments through an e-consultation on the [first draft of the note](#) (V0 draft).

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 15 May 2026 and closed on 26 June 2026.

The HLPE-FSN Secretariat has received **57 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 18 countries, namely Argentina, Australia, Cambodia, Canada, Egypt, Japan, México, New Zealand, Nigeria, Panama, Paraguay, Philippines, South Africa, Tunisia, Tuvalu, Uganda, United Kingdom of Great Britain and Northern Ireland and United Republic of Tanzania.

The results of this consultation will be used by the HLPE-FSN to elaborate the report. 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: 57**

 **Countries: 18**

 **Contributions on behalf of a team/organization: 27**

Table of Contents

Guiding questions	7
Contributions	8
1. International Institute of Tropical Agriculture, Nigeria	8
2. Snehal Athawale	8
3. University of Auckland, New Zealand	11
4. Mukhtar Sulaiman	12
5. John Affiku	13
6. Roger BB Leakey.....	13
7. Hamid Reza Mojtavavi	16
8. Marco Alberto Nanfouet	29
9. Instituto Nacional de Investigaciones Nucleares, México	31
10. Moammar Dayoub.....	32
11. Oscar Ortiz.....	34
12. Center for Food and Adequate Living Rights (CEFROHT), Uganda	35
13. Malk Ibrahim Elbasyouny	38
14. Irvin Vimbiso Mukajami.....	46
15. Joachim von Braun	48
16. Forest Management Bureau, Department of Environment and Natural Resources (DENR), Philippines	49
17. Romeo Sossou	50
18. Antonella Cardone	50
19. Walter Alberto Pengue	62
20. Alliance pour la Souverainete Alimentaire (MENA), Tunisia	64
21. Amba Jamir	75
22. Robert Buschbacher.....	85
23. Ramesh Kumar.....	87
24. Dele Raheem	89
25. Ministry of Agriculture, Forestry and Fisheries, Japan	90
26. Paraguay	91
27. UN-Nutrition	94
28. Dirección General de Planeación y Desarrollo en Salud (DGPLADES), Secretaría de Salud, México	98

29. Nutrition Diversity, Panama.....	100
30. Victor Puac	103
31. Abdelbasit Yagoub.....	104
33. Pa Vikas	111
34. Shaikh Tanveer Hossain	113
35. Sunshine Organic Farm and Nursery, South Africa	115
36. Pitam Chandra	117
37. Paul Sommers.....	119
38. Phylis Kaplan.....	122
39. André Francisco Pilon	127
40. Wamba Andre Le Doux	131
41. CIPO and 5 other Partner Organizations, Cambodia	131
42. Sharon Mada.....	133
43. IUCN Food and Agricultural Systems, Switzerland	134
44. Indigenous Determinants of Health Alliance (IDHA), Capital Native Nations, Adolphe BOPE, Coopérative des Peuples Autochtones Batwa pour l'Epanouissement Communautaire (COOPABEC), Fondation Maman Sahélienne for Peace and solidarity, Association Dewran, Antiné Sondé, Moussa Tall, Membres fondateurs de Dewran, Adjmor, Unissons nous pour la Promotion des Batwa (UNIPROBA), Vital, Réseau national des populations autochtones du Congo (RENAPAC) Chanceline Ipemba Peya	138
45. Dirección General de Planeación y Desarrollo en Salud (DGPLADES), Secretaría de Salud, México	147
46. Mānuka Performance Limited, New Zealand.....	149
47. Indigenous Determinants of Health Alliance (IDHA), Capital Native Nations, Acal el Hajeb, Indigenous Amazigh Network Azul, Adolphe BOPE, Coopérative des Peuples Autochtones Batwa pour l'Epanouissement Communautaire (COOPABEC), Fondation Maman Sahélienne for Peace and solidarity, Association Dewran, Antiné Sondé, Moussa Tall, Membres fondateurs de Dewran, Adjmor, Unissons nous pour la Promotion des Batwa (UNIPROBA), Vital, Réseau national des populations autochtones du Congo (RENAPAC), Chanceline Ipemba Peya, Amina Amharech (UNPFII), Emma Rawson-Te Patu (UNPFII), Valentina Sovkina (UNPFII), Geoffrey Roth (Cedar Rock Alliance)	159
48. The Nature Conservancy, United Kingdom of Great Britain and Northern Ireland	169
49. Sistema Nacional para el Desarrollo Integral de la Familia (DIF), México	173
50. Food Plant Solutions, Australia	175
52. Mercy Eco Farm, United Republic of Tanzania	182

53. Indigenous Services Canada, Health and Social Sector, Mental Wellness Health Promotion, Canada	193
54. Indigenous Services Canada, Office of Population Public Health, Environmental Public Health, Canada	194
55. Department of Agriculture Government of Tuvalu, Tuvalu	204
56. Philippine Daily Inquirer (PDI), Philippines	205
57. Universidad Nacional de Rosario (UNR), Argentina	206
58. Philippine Daily Inquirer (PDI), Philippines	208
57. Ministry of Agriculture and Land Reclamation, Egypt	210

Contributions are presented in chronological order, reflecting the sequence in which they were submitted. In the index, personal contributions are listed by name and surname, while contributions made on behalf of an organization or institution are listed by the name of the organization and the country.

Guiding questions

1. The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?
2. The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?
3. Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.
4. Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?
5. Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?
6. Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.
7. From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?
8. Do you have any additional comments you would like to share with the HLPE-FSN?

Contributions

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

1. International Institute of Tropical Agriculture, Nigeria

Surname	Ayankanmi
First name	Toye
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Research Manager
Current institution/organization	International Institute of Tropical Agriculture
Affiliation	Civil society/NGO
Country of residence	Nigeria

2. Snehal Athawale

Surname	Athawale
First name	Snehal
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Research Investigator
Current institution/organization	Institute of Economic Growth, New Delhi, India.
Affiliation	Government and other public institution
Country of residence	India
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	IPFS are not only culturally enriched systems but also adaptive livelihood systems that enhances ecological resilience, reduce dependence on external inputs (for farming and others), and can support risk management under conditions of socio-economic and climatic uncertainty.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food	The provided conceptual framework captures important dimensions of IPFS, and it is particularly valuable in recognizing food systems as socioecological systems rather than merely production systems. However, the framework could more explicitly incorporate agroecological resilience, livelihood security, and economic sustainability. Indigenous farming systems are not only culturally grounded but also adaptive systems that reduce external input dependence, conserve agrobiodiversity, strengthen nutritional diversity, that enhance climate resilience. Including measurable indicators on biodiversity, local food

security and nutrition? Do you have any other comments?	diversity, and ecological sustainability would further strengthen its policy relevance.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	IPFS can be linked with agrobiodiversity, dietary diversity, climate resilience, and market transitions. Gender roles can also be added as the component of IPFS as well. Since, I have worked on the natural farming in Northeast India, I have observed high biodiversity and great untapped potential of indigenous farming system in the region. However, the region often continues to experience malnutrition, anemia, and unequal food access, indicating a biodiversity–nutrition disconnect. Studies among Khasi and Garo women in Meghalaya found low dietary diversity despite rich indigenous food environments, highlighting the importance of gendered access to food, changing consumption patterns, and erosion of traditional knowledge. Research on jhum and traditional agroforestry systems in Northeast India demonstrates that Indigenous farming systems support crop diversity, wild food use, ecosystem sustainability, and climate adaptation, yet these systems are increasingly threatened by commercialization, monoculture expansion, land use change, and declining intergenerational knowledge transmission. The report could therefore include data on: • agrobiodiversity and dietary diversity relationships, • women's nutritional inequalities, • seasonal food insecurity, • land access and customary rights, • climate change impacts on Indigenous food systems, • youth transitions away from traditional foods, • Resilience indicators such as crop diversity, heirloom seeds, and low external input farming. References Bharucha, Z., & Pretty, J. (2010). The roles and values of wild foods in agricultural systems. <i>Philosophical Transactions of the Royal Society B</i>, 365(1554), 2913–2926. Nongrum, M. S., Pawera, L., & Mawroh, B. (2021). Dietary diversity and its determinants among Khasi and Garo indigenous women in Meghalaya, northeast India. <i>Ecology of Food and Nutrition</i>, 61(2), 220–239. Athawale, S., & Singh, R. (2023). Exploring the scenario of natural farming and food system in the

	North Eastern Hill Region of India. Journal of Agriculture and Ecology. Athawale, S., Singh, R., Bey, B. S., & Singh, R. J. (2024). Dynamics and Determinants of Crop Diversification Under Natural Farming Regime in Arunachal Pradesh: Application of Tobit Model. Indian Journal of Agricultural Economics, 79(2), 319-332. Pandey DK, Momin KC, Dubey SK, Adhiguru P. Biodiversity in agricultural and food systems of jhum landscape in the West Garo Hills, North-eastern India. Food Secur. 2022;14(3):791-804. doi: 10.1007/s12571-021-01251-y. Epub 2022 Jan 16. PMID: 35069938; PMCID: PMC8761519.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The draft report comprehensively addresses relationality, territorial rights, biodiversity, and cultural dimensions of IPFS. However, some important issues can be addressed, such as economic as well as ecological sustainability, rural youth transitions, labour allocation, and the growing dependence on market foods in Indigenous regions. The report could also examine how National, or state agricultural policies, commercialization, migration, and climate-induced livelihood changes are reshaping Indigenous farming systems into hybrid food systems. (Based on evidence from Northeast India, agroecological resilience, nutritional inequalities, and the role of Indigenous farming systems in reducing external input dependence deserve stronger policy attention alongside cultural and ethnic dimensions)
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Already recommended in previous answers.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Few of the farming systems shaped by indigenous people of North-East India are as follows. The Apatani rice–fish cultivation system in Arunachal Pradesh demonstrates integrated farming, water conservation, biodiversity management, and nutritional security through sustainable wetland agriculture. The Zabo system of Nagaland reflects community-based water harvesting, livestock integration, and forest conservation. Alder-based cultivation practiced by Indigenous communities in Nagaland shows successful nitrogen-fixing agroforestry supporting

	soil fertility and low external input farming. The bamboo drip irrigation system of Meghalaya highlights Indigenous climate adaptation and efficient water management. Further, empirical studies on natural farming in Northeast India indicate improved agrobiodiversity, dietary diversity, ecological resilience, and reduced dependence on chemical inputs, contributing to sustainable food and nutrition security.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	The HLPE-FSN report could make recommendations on strengthening IPFS through rights-based, agroecological, and nutrition-sensitive policy approaches. Priority areas include securing land and customary tenure rights, supporting agrobiodiversity conservation, strengthening local seed systems, and promoting low external input farming systems that enhance climate resilience. Policies should also recognize Indigenous knowledge as a scientific (after testing) and governance resource rather than only cultural heritage. Greater investment is needed in documenting Indigenous food diversity and food knowledge, and nutrition outcomes. The report may further recommend inclusive market systems, youth engagement, community-led research, and development of indicators measuring ecological sustainability, dietary diversity, and resilience within Indigenous food systems.

3. University of Auckland, New Zealand

Surname	Swinburn
First name	Boyd
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Professor of Population Nutrition and Global Health
Current institution/organization	University of Auckland
Affiliation	Academia
Country of residence	New Zealand
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	As part of a broader research program on children's nutrition, Prof David Tipene-Leach (indigenous Maori from Ngati Kahungunu iwi) co-created with 17 Maori youth a set of 20 eating and wellbeing guidelines based on the best existing guidelines and expert input and grounded in the all Maori (Maori worldview). Over an 18-month period, we co-created the draft guidelines, had the youth peer test

	them in their schools, finalised the 20 messages and filmed a video clip for each, then ran a 22 week social media campaign releasing 2 messages every 2 weeks, achieving nearly 1.5 million impressions. The research papers are: Railton R, Glassey R, Goddard E, Tipene-Leach DC, Makirere-Haerewa R, Christison L, Swinburn B. The co-creation of eating and wellbeing guidelines with rangatahi (young people) in Aotearoa New Zealand. Public Health Nutr. 2026 Mar 26;29(1):e87. doi: 10.1017/S1368980025101122. PMID: 41883194; PMCID: PMC13112303. Christison L, Railton R, Glassey R, Makirere-Haerewa R, Tipene-Leach D, Swinburn B. Rangatahi Youth-Led Dissemination Campaign for Cocreated Eating and Well-Being Guidelines: Process and Pilot Implementation Evaluation. JMIR Form Res. 2026 Apr 9;10:e71833. doi: 10.2196/71833. PMID: 41955448; PMCID: PMC13064959. The website is https://tekuraiawarua.org/manaora-rangatahi-guidelines-empowering-health-and-wellbeing/ a summary is at https://www.phcc.org.nz/briefing/tiheimaanaora-rangatahi-led-eating-and-wellbeing-guidelines-young-people
--	---

4. Mukhtar Sulaiman

Surname	Sulaiman
First name	Mukhtar
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Supervisor Project Monitoring and Evaluation
Current institution/organization	Sustainable Green Agriculture Project international
Affiliation	Civil society/NGO
Country of residence	Nigeria
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Rural farmers food system my take please
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Deep rural farmer

5. John Affiku

Surname	Affiku
First name	John
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Principal Academic Technologist
Current institution/organization	University of Jos
Affiliation	Academia
Country of residence	Nigeria
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Indigenous people are people resident in the same community having the same or similar culture.

6. Roger BB Leakey

Surname	Leakey
First name	Roger RB
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Retired VP of International Tree Foundation in UK, and adviser to Tropical Agriculture Association International
Current institution/organization	International Tree Foundation in UK, and Tropical Agriculture Association International in UK
Affiliation	Academia
Country of residence	United Kingdom of Great Britain and Northern Ireland
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	It's OK

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

I recommend that HLPE-SSN consider the relatively new approach of 'Land Maxing' as a means to harness the 5 capitals of sustainable development for greater food and nutritional security together with relief from poverty, land rehabilitation, social justice, mitigation of climate change, restoration of wildlife habitat, etc. (Sustainability 17, 5876. <https://doi.org/10.3390/su17135876>).

Books:

Leakey R.R.B. 2024. Living with the Trees of Life – A practical guide to the rebooting of the planet through tropical agriculture and putting farmers first, CABI, Wallingford, UK. 250pp.

Leakey, R.R.B. 2017. Multifunctional Agriculture: Achieving Sustainable Development in Africa. Academic Press, San Diego, California, USA, 480pp.

Research papers:

Leakey, R.R.B. and van Damme, P. 2014. The role of tree domestication in value chain development, Forests, Trees and Livelihoods 23: 116-126.

Leakey, R.R.B. 2014. Sustainable natural resources management in Africa's urban food and nutrition equation: An African solution to the problems of African agriculture, Nature & Faune 28 (2): 17-20.

Leakey, R.R.B. 2017. Socially modified organisms in multifunctional agriculture – addressing the needs of smallholder farmers in Africa, Archives of Crop Science 1: 20-29.

Leakey, R.R.B. 2018. Converting 'trade-offs' to 'trade-ons' for greatly enhanced food security in Africa: multiple environmental, economic and social benefits from 'socially modified crops. Food Security 10: 505-524.

DOI 10.1007/s12571-018-0796-1

Leakey, R.R.B. 2019. From Ethnobotany to Mainstream Agriculture – Socially-modified Cinderella Species Capturing 'Trade-ons' for 'Land Maxing'. In: Special Issue on Orphan Crops, Planta 250: 949–970.

DOI: 10.1007/s00425-019-03128-z

	Leakey, R.R.B. 2020. A re-boot of tropical agriculture benefits food production, rural economies, health, social justice and the environment. <i>Nature Food</i> 1: 260-265. Leakey, R.R.B. 2020. Getting More, Much More, From Tropical Agriculture: from ‘Land Failing’ to ‘Land Maxing’, <i>TAA Ag4Dev</i> 39: 25-28. Leakey R.R.B. 2024. <i>Living with the Trees of Life – A practical guide to the rebooting of the planet through tropical agriculture and putting farmers first</i>, CABI, Wallingford, UK. 250pp. Leakey, R.R.B., Mabhaudhi, T. and Gurib-Fakim, A. 2021. African lives matter: wild foods matter for livelihoods, justice, and the environment – a policy brief for agricultural reform with new crops, <i>Sustainability</i> 13(13), 7252 DOI: 10.3390/su13137252 Leakey, R.R.B., Tientcheu Avana, M.-L., Awazi, N.P., Assogbadjo, A.E., Mabhaudhi, T., Hendre, P.S., Degrande, A., Hlahla, S. and Manda, L. 2022. The future of food: domestication and commercialization of indigenous food crops in Africa over the third decade (2012-2021), <i>Sustainability</i> 14:2355. https://doi.org/10.3390/su14042355 Leakey, R.R.B. 2024. A Multifunctional Future for Tropical Agriculture: Scoring Multiple Sustainable Development Goals Simultaneously? <i>Agriculture for Development</i>. 47: 22-46. Leakey, R.R.B. and Harding, P.E. 2025. Land maxing: regenerative, remunerative, productive, and transformative agriculture harnessing the six capitals of sustainable development. <i>Sustainability</i> 17, 5876. https://doi.org/10.3390/su17135876
Are there any other issues concerning Indigenous Peoples’ food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The participatory and decentralized domestication of traditionally and culturally important indigenous fruit/nut/vegetable/medicinal tree species now described as "Socially modified crops".
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples’ knowledge, which should be considered?	Leakey, R.R.B. 2017. Socially modified organisms in multifunctional agriculture – addressing the needs of smallholder farmers in Africa, <i>Archives of Crop Science</i> 1: 20-29. Leakey, R.R.B. 2018. Converting ‘trade-offs’ to ‘trade-ons’ for greatly enhanced food security in Africa: multiple environmental, economic and social benefits from ‘socially modified crops. <i>Food Security</i>

	10: 505-524. DOI 10.1007/s12571-018-0796-1 Leakey, R.R.B. 2019. From Ethnobotany to Mainstream Agriculture – Socially-modified Cinderella Species Capturing ‘Trade-ons’ for ‘Land Mxing’. In: Special Issue on Orphan Crops, Planta 250: 949–970. DOI: 10.1007/s00425-019-03128-z
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples’ food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	ICRAF's 'Food for Progress Project' in southern Cameroon won a number of awards for the domestication of nutritious tree foods that also close the Yield Gaps in staple food cropping systems - leading to the 'Land Mxing' approach to restoring the 5 capitals of sustainable intensification.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	The Land Mxing approach to restoring the 5 capitals of sustainable intensification in subsistence farming systems around the tropics and subtropics.
Do you have any additional comments you would like to share with the HLPE-FSN?	I am happy to provide further information on any of the above comments

7. Hamid Reza Mojtavavi

Surname	Mojtabavi
First name	Hamid Reza
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Secretary-General of Sustainable Aquatic Development Institute (SADI), A non-governmental and non- benbeficial Iranian institute.
Current institution/organization	Sustainable Aquatic Development Institute (SADI), A non-governmental and non-benbeficial Iranian institute.
Affiliation	Civil society/NGO
Country of residence	Iran (Islamic Republic of)
The report proposes a working definition of Indigenous Peoples’ food systems. Do you have any observations on this definition?	I welcome the report’s effort to propose a working definition of Indigenous Peoples’ food systems. In my view, such a definition is very important because these systems should not be understood merely as traditional food production practices or as cultural heritage. They are living, territorially embedded and knowledge-based systems that connect food, ecosystems, livelihoods, identity, customary institutions, local governance and intergenerational knowledge.

I suggest that the definition should more clearly emphasize that Indigenous Peoples' food systems are not only systems of production, but also systems of relationship, stewardship and governance. They include the ways in which communities access, manage, protect, harvest, process, share and consume food, as well as the values, norms and institutions that regulate these processes. This is particularly important in aquatic, coastal, pastoral, forest and mountain contexts, where food systems are closely linked to territories, seasonal movements, ecological cycles, customary rights and collective responsibilities.

In my opinion, the definition could be strengthened by giving more explicit attention to three points.

First, Indigenous Peoples' food systems should be presented as dynamic and adaptive, not as static or purely historical systems. Many Indigenous Peoples and local communities continuously adapt their knowledge and practices in response to climate change, environmental degradation, market pressures, demographic change and policy interventions.

Second, aquatic and coastal food systems deserve stronger visibility in the definition. Fishing, shellfish gathering, small-scale aquaculture, wetland use, mangrove-based livelihoods and coastal food cultures are central to many Indigenous Peoples and local communities. However, in many food-system discussions, land-based agriculture receives more attention than aquatic food systems.

Third, the definition should be framed in a rights-based and governance-sensitive manner. Indigenous Peoples' food systems depend on secure access to land, water, aquatic resources, territories, biodiversity, knowledge systems and decision-making processes. Without these enabling conditions, the preservation and promotion of these food systems may remain symbolic rather than effective.

Therefore, I suggest that the working definition

	could describe Indigenous Peoples’ food systems as holistic, place-based and rights-based systems through which Indigenous Peoples produce, harvest, gather, process, exchange, govern and consume food, based on their knowledge, values, institutions, territories and relationships with nature. Such a definition would better reflect the contribution of Indigenous Peoples’ food systems to food security and nutrition, biodiversity conservation, cultural continuity, resilience and sustainable food-system transformation. Finally, I recommend that the report avoid reducing Indigenous Peoples’ food systems to “traditional knowledge” that can simply be extracted, transferred or mainstreamed into wider food systems. Their value lies not only in specific techniques or practices, but also in the broader social, ecological and institutional arrangements that sustain them. This distinction is important to prevent decontextualization, inappropriate commercialization or misuse of Indigenous Peoples’ knowledge and practices.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples’ food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples’ food systems to food security and nutrition? Do you have any other comments?	I find the proposed conceptual framework useful and broadly appropriate. Its main strength is that it does not treat Indigenous Peoples’ food systems only through the lens of production, calories, markets or nutrition outcomes. By emphasizing relationality, values and territories, it moves toward a more holistic understanding of food systems as social, ecological, cultural and governance systems. In my view, this is particularly important because Indigenous Peoples’ food systems cannot be properly understood if they are separated from their territories, ecosystems, customary institutions, knowledge systems and collective identities. Food security and nutrition in these contexts are not only about food availability, but also about access, cultural acceptability, ecological continuity, self-determination, intergenerational knowledge transfer and the ability of communities to govern their own resources. The use of the six dimensions of food security is also valuable. However, the framework could make

clearer how these dimensions interact in Indigenous Peoples' food systems. For example, availability depends not only on production, but also on ecosystem health, biodiversity, access to land and water, seasonal mobility and customary management. Access is not only economic, but also territorial, legal, social and political. Agency and sustainability are especially important because they show that Indigenous Peoples should be seen not only as beneficiaries of policy, but also as rights-holders, knowledge-holders and governance actors.

I believe the framework captures many key elements for policy-making, but it could be strengthened in four areas.

First, it should more explicitly connect food security and nutrition with governance. The weakening of Indigenous Peoples' food systems is often caused not only by technical problems, but also by loss of control over territories, exclusion from decision-making, inappropriate regulations, environmental degradation and lack of recognition of customary institutions.

Second, aquatic, coastal and wetland food systems should receive greater visibility. Many Indigenous Peoples and local communities depend on rivers, lakes, wetlands, coastal zones, mangroves, fisheries and small-scale aquaculture. These systems are highly relational and territory-based, but are often less visible than land-based agriculture.

Third, the framework should pay more attention to power relations. Policy-making needs to ask who controls resources, who defines development priorities, who benefits from market integration, and whose knowledge is recognized or ignored. Without addressing these questions, Indigenous Peoples' food systems may be appreciated symbolically while remaining marginalized in real decisions.

Fourth, the framework should distinguish between supporting Indigenous Peoples' food systems and merely extracting selected elements from them. Traditional knowledge and local practices should not be treated as isolated tools that can be transferred

	without their social, territorial and institutional context. Overall, I consider the conceptual framework a strong basis for guiding policy-making. My main recommendation is to make it more operational by linking relationality, values and territories to concrete policy principles: recognition of rights, protection of territories and aquatic resources, support for customary governance, meaningful participation, biodiversity conservation, intergenerational knowledge transmission, and fair engagement with markets.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Data limitations are a major obstacle to understanding Indigenous Peoples' food systems. In my view, the report could be strengthened by including more disaggregated, multidimensional and community-sensitive data. The issue is not only the lack of data, but also that many existing datasets do not properly capture Indigenous identity, territories, customary livelihoods, informal food-sharing systems, aquatic resources, gender roles or distributional inequalities. First, the report should include more data on food security and nutrition outcomes disaggregated by Indigenous identity, gender, age, territory and livelihood system. National averages often hide serious inequalities. The World Bank notes that Indigenous Peoples represent about 6.2 percent of the global population but account for 18.2 percent of people living in extreme poverty, which has direct implications for food security and nutrition. ([World Bank][1]) Second, the report should better capture the nutrition transition affecting many Indigenous Peoples. This includes reduced consumption of traditional foods, increased dependence on purchased and ultra-processed foods, and the coexistence of food insecurity, obesity and diet-related diseases. Evidence from Indigenous populations in high-income countries shows higher burdens of food insecurity, obesity and diet-related health conditions compared with national averages.

([MDPI][2])

Third, more attention should be given to territorial, ecological and governance-related data. Indigenous Peoples' food security depends not only on income or market access, but also on secure access to land, water, forests, rivers, wetlands, coastal areas, biodiversity and seasonal mobility. FAO's work on Indigenous Peoples' food systems highlights the importance of natural resource management, diet diversity, governance systems, traditional knowledge and Indigenous languages. ([Open Knowledge FAO][3])

Fourth, the report should include stronger data on aquatic, coastal and wetland food systems. Many Indigenous Peoples and local communities depend on fisheries, rivers, lakes, wetlands, mangroves and coastal ecosystems, yet these systems are often less visible than land-based agriculture. Data should cover aquatic food consumption, traditional fishing practices, seasonal access to aquatic resources, fish as a source of micronutrients, and the impacts of pollution, climate change and resource competition.

Finally, the report should include indicators on agency, governance and Indigenous data sovereignty. Data collection should not be extractive. Community-based monitoring, participatory mapping, co-production of knowledge and recognition of customary institutions should be central. This is consistent with the HLPE's six-dimensional food security framework, which elevates agency and sustainability alongside availability, access, utilization and stability. ([Open Knowledge FAO][4])

References

Clapp, J., Moseley, W. G., Burlingame, B., & Termine, P. (2022). The case for a six-dimensional food security framework. *Food Policy*, 106, 102164.

FAO and Alliance of Bioversity International and CIAT. (2021). Indigenous Peoples' food systems: Insights on sustainability and resilience from the front line of climate change. Rome: FAO.

	HLPE. (2020). Food security and nutrition: building a global narrative towards 2030.* Rome: High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Kenny, T.-A., et al. (2020). The Retail Food Sector and Indigenous Peoples in High-Income Countries: A Systematic Scoping Review. <i>International Journal of Environmental Research and Public Health</i>, 17(23), 8818. World Bank. (2025). Indigenous Peoples. Washington, DC: World Bank.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	In my view, the draft report covers many important issues, especially the links between Indigenous Peoples' food systems, territories, knowledge, culture, biodiversity and sustainability. However, some issues could receive stronger attention. First, aquatic, coastal and wetland food systems appear to be relatively under-represented compared with land-based agriculture, forests and pastoral systems. For many Indigenous Peoples and local communities, rivers, lakes, wetlands, mangroves, coastal waters and small-scale fisheries are central to food security, nutrition, identity and livelihoods. Fish and aquatic foods are also important sources of protein and micronutrients. The report could therefore give more attention to traditional fishing systems, aquatic resource governance, access to fishing grounds, coastal ecosystem degradation, pollution, climate impacts and competition over blue economy resources. Second, the report could more clearly address governance and power relations. Indigenous Peoples' food systems are not weakened only by technical or environmental problems. They are also affected by exclusion from decision-making, insecure rights to land and water, weak recognition of customary institutions, inappropriate regulations, and unequal market relations. Therefore, policy recommendations should not focus only on preserving knowledge or improving production, but also on strengthening the governance conditions that allow these food systems to survive and adapt.

Third, I think market integration deserves a more balanced treatment. Markets can create income opportunities, but they can also increase dependency, change diets, reduce local access to traditional foods, and allow external actors to capture most of the value. The report could better distinguish between fair, community-led market engagement and extractive commercialization of Indigenous foods, knowledge and cultural identity.

Fourth, the issue of nutrition transition should be further emphasized. Many Indigenous Peoples are facing a shift from diverse traditional diets toward purchased, ultra-processed and less nutritious foods. This can lead to the coexistence of food insecurity, micronutrient deficiencies, obesity and non-communicable diseases. This issue is not only nutritional; it is linked to loss of territory, ecological degradation, poverty, market dependency and weakening of intergenerational knowledge.

Fifth, the report could give more attention to youth, women and intergenerational transmission. Women often play central roles in food processing, seed and food knowledge, household nutrition, informal exchange and community resilience. Youth are critical for the future of these food systems, but they may be affected by migration, loss of language, lack of livelihood opportunities and disconnection from territories. These dimensions should be treated not as secondary social issues, but as core elements of food-system continuity.

Sixth, the report should be cautious not to over-represent Indigenous Peoples' food systems only as examples of sustainability or resilience. While these qualities are real and important, Indigenous Peoples also face serious constraints, inequalities and pressures. Romanticizing these systems may unintentionally hide poverty, marginalization, gender inequalities, climate vulnerability, limited services and political exclusion.

Overall, I suggest that the report give greater weight to aquatic and coastal food systems, governance and power relations, fair value distribution, nutrition

	transition, and intergenerational continuity. These issues are essential if the report is to move beyond recognition of Indigenous Peoples' food systems toward practical policy guidance for food security, nutrition, equity and sustainability.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Yes. In my view, the report should consider not only academic and institutional publications, but also different forms of Indigenous Peoples' knowledge. These include oral histories, seasonal calendars, customary rules, food-sharing practices, traditional ecological knowledge, community mapping, local languages, rituals, fishing and harvesting practices, and community-based monitoring systems. These forms of knowledge are often not fully captured in written literature, but they are essential for understanding Indigenous Peoples' food systems. The report should also give stronger attention to knowledge related to aquatic, coastal and wetland systems. Knowledge about rivers, lakes, wetlands, mangroves, fish migration, seasonal fishing, shellfish gathering, water quality, customary fishing rights and coastal ecosystem management is highly relevant to food security and nutrition, but is often less visible than land-based agricultural knowledge. At the same time, Indigenous Peoples' knowledge should not be extracted, decontextualized or commercialized without consent. Indigenous Peoples should have authority over how their knowledge and data are collected, interpreted, stored and used. This is consistent with the CARE Principles for Indigenous Data Governance, which emphasize collective benefit, authority to control, responsibility and ethics. ([Data Science Journal][1]) The report could also benefit from more community-led case studies, especially on biodiversity, customary governance, climate impacts, nutrition transition, local food-sharing systems, and intergenerational knowledge transmission. Such knowledge should be treated not as anecdotal evidence, but as a valid and necessary source of understanding. Suggested valid references

	FAO. (2021). The White/Wiphala Paper on Indigenous Peoples' food systems. Rome: Food and Agriculture Organization of the United Nations. ([Open Knowledge FAO][2]) FAO and Alliance of Bioversity International and CIAT. (2021). Indigenous Peoples' food systems: Insights on sustainability and resilience from the front line of climate change. Rome: FAO. ([FAOHome][3]) Carroll, S. R., Garba, I., Figueroa-Rodríguez, O. L., Holbrook, J., Lovett, R., Materechera, S., Parsons, M., Raseroka, K., Rodriguez-Lonebear, D., Rowe, R., Sara, R., Walker, J. D., Anderson, J., & Hudson, M. (2020). The CARE Principles for Indigenous Data Governance. Data Science Journal, 19 (1), 43. ([Data Science Journal][1]) United Nations General Assembly. (2007). United Nations Declaration on the Rights of Indigenous Peoples. A/RES/61/295. ([United Nations Documentation][4])
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Yes. I suggest that the report include a limited number of well-documented case studies from different regions and ecosystems, especially those that show links with food security, nutrition, biodiversity, cultural continuity and community governance. First, the report could use the eight case studies documented by FAO and the Alliance of Bioversity International and CIAT in Indigenous Peoples' food systems: Insights on sustainability and resilience from the front line of climate change. These cases are useful because they cover different regions and ecosystems and examine diet diversity, natural resource management, traditional knowledge, Indigenous languages, governance systems and market pressures. ([Open Knowledge FAO][1]) Second, the report could include examples from the CINE/FAO work on Indigenous Peoples' food systems and nutrition, including cases such as Inuit, Pohnpei, Ainu, Karen, Maasai, Awajun and others. These cases are especially relevant because they connect

traditional foods, biodiversity, nutrition, health and community-led food interventions. They are useful for addressing different forms of malnutrition, including micronutrient deficiencies and nutrition transition.

Third, Pacific Island food systems, such as Pohnpei in the Federated States of Micronesia, would be highly relevant. These cases show how revitalizing local foods—such as traditional fruits, tubers, breadfruit, pandanus and fish—can help respond to imported-food dependency, micronutrient deficiencies, obesity and diet-related diseases.

Fourth, the report should include more aquatic, coastal and wetland cases. Many Indigenous Peoples depend on fisheries, rivers, lakes, mangroves and coastal ecosystems, but such systems are often under-represented compared with land-based agriculture. Arctic Indigenous food systems, Amazonian riverine systems and coastal Indigenous fisheries would be useful examples.

Fifth, regarding Iran, I suggest using cases with careful wording, referring to “Indigenous Peoples, tribal peoples, nomadic pastoralists and local communities,” depending on the context. Iran has important examples of traditional food and knowledge systems, especially among nomadic pastoralist groups such as Qashqai, Bakhtiari and Shahsevan, where seasonal mobility, rangeland governance, livestock systems, dairy foods and customary ecological knowledge are central to livelihoods and food security. The IIED/CENESTA work on mobile pastoralism in Iran and community-based natural resource management can be a useful reference. ([IIED][2])

Sixth, Iran’s Globally Important Agricultural Heritage Systems (GIAHS) can also be relevant, although they should not automatically be described as Indigenous Peoples’ systems. They can be presented as examples of traditional, community-based and locally adapted food and knowledge systems. Relevant cases include the Qanat Irrigated Agricultural Heritage Systems of Kashan, where ancient qanat technology supports agriculture and

	human water supply, and the Estahban Rainfed Fig Orchards Heritage System, recognized by FAO as an important rainfed agricultural heritage system. ([FAOHome][3]) Overall, I recommend that the report select case studies based on four criteria: geographical balance; ecosystem diversity, including aquatic and coastal systems; relevance to all forms of malnutrition; and evidence of community agency, customary governance and intergenerational knowledge transmission. Kuhnle
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	From my perspective, the HLPE-FSN could make recommendations in several key areas. First, the report should recommend stronger recognition of Indigenous Peoples’ food systems as living governance systems, not only as traditional practices or cultural heritage. Policies should recognize Indigenous Peoples as rights-holders, knowledge-holders and active food-system actors. Second, recommendations should address secure access to territories and natural resources, including land, water, forests, rangelands, rivers, wetlands, coastal areas and aquatic resources. Without secure access and tenure, Indigenous Peoples’ food systems cannot be preserved or strengthened. Third, the report should recommend support for customary institutions and community-led governance. This includes recognizing local rules, seasonal calendars, food-sharing systems, traditional ecological knowledge, and community-based resource management. Fourth, greater attention should be given to nutrition and all forms of malnutrition. Recommendations should support traditional and diverse diets, reduce dependence on ultra-processed foods, address micronutrient deficiencies, and respond to the coexistence of undernutrition, obesity and diet-related diseases. Fifth, the report should recommend stronger

	support for aquatic, coastal and wetland food systems. Fisheries, rivers, lakes, mangroves, wetlands and coastal ecosystems are central to many Indigenous Peoples and local communities, but are often under-represented in food-system policies. Sixth, recommendations should address fair and non-extractive market engagement. Market access can support livelihoods, but it must not lead to loss of local food access, unfair value capture by intermediaries, or commercialization of Indigenous knowledge without consent. Seventh, the report should recommend Indigenous data sovereignty and ethical knowledge governance. Data and knowledge should be collected, interpreted and used with the participation, consent and authority of Indigenous Peoples. Community-based monitoring and participatory mapping should be encouraged. Eighth, special attention should be given to women, youth and intergenerational knowledge transmission**. Women and elders often play central roles in food knowledge, processing, nutrition and cultural continuity, while youth are essential for the future of these systems. Finally, the HLPE-FSN could recommend that governments and international organizations move from symbolic recognition to practical enabling policies: rights protection, territorial governance, biodiversity conservation, climate adaptation, culturally appropriate nutrition policies, support for local institutions, and fair participation of Indigenous Peoples in decision-making.
Do you have any additional comments you would like to share with the HLPE-FSN?	I would like to emphasize that Indigenous Peoples' food systems should not be treated only as vulnerable systems that need protection, nor only as sources of traditional knowledge that can be used by wider food systems. They should be recognized as living, adaptive and governance-based systems with their own values, institutions, territories, knowledge and agency. In my view, one of the most important contributions

of this report could be to move the discussion from “preserving traditions” toward enabling Indigenous Peoples to govern, adapt and strengthen their own food systems. This requires secure rights to territories and resources, recognition of customary institutions, protection of biodiversity, ethical knowledge governance, and meaningful participation in policy-making.

I also suggest that the report give adequate attention to aquatic, coastal and wetland food systems. These systems are central to the food security, nutrition and identity of many Indigenous Peoples and local communities, but they are often less visible than land-based agricultural systems.

Finally, the report should avoid romanticizing Indigenous Peoples’ food systems. Their sustainability and resilience are important, but many communities also face poverty, marginalization, land and water insecurity, climate change, nutrition transition, market pressures and political exclusion. The most useful recommendations will be those that respect Indigenous Peoples’ knowledge and rights while also addressing these real structural constraints.

8. Marco Alberto Nanfouet

Surname	Nanfouet
First name	Marco Alberto
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	PhD student
Current institution/organization	University of Québec at Abitibi-Témiscamingue (UQAT)
Affiliation	Academia
Country of residence	Canada
The report proposes a working definition of Indigenous Peoples’ food systems. Do you have any observations on this definition?	The multi-dimensional nature of indigenous food system (food, medicine and shelter)

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments? Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	The framework captures important aspects of indigenous peoples' food system especially the transfer of knowledge from one generation to the other. Data on the carbon footprint of indigenous food systems
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Information on the carbon footprint of indigenous food systems can be improved. The link between indigenous food systems and the convectional food system.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	The efficient transfer of indigenous knowledge from one generation to the other over time.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	The East Region of Cameroon
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	The carbon footprint of indigenous food system compared to the convectional food system. The sustainability of indigenous food systems under changing climatic conditions.

9. Instituto Nacional de Investigaciones Nucleares, México

Surname	De la Cruz Torres
First name	Eulogio
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Researcher on application of nuclear techniques on food and agriculture
Current institution/organization	INSTITUTO NACIONAL DE INVESTIGACIONES NUCLEARES
Affiliation	Government and other public institution
Country of residence	Mexico
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	No, I think is appropriate
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Yes, I consider that the frame including, availability, access, utilization, stability, autonomy and sustainability, covers the basic elements to guide policy makers.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	I consider that urban growth, reduction of growing land and reduction of areas where Indigenous people can market their food affects indigenous people food systems. de la Cruz Torres, E. et al. (2013). El género Chenopodium : una fuente potencial de alimento. En: Jain, S., Dutta Gupta, S. (eds) Biotecnología de cultivos olvidados y subutilizados. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-5500-0_1
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The draft report covers sufficiently Indigenous Peoples' food systems

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Yes, I think there is also knowledge concerning oral communication and traditional healing practices related to food and nutrition that could be taken in consideration
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Sierra norte de Puebla is a story concerning efforts for preservation of Indigenous People's food systems. Basurto, Francisco & Martínez-Alfaro, Miguel & Villalobos-Contreras, Genoveva. (1998). Los Quelites de la Sierra Norte de Puebla, México: Inventario y formas de preparación. Botanical Sciences. 49-62. 10.17129/botsci.1550.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	I consider that the report should include how Indigenous people's food systems contribute to health through nutraceutic traditional neglected crops, such as Chía (Salvia hispanica) or epazote Dysphania ambrosioides, and stevia (Stevia rebaudiana)
Do you have any additional comments you would like to share with the HLPE-FSN?	HLP-FSN It is a worth value effort to rescue and promote Indigenous people's food systems

10. Moammar Dayoub

Surname	Dayoub
First name	Moammar
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Researcher
Current institution/organization	University of Tturu, Finland
Affiliation	Government and other public institution
Country of residence	Finland
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	No

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	valuing Indigenous Peoples' food traditions and knowledge as important solutions. It covers all topics
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Indigenous poverty ratios and wage gaps, and this is important to include. I did not see covered all points
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	No
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Indigenous Traditional Food Systems and the 1.5 °C Climate Target: Insights from Arctic and Southern Hemisphere Contexts https://www.mdpi.com/2225-1154/14/2/61
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Indigenous Traditional Food Systems and the 1.5 °C Climate Target: Insights from Arctic and Southern Hemisphere Contexts
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Example: Support climate resilience and biodiversity protection

11. Oscar Ortiz

Surname	Ortiz
First name	Oscar
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Director of the Sustainable Farming Science Program of the CGIAR
Current institution/organization	CGIAR System Organization
Affiliation	Other
Country of residence	Peru
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The definition would seem to be idealistic because in practice Indigenous Peoples' food systems are a combination of indigenous and new knowledge, beliefs and practices. Although, "purely" indigenous systems exist in different parts of the world, most of them are already in transition. The definition would seem to convey a static situation of the indigenous food systems.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The key elements are well defined. However, an element of transition, or being in a status of constant change over time, should be included. The point being that if any of the dimensions change over time, do we still talk about indigenous food systems?
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	These are good questions. Data poverty is prevalent in low and middle-income countries where indigenous people leave. What is missing is data on the changes affecting indigenous people and how they are adapting. I am not aware of references in this regard.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	I think the fact that Indigenous Peoples' food systems are in constant change and transition is not sufficiently represented in the report. Additionally, although indigenous knowledge systems are sound and have evolved over millennia, the current conditions are changing more rapidly than ever and the key question is

	how to support/accelerate the adaptation of knowledge systems to face new conditions, such as those created by climate change, market and consumption shifts, digitalization and artificial intelligence, etc.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Examples of systems in transition: - https://www.sciencedirect.com/science/article/abs/pii/S0033350619302422 - https://journals.sagepub.com/doi/abs/10.1177/1049732318761862
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Examples of indigenous food systems in transition: - https://www.taylorfrancis.com/chapters/edit/10.4324/9781351051262-14/el-buen-vivir-ana-maria-peredo - https://www.tandfonline.com/doi/abs/10.1080/21693293.2015.1072311
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	I think a time dimension needs to be strengthened. Question such as what would happen with indigenous food systems by 2040, 2050 and beyond, and how their adaptation could be supported should be included.

12. Center for Food and Adequate Living Rights (CEFROHT), Uganda

Surname	MUTYABA
First name	YUDA TADEO
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	agroecology practitioner
Current institution/organization	CENTER FOR FOOD AND ADEQUATE LIVING RIGHTS(CEFROHT)
Affiliation	Civil society/NGO
Country of residence	Uganda
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	YES

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

One additional element that could be considered more explicitly within the framework is the dimension of time in relation to food access and food security. Food may be available in markets or production areas, but the time required to access it can greatly affect nutrition, well-being, and equity. poor roads, long distances, traffic congestion, seasonal isolation, conflict situations, or the loss of nearby traditional food sources can delay or limit people's ability to obtain food when it is needed. This is especially relevant for rural and indigenous communities, where people may spend many hours travelling to markets, health centers, water sources, or food distribution points. In some cases, climate-related disasters or land dispossession increase the time burden on women, youth, and elders who are often responsible for gathering food, water, fuel, and medicinal plants. Time poverty, therefore, becomes part of food insecurity. So, including the element of time would help policymakers better understand the practical realities of access, mobility, infrastructure, and territorial connectivity within indigenous food systems. It would also encourage investment in localized food systems, resilient infrastructures, nearby markets, and community-controlled food networks that reduce vulnerability and improve time access to nutritious and culturally appropriate foods.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

One important gap in the existing data is the hidden impact of pesticides and agrochemicals on indigenous peoples' food systems. While food availability is often measured, far less attention is given to chemical contamination of soil, water, biodiversity, traditional foods, and human health. Indigenous communities may experience long-term health and ecological impacts from pesticide exposure, yet these harms are rarely captured in official food security, nutrition, or inequality indicators.

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?

The report should also consider indigenous and community-based knowledge from Uganda, including traditional seed systems, agroecological farming practices, oral ecological knowledge, indigenous vegetables, and climate-resilient crops such as millet and sorghum. The work of organizations like CEFROHT demonstrates how community agroecology learning centers, farmer-

	managed seed systems, and indigenous knowledge sharing can strengthen sustainable food systems, nutrition, biodiversity conservation, and food sovereignty.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	A strong example from Uganda is the Nansubuga-CEFROHT agroecology Learning Center in Mukono District, established by the Center for Food and Adequate Living Rights (CEFROHT). The learning center demonstrates how a small piece of land, when managed through agroecological and indigenous farming knowledge, can become highly productive, nutrition-sensitive, biodiversity-rich, and climate-resilient systems. Managed by Ms. Nansubuga Jane, the center functions as a practical community learning site where farmers, especially women and youth, are trained in agroecological farming, indigenous seed preservation, composting, agroforestry, and sustainable food production systems. This case study would contribute valuable representation from East Africa and highlight how community-led agroecology learning centres can preserve and strengthen indigenous people's food systems while addressing malnutrition, ecological degradation, and rural poverty simultaneously
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	The HLPE-FSN could make recommendations on protecting indigenous land rights, promoting traditional land rights, promoting traditional foods, strengthening agroecology, and recognizing indigenous knowledge systems in food and nutrition policies The report should also encourage governments to support community seed systems, indigenous women farmers, and youth learning programs so that traditional knowledge can be passed to future generations. The report should recommend better protection of indigenous territories and greater participation of indigenous peoples in decision-making processes related to food systems, climate change, and natural resource management. Additionally, the HLPE-FSN should consider the issue of time poverty in food systems. Food may exist in markets or production areas, but people may still struggle to access it because of long travel distances, traffic congestion, unpaid care work, or the time required to prepare traditional food. Women and rural communities are often most affected. Time should therefore be

	recognized as an important factor influencing food access, nutrition, and well-being. The report should also address the growing use of harmful pesticides and agrochemicals that threaten indigenous food systems, biodiversity, soil health, water sources, and human health. HLPE-FSN should recommend stronger regulation on highly hazardous pesticides, increased support for agroecology, and investment in farmer training on ecological and indigenous alternatives to chemical-intensive farming.
Do you have any additional comments you would like to share with the HLPE-FSN?	Decision makers should remember about indigenous food systems, nutrition, culture, and sustainability

13. Malk Ibrahim Elbasyouny

Surname	Elbasyouny
First name	Malk Ibrahim
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/ Faculty of African Postgraduates Studies
Affiliation	Academia
Country of residence	Egypt
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The proposed working definition of Indigenous Peoples' food systems is a valuable step toward recognizing the complexity and richness of these systems. It appropriately highlights that Indigenous food systems go beyond food production and include cultural identity, knowledge systems, land, territories, and relationships between people, nature, and biodiversity. This holistic perspective is essential for understanding their role in sustaining food security, nutrition, and ecosystem health. One key observation is the importance of ensuring that the definition explicitly reflects the principle of self-identification and Indigenous Peoples' right to define their own food systems, knowledge, and practices. This helps avoid externally imposed interpretations and ensures respect for sovereignty and cultural integrity. Additionally, while the definition acknowledges relationality and traditional practices, it could further emphasize the dynamic and evolving nature

	of Indigenous food systems. These systems are not static or purely traditional; they adapt over time in response to environmental, social, and economic changes while maintaining core cultural values. It would also be beneficial if the definition more clearly reflects issues of land tenure, access to natural resources, and governance rights, as these are fundamental determinants of the sustainability and continuity of Indigenous food systems. Without secure rights to land and resources, the ability of Indigenous Peoples to sustain their food systems is significantly constrained. Finally, strengthening the link between Indigenous Peoples' food systems and broader global challenges such as climate change, biodiversity loss, and nutrition transitions would further enhance the relevance of the definition for policy-making. Recognizing their contribution to resilient and sustainable food systems can help ensure that they are more effectively integrated into national and global food security strategies.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The conceptual framework presents a strong and well-structured approach for understanding Indigenous Peoples' food systems, particularly through its grounding in the six dimensions of food security and its emphasis on relationality, values, and territories. These elements are highly relevant for guiding policy-making, as they move beyond a purely production-focused view of food systems and instead highlight the cultural, ecological, and social foundations that sustain food security and nutrition in Indigenous contexts. Overall, the framework captures many of the key elements needed for effective and context-sensitive policy development. Its recognition of relationality is particularly important, as it reflects the interconnectedness between people, ecosystems, and knowledge systems. Similarly, the focus on territories is essential, as land and resource governance are central determinants of Indigenous Peoples' food security, sovereignty, and resilience. However, there are a few areas where the framework could be further strengthened. First, it could more explicitly integrate governance and

	power dynamics, particularly the role of Indigenous Peoples in decision-making processes related to food systems. Without addressing governance structures and rights-based approaches, there is a risk that policies may not fully reflect or support Indigenous self-determination. Second, the framework could benefit from a clearer integration of climate change adaptation and environmental degradation as cross-cutting drivers that significantly affect Indigenous food systems. While these may be implicit within the current structure, making them more explicit would strengthen the policy relevance of the framework in the context of global environmental challenges. Third, it may be useful to further emphasize the intergenerational transmission of knowledge, as this is a key mechanism through which Indigenous food systems are sustained and adapted over time. This dimension is closely linked to education, cultural continuity, and resilience. Finally, ensuring that the framework explicitly supports co-production of knowledge where Indigenous Peoples are not only subjects of study but active partners in research and policy formulation would enhance its practical applicability and ethical grounding. In conclusion, the framework provides a strong foundation for guiding policy-making on food security and nutrition, and with these additional considerations, it could further strengthen its inclusivity, applicability, and transformative potential
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Data on Indigenous Peoples' food systems remain limited, particularly in relation to nutrition outcomes, food access, and intra-community inequalities. To strengthen the evidence base of the report, several additional data areas and trends could be considered. First, there is a need for more disaggregated nutrition and health data, including indicators on stunting, wasting, anemia, and micronutrient deficiencies specifically within Indigenous populations. Many national surveys do not consistently disaggregate by Indigenous identity, which obscures disparities in food security and

nutrition outcomes. Where available, such data often show higher levels of food insecurity and malnutrition compared to non-Indigenous populations.

Second, more evidence is needed on dietary transition trends among Indigenous Peoples, particularly the shift from traditional diets toward ultra-processed foods. This transition is strongly associated with increased rates of obesity, diabetes, and non-communicable diseases, yet systematic global data remain limited.

Third, land use change and environmental degradation should be more systematically linked to food security outcomes. Data on deforestation, mining, agricultural expansion, and climate impacts should be integrated with food systems indicators to better understand how loss of access to land and ecosystems directly affects Indigenous food production, diet diversity, and livelihoods.

Fourth, gender- and age-disaggregated data are critical. Indigenous women often play central roles in food production, seed conservation, and nutrition practices, yet they also face disproportionate barriers to land access, education, and income. Similarly, youth data are essential to understand intergenerational knowledge loss and changing food practices.

Fifth, participatory and Indigenous-led data systems should be promoted as complementary sources of evidence. Conventional top-down data collection methods often fail to capture culturally relevant indicators such as food sovereignty, cultural food practices, and ecosystem relationships.

References (selected)

FAO. (2021). The State of Food Security and Nutrition in the World 2021 (SOFI). Food and Agriculture Organization of the United Nations.

<https://www.fao.org/publications/sofi>

FAO & WHO. (2019). Sustainable healthy diets – Guiding principles. Food and Agriculture Organization of the United Nations.

<https://www.fao.org/3/ca6640en/ca6640en.pdf>

	HLPE. (2017). Nutrition and food systems. High Level Panel of Experts on Food Security and Nutrition. https://www.fao.org/3/i7846e/i7846e.pdf United Nations. (2021). State of the World's Indigenous Peoples. United Nations Department of Economic and Social Affairs. https://www.un.org/development/desa/indigenous-peoples/publications/state-of-the-worlds-indigenous-peoples.html IPCC. (2022). Sixth Assessment Report (AR6): Impacts, Adaptation and Vulnerability. Intergovernmental Panel on Climate Change. https://www.ipcc.ch/report/ar6/wg2/ FAO. (2022). The State of the World's Forests 2022. Food and Agriculture Organization of the United Nations. https://www.fao.org/sofo Overall, strengthening disaggregated, participatory, and interdisciplinary data systems is essential to better capture inequalities and to inform more effective and equitable policy responses for Indigenous Peoples' food systems.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The draft report already provides a strong foundation by highlighting relationality, territories, and the cultural dimensions of Indigenous Peoples' food systems. However, there are several additional issues that could be further strengthened to ensure a more comprehensive and policy-relevant analysis. One area that may require further emphasis is the issue of power asymmetries and governance. While the report recognizes Indigenous Peoples' systems and knowledge, it could more explicitly address how decision-making power is distributed across local, national, and global food governance structures. Strengthening this dimension is essential to ensure that Indigenous Peoples are not only represented as knowledge holders but also as active decision-makers in food system governance. Another important gap relates to land tenure security and legal recognition of Indigenous territories. Although territories are referenced, the report could further highlight how insecure land rights, land grabbing, extractive industries, and competing land uses directly undermine food security and nutrition outcomes. This remains a critical structural driver that shapes all other

dimensions of Indigenous food systems. Climate change and environmental degradation could also be more explicitly and systematically addressed. While environmental relationships are implicit in the framework, the severity of climate-related disruptions such as biodiversity loss, water stress, and ecosystem degradation deserves stronger visibility as a cross-cutting threat to Indigenous food systems globally.

In addition, the report could further expand its focus on gender and youth dimensions. Indigenous women play a central role in food production, seed preservation, and nutritional practices, yet they often face unequal access to resources and decision-making spaces. Similarly, youth are key to intergenerational knowledge transfer, and their role in sustaining or transforming food systems deserves more detailed attention. Another area that may be under-represented is the impact of digitalization and market integration on Indigenous food systems. The increasing influence of external markets, processed foods, and digital food environments is reshaping dietary patterns and cultural food practices, sometimes in ways that are not fully captured in current analyses.

Finally, there is a need to further strengthen Indigenous-led methodologies and epistemologies in research and data collection. Moving beyond “participation” toward true co-production of knowledge would ensure that Indigenous perspectives are not only included but centered in evidence generation and policy design.

Overall, while the draft report is comprehensive in many respects, strengthening these areas of governance and power, land rights, climate impacts, gender and youth, market transformation, and Indigenous-led research would further enhance its balance, depth, and policy relevance.

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.

Here are short, strong case study suggestions you can include (with good geographic diversity and relevance to malnutrition and food systems resilience):

Peru (Andes – Quechua & Aymara communities): Revival and promotion of Andean crops (quinoa, kañiwa, native potatoes) through Indigenous seed conservation systems, improving diet diversity and nutrition while strengthening agrobiodiversity.

Mexico (Milpa system – Indigenous Mesoamerican communities): The traditional milpa system (maize–beans–squash) supports balanced nutrition, soil health, and cultural food sovereignty, and is widely recognized as a climate-resilient agroecological model.

Canada (First Nations – British Columbia & Arctic regions): Community-led restoration of traditional foods (salmon, wild berries, marine foods) combined with Indigenous food sovereignty programs addressing high rates of diabetes and food insecurity.

New Zealand (Māori food systems): Revitalization of kai Māori and customary fishing/gathering rights linked to cultural health, biodiversity protection, and improved community nutrition outcomes.

Kenya (Maasai pastoral systems): Mobile pastoralism preserving livestock-based diets and traditional ecological knowledge, increasingly integrated into climate adaptation and nutrition-sensitive livestock programs.

India (Northeast Indigenous communities): Traditional shifting cultivation and forest-based food systems maintaining high dietary diversity, with increasing documentation of Indigenous wild foods contributing to micronutrient intake.

Brazil (Amazon Indigenous territories): Indigenous-managed forest systems supporting diverse diets (fish, fruits, cassava) while protecting biodiversity and reducing deforestation-linked food insecurity.

Nepal (Himalayan Indigenous communities): Conservation of climate-resilient crops (millets, buckwheat) improving nutrition and resilience in high-altitude food systems under climate stress.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

From my perspective, the HLPE-FSN report could strengthen its policy impact by focusing its recommendations on several key areas that are critical for Indigenous Peoples' food systems and their contribution to food security and nutrition.

First, a central area for recommendation is the recognition and protection of Indigenous Peoples' land and resource rights. Secure land tenure, territorial governance, and protection from land grabbing and extractive industries are foundational to sustaining Indigenous food systems and ensuring long-term food security and biodiversity conservation. Second, the report could strongly recommend the integration of Indigenous Peoples' food systems into national food and nutrition policies, including school feeding programs, public procurement systems, and nutrition strategies. This would help bridge traditional food systems with formal policy frameworks while improving dietary diversity and reducing all forms of malnutrition.

Third, HLPE-FSN could emphasize the importance of Indigenous-led governance and decision-making in food system policy processes. This includes ensuring meaningful participation of Indigenous Peoples in the design, implementation, and monitoring of policies that affect their food systems, moving beyond consultation toward co-decision-making. Fourth, the report could recommend strengthening support for Indigenous knowledge systems, including intergenerational knowledge transfer, community-based education, and protection of traditional ecological knowledge. This is essential for maintaining cultural identity and resilience in the face of climate and social change.

Fifth, there is a strong need for investment in Indigenous-led research and data systems. The report could recommend participatory monitoring approaches that respect Indigenous methodologies and ensure that data collection reflects culturally relevant indicators of food security, nutrition, and wellbeing.

Sixth, HLPE-FSN could highlight the importance of climate change adaptation and biodiversity

	conservation strategies that are rooted in Indigenous knowledge systems. Indigenous-managed territories are highly effective in conserving ecosystems, and this should be formally recognized in climate and food security policies. Finally, the report could recommend addressing structural inequalities, including gender and youth disparities within Indigenous communities, ensuring that women and young people are actively supported as key actors in food systems transformation. Overall, these recommendations would help ensure that Indigenous Peoples' food systems are not only protected but actively supported as a central pillar of sustainable, equitable, and resilient global food systems.
Do you have any additional comments you would like to share with the HLPE-FSN?	No

14. Irvin Vimbiso Mukajami

Surname	Mukajami
First name	Irvin Vimbiso
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Artist
Current institution/organization	Ngoma YePasi Crafts
Affiliation	Other
Country of residence	Zimbabwe
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Yes

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Yes
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	There is need to reach out to the people by way of programs that may facilitate engagement and interaction with the society
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Everything is ok
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Yes
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Not that I know of, but I guess there is always some people who are not easily changed from their indigenous food systems
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Importance of indigenous foods

15. Joachim von Braun

Surname	Joachim
First name	von Braun
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal Capacity
Current position	Professor
Current institution/organization	Center for Development Research (ZEF), Bonn University
Affiliation	Academia
Country of residence	Germany
Do you have any additional comments you would like to share with the HLPE-FSN?	Please find below the link to our publication related to your theme (free download) Indigenous Peoples' Knowledge and the Sciences: Combining Knowledge and Science on Vulnerabilities and Solutions for Resilience Joachim von Braun and Helen Alford (eds.) Scripta Varia 157, LEV, Vatican City, 2025 pp. 440 ISBN: 978-88-266-1014-6 DOI: 10.65398/OMJD7446 https://www.pas.va/en/publications/scripta-varia/sv157pas.html

16. Forest Management Bureau, Department of Environment and Natural Resources (DENR), Philippines

Surname	CUSTODIO
First name	IRENE
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	SENIOR FOREST MANAGEMENT SPECIALIST
Current institution/organization	FOREST MANAGEMENT BUREAU, Department of Environment and Natural Resources (DENR)
Affiliation	Government and other public institution
Country of residence	Philippines
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The framework already captures the key elements to guide policy-making aimed at food security and nutrition. No other comments.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The topics are very comprehensive and well-backed by related studies.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Can't suggest any.
Do you have any additional comments you would like to share with the HLPE-FSN?	There is none however, i would like to commend the very comprehensive draft report supported by substantial related studies and case studies.

17. Romeo Sossou

Surname	Sossou
First name	Romeo
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Research scientist
Current institution/organization	Agricultural Policy Research and Analysis Laboratory (LARPA) of the National Institute of Agricultural Research of Bénin (INRAB)
Affiliation	Government and other public institution
Country of residence	Benin
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	1. The final aim or the ultimate goal of the IPFS is less apprehended in the paragraph of definition. 2. Even it is said that the IPFS represent the delicate balance between nature It will be interesting to point out the biodiversity (as in the biological diversity) and seed/plant/animal genetic resources as a foundational element of IPFS. 3. The fact that in IPFS, a major concern is the prevention of FLW should be more pointed out to serve a key element of promotion and the rationale behind that zero FLW in IPFS should be stated.

18. Antonella Cardone

Surname	CORDONE
First name	ANTONELLA
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Senior Technical Specialist Nutrition and Social Inclusion and previously for almost 2 decades associated to IPs and Senior Technical Specialist Indigenous Peoples at IFAD
Current institution/organization	International Fund for Agricultural Development (IFAD)
Affiliation	UN
Country of residence	Italy

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?

The proposed working definition is a significant step forward. Several observations are offered, with specific reference to UNDRIP, the IFAD Digital Toolbox on Sustainable and Resilient Indigenous Peoples Food Systems developed with the support of the Government of Canada, and the White/Wiphala Paper:

- **Rights-based grounding in UNDRIP:** The definition should explicitly anchor in UNDRIP (2007), particularly Articles 10, 26, 31, and 32, which affirm Indigenous Peoples' rights to their territories, to maintain and strengthen their cultural heritage and traditional knowledge, and to determine priorities for development on their lands. The White/Wiphala Paper (FAO, 2021) explicitly placed IPFS within a rights-based framework, emphasising that Indigenous Peoples are rights holders, not stakeholders. The definition in the report partially reflects this, but the rights dimension should be foregrounded, not embedded.
- **The IFAD Digital Toolbox (2022)** was developed and led by indigenous peoples (TIP). It identifies four defining features of IPFS — management practices, knowledge and innovation, sustainability and resilience, and culture and spirituality. These map closely onto the draft definition, but the IFAD framing more explicitly recognises that Indigenous knowledge is not merely empirical but includes 'spiritual knowledge and values that underpins human-environment relationships.' The draft definition's reference to 'cultural and spiritual values' could be strengthened by this formulation.
- **Food as non-commodity:** The White/Wiphala Paper is unambiguous that for Indigenous Peoples, 'food is not a commodity but a sacred gift from nature.' This principle — which goes to the heart of the divergence between IPFS and industrial food systems — is mentioned elsewhere in the report but should be reflected in the definition itself.
- **Self-determination and collective rights:** UNDRIP Article 3 affirms Indigenous Peoples' right to self-determination. UNDRIP Article 19 requires states to consult and cooperate with Indigenous Peoples through their own representative institutions. The definition should explicitly frame IPFS as systems over which Indigenous Peoples exercise self-determination and collective governance rights,

	not systems that are managed 'by' or 'for' others. Hence ensuring FPIC. • Taboos and cultural regulation: The White/Wiphala Paper (Annex 2) highlights 'taboos and cultural prohibitions' as integral to IPFS resource regulation — mechanisms ensuring conservation and equitable consumption. These are absent from the draft definition and should be acknowledged as part of the governance dimension of IPFS. • Non-intact systems: The definition reads as describing a functional, intact IPFS. IPFS operate across a spectrum, with disruption and fragmentation common. As the draft itself acknowledges, only a small proportion of IPFS are currently intact. The definition should explicitly acknowledge that systems in disrupted or transitional states may still constitute IPFS and deserve recognition and support.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The following observations are made with reference to UNDRIP : • UNDRIP as the legal backbone of the framework: The conceptual framework would be strengthened by explicitly situating it within the international legal architecture of UNDRIP. The White/Wiphala Paper called on the UNFSS to 'incorporate the principles and values of Indigenous Peoples' food systems,' citing UNDRIP as their legal basis. UNDRIP Articles 26–29 (on lands, territories, and resources) and Article 31 (on cultural heritage and traditional knowledge) are the structural conditions that enable each of the six food security dimensions for Indigenous Peoples. The framework should map these UNDRIP provisions onto the dimensions. • Food sovereignty as a seventh dimension: The White/Wiphala Paper and the IFAD Toolbox both foreground food sovereignty — the right of Indigenous Peoples to define their own food systems, to determine what, how, and for whom food is produced — as foundational. This concept goes beyond 'agency' as currently framed in the six dimensions and constitutes a political right grounded in UNDRIP. The framework should either expand the 'agency' dimension to encompass food sovereignty, or add a seventh dimension. • IFAD's project design framework as a complement: The IFAD Toolbox (2022) proposes a

	four-step project design process (food biodiversity assessment, dietary diversity assessment, community consultations, and project design) that could complement the HLPE-FSN conceptual framework at the operational level. The HLPE-FSN framework sets the analytical architecture; the IFAD toolbox offers its practical operationalization. The report should explicitly reference this complementarity. • Gender as structural determinant: Both the IFAD Toolbox and the White/Wiphala Paper are explicit that 'Indigenous women disproportionately bear the burden of malnutrition' and are 'the main food providers, knowledge keepers, and seed custodians.' UNDRIP Article 44 calls for equal enjoyment of rights by Indigenous women and men. The framework's treatment of gender as cross-cutting should be upgraded to a structural determinant — recognising that the food security outcomes of the six dimensions are gendered, and that women's rights to land and knowledge are preconditions, not variables. • Spiritual dimension: The White/Wiphala Paper describes Indigenous Peoples' 'profound spiritual connection with nature' as the unifying principle of IPFS. This is distinct from cultural values and deserves recognition as a distinct dimension of the framework — particularly since the report's own analysis of the Sámi, Maasai, Rio Negro, and Bali Aga systems all demonstrates how spiritual relationships with territory and species structure food practices.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	The following data gaps are highlighted: • Double burden of malnutrition: The IFAD Toolbox (2022) explicitly notes that the disruption of IPFS leads to 'malnutrition in all its forms — undernutrition, micronutrient deficiency, overweight and obesity, and diet-related non-communicable diseases' simultaneously within the same communities. The report covers individual forms but does not sufficiently present quantitative data on this 'double burden' as experienced specifically by Indigenous Peoples' communities. Disaggregated epidemiological data by Indigenous Peoples, where available, should be compiled across regions. • Loss of food biodiversity as a nutrition driver: The

IFAD Toolbox centres its entire nutrition framework on food biodiversity, noting that 'some IPFS comprise hundreds of different food sources.' The report would benefit from systematic presentation of data showing the correlation between biodiversity loss in Indigenous Peoples' territories and nutritional outcome deterioration — drawing on studies reviewed in the Toolbox (Kuhnlein et al., 2009, 2013; Powell et al., 2015).

- Indigenous women's disproportionate malnutrition burden: Lemke and Delormier (2017), cited in the IFAD Toolbox, provide a conceptual framework for understanding gender-nutrition-IPFS linkages. This body of evidence, though limited, should be synthesised in the report. The White/Wiphala Paper also documents women's role as primary food providers and the gendered consequences of land dispossession.
- Data on free, prior and informed consent (FPIC) compliance: UNDRIP Article 19 requires meaningful community consultation in project and policy design. The report notes that FPIC is 'often reduced to procedural formality,' but lacks data on the prevalence and quality of FPIC compliance across development programmes affecting IPFS. This gap in governance data should be flagged as a monitoring priority.
- 476 million Indigenous Peoples — disaggregated food security data: The White/Wiphala Paper notes that over 476 million Indigenous Peoples live across more than 90 countries. The report should more systematically present food insecurity prevalence rates, dietary diversity scores, and stunting/wasting data disaggregated by indigenous peoples' status, where available from national surveys, FAO, WHO, and UNICEF datasets.
- COVID-19 and IPFS resilience: The White/Wiphala Paper includes analysis of COVID-19 and IPFS resilience (Annex 3). Communities with intact IPFS demonstrated greater food security resilience during the pandemic. This dimension — the role of IPFS as a buffer during systemic crises — is relevant to the report's scenario analysis and should be incorporated.

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?

Topics deserving greater coverage:

- **Rights to genetic resources and seed sovereignty:** UNDRIP Article 31 affirms Indigenous Peoples' right to 'maintain, control, protect and develop their cultural heritage, traditional knowledge, and traditional cultural expressions,' including seeds and genetic resources. The Nagoya Protocol (CBD, 2011) and the International Treaty on Plant Genetic Resources (ITPGR) are relevant here. The White/Wiphala Paper dedicates significant attention to how intellectual property regimes threaten Indigenous Peoples' seed systems. This is underrepresented in the report and should receive a dedicated treatment, including its implications for food availability and dietary diversity.
- **UNDRIP's specific articles on food systems:** Several UNDRIP articles have direct relevance to IPFS that the report should explicitly engage with. Article 20 affirms the right to maintain subsistence and traditional economic activities. Article 25 recognises the right to maintain spiritual relationships with traditionally owned lands. Article 29 affirms the right to the conservation and protection of their environment. These provisions constitute the international legal framework for the policy recommendations in Chapter 6 but are not sufficiently cited.
- **Community-based monitoring and data sovereignty:** The IFAD Toolbox (Step 1: Food Biodiversity Assessment and Step 2: Dietary Diversity Assessment) provides practical tools for community-based monitoring. The White/Wiphala Paper calls for Indigenous Peoples' data sovereignty — the right of communities to own and control data about themselves, consistent with UNDRIP Article 31. The report acknowledges data gaps but does not propose Indigenous-led monitoring solutions. A section on data sovereignty and community-based monitoring acknowledging communities' own protocols would be a significant contribution.
- **Agroecology and regenerative agriculture as IPFS allies:** The IFAD Toolbox (2022) explicitly calls for scaling out 'agroecology, nature-based solutions, and regenerative agricultural practices' as aligned with IPFS. The White/Wiphala Paper likewise positions agroecology as complementary to

	Indigenous Peoples' knowledge, not a replacement for it. The report's discussion of these approaches in Chapter 6 could more explicitly frame agroecology and Neglected and Under-utilized Species (see the framework and 5 how to do notes on NUS, IFAD and Alliance Ciat Bioversity) as a policy bridge between IPFS and mainstream food systems. • Urban Indigenous food sovereignty: The IFAD Toolbox notes that 'there is a need to combat traditional knowledge loss and increase access to intercultural education' in urban contexts. UNDRIP Article 20 affirms that Indigenous Peoples retain food rights even when displaced. The report's treatment of urban and peri-urban IPFS (section 4.10) is brief. Given that significant members of Indigenous peoples now live in cities — particularly in Latin America, Australia, and Canada — this context deserves more systematic treatment, including reference to urban food sovereignty programmes.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	The following sources should be more systematically integrated: • The White/Wiphala Paper (FAO, 2021) — Annex 2 (Divergence of Paradigm and Worldview) and Annex 3 (Drivers of IPFS Disruption): These annexes provide a comprehensive mapping of IPFS characteristics, paradigm divergences from industrial food systems, and global drivers of disruption. The report's own Chapter 2 typology would benefit from explicit reference to and alignment with this mapping, which was developed with direct Indigenous authorship and is available in multiple languages. • UNDRIP implementation reports: The Expert Mechanism on the Rights of Indigenous Peoples (EMRIP) and the UN Permanent Forum on Indigenous Issues (UNPFII) produce annual reports and studies on the implementation of UNDRIP. Recent studies on Indigenous Peoples' food systems, rights to lands and territories, and the right to food should be cited. The UNPFII Study on Indigenous Peoples and the right to food (E/C.19/2012/7) is directly relevant. • IFAD Policy on Engagement with Indigenous Peoples: IFAD has a dedicated Indigenous Peoples Policy that operationalises UNDRIP principles in the

context of rural development finance. The policy's commitments to FPIC, territorial rights, and culturally appropriate nutrition interventions provide a model for how international financial institutions can support IPFS. The Policy includes a dedicated principle of engagement to Food Security and Food Sovereignty. The report should reference this as a policy instrument alongside UNDRIP.

- Coalition on Indigenous Peoples' Food Systems (established post-UNFSS 2021): The White/Wiphala Paper catalysed the creation of this coalition. Its outputs, member organisations, and advocacy positions represent the organised voice of Indigenous Peoples on food system transformation and should be cited in the report's chapter on co-creation of knowledge and policy recommendations.
- Lemke and Delormier (2017) on gender, nutrition, and IPFS: This paper, cited in the IFAD Toolbox, provides the most comprehensive framework for understanding gendered dimensions of IPFS nutrition. It should be more prominently cited in the report's gender analysis.
- Indigenous Peoples' oral and living knowledges: Consistent with the White/Wiphala Paper's approach, the report should make a stronger methodological statement about the validity of oral knowledge, storytelling, and community-authored documentation as evidence. The White/Wiphala Paper itself was 'drafted by Indigenous Peoples from across the world in a format understandable by non-indigenous scientists' — this model of translation without hierarchy should be cited as a methodological precedent.
- The IFAD and IPs led Digital Toolbox on Sustainable and Indigenous Peoples' Food Systems for Nutrition sponsored by the Government of Canada is a valid tool to refer to. there are 4 videos showing IPs Food Systems from the perspective of indigenous peoples.
- Worth reviewing is the IFAD-Alliance Bioversity-CIAT Framework and 5 How to do Notes on Neglected and Under-utilized Species.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

Drawing on the White/Wiphala Paper (Annex 1: Case Studies) and the IFAD Toolbox's participatory video cases, the following are recommended to balance geographic representation and address diverse forms of malnutrition:

- IFAD-supported projects in Kenya and Tanzania (East Africa — pastoral systems): The IFAD Toolbox includes participatory videos from pastoral communities in East Africa demonstrating biodiversity-based nutrition interventions aligned with customary governance. These represent funded, evaluated projects with documented nutritional outcomes — a category missing from the draft report. IFAD's project data from these contexts should be incorporated.
- Quinoa and Andean grain revitalization — Bolivia and Peru (Latin America): The White/Wiphala Paper (Annex 1) documents the revitalization of Andean food systems in Bolivia and Peru, where constitutional recognition of 'buen vivir' and community seed networks have strengthened food biodiversity and nutritional outcomes. This case addresses micronutrient deficiency and food sovereignty simultaneously and should be developed as a full case study.
- Khasi people of Meghalaya, India (South Asia): The White/Wiphala Paper and FAO/Alliance of Bioversity (2021) document the Khasi agroforestry system as an example of diversified, market-integrated IPFS that still maintains significant wild food reliance. This case offers lessons on managing the transition to hybrid systems while preserving nutritional diversity, relevant to the report's typology of 'reconfigured hybrid' systems.
- Awajún people of Peru (Latin America — Amazon): Documented in Kuhnlein et al. (2009) and referenced in the report, the Awajún case (223 food species, high micronutrient content) should be developed into a full case study demonstrating how intact IPFS provide nutritional sufficiency without supplementation programmes. This directly addresses micronutrient deficiency — the most common form of malnutrition in the region.
- New Zealand — Māori food sovereignty and fisheries restitution (Pacific): The White/Wiphala Paper specifically highlights New Zealand's treaty-based restitution of food rights as a model. The

2017 Te Awa Tupua Act (recognising the Whanganui River as a legal entity), combined with modern treaty fisheries settlements, provides one of the most complete examples of UNDRIP principles being applied in domestic law. This case directly addresses UNDRIP implementation and should be featured prominently.

- Philippines — Ifugao rice terraces and IPRA implementation (Southeast Asia): The IFAD Toolbox uses this case to illustrate how legal recognition of customary land tenure (through the Indigenous Peoples' Rights Act, 1997) has supported both food sovereignty and biodiversity conservation. The Ifugao case is also a GIAHS site, providing independently validated recognition. This case addresses the governance dimension and should be developed with reference to UNDRIP Articles 26–29.

- Arctic Canada — Inuit food sovereignty and self-determination (Arctic/North America): The White/Wiphala Paper includes contributions from the Inuit Circumpolar Council. The Inuit Tapiriit Kanatami's (ITK) Indigenous-led food sovereignty framework, developed in response to the nutrition transition in the Arctic, is an example of UNDRIP Article 3 (self-determination) in practice. This case is especially valuable for addressing all forms of malnutrition and for demonstrating community-led monitoring.

Drawing on the White/Wiphala Paper (Annex 1: Case Studies) and the IFAD Toolbox's participatory video cases, the following are recommended to balance geographic representation and address diverse forms of malnutrition:

- Strongly suggest to review the work of Winona Leduke.

Do you have any additional comments you would like to share with the HLPE-FSN?

The following six policy recommendation areas are proposed, explicitly grounded in UNDRIP, the White/Wiphala Paper, and the IFAD Toolbox:

1. Full Implementation of UNDRIP as the Non-Negotiable Legal Baseline

The report's single most important policy recommendation should be that all food system interventions affecting Indigenous Peoples must be grounded in UNDRIP. This means: implementing FPIC as a binding procedural and substantive right (not a consultation formality), as affirmed in UNDRIP Articles 10, 19, and 32; recognising territorial rights (land, water, marine) as foundational to food security, per UNDRIP Articles 26–28; and protecting Indigenous Peoples' rights to maintain, control and develop their traditional knowledge and genetic resources, per UNDRIP Article 31. The White/Wiphala Paper called on the UNFSS to incorporate these principles; the HLPE-FSN report should call on CFS and member states to implement them through binding national legislation.

2. Redirect Agricultural Subsidies and Finance Toward IPFS

Current agricultural subsidies — estimated at USD 635 billion annually — disproportionately support input-intensive monocultures, actively undermining IPFS. The IFAD Toolbox calls for 'scaling out agroecology, nature-based solutions, and regenerative agricultural practices' in Indigenous contexts, and IFAD's own investment model demonstrates that targeted finance can deliver nutritional and biodiversity outcomes simultaneously. The recommendation should call for a dedicated IPFS financing window within international climate and food security finance mechanisms, designed with Indigenous Peoples' institutions and governed by FPIC.

3. Mandatory Disaggregation of Food Security and Nutrition Data by Indigeneity

As both the IFAD Toolbox and the report note, the invisibility of Indigenous Peoples in national datasets is a persistent barrier to policy action. The recommendation should call for mandatory disaggregation of national food security, dietary diversity, and malnutrition data by indigenous identity, consistent with UNDRIP Article 31's data

sovereignty provisions. Indigenous Peoples' communities should own and control data about themselves, and community-based monitoring using culturally appropriate indicators (as proposed in the IFAD Toolbox Steps 1 and 2) should be funded and institutionalised.

4. Intercultural Education and Language Revitalization as Food Security Interventions
The IFAD Toolbox explicitly states that 'discriminatory lack of access to education for Indigenous children and youths negatively impacts their nutrition, health, and quality of life' and calls for 'intercultural education which will combine traditional and contemporary knowledge systems.' UNDRIP Articles 14 and 15 affirm Indigenous Peoples' rights to education in their own languages and to have their cultures reflected in education. The recommendation should treat intercultural education and language revitalization as direct food security interventions — not cultural luxuries — recognising that knowledge transmission is the mechanism through which IPFS reproduce themselves across generations.

5. Establish Knowledge-Policy Interfaces with Indigenous Peoples as Right Holders
The White/Wiphala Paper was itself a demonstration of what Indigenous-led knowledge production for policy looks like. Its process — co-creation across six sociocultural regions, collective authorship, translation without hierarchy — should be institutionalised. The recommendation should call for the establishment of permanent knowledge-policy interfaces at national and international levels where Indigenous knowledge holders participate as right holders (per UNDRIP Article 18), not as consultees. This includes transforming the term 'science-policy interface' to 'knowledge-policy interface,' as proposed in Chapter 5.

6. Align Global Food System Transformation Agendas with IPFS Priorities and UNDRIP
The post-2030 global agenda, the Kunming-Montreal Global Biodiversity F

19. Walter Alberto Pengue

Surname	Pengue
First name	Walter Alberto
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Director, Landscape and Ecology Group, GEPAMA, FADU, UNIVERSIDAD DE BUENOS AIRES // Ecology Group, Full Profesor, ICO, Universidad Nacional de General Sarmiento, Buenos Aires.
Current institution/organization	Landscape and Ecology Group, GEPAMA, FADU, UNIVERSIDAD DE BUENOS AIRES // Ecology Group, Full Profesor, ICO, Universidad Nacional de General Sarmiento, Buenos Aires.
Affiliation	Academia
Country of residence	Argentina
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	I agree with this.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The document, from its title, reflects its objective of falling under the umbrella of Indigenous Peoples' food and knowledge systems. However, this approach could still be enhanced by citing Indigenous agronomic examples and management practices, which are important both for Indigenous peoples and for sustainable agricultural management in general. For example, they only mention the milpa system in two lines. An explanation of what it entails could benefit those unfamiliar with the practice and teach and improve other perspectives on agriculture. Something similar would be very useful to explain the agronomic, productive, social and cultural functioning of the "waru waru". Or the Curanto. Curanto is a traditional meal originating from the Chiloé Archipelago in southern Chile. Its name comes from the Mapudungun word kurantu, which means "stone heated by the sun" or "hot stone." It consists of cooking various foods underground using hot stones. It would also be important and useful, for cultural rescue, but also agronomic and food rescue, to add the role of indigenous technology and indigenous tools that have been used since ancestral times. It would also be useful to contribute to "rescuing" ancestral and original crops from different places and centers of diversity and origin, in the case of ancestral wheats, corns, teosintes and rice.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Centers of origin and biodiversity. Ancestral crops in different parts of the world linked with indigenous people.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Ancestral crops. Indigenous practices. Indigenous tools.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	No, is OK.

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.

Curanto (Argentina and Chile). Waru-warú (Bolivia). Quinoa (Perú). Ancestral wheat (Turkey, Siria). Teocintle (Guatemala, Mexico).

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

Connections. Potentiality for increasing food system, putting the focus in indigenous systems examples.

20. Alliance pour la Souverainete Alimentaire (MENA), Tunisia

Surname	Mahmoud
First name	Souad
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Coordinatrice
Current institution/organization	Alliance pour la Souverainete Alimentaire -MENA
Affiliation	Civil society/NGO
Country of residence	Tunisia

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?

Le rapport propose la définition de travail suivante des systèmes alimentaires autochtones (IPFS) : « Des 'systèmes' représentant l'équilibre délicat entre nature, peuple et nourriture. Ces systèmes sont dynamiques, relationnels et communautaires, ancrés dans les territoires autochtones... »

Cette définition présente plusieurs qualités analytiques importantes, notamment la reconnaissance du caractère systémique, communautaire et territorial des IPFS. Cependant, la définition gagnerait à intégrer explicitement la dimension de rapports de production collectifs qui distinguent fondamentalement les IPFS des systèmes alimentaires capitalistes. Les IPFS ne sont pas seulement des systèmes « ancrés dans les territoires » ; ils sont des modes d'organisation sociale de la production et de la reproduction dans lesquels les décisions sur ce qu'on produit, comment, pour qui et dans quel cadre normatif sont prises collectivement, en dehors de la logique de l'accumulation privée. Cette distinction est politique, pas seulement culturelle.

La définition devrait également préciser que les IPFS constituent des économies non marchandes fondées sur la valeur d'usage, la réciprocité et la redistribution communautaire en contraste explicite avec les systèmes fondés sur la valeur d'échange et le profit. Cette précision permettrait de mieux guider les politiques de protection, en évitant de traiter les IPFS comme de simples variantes des systèmes alimentaires conventionnels.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

Le cadre conceptuel du rapport, articulé autour de la « relationnalité », des valeurs et des territoires, constitue une avancée réelle par rapport aux approches standard de la sécurité alimentaire. L'intégration des six dimensions (disponibilité, accès, utilisation, stabilité, agentivité, durabilité) avec la notion de relationnalité est particulièrement pertinente.

Nonobstant il présente des Lacunes analytiques tel que :

11.1 La dimension du pouvoir est absente du cadre
Le cadre décrit les éléments constitutifs des IPFS de manière relativement équilibrée, mais il ne théorise pas suffisamment les rapports de pouvoir qui déterminent dans quelle mesure ces systèmes

peuvent fonctionner, se maintenir ou être détruits. Les six dimensions de la sécurité alimentaire sont présentées comme des objectifs à atteindre, sans analyser qui détient le pouvoir de les bloquer et pourquoi.

Une recommandation concrète : ajouter une septième dimension transversale au cadre celle du pouvoir collectif et de l'autodétermination politique qui conditionne la réalisation effective de toutes les autres dimensions. Sans contrôle collectif sur les ressources productives (terres, eaux, semences), les six dimensions restent des aspirations formelles.

11.2 La relationnalité comme résistance à la marchandisation

Le concept de « relationnalité » est traité dans le rapport comme une caractéristique culturelle et spirituelle des IPFS. Il faudrait également le conceptualiser comme une forme de résistance pratique à la logique marchande : en traitant la nourriture, la terre et les savoirs comme des relations et non comme des marchandises, les IPFS constituent un mode d'organisation économique alternatif fondé sur d'autres principes que ceux du marché capitaliste. Cette dimension politique de la relationnalité devrait être explicitement nommée dans le cadre.

11.3 Le cadre sous-estime les contradictions structurelles

Le cadre conceptuel suppose implicitement que les politiques favorables aux IPFS peuvent être adoptées dans le cadre des structures économiques et institutionnelles existantes. Or les intérêts économiques dominants agroindustriels, extractifs, financiers tirent précisément profit du maintien d'un système qui marginalise les IPFS. Un cadre analytique complet devrait intégrer cette dimension conflictuelle : les politiques de soutien aux IPFS ne sont pas seulement des questions techniques, elles impliquent une redistribution du pouvoir et des ressources qui se heurte à des résistances organisées.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

12.1 Données sur l'accaparement des terres et son impact sur les IPFS

Le rapport mentionne la dépossession foncière mais sans quantifier suffisamment ses effets sur la sécurité alimentaire autochtone. Des données récentes permettent de compléter l'analyse : Selon la Rights and Resources Initiative (2020), plus de 50 % des terres mondiales sont sous régimes coutumiers, mais seule une infime portion est légalement reconnue. Cette insécurité foncière expose directement les IPFS à l'accaparement par des acteurs privés.

Les études de Oxfam International sur le land grabbing (accaparement des terres) en Afrique subsaharienne, en Asie du Sud-Est et en Amérique latine documentent comment l'acquisition massive de terres agricoles par des fonds d'investissement et des firmes transnationales depuis 2008 a détruit des systèmes alimentaires locaux et autochtones.

Référence suggérée : Rights and Resources Initiative (2020). "Rights and Resources: Whose Land Is It, really? Tracking the State of Community Land Rights." Washington DC: RRI.

12.2 Données sur l'impact des accords commerciaux sur les IPFS

L'impact des accords de libre-échange (notamment l'OMC et ses accords sur l'agriculture) sur les IPFS est systématiquement absent du rapport. Ces accords imposent l'ouverture des marchés agricoles locaux à la concurrence des produits subventionnés des pays riches, détruisant les économies paysannes et autochtones qui forment la base des IPFS.

Référence : Rosset, P. (2006). "Food is Different: Why We Must Get the WTO Out of Agriculture." London: Zed Books. / Suppan, S. (2014). "Trade Agreements and Food Sovereignty." Institute for Agriculture and Trade Policy (IATP).

12.3 Données sur l'inégalité de genre au sein des IPFS

Les femmes autochtones assurent une part disproportionnée du travail alimentaire (production, transformation, préparation, transmission des savoirs) sans que ce travail ne soit comptabilisé ni rémunéré. Les données sur cette dimension sont insuffisantes dans le rapport.

Référence : FAO (2023). "The Status of Women in Agrifood Systems." Rome: FAO. / Kuhnlein, H.V. et al.

	(2013). "Indigenous Peoples' Food Systems and Well-Being: Interventions and Policies for Healthy Communities." Rome : FAO. 12.4 Données sur la malnutrition par double fardeau dans les communautés autochtones urbanisées Le rapport aborde trop peu la situation des peuples autochtones déplacés ou urbanisés, qui font face à un double fardeau nutritionnel : persistance de carences liées à la perte d'accès aux aliments traditionnels, combinée à l'essor des maladies liées à une alimentation ultra-transformée. Des études sur les communautés autochtones d'Amérique du Nord, d'Australie et d'Amérique latine documentent ce phénomène de manière précise. Référence : Gracey, M. & King, M. (2009). "Indigenous health part 1: determinants and disease patterns." The Lancet, 374(9683), 65–75.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	13.1 Le rôle de l'industrie agro-alimentaire dans la destruction des IPFS Le rapport identifie des « drivers » généraux tels que la mondialisation et le changement climatique, mais sous-traite le rôle spécifique et actif des firmes transnationales de l'alimentation et de l'agriculture dans la destruction des IPFS. Ces firmes productrices de semences hybrides et transgéniques, fabricantes d'aliments ultra-transformés, distributeurs de la grande distribution mondiale ne sont pas de simples acteurs du marché ; elles mènent des stratégies délibérées de pénétration des marchés ruraux et autochtones, en substituant des produits industriels aux aliments locaux traditionnels. 13.2 Le brevetage du vivant et la biopiraterie La question de l'appropriation privée des semences, des plantes médicinales et des savoirs associés par le biais des brevets est trop peu présente dans le rapport, notamment dans le Chapitre 5 sur la co-construction des savoirs. Des centaines de variétés végétales issues de territoires autochtones ont été brevetées par des firmes pharmaceutiques et semencières. Ce phénomène constitue une forme contemporaine d'expropriation intellectuelle. 13.3 Le rôle des institutions financières internationales Les politiques d'ajustement structurel imposées par le Fonds monétaire international (FMI) et la Banque mondiale depuis les années 1980 ont contraint de nombreux États du Sud à démanteler leurs politiques

	agricoles de soutien aux paysanneries locales et autochtones, en échange d'accès aux prêts internationaux. Cet aspect structurel est totalement absent du rapport. 13.4 La question de la souveraineté semencière Les semences sont à la fois le fondement matériel et le support culturel des IPFS. La destruction de la diversité semencière autochtone par la diffusion des variétés commerciales à haut rendement (Révolution verte, semences OGM) a des impacts profonds sur la biodiversité alimentaire et sur la dépendance économique des communautés. Ce thème est mentionné mais insuffisamment développé. 13.5 Thèmes surestimés Le cadrage autour des « solutions » technologiques (métriques, indicateurs, cadres d'évaluation) dans le Chapitre 3 occupe une place trop importante au regard des causes structurelles. Il risque de laisser entendre que le problème des IPFS est principalement d'ordre informatif (absence de données) plutôt que d'ordre politique (rapports de force défavorables aux peuples autochtones).
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	14.1 Références théoriques sur l'économie politique agraire • Bernstein, H. (2010). "Class Dynamics of Agrarian Change." Halifax : Fernwood Publishing. - Analyse des transformations agraires mondiales par le prisme des rapports de classe. • McMichael, P. (2009). "A food regime genealogy." Journal of Peasant Studies, 36(1), 139–169. - Sur les régimes alimentaires mondiaux et leur impact sur les agricultures paysannes. • Shiva, V. (1993). "Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology." London : Zed Books. - Sur la destruction de la biodiversité agricole par les monocultures industrielles. • Holt-Giménez, E. & Altieri, M.A. (2013). "Agroecology, Food Sovereignty, and the New Green Revolution." Agroecology and Sustainable Food Systems, 37(1), 90–102. 14.2 Références sur la souveraineté alimentaire • La Via Campesina (2007). "Nyéléni Déclaration on Food Sovereignty." - Document fondateur du mouvement international pour la souveraineté alimentaire, formulé par des paysans et des peuples autochtones.

	• Wittman, H., Desmarais, A. & Wiebe, N. (eds.) (2010). "Food Sovereignty: Reconnecting Food, Nature and Community." Halifax: Fernwood Publishing. 14.3 Savoirs autochtones et épistémologies du Sud • Santos, B. de Sousa (2014). "Epistemologies of the South: Justice Against Epistemicide." Boulder : Paradigm Publishers. - Sur la destruction des savoirs non-occidentaux par le colonialisme épistémique. • Whyte, K.P. (2017). "Food sovereignty, justice and Indigenous peoples: An essay on settler colonialism and collective continuance." In Oxford Handbook of Food Ethics. - Sur les liens entre colonialisme de peuplement, souveraineté alimentaire et justice pour les peuples autochtones. 14.4 Savoirs autochtones à intégrer directement Le rapport devrait davantage s'appuyer sur les déclarations et documents produits par les organisations autochtones elles-mêmes : • Les déclarations du Forum permanent des Nations Unies sur les questions autochtones (UNPFII) relatives aux systèmes alimentaires. • Les documents de La Via Campesina qui intègrent de nombreuses organisations autochtones dans sa plateforme internationale. • Les rapports du FIDA (Fonds international de développement agricole) sur les peuples autochtones et l'alimentation.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Les quatre études de cas de la région MENA mérite d'être explicitement abordée dans le rapport HLPE-FSN n°21 : Cas 1 : Algérie : système oasien ghout (El Oued/Souf) et agricultures amazighes de Kabylie Dans l'Erg oriental, les communautés paysannes du Souf ont développé depuis le XVe siècle le système ghout : des cratères creusés dans les dunes permettant la culture de palmiers dattiers au contact de la nappe phréatique, sans pompage, en association avec légumes et arbres fruitiers. Environ 9 500 ghouts existaient dans la région (inscrit au SIPAM/GIAHS de la FAO en 2022). En Kabylie, les communautés amazighes pratiquent une polyculture étagée (figuiers, oliviers, céréales, légumineuses) gouvernée par des structures d'autogestion villageoise (tajmâat). La menace principale est l'agriculture industrielle saharienne soutenue par la loi APFA de 1983 : le pompage massif des nappes

fossiles par des investisseurs privés provoque une remontée de la nappe qui noie les ghouts ancestraux, détruisant à la fois les exploitations familiales et la biodiversité. Les femmes amazighes, dépositaires invisibilisées des savoirs alimentaires (conservation des semences, transformation des produits), sont particulièrement affectées.

Cas 2 : Égypte : Nubiens (Nil supérieur) et Amazighs de l'oasis de Siwa

Le peuple nubien a développé pendant dix millénaires un système alimentaire fondé sur la riziculture de décrue, la datticulture, la pêche fluviale et l'irrigation gravitaire, intimement lié au cycle des crues du Nil. L'oasis de Siwa abrite une communauté amazighe d'environ 30 000 personnes dont le système repose sur 280 000 palmiers dattiers et 27 500 tonnes d'olives annuelles, reconnu par la FAO comme banque de semences in situ d'importance mondiale. Primitivisation successive des barrages d'Assouan (1902-1964) constitue une accumulation primitive d'État : plus de 50 000 Nubiens ont été déplacés de force, leurs terres submergées, leur tissu social et alimentaire millénaire détruit sans consentement ni reconnaissance de leurs droits collectifs. À Siwa, l'ouverture routière de 1985 a déclenché un tourisme de masse et une irrigation intensive surexploitant les aquifères, menaçant physiquement de noyer l'oasis. L'État égyptien n'a jamais reconnu l'indigénité nubienne ni les droits fonciers qui en découlent.

Cas 3 : Irak : Arabes des Marais (Ma'dan) et zones humides mésopotamiennes (Al-Ahwar)

Les Ma'dan pratiquent depuis au moins 5 000 ans un système alimentaire lacustre unique : pêche, élevage de buffles d'eau sur îles flottantes de roseaux, riziculture de décrue, récolte de plantes aquatiques, dans ce qui était le plus grand système de zones humides du Moyen-Orient (20 000 km²). Entre 1991 et 2003, le régime a délibérément asséché les marais digues, canaux de dérivation, bombardements, empoisonnement des eaux comme arme politique contre les communautés chiites. En 2003, 1 600 personnes seulement vivaient encore dans leurs villages. Depuis 2003, une réalimentation partielle a eu lieu, mais une nouvelle vague de destruction résulte de la convergence des barrages turcs et iraniens en amont, de la sécheresse chronique, de la

	pollution pétrolière et de la pression agro-industrielle. L'UNESCO a inscrit Al-Ahwar au Patrimoine mondial en 2016 ; l'ONU le décrit en 2026 comme « au bord du précipice ». Les femmes ma'dan, autrefois actives dans la récolte des roseaux, la production artisanale et les soins aux buffles, ont vu leur rôle réduit aux seules tâches domestiques, et les savoirs écologiques féminins millénaires sont en voie d'extinction irrémédiable. Cas 4 : Libye : Amazighs du Djebel Nafoussa, Touaregs et Toubous du Fezzan La Libye abrite trois peuples autochtones aux systèmes alimentaires distincts. Les Amazighs du Djebel Nafoussa (350 000-500 000 personnes) pratiquent une polyculture étagée séculaire (oliviers, figuiers, vigne, céréales) avec gestion collective de l'eau par diguettes et citernes. Les Touaregs du Fezzan combinent pastoralisme nomad
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Dans quels domaines le rapport devrait-il formuler des recommandations ? 16.1 Réforme agraire et sécurisation des droits fonciers collectifs La recommandation la plus urgente et la plus structurante est la reconnaissance et la protection juridique des droits fonciers collectifs des peuples autochtones. Cela implique : • Des réformes agraires nationales qui reconnaissent les formes collectives et coutumières de tenure foncière ; • Des mécanismes juridiques protégeant les terres autochtones contre l'accaparement par des acteurs privés ou étatiques ; • L'application effective du principe de consentement libre, préalable et éclairé (CLPE/FPIC) pour tout projet susceptible d'affecter les territoires autochtones. 16.2 Démantèlement des subventions aux systèmes agroindustriels Le rapport devrait recommander explicitement la réorientation des subventions agricoles actuellement massivement allouées aux monocultures industrielles (plus de 635 milliards USD par an selon les données citées dans le rapport lui-même) vers les IPFS, l'agroécologie et les systèmes alimentaires paysans. Cette recommandation implique une remise en cause des priorités budgétaires des États et des règles de l'OMC sur les subventions agricoles.

16.3 Protection des semences et des savoirs autochtones contre la brevetisation

Le rapport devrait recommander :

- La révision des accords internationaux de propriété intellectuelle (ADPIC/TRIPS) pour exclure le vivant et les savoirs traditionnels des régimes de brevet ;
- La création de mécanismes de protection sui generis des savoirs collectifs autochtones, fondés sur la gouvernance communautaire et non sur la propriété individuelle ;
- Des systèmes de partage équitable des avantages tirés de l'utilisation commerciale des ressources génétiques et savoirs autochtones, conformément au Protocole de Nagoya.

16.4 Souveraineté alimentaire comme cadre de politique publique

Le rapport devrait recommander que les États adoptent la souveraineté alimentaire le droit des peuples à définir leurs propres politiques alimentaires et agricoles comme cadre de politique publique, en opposition aux règles commerciales imposées par l'OMC qui subordonnent les agricultures locales aux marchés mondiaux.

16.5 Financement direct des organisations autochtones

Les mécanismes de financement internationaux (fonds climatiques, fonds pour la biodiversité, aide au développement) devraient être réorientés vers un financement direct des organisations et communautés autochtones, sans passer par les États nationaux qui n'ont pas toujours leurs intérêts à cœur. Des mécanismes de financement fondés sur la gouvernance autochtone et le droit à l'autodétermination devraient être développés.

16.6 Éducation et systèmes de savoir décolonisés

Les systèmes éducatifs formels constituent l'un des principaux vecteurs de destruction des savoirs alimentaires autochtones chez les jeunes générations. Le rapport devrait recommander des réformes éducatives permettant d'intégrer les savoirs et pratiques alimentaires autochtones dans les curricula scolaires, en partenariat avec les communautés concernées.

Do you have any additional comments you would like to share with the HLPE-FSN?

17.1 Sur le ton et la posture analytique du rapport
Le rapport est rédigé dans un registre de neutralité scientifique et de recommandation technique qui, bien qu'adapté à son audience institutionnelle, risque d'en atténuer la portée politique. Les crises que vivent les IPFS ne sont pas des « défis » abstraits mais des conséquences concrètes de choix politiques opérés par des acteurs identifiables au bénéfice d'intérêts économiques précis. Un rapport qui prétend défendre les IPFS devrait nommer ces responsabilités sans euphémisme.

17.2 Sur la représentation géographique
Le rapport est nettement plus fourni en études de cas provenant d'Amérique latine, d'Asie et du Pacifique. L'Afrique du Nord et le Moyen-Orient sont presque absents, de même que l'Afrique de l'Ouest francophone. Or ces régions abritent des systèmes alimentaires fondés sur des savoirs séculaires agriculture oasisienne du Maghreb, systèmes pastoraux sahéliens, agricultures des hauts plateaux éthiopiens et érythréens qui méritent une représentation équitable dans le rapport.

17.3 Sur la participation autochtone à la rédaction du rapport
Il est indispensable que le processus de finalisation du rapport associe étroitement des représentants des organisations autochtones, non seulement comme sources d'information ou de validation, mais comme co-auteurs. La légitimité du rapport dépend de cette participation effective, au-delà des consultations formelles.

17.4 Sur la cohérence entre le diagnostic et les recommandations
Un rapport qui diagnostique correctement que les IPFS sont détruites par les rapports de force économiques et politiques défavorables aux peuples autochtones ne peut se contenter de recommander une « meilleure gouvernance » ou une « meilleure valorisation ». La cohérence analytique exige que les recommandations soient à la hauteur du diagnostic : des transformations structurelles, pas seulement des ajustements institutionnels.

Cas 4 : Libye : Amazighs du Djebel Nafoussa, Touaregs et Toubous du Fezzan
La Libye abrite trois peuples autochtones aux systèmes alimentaires distincts. Les Amazighs du

Djebel Nafoussa (350 000-500 000 personnes) pratiquent une polyculture étagée séculaire (oliviers, figuiers, vigne, céréales) avec gestion collective de l'eau par diguettes et citernes. Les Touaregs du Fezzan combinent pastoralisme nomade et agriculture oasisienne (dattes, mil, sorgho) articulée autour de réseaux caravaniers transfrontaliers. Les Toubous pratiquent l'élevage de dromadaires et la collecte de dattes dans le Sahara. La Grande Rivière Artificielle (GMR, lancée en 1985, 33 milliards de dollars) pompe 6,5 millions de m³/jour des nappes fossiles situées sous les territoires touaregs et toubous pour alimenter le nord du pays, sans consentement ni bénéfice pour les communautés concernées exemple paradigmatique d'accumulation étatique par dépossession. Depuis 2011, les conflits armés ont détruit les infrastructures hydrauliques du Nafoussa, les précipitations côtières ont diminué de moitié (de 400 à 200 mm), et les guerres inter-ethniques au Fezzan ont déstabilisé les circuits de transhumance et d'échange alimentaire. Les femmes amazighes et touarègues, dépositaires des savoirs botaniques et culinaires, sont directement menacées par l'abandon des terres et les migrations forcées vers les villes.

21. Amba Jamir

Surname	JAMIR
First name	AMBA
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Advisor, CLANS
Current institution/organization	Consortium of Landscape Alliance for Nature Stewardship (CLANS)
Affiliation	Civil society/NGO
Country of residence	India
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	No, the Global-Hub strongly recommends that the HLPE refrain from using a standardized working definition for Indigenous Peoples' food systems. I agree with this stand. Attempting to compress these systems into a singular, homogenized definition overlooks the immense diversity that characterizes them.
	Restructure this section based on the following three

	critical interventions: 1. Adopt a Characterization, Not a Definition: Rather than utilizing a rigid definition, the report should align with the FAO and Alliance of Bioversity International and CIAT (2021) publication (pp. 65–66), where the authors deliberately chose to characterize the core attributes of these systems instead of defining them. (Note: The current reference to Sobrevilla (2008) in the draft is inaccurate and must be omitted). 2. The final report must explicitly acknowledge that Indigenous Peoples’ food systems cannot be accurately captured by dominant global frameworks that view food networks as linear value chains. As articulated in the white/wiphala paper drafted for the UN Food Systems Summit, these systems are holistic, non-linear lifeways. This structural contradiction must be clearly presented when discussing food systems definitions. 3. The text should replace linear value-chain language with explicit references to relationality, values, and distinct geographic territories. Crucially, these elements must be tied directly to the right to self-determined development and the Right to Food. This includes recognizing the primary authority of traditional governance institutions and local Village Councils over state-instituted administrative models. Finally, the characterization must validate complex, traditional agrarian practices, such as shifting cultivation and the ecological management of fallow forests, as highly sophisticated, nature-positive solutions for climate resilience. The report should explicitly counter standard policy fallacies that misrepresent these cyclical systems as outdated or unsustainable.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples’ food	The Global-Hub strongly supports grounding the conceptual framework in the six dimensions of food security and recognizes the vital importance of highlighting relationality, values, and territory. However, to effectively guide policy-making, the framework must be structurally amended to fully reflect Indigenous lifeways.

systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

We recommend the following key modifications to the conceptual framework:

1. In the current draft (notably Figure 1.1), relationality, values, and territory remain confined to the center. This dimension must be visually and conceptually expanded to encapsulate all six dimensions of food security, serving as the foundational envelope for the entire framework rather than an isolated center point.

2. The core elements of relationality, values, and territory must be explicitly associated with the right to self-determined development and the Right to Food. Policy cannot be successfully guided without recognizing the primary governance of traditional institutions and local Village Councils over state-instituted administrative models.

3. The HLPE should draw upon existing, successful indigenous-led frameworks that acknowledge the diversity of conceptualizing food security. For example, the Alaskan Inuit Food Security Conceptual Framework (2015) depicts food security across six dimensions (Availability, Inuit Culture, Decision-Making Power and Management, Health and Wellness, Stability, and Accessibility), all completely encapsulated within a drum that represents food sovereignty as a prerequisite for security. Other vital frameworks include the AICBR's Food Security models and the Indigenous Food Systems Network's work on Indigenous Food Sovereignty.

4. The policy framework must explicitly validate complex cyclical ecosystems, such as mixed farming and the stewardship of fallow forests and all other resources, as highly sophisticated, nature-positive solutions. The framework needs to actively counter standard development arguments and policy fallacies that mistakenly advocate for shortening traditional shifting cultivation cycles without understanding their ecological, cultural, and soil-recovery benefits.

By shifting from an isolated center-point model to an encapsulated sovereignty framework, the HLPE will provide policymakers with a tool that respects indigenous cosmology while practically advancing

	nutrition security, biodiversity conservation, and climate resilience.
Data on Indigenous Peoples’ food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	To be practical, the report needs to move beyond broad global statistics and show what food insecurity actually looks like in Indigenous communities. 1. Global data often focuses on calories or extreme starvation and misses “hidden hunger”, micronutrient deficiencies. Many Indigenous communities are pushed away from diverse traditional foods toward cheap, ultra-processed options. This creates a silent crisis where diabetes, heart disease, stunting, and obesity rise at the same time. 2. National averages hide how severe food insecurity is for Indigenous households. Local data shows rates two to four times higher than non-Indigenous communities, driven by land loss, declining biodiversity, and poor local infrastructure. 3. Even where traditional farming and foraging systems remain strong, not everyone benefits equally. Women often lack land rights and face heavier market pressures, leading to higher rates of anemia and nutrient deficiencies among women and young children. 4. Remote Indigenous communities are highly exposed to rising food prices. When costs spike, families turn to cheaper processed foods. Communities try to fall back on traditional harvesting and sharing, but high fuel costs and limited storage or processing facilities make this difficult. The report should call for traditional foods to be included in public nutrition programs like school meals and maternal health schemes. This requires practical steps to handle seasonality, build local supply chains, and respect community governance instead of relying only on state-run systems. References: 1. For the Global/North American Context (The FNFNES Study) This was a massive, landmark 10-year study across

hundreds of communities that definitively proved that eating traditional food directly drives up diet quality, while forced reliance on expensive, low-quality market foods triggers severe food insecurity.

Full Reference:

Chan, L., Batal, M., Sadik, T., Tikhonov, C., Schwartz, H., Fediuk, K., Ing, A., Marushka, L., Lindhorst, K., Barwin, L., Berti, P., Singh, K., & Receveur, O. (2019). First Nations Food, Nutrition and Environment Study (FNFNES): Final Report for Eight Assembly of First Nations Regions (Draft Comprehensive Technical Report). Assembly of First Nations, University of Ottawa, & Université de Montréal. Submitted to First Nations and Inuit Health Branch, Indigenous Services Canada.

2. For the Regional/South Asian Context (Agrobiodiversity vs. Nutrition Gaps)

This specific, multi-disciplinary review directly tackles the paradox of why regions with incredibly rich traditional food systems and agrobiodiversity still experience hidden hunger, stunting, and anemia due to infrastructure gaps, gender dynamics, and market pressures.

Full Reference:

Frontiers Editorial Board. (2026). Sustainable diets, indigenous food systems, and planetary health: A regionally grounded review with Meghalaya, India as a case study. *Frontiers in Sustainable Food Systems*, 10, Article 1770461.
<https://doi.org/10.3389/fsufs.2026.1770461>

3. For the Authoritative Baseline Data Context (NFHS-5)

This is the official government data framework used internationally to map localized health disparities. It provides the definitive, disaggregated proof that standard regional averages completely mask the high rates of chronic anemia and stunting faced by remote, indigenous families.

Full Reference:

International Institute for Population Sciences (IIPS), & ICF. (2021). National Family Health Survey (NFHS-

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

5), India, 2019–21: Meghalaya. Ministry of Health and Family Welfare, Government of India.

The draft report suffers from a significant imbalance: it over-represents standard, centralized policy solutions while severely under-representing the actual institutional, ecological, and cultural pillars that keep indigenous food systems secure.

We recommend the HLPE rebalance the report by addressing the following areas:

1. Heavily Under-Represented and Omitted Topics

1.1. The report fails to recognize that standard state-instituted administrative models (like centralized local councils or agencies) often undermine or conflict with actual community based traditional institutions. In many regions, these traditional governance bodies lack formal legal recognition by the state, yet they are the primary entities managing communal land tenure, resource allocation, and traditional food sharing networks.

1.2. The draft completely misses the ecological value of traditional mixed farming and the active management of fallow forests. These are not primitive or outdated practices; they are highly sophisticated, cyclical, nature-positive production systems that are vital for soil recovery, local agrobiodiversity conservation, and long-term climate resilience.

1.3. While the draft mentions local knowledge, it does not cover the practical execution of integrating traditional foods into formal public frameworks, such as school feeding and maternal nutrition programs. The report needs to highlight the structural bottlenecks that prevent this, specifically the lack of decentralized, localized supply chains and the policy failure to accommodate the natural seasonality of indigenous crops.

1.4. The report ignores the vital link between sustainable local waste management and traditional production. Indigenous food security is inherently circular, relying on practices like biocomposting to maintain soil health. Failing to protect these localized loops leaves systems highly vulnerable to

	modern environmental degradation and chemical-heavy inputs. 2. Over-Represented and Misrepresented Topics 2.1. The Typo/Fallacy of "Max Farming" and Shortened Cycles: The report over-represents generalized development arguments that push for the forced institutionalization or "modernization" of traditional systems. This includes the widespread policy fallacy that shortening traditional shifting cultivation (jhum) cycles is an inherent ecological or economic necessity. This argument is a top-down policy assumption that fundamentally misinterprets the regeneration dynamics of traditional agroecological landscapes. 2.2. Linear Value Chain Models: The draft over-relies on dominant global frameworks that treat food security purely as a matter of linear value chains and market connectivity. This over-representation distorts the reality of indigenous food systems, which are grounded in non-linear lifeways, cultural cosmology, community stewardship, and deep relationality with the territory.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Yes. The current draft relies heavily on big international reports and completely misses what is actually happening on the ground in regions like Northeast India. To make this report practical and accurate, the HLPE needs to look at localized, regional evidence and traditional knowledge systems: 1. Real Public Health Data Over Regional Averages: The report should look at disaggregated local data, like India's National Family Health Survey (NFHS-5) for India's Northeast region. This official data provides clear proof that when you average numbers across a whole state or country, you completely hide the high rates of childhood stunting and anemia faced by remote indigenous families who are losing access to their traditional foods. 2. The Actual Science of Shifting Cultivation (Jhum): The report needs to include specialized regional literature on traditional farming innovations (such as publications from NEPED/IIRR on shifting cultivation). This body of work proves that mixed

	farming systems and the management of fallow forests are highly sophisticated, nature-positive ways to restore soil and protect biodiversity. It actively corrects the common policy mistake that these traditional cycles are backward and must be shortened. 3. Practical Studies on the Ground Reality: The report should consider multi-year regional reviews that look at the direct connection between sustainable diets, indigenous food systems, and planetary health (such as the 2026 Frontiers in Sustainable Food Systems case study on Meghalaya). This research explains the real-world paradox of why an area can have incredibly rich traditional foods and agrobiodiversity but still suffer from nutritional gaps because of modern market pressures and a lack of local processing infrastructure. 4. Protecting Local Values in the Market: The report should utilize the FAO and Alliance of Bioversity and CIAT (2022) guidelines on labelling and certification schemes for Indigenous Peoples' foods. This publication offers practical ways for communities to generate local income from traditional foods without destroying their cultural values and community stewardship systems
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	I can only suggest the Agroecology and Traditional Food Systems Models in Northeast India. In states like Meghalaya and Nagaland, grassroots initiatives led by independent researchers, traditional institutions and local organizations have successfully documented and revitalized indigenous food systems. By mapping local agrobiodiversity, these initiatives have shown that traditional jhum (shifting cultivation) landscapes and kitchen gardens contain hundreds of varieties of wild edible plants, millets, and local crops that are exceptionally rich in micronutrients. This model directly addresses "hidden hunger" and anemia by reintroducing these diverse, climate-resilient foods back into community diets and local biodiversity festivals, proving that traditional mixed-farming systems are sophisticated, nature-positive solutions for nutrition security.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Based on practical, on-the-ground experience with traditional agrarian systems, the HLPE-FSN should focus its policy recommendations on the following

four critical areas:

1. **Formal Legal Recognition of Traditional Governance:** The HLPE should recommend that national governments formally recognize and empower traditional institutions and local Village Councils as the primary authorities for land and resource governance. Policy interventions consistently fail when states try to impose centralized, state-instituted administrative models that bypass or undermine the legally unrecognized traditional bodies already successfully managing communal lands and food sharing networks.
2. **Support for Indigenous Food Values in Local Markets:** Recommendations should focus on creating specialized labelling, biocomposting support, and certification schemes that match indigenous values. This will allow local farmers to generate sustainable income from traditional crops without being forced to sacrifice their community stewardship models or hand over control to large, linear commercial value chains.
3. **Institutionalizing Traditional Foods in Public Nutrition:** The report must recommend that governments actively integrate diverse, local seasonal crops into formal public frameworks, specifically school feeding and maternal health programs. This requires making explicit recommendations to fix structural bottlenecks—such as building decentralized, local storage and processing infrastructure that can handle the natural seasonality of indigenous foods.
4. **Stop Blaming Traditional Farming for Shortened Fallow Cycles:** The report must actively challenge the common policy mistake that traditional cultivation cycles are inherently unsustainable. On the ground, traditional jhum relies on long, healthy fallow periods to restore soil nutrients naturally. It is actually top-down development programs, commercial land-use changes, and market pressures that have squeezed community lands and forced these cycles to shorten. Policy recommendations should focus on protecting communal land rights so communities can maintain their traditional, long cyclical systems.

Do you have any additional comments you would like to share with the HLPE-FSN?

As a practitioner working directly with traditional food systems in Northeast India, my final recommendation to the HLPE-FSN is to ensure that the final report shifts away from top-down, generalized global frameworks and firmly anchors itself in localized, community-led realities.

Please consider these three final guiding principles:

1. **Protect Communal Land Systems over State Models:** In many indigenous regions, food security is completely dependent on communal land ownership and resource sharing. The report must explicitly warn against state-instituted development models that try to privatize or formalize these lands under centralized government administration. True food sovereignty relies on legally recognizing the authority of traditional village councils and institutions that have sustainably managed these landscapes for generations.

2. **Stop Misrepresenting Cyclical Agriculture:** Outside development programs and commercial land-use changes are the real factors that squeeze community land boundaries and force traditional fallow cycles to shorten. The report must stop blaming traditional farming systems (like shifting cultivation or jhum) for land degradation. Instead, it should champion long-cycle mixed farming as a highly sophisticated, nature-positive practice that naturally recovers soil health and preserves rich agrobiodiversity.

3. **Focus on Practical, Decentralized Infrastructure:** To genuinely improve nutrition security and eliminate hidden hunger, we do not need complex, linear commercial value chains that pull resources away from the village. Instead, policy must focus on practical, decentralized support, such as local processing equipment, biocomposting tools, and regional supply networks. This will allow communities to store and integrate their seasonal, diverse traditional foods into public nutrition and school feeding programs on their own terms.

We urge the HLPE-FSN to use this report to amplify the voices of practitioners and traditional institutions on the ground, ensuring that global food

	policy protects indigenous self-determination rather than forcing communities into unsustainable market dependencies.
--	---

22. Robert Buschbacher

Surname	Buschbacher
First name	Robert
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Researcher and Advisor in Biocultural Conservation
Current institution/organization	Independent. Formerly: Tropical Conservation and Development Program, University of Florida
Affiliation	Academia
Country of residence	United States of America
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The definition would be stronger if it made explicit two parts it currently blends: the seven characteristics that are the defining properties of an IPFS, and the typology of system types that captures the range of forms those properties take. The clarification of the scope of “food” now in Section 3.4 also belongs with the definition in Chapter 1. More fundamentally, the definition leans toward presenting IPFS as categorically distinct from other food systems; it would be stronger framed as a specific, emblematic case within the full spectrum of food systems. (See Annex 1, Sections 1 and 2.)
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The elements are valuable but not yet reconciled into a single framework. The report runs three overlapping schemas — a typology of types, a narrative flow (definition, value, drivers, impacts, responses), and the seven characteristics with the five states — and uses the seven characteristics in several roles without reconciling them, while Chapter 3 sets them aside for a separate capitals framework. To guide policy, value should be tied explicitly to the characteristics: value is what is lost as the characteristics erode under the drivers, and the states are simply their condition. I recommend defining the categories once, early, and applying them consistently, deriving Chapter 3's value analysis from the seven characteristics. One caution: the capitals framework cannot accommodate the seventh characteristic (relational values grounded in cosmology), the dimension the report treats as most distinctive. (See Annex 1, Sections 1 and 2.)

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	I do not have specific datasets to add.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Drivers and impacts are over-represented, in the sense that they are re-narrated across Chapters 2, 3, and 4 rather than given one home; each chapter would benefit from a distinct task. On the other side, the evidence base is thin where it matters most: the four case studies span only two of the five system types, and the two most-disrupted states carry no cases at all, even though disruption is the central concern. Agriculture-specific Indigenous concepts are also under-weighted in Chapter 5. (See Annex 1, Sections 2 and 3.)
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	I have no specific additional references to submit here.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	The most useful step would be to plot the existing cases on a populated types-by-states matrix (replacing Fig 2.1), which shows precisely where representation is missing: the water-and-fisheries, agrarian, and reconfigured system types, and the fragmented and externally-dependent conditions. New cases should be sought to fill those cells. As a worked success story I would point to the Yucatec Maya farmer who developed a new maize variety by blending traditional knowledge with modern genetics, where the success was preceded by an intracultural creation of knowledge; developed against the Chapter 5 framework, it illustrates co-creation well. (See Annex 1, Sections 3 and 4.)

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	I endorse the report's own four recommendations, which are well-judged and map cleanly onto its chapters (territory, biocultural systems, co-creation, and alignment of the wider policy environment). I would add four cross-cutting recommendations to the panel: reframe IPFS as a specific case within the spectrum of food systems; adopt a consistent analytical vocabulary and tie value to the seven characteristics; substantiate the central thesis and the recommendations by broadening and comparing the cases; and ground each recommendation in the specifics of real territories rather than leaving them as general principles. (See Annex 1, Sections 1–3.)
Do you have any additional comments you would like to share with the HLPE-FSN?	The attached detailed comments include a close, section-by-section reading of Chapter 5, which I consider the strongest chapter and a model of integrated analysis (Annex 1, Section 4). A short editorial annex lists figure and table numbering errors, a duplicated quotation, a placeholder, and minor copyedits (Annex 2). The report's central message — that the future of Indigenous Peoples' food systems turns on governance more than on technology — is correct and important, and these comments are offered to help make that case as strongly as the material allows.

23. Ramesh Kumar

Surname	Kumar
First name	Ramesh
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Assistant Professor
Current institution/organization	Department of Economics and Rural Development, Alagappa University, Karaikudi, Tamil Nadu, India
Affiliation	Academia
Country of residence	India
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	In my understand those who are working in traditional sector like fish catching and other related activities.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Yes, i hope this will bring the new framework for the dimension of indigenous people food system and to safe the knowledge for next generation
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	i have collected through field work in my state regarding coastal women perspective through the seaweed cultivation
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	through my field observation still we need to look their problems particularly on women and children's food security issues
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Seaweed reports published by the NITI Aayog, government of India and State Planning Commission reports published by the Government of Tamil Nadu.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Yes, I am interested to share my case studies conducted in Tamil Nadu costal districts.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Promotion of seaweed cultivation and seaweed value added products
Do you have any additional comments you would like to share with the HLPE-FSN?	I am interest to collaboration with FSN for future works on seaweed cultivation in India

24. Dele Raheem

Surname	Raheem
First name	Dele
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Senior Researcher
Current institution/organization	Arctic Centre, University of Lapland, Finland
Affiliation	Academia
Country of residence	Finland
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Dialogue with the people directly based on their lived in experiences will help to transform and shape the desired outcome of the food system.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Alford, Kristin JS, Lenore Manderson, Fabio Boschetti, Jocelyn Davies, Steve Hatfield Dodds, Ian Lowe, and Pascal Perez. "Social perspectives on sustainability and equity in Australia." Living scenarios for Australia to (2012): 93. Bogdanova, E., Filant, K., Sukhova, E., Zabolotnikova, M., Filant, P., Raheem, D., Shaduyko, O., Andronov, S., & Lobanov, A. (2022). The Impact of Environmental and Anthropogenic Factors on the Migration of the Rural Arctic Population of Western Siberia. Sustainability (Switzerland), 14(12), Article 7436. https://doi.org/10.3390/su14127436
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Strengthening food sovereignty might be one important area to be further addressed.

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	EALLU: Arctic Indigenous Youth, Arctic Change and Food Culture; Policy Recommendations, and Cookbook - http://hdl.handle.net/11374/1986 - http://www.fao.org/3/a-i0370e.pdf
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	I can suggest: 1. Indigenous Youth, Food Knowledge and Arctic Change (EALLU) https://arctic-council.org/projects/arctic-indigenous-youth-food-knowledge-and-arctic-change-eallu-ii/ 2. "Traditional food systems of Indigenous Peoples: the Ainu in the Saru River Region, Japan" - https://www.fao.org/4/i0370e/i0370e08.pdf
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	The impact of digital solutions within the food system, what are the likely implications for the future in regard to global warming.

25. Ministry of Agriculture, 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
Current institution/organization	Ministry of Agriculture, Forestry and fisheries of Japan
Affiliation	Government and other public institution
Country of residence	Japan

Do you have any additional comments you would like to share with the HLPE-FSN?

The term “ultra-processed foods” (UPFs) is used frequently throughout the text. However, since “ultra-processed foods” is not a clearly defined term, we request that the expression “so-called” be inserted immediately before each occurrence of the term UPFs in the document.

It is recalled that this matter was discussed on the agenda PC141/8: Vision and Approach to FAO’s Work in Nutrition (VAN) at the 141st Session of the Programme Committee held in Rome in November last year. At that session, the committee stressed that VAN should align itself with multilaterally agreed terminology on nutrition including the term UPFs. The relevant report reflecting this recommendation was subsequently endorsed by the 179th Session of the FAO Council in December last year.

Also, at the 38th FAO Regional Conference for Asia and the Pacific (APRC38), including the Senior Officers Meeting (SOM) held until 22 April, references to ultra-processed foods in the draft report were revised to “so-called ultra-processed foods.” In addition, a footnote was inserted stating that “ultra-processed food” is not a term that has been multilaterally agreed upon in the field of nutrition.

26. Paraguay

Country	Paraguay
The report proposes a working definition of Indigenous Peoples’ food systems. Do you have any observations on this definition?	It is appreciated that the definition recognizes Indigenous Peoples’ food systems as a dynamic, relational and communal-based systems, linked to the balance between nature, people and food. However, it is suggested that the wording avoid overly broad and absolute and sometimes very political statements. It promotes non agreed definitions based on the opinions of the HPLE.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to	It is considered that the conceptual framework captures relevant elements for the understanding of the Indigenous Peoples’ food systems. However, FAO recognizes 4 elements of food security, not six. The idea that Indigenous Peoples’ food systems contribute to the strengthening of food security and nutrition could be reinforced, taking into account

understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	the territorial, environmental, social, economic and institutional particularities of each community and each State. However, the report also takes a very negative approach and view to traditional agriculture and production systems. We strongly suggest reframing the vision to a more inclusive and complementary one that does not demonize modern agricultural production to highlight the value of traditional and indigenous people's knowledge. The report should highlight and promote the contributions of this knowledge to modern agriculture. It is not a one or the other approach, but how both should strengthen and collaborate to produce more and more efficiently.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	It could be relevant to incorporate information from national statistical agencies, national institutions on Indigenous affairs, and research or worth that included the participation of Indigenous people.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The report addresses relevant aspects that make it possible to understand Indigenous Peoples' food systems. The role of women and older people with the knowledge on the topics of food and traditional food preparation could be further explored. The report could elaborate more on the consultation and participation process, as well as, the free, prior and informed consent, in accordance with national regulatory frameworks.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	In addition to academic and technical sources, it would be valuable for the report to further explore the knowledge generated by Indigenous People. This approach could enrich the report with an inside perspective of the communities, while respecting the knowledge systems of each community
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Case studies seem anecdotal and used to fit a narrative that permeates the main political vision promoted by the report. Extrapolation from cases to generalizations is one of the weaknesses the reports presents as there is no one indigenous people's food systems but they are varied and unique, including in their circumstances and contexts.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

The HLPE-FSN could formulate general recommendations aimed at supporting States in the progressive strengthening of public policies related to Indigenous Peoples' food systems and the valorization of traditional foods, as well as the intergenerational transmission of knowledge related to food, while respecting national regulatory frameworks and institutional capacities. Regarding the policy recommendations, it would be advisable for them to be balanced, avoid blanket conclusions based on prejudice and political views. They should highlight, objectively, the valuable contribution of Indigenous Peoples' food systems while at the same time recognize different national, territorial and institutional realities. Broad generalizations approaches should not be the way forward on the potential recommendation. Instead wording that is adaptable to different contexts and to the legal frameworks of different States should be used.

Do you have any additional comments you would like to share with the HLPE-FSN?

The preparation of the report is valued as an opportunity to raise visibility of Indigenous Peoples' food systems. Furthermore, it is key for the report to maintain a balanced approach, based on human rights and progressive institutional strengthening, not an antagonistic approach with conventional food production and innovation which are also key in strengthening global food security. The report is overly subjective overall, extremely long, repetitive on occasion and lacks a balanced view when it comes to modern agriculture. Communicating effectively is key to getting the message across and the messages are lost in 74 pages of political views and opinions, drawn from literature and no primary sources or actual engagement with indigenous peoples' based on the provided list of references. Several drafting suggestions to provide a more balanced view are attached to the following responses

27. UN-Nutrition

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
Current institution/organization	UN-Nutrition
Affiliation	UN
Country of residence	Italy
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	- The working definition is robust and captures the holistic, relational and dynamic nature of Indigenous Peoples' food systems (IPFS). It provides a strong basis for integrating food systems, nutrition and sustainability. - The definition appropriately links food systems to livelihoods, wellbeing and cultural identity, which are key determinants of nutrition outcomes. - It recognizes the importance of diverse, culturally appropriate, and healthy diets, which is central to addressing all forms of malnutrition. - The emphasis on reciprocity, sustainability and relationality supports long-term food system resilience and diet quality. - It could explicitly integrate nutrition outcomes and malnutrition in all its forms as a core objective and outcome of IPFS.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	- The framework is strong and well aligned with multidimensional food security approaches but could further strengthen its nutrition dimension. - The integration of the six dimensions of food security is highly relevant to nutrition. - The emphasis on relationality and agency is important for enabling dietary quality and culturally appropriate food choices. - Limited consideration of food environments, diet quality and dietary patterns, nutrition transition and the rise of ultra-processed foods. - Links between food systems and health outcomes (e.g. NCDs, double burden of malnutrition) can be strengthened.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

o Key trends to strengthen are the emergence of a double burden of malnutrition in Indigenous communities, rapid nutrition transition (increasing consumption of ultra-processed foods by IP), declining consumption of traditional nutrient-dense foods.

o for references: see question on references/publications.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

ü Indigenous Peoples and Tribal populations disproportionately experience diet related noncommunicable diseases, including obesity, diabetes and cardiovascular diseases. This burden is closely linked to a nutrition transition from traditional diets toward processed foods, which has increased cardiometabolic risks and contributed to a double burden of malnutrition, where food insecurity coexists with chronic disease. Diabetes prevalence alone frequently exceeds 10 percent in Indigenous populations globally, while lifestyle related diseases are rising rapidly among Tribal groups. The situation is particularly acute in Small Island and Pacific contexts, where populations exhibit some of the highest levels of diet related risk factors and premature mortality from noncommunicable diseases linked to poor diets.

https://www.csm4cfs.org/wp-content/uploads/2019/10/EN_FINAL_CSM_Youth_Response_to_HLPE_Zero_Draft_Promoting_Youth_Engagement_and_Employment_in_AFS.pdf ;
<https://studylib.net/doc/6756108/fao-corporate-response-to-hlpe-water-report-zero-draft>;
https://cdn.who.int/media/docs/default-source/food-safety/onehealth/ohhleap-annual-report-2021.pdf?sfvrsn=f2d61e40_5%2526download=true;
<https://openknowledge.fao.org/server/api/core/bitstreams/af87b1fb-9e38-4820-b551-4757460c5126/content> ;
https://apps.who.int/gb/wgpr/pdf_files/wgpr4/A_WGPR4_3-en.pdf ;
https://apps.who.int/gb/wgpr/pdf_files/wgpr4/A_WGPR4_3-en.pdf

- The report does not sufficiently address infant and young child feeding practices, maternal nutrition, intergenerational transmission of nutrition outcomes. These are key entry points for addressing malnutrition across the life course. Especially the

practice of breastfeeding among Indigenous peoples is both a biological and cultural practice embedded in community life and identity. It is widely understood as a natural extension of mothering that reinforces bonds while transmitting cultural knowledge and values across generations. Historically, many Indigenous societies practiced exclusive and extended breastfeeding supported by family and community structures. However, the impacts of colonization and social inequalities have disrupted these traditions, contributing to lower breastfeeding rates in some Indigenous populations today. Despite this, breastfeeding remains crucial for maternal and child health, supporting infant immunity, growth, and long-term wellbeing, and culturally appropriate, community-led approaches are increasingly emphasized to support and revitalize these practices (Monteith, H. et al. (2024). Infant feeding experiences among Indigenous communities... BMC Public Health.).

ü While the report refers to colonization, land dispossession and structural inequalities, these issues could be more explicitly and consistently framed as ongoing determinants of food security and nutrition outcomes. The report would benefit from a stronger analysis of how historical and contemporary forms of racism, discrimination and (neo)colonial power relations continue to shape Indigenous Peoples' food systems, systemic inequities in food environments, including unequal access to healthy and culturally appropriate foods, the role of corporate and market forces in reinforcing dietary shifts and health disparities, how policy and institutional frameworks may reproduce or fail to address these inequities (reference: Gillespie, Stuart. Food Fight: From Plunder and Profit to People and Planet. HarperCollins, 2025.).

ü The report would benefit from explicitly incorporating and discussing the One Health approach, highlighting the interconnectedness of human, animal, plant and ecosystem health, and its relevance for understanding and strengthening Indigenous Peoples' food systems and knowledge.

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?

- The health of Indigenous Peoples WHA resolution https://apps.who.int/gb/ebwha/pdf_files/WHA76/A76_R16-en.pdf
- Global action plan on the health of IP paragraphs 9, 33, 36, 37 https://cdn.who.int/media/docs/default-source/documents/gender/2nd-draft-gpa-health-of-indigenous-peoples.pdf?sfvrsn=f3618b2b_1
- Dietary Transitions and Health Outcomes in Four Populations – Systematic Review <https://www.frontiersin.org/journals/nutrition/articles/10.3389/fnut.2022.748305/full>
- [https://www.thelancet.com/journals/landia/article/PIIS2213-8587\(24\)00100-1/abstract](https://www.thelancet.com/journals/landia/article/PIIS2213-8587(24)00100-1/abstract)
- The Bridgetown Declaration (2023): <https://www.who.int/publications/m/item/2023-bridgetown-declaration-on-ncds-and-mental-health> acknowledges importance of protecting local food systems
- Report of the Special Rapporteur in the field of cultural rights A/69/286 (2014) (The Special Rapporteur in the field of cultural rights considers the impact commercial advertising and marketing practices have on the enjoyment of cultural rights, with a particular focus on freedom of thought, opinion and expression, cultural diversity and ways of life, the rights of children with respect to education and leisure, academic and artistic freedom and the right to participate in cultural life and to enjoy the arts.) <https://docs.un.org/en/A/69/286>

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

- ü Nutrition and health: integrate nutrition objectives explicitly across all recommendations, addressing all forms of malnutrition, including NCDs, improve access, availability and affordability of healthy diets and reduce exposure to ultra-processed foods.
- ü Territorial rights and nutrition: recognize land and resource rights as key determinants of diet quality and nutrition
- ü Food systems transformation: strengthen traditional, biodiverse and nutrient-rich food systems and promote agroecological and Indigenous food practices
- ü Knowledge systems: Support co-creation of knowledge including nutrition science and Indigenous knowledge building on the CFS Policy recommendations on Strengthening collection and use of food security and nutrition data

Do you have any additional comments you would like to share with the HLPE-FSN?	- Indigenous Peoples' food systems have significant potential to: i) contribute to healthy diets and improved nutrition outcomes; ii) address multiple forms of malnutrition simultaneously; iii) inform broader transformations toward sustainable and equitable food systems; iv) stronger link with climate adaptation and mitigation; v) more attention to discrimination, racism, colonialism and inequalities affecting IP and thus impacting their food security, nutrition, health and well-being (and highlight more mental health)
--	--

28. Dirección General de Planeación y Desarrollo en Salud (DGPLADES), Secretaría de Salud, México

Surname	Herrera
First name	Miguel Angel
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Director de Medicina Tradicional y Desarrollo Intercultural
Current institution/organization	Dirección General de Planeación y Desarrollo en Salud (DGPLADES), Secretaría de Salud, México
Affiliation	Government and other public institution
Country of residence	Mexico
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Estamos completamente de acuerdo, puesto que reconoce y promueve el conocimiento y la racionalidad de los pueblos indígenas y toma en cuenta elementos valiosos.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	La DGPLADES tiene como atribuciones conducir en todo el Sistema Nacional de Salud, la Política Nacional de Atención Intercultural en Salud; la Política Nacional de Atención Intercultural a la Salud de los Pueblos Indígenas y Afromexicanos, y la Política Nacional de Medicina Tradicional Indígena y Afromexicana. Dichas políticas las conduce la Dirección de Medicina Tradicional y Desarrollo Intercultural (DMTDI). En el campo de la alimentación y seguridad alimentaria se traducen en la coordinación a nivel nacional de un modelo de alimentación llamado: "La Dieta de la Milpa. Corazón de la Cocina Mexicana. Alimentación Regional Saludable, Culturalmente Pertinente". En dicho modelo se coincide con los elementos clave del HLPE-FSN para orientar la formulación de políticas

	en materia de seguridad alimentaria y nutrición. Dicho documento se encuentra en la siguiente liga: https://drive.google.com/file/d/1RsnBfWwqRXxY4hHyjBR-JjWpTtTabZ10/view
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	El establecimiento de relaciones estructurales de desigualdad, discriminación y colonialidad a nivel social y cultural, presentes en los programas gubernamentales de salud y desarrollo que se aplican con los pueblos indígenas. Referencia: Freyermuth Enciso Graciela. Coordinadora. Panorama de la salud de los pueblos indígenas en los albores del siglo →XXI. Rezagos y desafíos. Centro de Investigaciones y Estudios Superiores en Antropología Social, 2023 México.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Las Dietas Tradicionales Regionales. El Informe EAT–Lancet 2025 propone 8 soluciones para enfrentar la situación de alimentación en el mundo. La 2ª señala: “Proteger y promover dietas tradicionales regionales. Con frecuencia representan una profunda conexión con el entorno local, la diversidad biológica, las prácticas agrícolas, las creencias culturales y las adaptaciones a largo plazo de los recursos disponibles”. Este es uno de los elementos centrales en el modelo de la dieta de la milpa. https://drive.google.com/file/d/1Fgv52f9TS0Tug_MylrYglmyEF460UQR9/view
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	La DMTDI/DGPLADES elaboró un documento que presenta y detalla el aporte de la Dieta de la Milpa como base de la seguridad alimentaria. Disponible en: https://drive.google.com/file/d/1Sm5JRyuk0BYVbHf6X3JnPe2Ku-l6EpGB/view?usp=sharing
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	En este momento en México estamos trabajando con instituciones federales en el campo productivo y de promoción social y de salud, respecto a los pueblos indígenas en un proyecto coordinado para promover la seguridad alimentaria. Estamos en su inicio y tardará en obtener resultados.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	El informe da cuenta de la importancia en considerar la interculturalidad, sin embargo, está más como un elemento explicativo que operativo. Nosotros contamos con un documento de lineamientos interculturales para todos los programas de salud que se llevan a cabo con población indígena, llamado “Lineamientos y protocolos de carácter transversal, para los programas de salud que se aplican con población indígena y afroamericana, con enfoque intercultural y de respeto a los derechos humanos”, que se puede considerar para promover los elementos de la Seguridad alimentaria con grupos poblacionales indígenas. Liga: https://www.gob.mx/cms/uploads/attachment/file/1044281/Lineamientos_y_protocolo_para_programas_de_Saud.pdf
Do you have any additional comments you would like to share with the HLPE-FSN?	Para la promoción del modelo de la dieta de la milpa ha sido fundamental el documentar las evidencias de los aportes a la salud de los alimentos mexicanos que se promueven. Ello lo tenemos en la siguiente liga: https://drive.google.com/file/d/1Pp64676wtA0Iyo-BpOndpP9_aHa9kazm/view?usp=sharing También, contamos con un cartel que explica los alimentos mexicanos que forman parte de la dieta de la milpa y que se encuentra en: https://drive.google.com/file/d/1x6bp9ZCpCEZBG8k_wgKZM77LvUth6ewKZ/view?usp=sharing

29. Nutrition Diversity, Panama

Surname	MRANGEL
First name	BRANDON
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Research and Development
Current institution/organization	Nutritional Diversity
Affiliation	Other
Country of residence	Panama

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	All of them.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Please see https://youtu.be/zhMtv8BCYKU?si=Fn1TNvUaHlbGJdG <u>V</u>
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	All
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	https://youtu.be/zhMtv8BCYKU?si=Fn1TNvUaHlbGJdG <u>V</u>
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Preserving, strengthening, and promoting Indigenous Peoples' food and knowledge systems and traditional practices for sustainable food systems The Strength is in the Expertise, Wisdom, Cooperative Ability, Strength & Discipline of the Team. Indigenous Peoples' food and knowledge systems must be learning, experimental, and research-oriented. No limits thinking biodynamic wonder workers are out here! Rare but here. I am thinking we are a spear's tip for innovative indigenous but multi-culturally

	cooperative groups. We are also connected to the rare others and able to put together immensely large teams to enact immensely important innovative designs, also integrating modern sustainable technologies. Because we understand that tech is also both a remedy and a toxin, and the dose and more decides. Counsel seats consist of a hierarchy dictated by time and relationship to nature. Each seat should be represented in twelve voting bodies from as diverse a sourcing as possible for that seat's oversight. We could do this now and immediately bring stabilization to any unstable organization. This is just one example of how following nature (in this case, diversity of power) brings health and distance from nature, and natural processes bring decay. For 15 years now, the Nutritional Diversity team has contributed to the alternative and sustainable agriculture collectives (including this Forum) from the shadows and the shovel. We are proud to say we are more than ready to take the lead in this, and it just so happens that as innovators, we have been creating A.I. assets and cohesive blueprints to take human-to-nature biodynamic relations into a whole new epoch. The possibilities here are immense and ignored! Wild, how areodynamic and space dynamic and Mars ambitious we can be while ignoring the insane nuclear potentials in biology. Wild how indigenous are simultaneously attributed to soil types (terrapeta, for example) "unreproducible" today with a history of unintelligent barbaric cannibals. Wild how many lesser wheels we reinvent instead of getting behind the spear-tipping innovators in the field today!
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	strengthen, and use as a foundation for innovation in indigenous food systems. We have already mapped out a full A.I. powered autonomous food and energy production system. We work behind the shovel with the best of the best in handmade biodynamic agricultures everyday across many microclimates and sites.

	We work today in regions that have the highest growth rates and the lowest regulations, making innovation more possible. We have the ability to work with organizations to preserve the future potential and indigeous formats, especially with increased involvement. Our administrative design is with sustainable scalability in tow.
Do you have any additional comments you would like to share with the HLPE-FSN?	you should get ahold of and behind us.

30. Victor Puac

Surname	Victor
First name	Puac
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Director de Hospital
Current institution/organization	Ministerio de Salud Pública y Asistencia Social de Guatemala
Affiliation	Government and other public institution
Country of residence	Guatemala
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	No
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be	Me parece que en Guatemala, la investigacion en temas alimentarios ancestrales del pueblo Maya, son actualmente muy básicos. La cultura Maya prevalece todavía por el efecto de transferencia oral del conocimiento ancestral y no tanto debido a las investigaciones que se realicen. El Estado todavía debe

included in the report? Please provide full references.	facilitar el financiamiento y las capacidades técnicas y académicas para fortalecer procesos de investigación-acción-participativa -IAP- , ya que considero que hacer investigación alimentaria con pueblos indígenas es un tema que se sale del pensamiento tradicional de la investigación del saber por saber.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Me parece que todavía hay un vasto campo para abordar el tema de los sistemas alimentarios ancestrales y nutrición. Lo que considero debe analizarse es la metodología de abordaje y si FAO puede preparar una guía de trabajo basado en IAP, los resultados pueden ser interesantes. Tuve la oportunidad con FAO de ser consultor para América Latina y participamos en un estudio con África y con Oceanía para preparar una guía de país previo a la implementación de programas nacionales de alimentación y nutrición.
Do you have any additional comments you would like to share with the HLPE-FSN?	Felicitarlos por la iniciativa

31. Abdelbasit Yagoub

Surname	Yagoub
First name	Abdelbasit
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Independent Researcher & Creator, Sudan MPI 4D Framework Former Lead Consultant, FAO Sudan 2021-2024
Current institution/organization	Independent researcher
Affiliation	Other
Country of residence	Sudan
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Yes. The working definition must recognize Indigenous food systems as dynamic, operational knowledge systems, not static heritage. The definition should add: "Indigenous Peoples' food systems are living, adaptive systems that combine ancestral knowledge with contemporary innovation to produce measurable food security outcomes." Evidence: Sudan MPI 4D, operational since 2020, codifies 64 Indigenous Sudanese indicators on climate, seeds, and famine coping into a national AI platform.

	This proves Indigenous knowledge is a data source for predictive systems, not just cultural practice. Excluding this misrepresents Indigenous agency.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	No. The framework is incomplete without operational mechanisms. It describes values but not how to translate "relationality and territories" into policy tools. Critical Gap: Policy-makers need frameworks linking Indigenous territories to national data systems. Solution: Sudan MPI 4D demonstrates this. It maps Indigenous indicators from 18 Sudanese states onto the six dimensions of food security: 1. Availability: Indigenous seed banks + satellite monitoring 2. Access: Community-defined market barriers + mobile price data 3. Utilization: Traditional nutrition + health data 4. Stability: Elder drought predictions + AI climate models 5. Agency: Community data ownership protocols 6. Sustainability: Indigenous land management + carbon tracking This model is tested, serving 65 million people, and validated by WFP 2024. Excluding such examples makes the framework theoretical and unusable for policy.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	The claim that data is limited is inaccurate. The data exists but is not recognized by UN agencies. Submit for inclusion: Sudan MPI 4D Dataset 2020-2024 - Coverage: 65 million people, 18 states, 186 localities in Sudan - Indicators: 64 Indigenous-defined metrics on food, climate, resilience - Impact Data: 89% accuracy in predicting IPC Phase 3+ food insecurity 3 months in advance, validated by WFP 2024 - Inequality Data: Disaggregated by tribe, gender, displacement status, and Indigenous territory Reference: Salman, A.Y. (2020-2024). Sudan MPI 4D: National Implementation Reports. Ministry of Social Development, Sudan. Dataset formerly used as operational basis for FAO Sudan programming 2021-2024. Available to HLPE drafting team under NDA to verify claims while protecting IP.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

Under-represented: The role of Indigenous knowledge as core INPUT for Artificial Intelligence and national early warning systems. VO draft treats technology as a threat to Indigenous systems. Reality: Indigenous knowledge is the most valuable training data for AI in food security.

Over-represented: Descriptive anthropology without policy application.

Required correction: Add full section "Indigenous Knowledge as Data Infrastructure for FSN Technology", using Sudan MPI 4D as primary case study. This addresses the report title: preserving, strengthening, and PROMOTING.

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?

14. Are there other references, publications, or Indigenous knowledge to consider?

1. Salman, A.Y. [Abdelbasit Yagoub]. (2022). Sudan MPI 4D: Framework Design and Indigenous Indicators Integration. Ministry of Social Development, Sudan. [First official documentation of MPI 4D methodology].

2. Salman, A.Y. (2024). Integrating Indigenous Resilience Indicators with Machine Learning: The Sudan MPI 4D Model. [Technical paper submitted to FAO Sudan. Available to HLPE drafting team].

3. WFP Sudan. (2024). Technical Validation of MPI 4D for IPC Analysis and Famine Early Warning. [Internal validation report confirming 89% predictive accuracy using Indigenous indicators].

4. Oral Knowledge Documentation: Methodologies and protocols used 2020-2023 to codify predictions from Sudanese Indigenous elders and farmers on rainfall, locust patterns, seed selection, and famine signals for MPI 4D national rollout.

5. FAO Sudan. (2021-2024). Annual Country Reports. [Documents operational use of MPI 4D data in program design and targeting].

Note: References 1, 2, 3 can be provided to HLPE-FSN drafting team under NDA to verify claims while protecting intellectual property and Indigenous data sovereignty.

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.

Case Study: Sudan MPI 4D Framework

Location: Sudan, Sahel Region - critical for geographical balance in report

Scale: National coverage, 65 million people

Innovation: First national system to officially adopt Indigenous Peoples' indicators as core inputs for AI-driven food security governance.

Key Outcomes:

1. Preserving: Digitized 64 Indigenous knowledge indicators before displacement disrupted communities.
2. Strengthening: Combined elder knowledge with satellite data, increasing community trust in early warning by 73%.
3. Promoting: Framework was operational basis for FAO Sudan 2021-2024 and recognized by UNDP as Sahel best practice.

This case addresses all forms of malnutrition by tracking stunting via Indigenous child feeding practices and acute malnutrition via AI prediction. It provides critical representation from Africa and the Arab region.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

HLPE-FSN must recommend:

1. UN Indigenous Knowledge IP Protocols: No Indigenous data used in AI/FSN systems without attribution and benefit-sharing. Reference Sudan MPI 4D's community data ownership model.
2. Mandatory inclusion of operational Global South frameworks in all CFS policy. Theoretical reports without tested examples harm Indigenous Peoples.
3. Establish CFS Indigenous Data Verification Panel to audit FAO, WFP, IFAD use of Indigenous knowledge and prevent misappropriation, as occurred with Sudan MPI 4D 2021-2024.
4. Direct 15% of FSN innovation funding to Indigenous communities building their own data platforms, not just to UN agencies.

Do you have any additional comments you would like to share with the HLPE-FSN?

Declaration of Prior Art and Non-Waiver of Rights:

This submission documents that Sudan MPI 4D, created by Dr. Abdelbasit Salman Yagoub Salman, constitutes prior art in integrating Indigenous Peoples' food and knowledge systems with AI for sustainable food systems.

The framework was operational and shared with FAO, WFP, and IFAD beginning 2021. Any representation of these concepts in the final HLPE-FSN report without full citation to Dr. Abdelbasit Salman Yagoub Salman and Sudan MPI 4D will constitute intellectual property infringement and violation of Indigenous data sovereignty.

This comment is submitted to ensure scientific accuracy and protect Indigenous rights. It does not constitute partnership, collaboration, or transfer of intellectual property. All rights reserved.

32. Purabi Bose

Surname	Bose
First name	Purabi
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Indigenous Peoples Author and Filmmaker
Current institution/organization	Freelance
Affiliation	Other
Country of residence	India

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?

Here are a few references authored by me

FOUR BOOK CHAPTERS (Bose, P)

Purabi Bose,
Forest foods for tribals in selected regions of India and their sustainability,
Editor(s): Jamuna Prakash, Viduranga Waisundara, Vishweshwaraiah Prakash,
In Elsevier Traditional and Ethnic Food Series,
Nutritional and Health Aspects of Food in South Asian Countries,
Academic Press, 2020,
Pages 51-59,
ISBN 9780128200117,
<https://doi.org/10.1016/B978-0-12-820011-7.00005-8>.

Food as Commodity – 'Super' Food Insecurity of Indigenous Peoples Analysis from Asia, Africa, and Latin America
Book Author: Purabi Bose
Publication date: 2024
Book: Acknowledging Indigenous Knowledge
Volume 1
Pages 14
Publisher Routledge CRC Press
<https://www.taylorfrancis.com/chapters/mono/10.1201/9781003153061-4/food-commodity-super-food-insecurity-indigenous-peoples-purabi-bose?context=ubx>

Forest food
Author: Purabi Bose
Publication date: 2025/11/13
Book: Elgar Concise Encyclopedia of Food Law
Pages: 171-173
Publisher: Edward Elgar Publishing
Description
This chapter explores the significance of forest food as a critical source of nutrition and livelihood for communities, particularly in the Global South. It emphasizes the diverse contributions of forest-derived foods in providing essential nutrients, especially during food shortages or emergencies. The chapter explains the role of non-timber forest products, like honey and

berries, as both subsistence resources and economic assets. It highlights the risks associated with overexploitation and commercialization of forest food, often driven by high-income markets demanding 'superfoods'. The chapter also addresses the cultural and governance challenges in managing forest resources sustainably, underscoring the need for regulations that protect indigenous knowledge, ecosystems and traditional practices. Furthermore, bushmeat consumption is discussed as both a source of protein in marginalized communities and a ...

Scholar articles: Forest food

P Bose - Elgar Concise Encyclopedia of Food Law, 2025

India's Right To Food Act: human rights for tribal communities' forest food

Author: Purabi Bose

Publication date: 2019

Book: The functional field of food law

Series: European Institute for Food Law series, Volume: 11

E-Book ISBN: 978908686

Pages: 55-72

Publisher: Wageningen Academic Brill

Description

India's National Food Security Act, 2013 marks a historic shift from a welfare-based to a rights-based approach to food security. The importance of 'wild' food gathered from landscapes like forests, water, mountains, grasslands—or lack thereof—for food and nutrition security of indigenous peoples and pastoralists remains underexposed. This evidence-based paper examines forest-based food cultures vis-à-vis the Act's subsidized food grains. This paper proposes a 'right to forest food' governance framework to analyse the data. Primary data was collected from 12 distinct indigenous communities living in tribal India. This study result shows that agri-food and not forest food is promoted by the Act's public distribution system, which is ill suited to ensure indigenous peoples' food security. The paper highlight implications of 'cultural acceptability' and Aadhar—identity card regulations in the human right to food.

	JOURNAL ARTICLE (Bose, P) Purabi Bose, 52. Indigenous food sovereignty Authors: Purabi Bose Publication date 2025 Journal: Elgar Concise Encyclopedia of Food Law Pages: 220 Publisher: Edward Elgar Publishing Description International Day of the World's Indigenous Peoples is observed on 8 August each year to recognize the contribution of Indigenous people as guardians of natural biodiversity and food sovereignty. The term 'Indigenous food sovereignty' (IFS) is a relatively new concept that has emerged to indicate Indigenous communities' thousands of years of food system knowledge based on knowledge, wisdom, and practice.
Do you have any additional comments you would like to share with the HLPE-FSN?	I would be happy to contribute to this report in detail, if needed.

33. Pa Vikas

Surname	VIKAS
First name	PA
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Senior Scientist
Current institution/organization	ICAR CMFRI MRC
Affiliation	Other
Country of residence	India

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.

Suggested Case Study for Inclusion in HLPE-FSN Report #21

Pokkali Indigenous Water and Fisheries-Based Food System, Kerala, India

I would like to suggest including the Pokkali farming system of Kerala, India, as a case study under the Water and Fisheries-Based Food Systems category. Pokkali is a traditional indigenous food production system practiced in the coastal brackishwater wetlands of Kerala and represents a unique example of the integration of agriculture, fisheries, customary governance, biodiversity conservation, and climate adaptation within a single socioecological landscape.

The functioning of the Pokkali system is closely linked to seasonal monsoon rainfall, salinity fluctuations, and tidal movements. During the summer months of April and May, salinity in the fields may reach approximately 25 ppt due to seawater influence and evaporation. Fish and shrimp harvesting is completed before 15 April. Following the harvest, a unique customary arrangement comes into effect, granting local fisherfolk legal and social rights to enter the fields and harvest any remaining fish, shrimp, and other aquatic resources. Landowners traditionally do not restrict this access. This community fishing phase represents an important example of reciprocity-based food access, customary rights, and collective resource governance that has survived for generations.

After the fishing season, the fields are drained and exposed. Salts accumulated during the dry season remain deposited on the soil surface. The farming community then waits for the arrival of the southwest monsoon. Heavy monsoon rainfall naturally flushes accumulated salts from the fields and drainage channels, reducing salinity levels to nearly zero. This natural desalinization process is fundamental to the system and demonstrates the close relationship between local ecological knowledge and food production.

Rice cultivation begins with the onset of the monsoon. Traditional Pokkali rice seeds are soaked in water, germinated, and distributed in prepared nursery beds and fields. Approximately twenty-eight days after establishment, farmers undertake a traditional operation known as "Nirathal," through which seedlings are redistributed to ensure uniform plant spacing and crop establishment. Throughout the monsoon season,

water levels in the fields may rise to three feet or more. Unlike conventional rice varieties, Pokkali rice possesses the remarkable ability to elongate rapidly and grow above rising water levels, enabling it to withstand prolonged flooding and fluctuating hydrological conditions.

During August and September, mature rice panicles are harvested while a substantial proportion of the plant biomass remains within the field. These residues subsequently decompose, becoming an important source of nutrients for the aquatic phase of the production cycle. Thus, the rice crop contributes directly to the productivity of subsequent shrimp and fisheries production. From approximately 15 November until 15 April, the fields are utilized for shrimp farming and capture fisheries. Shrimp feed primarily on naturally occurring plankton, benthic organisms, detritus, and other biological resources generated within the ecosystem. The system therefore functions through internal nutrient cycling rather than external chemical inputs, representing a naturally organic production system.

The Pokkali ecosystem simultaneously produces rice, shrimp, fish, crabs, and other aquatic resources while maintaining wetland biodiversity. The system contributes to food security, nutritional diversity, and livelihood support for both farming and fishing communities. In addition, Pokkali conserves valuable traditional rice landraces that possess exceptional tolerance to salinity and flooding, traits that are increasingly important under climate change scenarios characterized by sea-level rise, salinity intrusion, and extreme rainfall events.

The Pokkali system also illustrates several of the key dimensions of Indi

34. Shaikh Tanveer Hossain

Surname	Hossain
First name	Shaikh Tanveer
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Director, Policy and Strategy
Current institution/organization	IFOAM - Organics Asia
Affiliation	Civil society/NGO

Country of residence	Bangladesh
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Agree with the proposal
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	It may be good to focus more deepen into the regional and specific indigenous groups elements as case studies.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Local food habits, food sources and importance of identification and promotion of local nutritional crop varieties can be covered more.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	https://japan.iclei.org/en/news/jinfong-indigenous-arts-festival-international-forum-2026/ https://expo2026.ijinfong.com/
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Examples from Taiwan, Japan and Bangladesh could be interesting to share as unique cases. 2026 JinFong Indigenous Art International Expo (April 13-16, 2026) - International Forum on Indigenous Wisdom for Sustainable Futures program booklet has highlighted presentation abstracts and cases.

35. Sunshine Organic Farm and Nursery, South Africa

Surname	Ruiters
First name	Linda
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Founder, Indigenous Food Researcher, Community Educator and Nursery Practitioner
Current institution/organization	Sunshine Organic Farm and Nursery
Affiliation	Other
Country of residence	South Africa
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The proposed definition is comprehensive, but it could place greater emphasis on the spiritual, cultural, and intergenerational dimensions of Indigenous food systems. Food is not merely a source of nutrition but is deeply connected to identity, language, ceremony, healing, biodiversity, and relationships with the land. These systems should also recognize the role of Indigenous women, Elders, and youth in preserving and transmitting knowledge.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The framework captures many important elements, especially relationality and territories. However, I recommend strengthening the recognition of Indigenous governance systems, customary stewardship, and oral knowledge transmission. Policies should be designed with Indigenous communities as equal partners and acknowledge that food security includes cultural continuity and ecological wellbeing.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	The report should include data on the loss of traditional seed varieties, declining access to wild foods due to land-use change, and the nutritional contribution of Indigenous edible plants. More research is needed on Indigenous foods that are rich in micronutrients and climate resilient. Community-led documentation and participatory research should be encouraged to fill existing data gaps.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The report could better address urban Indigenous communities, youth engagement, and the commercialization of Indigenous knowledge without fair benefit-sharing. It should also highlight the importance of medicinal plants, pollinators, biodiversity restoration, and local food sovereignty in maintaining resilient food systems.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Oral histories, traditional ecological knowledge, Indigenous languages, storytelling, seasonal calendars, and the lived experiences of community knowledge holders should be recognized as valid evidence. Knowledge passed down through generations is as important as published academic research.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	South Africa offers initiatives, Indigenous food gardens, African leafy vegetable cultivation, medicinal plant nurseries, and educational programmes that reconnect children with traditional foods. Similar initiatives across Africa demonstrate how Indigenous knowledge can improve nutrition, biodiversity conservation, and climate resilience while creating livelihoods.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Protecting Indigenous land and resource rights. Supporting community-led seed banks and biodiversity conservation. Investing in Indigenous-led research and documentation. Integrating Indigenous food knowledge into schools and public education. Strengthening policies that promote traditional foods in local markets and public procurement. Ensuring fair recognition and benefit-sharing for Indigenous knowledge holders.
Do you have any additional comments you would like to share with the HLPE-FSN?	Indigenous food systems are living systems that continue to provide solutions for climate adaptation, nutrition, ecological restoration, and cultural resilience. Preserving these systems requires respecting Indigenous leadership, protecting

biocultural diversity, and ensuring that communities remain the primary custodians and beneficiaries of their own knowledge.

36. Pitam Chandra

Surname	Chandra
First name	Pitam
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Retired director, ICAR-CIAE, Bhopal M.P. India
Current institution/organization	Retired from ICAR
Affiliation	Government and other public institution
Country of residence	India
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The definition of Indigenous Peoples' food system is quite adequate.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	My observations are as follows. 1. Food requirements of an individual depend on the external environment, physiology, individual's activities, and the local availability of food. 2. Ayurveda divides three distinct categories of human activities: (a) intellectual work such as academics, research, and spiritual pursuit; (b) medium intensity work such as agriculture, business, and labour; (c) Heavy intensity work such as people engaged on battle field. The diets prescribed for the three categories are different; Tapasi diet for category (a), Rajashi diets for category (b), and Tamasi diet for category (c). clearly, diets need differentiation; only Tamasi diets include meat based foods. Such differentiation helps in planning agricultural production portfolio in view of the health and wellness of the people.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	The concepts outlined under point 11 make it obvious that the food production and processing activities must be commensurate with societal demands and with minimum need for translocation of the food to minimize the expenditure on transportation energy. Foods are converted into functional foods to impart medicinal benefits to the foods as well. For example, Rasam in south Indian cuisine is a functional food that maintains positive gut health.

	Energy expended for cooking/ processing should be minimized with maximum retention of nutrients.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Each Indigenous Peoples' food system has food safety protocols built into it. We must necessarily discover them and document them.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Ayurveda
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	There are numerous examples from all over India that need to be studied and documented for their relevance to human nutrition and sustainable food systems. Dissection of such examples/ case studies will surely indicate the essential parameters required for sustainability. In today's digital eco-system, each individual could be characterised in terms of nutrition needs and, thus, food requirements could be precisely determined both in time and space dimensions. This exercise will also permit the precise dispensation of food for an individual, a family, or a group of individuals.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	1. Geographical planning of agricultural production 2. Post-harvest processing, value addition, and consumption in circular economy fashion for obviating the waste generation and achieving sustainability. 3. Field testing of the results of the analysis. 4. Organic linkages of food production, processing, nutrition, environment, and wellness for sustainability.
Do you have any additional comments you would like to share with the HLPE-FSN?	I am looking forward to witnessing a system where the food and nutrition are dispensed as per the precise requirements, resulting into better health without much expenditure on medicines and with clean environment.

37. Paul Sommers

Surname	Sommers
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	N/A
Affiliation	Other
Country of residence	United States of America
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	It's accurate.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Yes

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

The Science Is Settled. The Practice Is Not. Seventy Years of Knowing What, and Still Not Knowing How Terra settled the science in 1954. Mixed garden horticulture in Java was not a curiosity or a survival default — it was a nutritionally sophisticated, ecologically coherent, self-regulating food system that formal agriculture has spent seven decades failing to replicate. Sommers confirmed it in the Philippines in 1978. The biodiverse, multi-story polyculture systems that smallholder households — mostly women — have maintained across the humid tropics are resilient, nutritionally adequate, ecologically sound, and require no external inputs to function.

This is not news. It has not been news for seventy years.

What remains unresolved — genuinely, stubbornly unresolved — is not the science but the practice. And the development policy community, for all its accumulated sophistication, has not cracked it.

The structural problem is this: donors fund change. Their entire apparatus — log frames, procurement systems, input packages, output metrics, impact evaluations — is engineered to alter the status quo. The evidence, from Terra onward, says the status quo in indigenous food systems is precisely what should be understood, respected, and built upon incrementally. These two positions are not easily reconciled, and they rarely are.

In my forty five-plus years of field experience across more than fifty countries has produced one firm conclusion: outsiders can add value, but only at the margins, and only when they work within the existing structure and function of the local food system rather than alongside it or against it. The critical point — one that this audience knows but that policy documents consistently miss — is that communities do not separate food from life. A plant that appears in a garden performs multiple functions across a growing season: food in one month, medicine in another, shade, fencing, soil cover, ritual use. Development programmes that extract the food function and optimize it in isolation break the integration that makes the whole system work.

Knowledge management, not material inputs, is the primary lever. But development policy consistently names the wrong actors: states, multilateral

	agencies, donors, research institutions. It does not name the person who needs to be sitting with a household in Nyamagabe district or moving with pastoralists in the Karamoja cluster on a Tuesday morning. The implementation chain is assumed. In most places it does not exist, or it is one underpaid extension worker carrying twelve mandates across a district the size of a small country. The deeper failure is one that scientists working in this space will recognize immediately: the translation problem between knowledge registers. Community members speak in seasonal, relational, and ecological terms that are inseparable from place and practice. Policy speaks in indicators, outcomes, and budget lines. These are not just different languages — they reflect genuinely different ways of organizing knowledge about the world. Co-creation is not a workshop methodology. It is a sustained, friction-heavy, slow process of building a shared language between people who have very different things at stake — and it costs far more in time, trust, and institutional continuity than any programme budget accounts for. Seven decades after Terra, the science is not the problem. The problem is the gap between knowing what works and building the human and institutional infrastructure to do it — quietly, incrementally, on the ground, in the places where it matters, in a language the community already speaks. Terra, G., 'Mixed Garden Horticulture in Java', <i>Journal of Tropical Geography</i>, 1954. Sommers, P., 'Traditional Home Gardens of Selected Philippine Households and Their Potential for Improving Human Nutrition', MS Thesis, University of the Philippines, 1978.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Terra, G., 'Mixed Garden Horticulture in Java', <i>Journal of Tropical Geography</i>, 1954. Sommers, P., 'Traditional Home Gardens of Selected Philippine Households and Their Potential for Improving Human Nutrition', MS Thesis, University of the Philippines, 1978.

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Solomon Islands Sup-Sup Garden. Established by local women in 1984. https://kastomgaden.org/
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	see #13

38. Phyllis Kaplan

Surname	Kaplan
First name	Phyllis
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Author: 1. Manuscript "MICROCOSM The omen of a small island overrun by Globalization, Neocolonialism, and White Entitlement. An NGO's tale in Bali . (querying publishers). Author: 2. Academic paper. SAGE Publishers. "Sustainable Agriculture in Bali: Environmental Justice and Social Equality" . Activist: Over tourism obscures cultural heritage, eliminates food security, and destroys natural habitats. https://www.linkedin.com/in/phyllis-kaplan-sawahbali/ The tropes in writing include agriculture, best practices within the framework of indigenous people, with respect to culture, natural heritage, religion and change management.
Current institution/organization	Former Executive Director of NGO. Yayasan Konservasi Sawah Bali. website: www.sawahbali.org + Facebook
Affiliation	Foundation
Country of residence	Indonesia

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?

The ongoing system of The Green Revolution has taken away the ability to grow/harvest F1 heritage seeds, therefore bankrupting indigenous farmers by the cost of added chemicals and fertilizers and creating poor nutrition. Natural heritage, food security, mindfulness about the environment as a whole integrated system, and the role of the small hold farmer is no longer seen as valuable, but archaic. Innovation is stifled, products are limited, and best practices with land, water, or going organic is the exact system employed for thousands of years fomenting the health of people and habitat, food security(somewhat), feeding community with the necessary nutritional needs is only available to the renegade farmer. Greed comes from the corporations and chemical companies, usually subsidized by governments, who reap the benefits by taking advantage of the poorest people in the world's villages: farmers. The status of their important roles removed, leads to the decimation of cultural heritage, best land use practices, inappropriate development, and the disappearance of animist practices.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

It's very good, but incomplete. The reason I mention the following is because developing nations follow/mimic developed nations, to become "modern" and "relevant", thinking their status will be elevated. There was no inclusion of US values of the current industrialized systems, they should be demonized. Reform is needed. Corporate hegemony + subsidization, PAC money to politicians, and a current president that has zero integrity toward serving ALL the people in the US. The US is way behind indigenous recognition, and priorities of healthy food security has not been an issue front and center, even though it should be a major consideration due to climate crisis. More agricultural/forest lands are purchased for development. Most governments collude in counter-productive policy and lack the moral authority to not follow developed nations. Unfortunately, these systems also prevail in the country I have lived in for 17 years, Indonesia. But, throughout the world there are pockets of people who want nothing to do with an industrialized food system. Or the "modern" practices, of chemical usages and manufacturing that poisons the environment and its people.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

The US food system has been broken for decades, and the inequality of the haves and have nots has been growing steadily. Newer immigrants are continuing to grow their own indigenous foods, bringing their sense of place with them. I witnessed this in the state of Vermont, Community Garden plots.

Also I am a former Trustee of TNC, The Nature Conservancy (Vermont), which along with The Vermont Land Trust (VLT), has years of data regarding land use and agriculture and the changes needed to keep it relevant. Land Conservation + Economic Development. Thriving system employed in VT and used as a model for NOG, Bali, Indonesia. All small-holders.

My work with Balinese team members, the collaboration with indigenous farmers through my role as Executive Director of the NGO, Yayasan Konservasi Sawah Bali has all been recorded in data, photos/videos, reports, CNN, magazines, UNESCO WHS, newsletters, and sales of farmers' products. See below for access.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

YES! Nowhere does the report talk about the culpability of the CORPORATIONS. A farmer receives 4% of the revenue for supplying the grain for commercial cereals. That is one tiny example of exploitation and how corporations receive all the monetary benefits. It is the corporations behind the Food Industry that have their experts in how to get a consumer to become addicted to their product by hiring "flavoring enhancers" ("bet you can't just eat one"). The co-opting of cartoon/ children's TV shows characters is completely nefarious. Products that contain these images, ends up putting the Child in control of what they want...not what is healthy. The US population is all about convenience, because of lack of time, need to make money, and priorities screwed up. Does anyone remember when George W. Bush told citizens to go shopping, on 9/11?! And Politics have everything to do with food security and corporate subsidization. More and more developing countries follow these unhealthy corporate practices, even though there are healthier products produced locally. And individual/community gardening/farming are ways to regulate and nurture one's own sanity, retain physical capabilities, and get

	away from technology. ! I personally have been happiest in the garden since the 1970's! (in fact, filling out this form has taken me out of my ½ acre garden in Bali for two days.)
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Mongabay weekly newsletter: Independent journalism connecting nature and people https://mongabay.org/
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Yes, the NGO, Sawah Bali has a pilot project report with data, photos + graphs. https://www.sawahbali.org/pilot-report . Village of Bunutan, regency Gianyar, Bali, Indonesia The website has a lot information about strengthening indigenous knowledge. www.sawahbali.org
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Additional recommendations: Sustained Technical Assistance = Change Management = Adaptation. Each year climate crisis brings us closer to existential realities; food security is one of them. Big Agro is not the solution to healthy food. Organic/small-holder farming communities lead to better resilience. Everyone should be learning how to grow food! 99% of US grocery stores sell unhealthy foods, and chemically derived cleaning products, all wrapped in plastic. Even the SNAP program supports purchasing power at Farmer's Markets. Conventional US businesses, (not B-corporations) are Only about capitalism. Late Stage Capitalism has created more sick people, unable to afford healthcare/meds, and fresh foods. The shelving priorities in grocery stores needs to be changed by putting the Coca-Cola, snacks and candies, canned goods, prepared dressings, 99% of cereals, etc in the hard to reach aisles. The prime aisles should be fruit, vegetable, dairy, legumes, nuts, fish and meat and organic products. Best case scenario still is Farmer's Markets running 12 months a year. We don't need 95% of what is in the grocery stores. And buy locally! (often described within 100 miles and unfortunately not always possible)

Do you have any additional comments you would like to share with the HLPE-FSN?

Change management: Even indigenous peoples have pressures that augment their original systems. Modernity itself is a beast, and the younger generations want to change, and they want it fast. If the original system itself no longer thrives in its output, adaptation is itself the change management. Climate crisis, pollution, best land use, clean water... just a few aspects that require change management. And this takes time. Hands-on workshops in the field. Meeting with other farmers, out of their immediate area, and considering their solutions, utilizing technology, through the younger generations to monitor weather, peak harvesting times (sugar content), and the need to filter water for crops, to combat polluting runoff, or chemical contamination. Topical hands-on workshops must be repeated regularly with technical assistance... This is the KEY for the sustained adoption to better practices. Real change never takes place in nano-second, it takes time. Add people into the mix, and while there are always early adopters.....it is these people who can lead from within and help those that are having difficulty.

Earlier FAO + SDG reports were part of the shaping the NGO (Sawah Bali) and its criteria. The fact that small family farms were heralded as the most feasible, strengthened Sawah Bali's mission. (2012 was the year of my research in feasibility).

"Community Resilience: Conceptual Framework and Measurement Feed the Future Learning Agenda" US AID 2013.

"Wake up before it's too Late" MAKE AGRICULTURE TRULY SUSTAINABLE NOW FOR FOOD SECURITY IN A CHANGING CLIMATE
TRADE AND ENVIRONMENT REVIEW
UNCTAD 2013

39. André Francisco Pilon

Surname	Pilon
First name	André Francisco
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 São Paulo / International Academy of Science, Health & Ecology
Affiliation	Academia
Country of residence	Brazil
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Instead of addressing the consequences (the “bubbles in the boiling pot”), communication, advocacy, public policies, research and teaching programs should take in account the general phenomenon in view of the transformation of the dominant paradigms of development, growth, wealth, power and freedom embedded at political, economic, educational and cultural levels. All dimensions of being in the world (intimate, interactive, social and biophysical), should be combined as donors and recipients, as they elicit, maintain or transform the events. Ref.: PILON, A. F. (2025). The Bubbles or the Boiling Water? Ways to regenerate the Earth and Humanity, Katoikos: https://katoikos.world/analysis/the-bubbles-or-the-boiling-water-ways-to-regenerate-the-earth-and-humanity.html
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Challenges are conceptual, more civic and political than technical: institutional capacity, judicial neutrality, informational transparency, social spaces for civic engagement are the main factors to deal with the dynamics that create and sustain lock-ins and barriers to change, including the power and threatening behaviour of dominant political and economic actors, the deterioration of collective responsibility and welfare functions of the state.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

Fearnside, P. M., Challenges for sustainable development in Brazilian Amazonia, Sustainable Development, 26, 2, 2018.
<https://onlinelibrary.wiley.com/doi/abs/10.1002/sd.1725>

Firpo, S. et al. (2020). 'Inclusive Growth Without Structural Transformation?: The Case of Brazil'. WIDER Working Paper 2020/58. Helsinki: UNU-WIDER [online]:
<https://www.wider.unu.edu/sites/default/files/Publications/Working-paper/PDF/wp2020-58.pdf>

Fois, F. and Machado, S. M. M., Blood in bio-ethanol: how indigenous peoples' lives are being destroyed by global agribusiness in Brazil, The Conversation, August 30, 2018 [on line]:
https://theconversation.com/blood-in-bio-ethanol-how-indigenous-peoples-lives-are-being-destroyed-by-global-agribusiness-in-brazil-101348?utm_medium=email&utm_campaign=The%20Weekend%20Conversation%20-%20110069829&utm_content=The%20Weekend%20Conversation%20-%20110069829+CID_128a44994b3f95b3cd89116bfc8a4954&utm_source=campaign_monitor_global&utm_term=Blood%20in%20bio-ethanol%20how%20indigenous%20peoples%20lives%20are%20being%20destroyed%20by%20global%20agribusiness%20in%20Brazil

Garí, J. A., Biodiversity and Indigenous Agroecology in Amazonia: The Indigenous Peoples of Pastaza, Etnoecológica Vol. 5 No. 7: 21-37 [on line]:
https://www.researchgate.net/publication/284034435_Biodiversity_and_Indigenous_Agroecology_in_Amazonia_The_Indigenous_Peoples_of_Pastaza

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Indigenous food systems are crucial for ecological and socio-economic sustainability, yet they often remain marginalized in science and policy. Recognizing and documenting indigenous knowledge can help transform food systems and promote sustainability. The Global-Hub on Indigenous Peoples' food systems is an innovative think tank that pioneers new ways to create knowledge. Gathering Indigenous and non-Indigenous experts, it gives the same level of respect to academic and Indigenous Peoples' knowledge. The latter is often disregarded by the scientific community and by policy makers. Since the time of colonization, Indigenous communities have witnessed a drastic decline in the health and integrity of Indigenous cultures, ecosystems, social structures and knowledge systems which are integral to our ability to respond to our own needs for adequate amounts of healthy Indigenous foods.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Indigenous knowledge refers to the unique understanding, skills, and philosophies developed by Indigenous peoples through long histories of interaction with their natural surroundings. It encompasses cultural traditions, practices, and beliefs that are passed down through generations and is often holistic, adaptive, and deeply connected to the environment. Ref.: Bruchac, M.M. (2014). Indigenous Knowledge and Traditional Knowledge. In: Smith, C. (eds) Encyclopedia of Global Archaeology. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-0465-2_10
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	There is a dissonance between the legal framework, international conventions and the practices of political and economic groups that endorse the abuse of nature, devastating huge areas through logging, mining, industrial chemical production and "commodities"; indigenous and preservation areas are constantly at risk of invasions. The Indigenous Peoples Food Systems Coalition, formed in 2021 as an outcome of the UN Food Systems Summit, is an Indigenous Peoples-led collaborative initiative that brings together Indigenous Peoples' organizations, UN Member States, UN agencies, and other key stakeholders to build healthy, equitable, and sustainable food systems.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

Special attention should be given to hegemonic discourses and powerful incumbents because of their role in implementing or impeding the social, political, economic and environmental transformations of the ecosystems. Spaces for pluralism of knowledge, deliberative governance processes, shared creativity and community-led initiatives should be enhanced, in view of effective leverage points of influence to transform the current models of growth, development, wealth and freedom. The recommendations should allow for many drivers of change: policies on climate change and environmental degradation; effective conditions for the implementation of international agreements; business interests associated with technological changes; distinct and privileged segments for communications; displacement of indigenous peoples and demographic factors; increasing scarcity and imbalance of global demand for resources; and shifts in power in the global economy and the geopolitical landscape; different values, lifestyles and approaches to governance. Thematic clusters include society, technology, economy, environment, politics and values. New visions and proposals should consider the political, economic, social and cultural contexts that support or oppose them and the instruments for evaluation of the effects of current disciplines, epistemologies and methodologies contained in the recommendations. Ref.: PILON, A. F., Reframing Relationships between Humans and the Earth: The "Anthropocene", a New Ideology to Justify the Status Quo? MPRA Munich Personal RePEc Archive, 2023. https://mpra.ub.uni-muenchen.de/119041/1/MPRA_paper_119041.pdf

Do you have any additional comments you would like to share with the HLPE-FSN?

Most of the international organizations and other relevant bodies that constitute the global institutional settlement, are becoming highly vertical and inaccessible. The best way to make it clear that there several sources of discomfort is to make extensive use of strategic-in-scope documents to the public. Current human business-economic-industrial rationale will not solve any problem at all. In an overpopulated planet (another behaviour flaw of this biology-based evolutionary-in-origin and technologically skilled) the worst humans can do is

	to keep forcing the Earth's Life Support Systems (ELSSs) to their limits.
--	---

40. Wamba Andre Le Doux

Surname	Andre Le Doux
First name	Wamba
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Social and Cultural Worker
Current institution/organization	AFVMC Assistance to Families and Migrants
Affiliation	Civil society/NGO
Country of residence	Cameroon

41. CIPO and 5 other Partner Organizations, Cambodia

Surname	Ironside
First name	Jeremy
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Consultant for the REDAA project in Cambodia.
Current institution/organization	The project is managed by CIPO, and 5 other Partner Organisations are involved.
Affiliation	Civil society/NGO
Country of residence	Cambodia
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	This is important to promote changes in the dominant conventional agriculture.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Yes, it does seem to provide good information for policy-making for food security and nutrition. There is mention, and good to talk about climate resilience, promoting food sovereignty and agroecology, etc..
Data on Indigenous Peoples' food systems are limited. What are additional trends and	The limited recognition of Indigenous food systems in Cambodia is an issue. Indigenous groups have only

data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	limited recognition of their indigeneity. In Cambodia it is more related to heaving Indigenous groups becoming Khmer. As part of the REDAA work in Cambodia Indigenous organization wrote - Rotational Farming of Indigenous Peoples in Cambodia, as part of trying to support Indigenous knowledge and building on traditional agriculture. I can't send the reference of this document in this form. I will send it to Emily (IIED) There is also a document talking about the changes of swidden agriculture in Ratanakiri, northeast Cambodia and the need to deal with this - SWIDDEN AGRICULTURE UNDER THREAT; The case of Ratanakiri, northeast Cambodia: Opportunities and constraints from the national policy environment. (2017) Jeremy Ironside, Gordon Paterson and Anne Thomas
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	It is mentioned about the difficulties that traditional Indigenous food systems face now. In Cambodia it is difficult to continue the traditional food systems because Indigenous groups have lost a lot if their land to companies and internal migrants. There has also been problems of high logging in Cambodia. Indigenous groups have had to change their farming to grow products for sale because they have to repair the money they have been borrowing. Indebtedness is a further problem that Indigenous groups have to deal with. It is just difficult to continue traditions, and there is a need to build on traditional knowledge to deal with changes in farming areas.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	The Indigenous swidden agriculture is important, but there has been a lot of comments during colonialism and postcolonialism in Cambodia that have mentioned swidden farming as a process that has been cutting trees/reducing forest areas. There wasn't the recognition of the maintaining of forest areas with the fallow land. The Indigenous groups maintained their forest areas. When swidden systems were maintained, overall forest cover (primary and secondary forest) continued at around 80% for several centuries.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially	As mentioned there is this document - Rotational Farming of Indigenous Peoples in Cambodia – sent to Emily (IIED). This helps promote traditional knowledge about traditional Indigenous agriculture to use in building on that, in the present different

interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	contexts. It was written to promote Indigenous knowledge.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	There is mention of advocacy, that is important. Just good to support promoting traditional agriculture knowledge. There is also mention of agroecology, it is important to continue to promote and build agroecology.

42. Sharon Mada

Surname	Mada
First name	Sharon
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Postdoc Researcher
Current institution/organization	The Catholic University of Zimbabwe
Affiliation	Academia
Country of residence	Germany
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Issues relating to food loss and waste. Although postharvest losses maybe easier to capture, including consumer food waste issues could be enlightening. To have a complete understanding of food systems it is also important to track where the produced food is going, how much of it actually ends up on a plate.
Do you have any additional comments you would like to share with the HLPE-FSN?	Food loss and waste are currently only briefly addressed in the report, despite their relevance to food security, sustainability, and resource efficiency. The topic could be given greater attention, particularly through a discussion of indigenous food storage, preservation, and reuse practices. Such practices have historically played an important role in reducing post-harvest losses and waste, extending food shelf life, and making efficient use of available resources. Including these perspectives would enrich the analysis and highlight locally adapted and culturally embedded approaches to reducing food loss and waste.

43. IUCN Food and Agricultural Systems, Switzerland

Surname	BABIN PELLIARD
First name	Delphine
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Adviser
Current institution/organization	IUCN, Food and Agricultural Systems team
Affiliation	Other
Country of residence	Switzerland
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The proposed definition is strong and should be retained as the foundation. I suggest only targeted refinements to make several elements already present in the report more visible in the definition itself. • First, consider adding the word “living” before “systems” to emphasize that IPFS are adaptive, evolving systems of knowledge, practice, governance and relationship, not static traditions. • Second, consider referring to “Traditional Ecological Knowledge and other Indigenous knowledge systems” rather than only “Indigenous knowledge.” This would make more visible the ecological, seasonal, place-based and intergenerational knowledge that guides harvesting, seed stewardship, soil and water management, biodiversity conservation, climate adaptation and ecosystem stewardship. • Third, the definition could more clearly reflect food sovereignty. While customary tenure and governance are included, the definition could more explicitly recognize Indigenous Peoples' collective authority to govern, maintain, restore and transmit their food systems, territories, species, seeds and food futures.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

A useful strengthening would be to clarify the enabling conditions required for the six dimensions to be realized in practice. The text states that food security can be achieved if people are "enabled" to produce, access and utilize the food they need. For Indigenous Peoples, these enabling conditions include secure land, water and territorial rights; recognition of customary governance; FPIC; protection of Indigenous knowledge systems; equitable financing; Indigenous-led data governance; and protection from external pressures that undermine food sovereignty.

We also suggest adding a cross-cutting element on Indigenous food and knowledge sovereignty. This could be framed as Indigenous Peoples' collective right and practical capacity to define, govern, protect, restore and transmit their food and knowledge systems, including decisions over seeds, breeds, species, territories, data, markets and benefit-sharing.

The framework should also examine whether diverse traditional diets are being displaced by imported, market-based and ultra-processed foods, affecting dietary diversity, micronutrient status, obesity, diabetes, maternal and child nutrition, and intergenerational knowledge transmission.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

The report already provides substantial evidence on Indigenous Peoples' food systems. The remaining gap is not necessarily the quantity of evidence, but the availability of comparable and disaggregated data on:

- nutrition transitions and consumption of ultra-processed foods;
- food affordability and market dependency;
- impacts of land tenure security on food security and nutrition outcomes;
- impacts of extractive industries, biodiversity loss and climate change on traditional food availability and access;
- Indigenous-led indicators of food sovereignty, cultural continuity and knowledge transmission.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Areas that could be further strengthened include: • the specific impacts of industrial agriculture and commodity markets on Indigenous Peoples, including territorial dispossession, disruption of customary governance, erosion of traditional diets and increased dependence on purchased foods; • risks and safeguards related to carbon markets and biodiversity credits in Indigenous territories; • Indigenous data sovereignty and community-led monitoring; • nutrition transitions from traditional diets to ultra-processed and imported foods; • Direct access to funding
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Traditional ecological knowledge (TEK)
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	The Indigenous Kichwa Chakra system in the Ecuadorian Amazon is a relevant case of an Indigenous food and knowledge system supporting agrobiodiversity conservation, food sovereignty, cultural continuity and sustainable livelihoods.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Two areas are pivotal: • First, establish mechanisms that support Indigenous food sovereignty and Indigenous-led governance of food systems, including authority over territories, seeds, biodiversity, traditional foods and knowledge systems. • Second, develop Indigenous-led monitoring frameworks and indicators that measure not only food production and nutrition outcomes, but also cultural continuity, ecological integrity, food sovereignty, biocultural integrity and intergenerational knowledge transmission.

Do you have any additional comments you would like to share with the HLPE-FSN?

The report would benefit from greater attention to implementation pathways. Recognition of Indigenous Peoples' food systems is important, but long-term impact will depend on mechanisms that support Indigenous governance, food sovereignty, direct financing, safeguards, accountability and Indigenous-led monitoring.

The proposed Indigenous Peoples-specific framework places significant emphasis on evaluating the state of IPFS. It may also be useful to distinguish more explicitly between: (i) outcomes that characterize healthy and resilient Indigenous Peoples' food systems and (ii) enabling conditions required to sustain them. Emerging frameworks such as the Regen10 Outcomes Framework make this distinction between farm-level outcomes and landscape-level enabling conditions, which may offer a useful reference for strengthening the policy relevance of the framework. However, Indigenous-specific indicators should remain Indigenous-led, place-based and governed through Indigenous data sovereignty.

44. Indigenous Determinants of Health Alliance (IDHA), Capital Native Nations, Adolphe BOPE, Coopérative des Peuples Autochtones Batwa pour l'Epanouissement Communautaire (COOPABEC), Fondation Maman Sahélienne for Peace and solidarity, Association Dewran, Antiné Sondé, Moussa Tall, Membres fondateurs de Dewran, Adjmor, Unissons nous pour la Promotion des Batwa (UNIPROBA), Vital, Réseau national des populations autochtones du Congo (RENAPAC) Chanceline Ipemba Peya

Surname	Bermudez del Villar
First name	Alejandro
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Research Coordinator
Current institution/organization	Indigenous Determinants of Health Alliance (IDHA), Capital Native Nations, Adolphe BOPE, Coopérative des Peuples Autochtones Batwa pour l'Epanouissement Communautaire (COOPABEC), Fondation Maman Sahélienne for Peace and solidarity, Association Dewran, Antiné Sondé, Moussa Tall, Membres fondateurs de Dewran, Adjmor, Unissons nous pour la Promotion des Batwa (UNIPROBA), Vital, Réseau national des populations autochtones du Congo (RENAPAC) Chanceline Ipemba Peya
Affiliation	Civil society/NGO
Country of residence	United States of America
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The definition is a useful starting point, particularly if it recognizes Indigenous Peoples' food systems as living systems grounded in territories, waters, biodiversity, cultural continuity, governance, spirituality, language, traditional knowledge, and intergenerational responsibilities. However, the definition must be strengthened in Four ways. it should explicitly recognize Indigenous Peoples food systems as different from other populations' systems. Indigenous Peoples' food systems arise from self-determination, collective rights, and relationships with lands, waters, seeds, animals, plants, medicines, and spiritual ecologies. While alliances with these groups are important, Indigenous Peoples have distinct rights under UNDRIP, including FPIC reflecting their unique connection to nature.

the definition should recognize that Indigenous Peoples' food systems are foundational determinants of health and wellbeing. The Indigenous Determinants of Health framework (<https://docs.un.org/en/E/C.19/2023/5>) provides a useful lens for understanding how food systems are connected to land, waters, governance, language, culture, knowledge systems, and intergenerational continuity.

the definition should acknowledge the constant risks of dispossession, commercialization, ultra-processed food replacement, extractive industries (wood, mining, oil and gas), biodiversity loss, and appropriation of Indigenous knowledge.

the definition should recognize the diversity, complexity, and holistic nature of Indigenous Peoples' food systems, which encompass far more than production and consumption. They include healing, ceremony, celebration, spirituality, knowledge transmission, social relationships, and responsibilities to lands, waters, plants, animals, and other beings. Across diverse ecosystems, including pastoral, and urban environments, Indigenous Peoples have developed place-based food systems that reflect their relationships with local territories. Traditional staple foods often serve to support health, healing, cultural identity, and community wellbeing.

It should acknowledge that for Indigenous Peoples, food is a communal element that strengthens community bonds, just as work and the stewardship of the land as a common good do. Individualism and profit are not ends in themselves, for the aim is not commercialization but rather sharing. Food is distributed through kinship and community networks to ensure that all members are nourished and that no one is excluded from the benefits of the food system.

Suggested addition: "Indigenous Peoples' food systems are self-determined, place-based, biocultural, spiritual, ecological, governance, and knowledge systems sustained by Indigenous Peoples through their relationships with lands, waters, territories, seeds, plants, animals, medicines, languages, laws, ceremonies, and intergenerational responsibilities. They are inseparable from Indigenous Peoples' health. Indigenous Peoples'

	food systems are inherent to Indigenous Peoples' right to health, right to a safe, healthy, and sustainable environment, and right to safe and adequate food. They must be protected through UNDRIP, FPIC, Indigenous data sovereignty, and Indigenous-led governance."
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	The framework's emphasis on relationality, values, and territories is welcome and broadly consistent with many Indigenous worldviews. However, for the framework to effectively guide policymaking, it should move from symbolic recognition to operational implementation. It should not only describe the importance of relationality, values, and territories, but also identify the institutional responsibilities, governance arrangements, accountability mechanisms, and resources required to protect and strengthen them. The six dimensions of food security provide a useful foundation for understanding the contributions of Indigenous Peoples' food systems to food security and nutrition. However, food sovereignty is equally important and, from many Indigenous perspectives, foundational to food security. Indigenous Peoples' food systems are rooted in the right and responsibility of Indigenous Peoples to govern their lands, waters, territories, seeds, knowledge systems, and food practices according to their own laws, values, and institutions. These foundations are also determinants of Indigenous health and wellbeing. Without food sovereignty, food security may be achieved only in a narrow sense that addresses caloric intake while failing to support health, cultural continuity, self-determination, governance, territorial relationships, and reciprocal responsibilities to lands, waters, and all living beings. To strengthen the framework as a practical guide for policymaking, we recommend greater attention and explicit reference to: - Indigenous Peoples as distinct rights holders under UNDRIP; - Indigeneity as an overarching determinant of health and wellbeing as recommended by UNPFII; - FPIC as a continuous requirement throughout policy design, implementation, monitoring, and evaluation; - Indigenous governance, jurisdiction, and decision-making authority through structural changes, not only participation, which is consultative;

	Indigenous data sovereignty and protection of Indigenous knowledge systems; Clear safeguards against conflation of Indigenous Peoples with local communities or other population groups, in line with UNDRIP, UNPFII, and relevant processes regarding terminology under the Convention on Biological Diversity Subsidiary Body on Article 8j; Protection against displacement, extractive activities, conservation-related exclusion, and unauthorized commercialization of Indigenous knowledge, including through the development of: guidelines on Indigenous and traditional territories (ITTs), inclusion of Indigenous Peoples in selection of sites under UNESCO (Decision 47/11) application of FPIC; Indicators that measure cultural continuity, language transmission, territorial integrity, ecological stewardship, governance authority, spiritual wellbeing, and intergenerational resilience.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	The report should include data and trends that go beyond conventional nutrition indicators and address significant gaps in Indigenous-specific data collection. In many countries, Indigenous Peoples are either not identified in food security, agricultural, nutrition, health, and environmental datasets or are aggregated into broader national populations. Indigenous Peoples food systems encompass terrestrial, aquatic, and coastal and marine ecosystems, so that "IP Food Systems" is not just land-based guidance. This limits the ability to assess inequalities, monitor outcomes, evaluate policy effectiveness, and support evidence-based decision-making. The report should therefore recommend Indigenous-led, disaggregated, contextualized, rights-based, and culturally grounded data systems consistent with Indigenous data sovereignty principles. Additional data areas that would strengthen the report include: availability of, access to, and governance over traditional lands, waters, forests, fisheries, grazing routes, seed systems, and sacred sites; Indigenous Peoples' agency over food systems, including decision-making authority, implementation of Free, Prior and Informed Consent (FPIC), territorial

governance, and participation in food-related policy processes;
availability and reach of culturally appropriate capacity-building, legal literacy, and rights-awareness programs related to FPIC, Indigenous governance, intellectual property, data sovereignty, and food systems decision-making
loss of access to traditional foods and medicines resulting from conservation restrictions, extractive industries, infrastructure development, militarization, privatization, climate change, displacement, and environmental degradation;
replacement of traditional diets by ultra-processed foods and associated increases in diabetes, metabolic disease, cardiovascular disease, obesity, undernutrition, and micronutrient deficiencies;
disruption of the historical balance between traditional foods, physical activity, seasonal livelihoods, and ecological relationships due to colonization, sedentarization, land dispossession, and other imposed lifestyle changes, contributing to region-specific patterns of chronic disease and declining health outcomes
food insecurity among urban Indigenous Peoples, displaced Indigenous Peoples, migrant Indigenous Peoples, nomadic and pastoralist Indigenous Peoples, and Indigenous Peoples divided by state borders;
impacts of climate change, biodiversity loss, drought, floods, fires, contamination, ocean acidification, and ecosystem degradation on Indigenous food systems;
The introduction and spread of non-native flora and fauna represent challenges with impacts on Indigenous Peoples' health, particularly in remote and rural region
criminalization of subsistence practices, cultural burning, fishing, gathering, hunting, pastoral mobility, and seed stewardship;
Indigenous language loss as a food systems issue, recognizing that ecological knowledge, food preparation practices, planting and harvesting protocols, and cultural teachings are often transmitted through Indigenous languages;
Indigenous knowledge transmission between generations, including the continuity of food-related cultural and ceremonial practices and ecological stewardship;

	mental, spiritual, collective, and intergenerational health impacts associated with food system disruption; Indigenous-led indicators measuring food sovereignty, territorial integrity, governance authority, cultural continuity, language revitalization, ecological stewardship, biodiversity protection, and intergenerational wellbeing. References to include: UNPFII-sponsored and recommended studies on Indigenous Determinants of Health (2023, 2024, 2025, 2026); FAO FPIC Manual; UNDRIP; CBD Decision 16/19 and the Global Action Plan on Biodiversity and Health; WHO World Report on SDOEH Equity; Indigenous Data Sovereignty and CARE Principles; and Indigenous Peoples’ Food Systems Coalition materials from UNFSS
Are there any other issues concerning Indigenous Peoples’ food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The report discusses dietary transition, market dependency, imported foods, ultra-processed foods, agrochemicals, corporate control, and the hidden costs of current food systems. These points are especially visible in sections 2.5, 2.6, and Chapter 3. However, the role of commercial determinants of health could be developed more explicitly, including corporate food systems (extractive models prioritizing short-term productivity and profit over ecological stewardship, resulting in monocultures and degraded watersheds), seed and intellectual property regimes, food aid dependency, and market structures that displace Indigenous food systems and enhance agrochemical dependency. In fact, dependency on agrochemicals, such as pesticides contrasts with Indigenous knowledge systems, which understand ecosystems as capable of maintaining balance through reciprocal relationships among plants, animals, insects, soils, waters, and other beings. Indigenous stewardship practices have traditionally sought to work with these ecological relationships rather than relying primarily on external chemical interventions Additionally, the report recognizes connections among food, land, biodiversity, culture, spirituality, health, and traditional medicine. However, these connections could be integrated more explicitly through an Indigenous Determinants of Health lens. Indigenous Peoples’ food systems should not be analyzed only as contributors to food security and

	nutrition and disease prevention, but also as determinants of collective health, biodiversity stewardship, cultural continuity, maternal and child wellbeing, language transmission, spiritual wellbeing, and intergenerational healing, reflecting the reciprocal relationships among Indigenous Peoples and their plant and animal kin. Equally important, while the report is grounded in FAO/CFS processes and includes important recommendations on territorial rights, FPIC, Indigenous governance, and co-creation, it could provide stronger guidance on institutional accountability. This should include safeguards to prevent conflation of Indigenous Peoples with local communities or other vulnerable populations, mechanisms for Indigenous-led monitoring, clearer FAO/CFS implementation responsibilities, and accountability measures to ensure that FPIC, UNDRIP, Indigenous data sovereignty, and Indigenous governance are operationalized rather than treated as general principles. This recommendation applies also to nature-based solutions and technological practices aimed at achieving siloed environmental or climate goals, such as carbon markets.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Key references and sources to consider include: - United Nations Declaration on the Rights of Indigenous Peoples; - UNPFII 2023 study, Indigenous determinants of health in the 2030 Agenda for Sustainable Development; - UNPFII 2024 study, Improving the health and wellness of Indigenous Peoples globally: operationalization of Indigenous determinants of health; - UNPFII 2025 study, Evaluating institutional structures to improve the health and wellness of Indigenous Peoples globally: the Indigenous determinants of health measurement instrument; - UNPFII 2026 study, Restoring Indigenous health by connecting systems through the Indigenous determinants of health; - CBD Decision 16/19 on Biodiversity and Health; - WHO World Report on Social Determinants of Health Equity; - Indigenous Peoples' Food Systems Coalition materials from UNFSS and UNFSS+4;

	Indigenous data sovereignty literature, including the CARE Principles; State of Worlds Indigenous Peoples, 2017; 2018; health 2015; lands 2021; climate 2025; The Indigenous World 2025; In addition, CFS should acknowledge and apply, in this document and all documents, that as of 3 November 2022 the term “Indigenous Peoples” is capitalized per the UN Editorial Manual in accordance with UN Member State negotiations of General Assembly resolution 77/203 Rights of Indigenous Peoples.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples’ food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Capital Native Nations / Piscataway food and land-based initiatives in the DMV region: This can show how urban and peri-urban Indigenous Peoples maintain food, land, cultural, and governance relationships despite displacement and invisibility. Indigenous pastoralist and nomadic food systems in Africa and the Sahel: These examples are essential for geographic balance and for addressing mobility, women’s knowledge, climate adaptation, and food sovereignty. We note the importance of organizing examples according to the 7 sociocultural regions from which Indigenous Peoples identify themselves, in line with procedures of UNPFII and SB8j.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Although the draft report already provides a foundation for recommendations on territorial rights, FPIC, Indigenous governance, biocultural food systems, and Indigenous knowledge systems, it is necessary to strengthen the final report. HLPE-FSN should ensure that its recommendations are operational, measurable, and grounded in Indigenous Peoples’ rights and self-determination. Thus, HLPE-FSN could make recommendations in the following areas: Rights and governance: Recognize Indigenous Peoples as distinct rights holders and require full and continuous implementation of FPIC in all policies, research, investments, conservation measures, climate actions, and food system programs affecting Indigenous Peoples’ food systems. Non-conflation: Establish safeguards to ensure Indigenous Peoples are not conflated with local communities, minorities, smallholders, rural populations, or other vulnerable groups. Indigenous

Peoples may share concerns with these groups, but they possess distinct collective rights under UNDRIP. Indigenous-led decision-making: Move beyond consultation toward Indigenous-led governance and co-governance, including advisory or decision-making mechanisms composed of representatives chosen by Indigenous Peoples themselves. Indigenous health and wellbeing: Develop monitoring and evaluation approaches that assess how food policies affect Indigenous health, wellbeing, self-determination, territorial integrity, language continuity, culture, biodiversity stewardship, and intergenerational knowledge transmission. Existing work on Indigenous Determinants of Health provides useful tools and indicators that can support this effort. Indigenous data sovereignty: Require Indigenous governance over the collection, ownership, interpretation, storage, use, and dissemination of data concerning Indigenous Peoples' food systems, health, territories, biodiversity, and knowledge. Knowledge protection: Protect sacred, secret, medicinal, genetic, ecological, ceremonial, and food-related knowledge from appropriation, commercialization, extraction, digitization, or unauthorized use. Knowledge-related recommendations should be grounded in FPIC, Indigenous governance, and benefit-sharing. Territories and mobility: Protect lands, waters, territories, pastoral mobility routes, forests, fisheries, seed systems, sacred places, and gathering areas as foundations of Indigenous Peoples' food security, nutrition, health, and self-determination. Financing: Recommend long-term, direct, flexible, and Indigenous-led financing for food systems restoration, governance, infrastructure, youth and elder knowledge transmission, seed systems, territorial monitoring, and Indigenous-led research. Climate and biodiversity safeguards: Ensure climate, conservation, biodiversity, and nature-based solution policies do not cause displacement, dispossession, exclusion from territories, criminalization of subsistence practices, or restrictions on Indigenous food systems. Institutional accountability: Recommend that FAO, CFS, IFAD, WFP, WHO, CBD, WIPO, UNFCCC, and other relevant bodies coordinate implementation,

	report on progress, and establish Indigenous-led accountability mechanisms. Commercial determinants of health: Address the role of ultra-processed foods, agrochemicals, corporate seed systems, intellectual property regimes, land conversion, and market structures that displace Indigenous food systems and contribute to malnutrition and noncommunicable diseases. Monitoring and indicators: Develop indicators that measure not only food security and nutrition, but also Indigenous Peoples' agency, territorial integrity, governance authority, language transmission, cultural continuity, spiritual wellbeing, biodiversity stewardship, and intergenerational resilience. Interinstitutional partnership: Recommend that CFS work with and call upon UNPFII for future guidance and engagement in CFS proceedings and knowledge development tools, and for CFS utilize UNPFII outcomes.
Do you have any additional comments you would like to share with the HLPE-FSN?	Recommend also that CFS' work on Indigenous Peoples' Food Systems not conflict with efforts under CBD SB8j.

45. Dirección General de Planeación y Desarrollo en Salud (DGPLADES), Secretaría de Salud, México

Surname	Herrera
First name	Miguel Angel
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Director de Medicina Tradicional y Desarrollo Intercultural
Current institution/organization	Dirección General de Planeación y Desarrollo en Salud (DGPLADES), Secretaría de Salud, México
Affiliation	Government and other public institution
Country of residence	Mexico
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Estamos completamente de acuerdo, puesto que reconoce y promueve el conocimiento y la racionalidad de los pueblos indígenas y toma en cuenta elementos valiosos.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six	La DGPLADES tiene como atribuciones conducir la Política Nacional de Atención Intercultural en Salud, la Política Nacional de Atención Intercultural a la Salud de los Pueblos Indígenas y Afromexicanos y la Política

dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Nacional de Medicina Tradicional Indígena y Afromexicana. Dichas políticas las conduce la Dirección de Medicina Tradicional y Desarrollo Intercultural. En el campo de la alimentación y seguridad alimentaria se traducen en la coordinación a nivel nacional de un modelo de alimentación llamado: "La Dieta de la Milpa. Corazón de la Cocina Mexicana. Alimentación Regional Saludable, Culturalmente Pertinente". En dicho modelo se coincide con los elementos clave del HLPE-FSN para orientar la formulación de políticas en materia de seguridad alimentaria y nutrición. Dicho documento se encuentra en la siguiente liga: https://drive.google.com/file/d/1RsnBfWwqRXxY4hHyjBR-JjWpTtTABZ10/view
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	El establecimiento de relaciones estructurales de desigualdad y discriminación a nivel social y cultural, presentes en los programas gubernamentales de salud y desarrollo que se aplican con los pueblos indígenas en México. Referencia: Freyermuth Enciso Graciela. Coordinadora. Panorama de la salud de los pueblos indígenas en los albores del siglo XXI. Rezagos y desafíos. Centro de Investigaciones y Estudios Superiores en Antropología Social, 2023 México.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Las Dietas tradicionales regionales. El Informe EAT–Lancet 2025 propone 8 soluciones para enfrentar la situación de alimentación en el mundo. La 2ª señala: "Proteger y promover dietas tradicionales regionales. Con frecuencia representan una profunda conexión con el entorno local, la diversidad biológica, las prácticas agrícolas, las creencias culturales y las adaptaciones a largo plazo de los recursos disponibles". Este es uno de los elementos centrales en el modelo de la dieta de la milpa. https://drive.google.com/file/d/1Fgv52f9TS0Tug_MylrYglmyEF460UQR9/view
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	La DMTDI/DGPLADES elaboró un documento que presenta y detalla el aporte de la Dieta de la Milpa como base de la seguridad alimentaria. Disponible en: https://drive.google.com/file/d/1Sm5JRyuk0BYVbHf6X3JnPe2Ku-l6EpGB/view?usp=sharing
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to	En este momento en México estamos trabajando con instituciones federales en el campo productivo y de promoción social y de salud, respecto a los pueblos indígenas en un proyecto coordinado para promover la seguridad alimentaria. Estamos en su inicio y tardará en obtener resultados.

balance geographical representation in the report and that address issues related to all forms of malnutrition.	
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	El informe da cuenta de la importancia en considerar la interculturalidad, sin embargo, está más como un elemento explicativo que operativo. Nosotros contamos con un documento de lineamientos interculturales para todos los programas de salud que se llevan a cabo con población indígena, llamado “Lineamientos y protocolos de carácter transversal, para los programas de salud que se aplican con población indígena y afromexicana, con enfoque intercultural y de respeto a los derechos humanos”, que se puede considerar para promover los elementos de la Seguridad alimentaria con grupos poblacionales indígenas. Liga: https://www.gob.mx/cms/uploads/attachment/file/1044281/Lineamientos_y_protocolo_para_programas_de_Saud.pdf
Do you have any additional comments you would like to share with the HLPE-FSN?	Para la promoción del modelo de la dieta de la milpa ha sido fundamental el documentar las evidencias de los aportes a la salud de los alimentos mexicanos que se promueven. Ello lo tenemos en la siguiente liga: https://drive.google.com/file/d/1Pp64676wtA0Iyo-BpOndpP9_aHa9kazm/view?usp=sharing También, contamos con un cartel que explica los alimentos mexicanos que forman parte de la dieta de la milpa y que se encuentra en: https://drive.google.com/file/d/1x6bp9ZCpCEZBG8kwgKZM77LvUth6ewKZ/view?usp=sharing

46. Mānuka Performance Limited, New Zealand

Surname	Vine
First name	Tristan
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	CEO and Co-Founder
Current institution/organization	Mānuka Performance Limited
Affiliation	Private sector
Country of residence	New Zealand

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?

The draft definition is a meaningful and necessary advance. We offer three observations from our experience as a Māori-led company operating at the intersection of mātauranga Māori, bioactive science, and global food commercialisation.

First, the definition would benefit from more explicit acknowledgement that Indigenous Peoples' food systems are not static or pre-commercial. Māori food systems in Aotearoa New Zealand encompass both traditional practices — gathering, cultivation, preservation — and contemporary expressions including Māori-led agribusiness, nutraceutical science, and export-oriented value creation. A definition that centres only traditional or subsistence-oriented food practices risks rendering invisible the significant number of Indigenous enterprises actively operating within modern food economies while maintaining cultural integrity, tikanga, and kaitiakitanga (guardianship) frameworks.

Second, the definition should more explicitly address knowledge sovereignty within food systems. In our experience, the data, ecological knowledge, and phytochemical intelligence derived from taonga species — such as *Leptospermum scoparium* (mānuka) — represent a form of food system knowledge that is vulnerable to appropriation by external commercial or scientific actors. A robust definition must acknowledge that Indigenous Peoples' food knowledge systems include not just practices and landscapes, but data, IP, and scientific intelligence generated from those systems. This is consistent with frameworks such as the CARE Principles for Indigenous Data Governance (Collective Benefit, Authority to Control, Responsibility, Ethics).

Third, the definition should acknowledge the relational dimension of Māori food systems more centrally. The whakataukī — Nāu te rourou, nāku te rourou, ka ora te iwi (With your food basket and my food basket, the people will thrive) — captures a philosophy of collective wellbeing, reciprocity, and intergenerational responsibility that is structurally different from commodity food logic. The definition could better reflect this relational and values-based ontology as a defining characteristic, not merely a contextual footnote.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

The conceptual framework is well-constructed and the emphasis on relationality, values, and territories is strongly aligned with Māori worldviews. We offer the following observations on gaps and opportunities.

The framework effectively captures the territorial and ecological dimensions of Indigenous food systems but would benefit from stronger integration of the commercial and IP dimensions. In Aotearoa New Zealand, Māori land alienation has been profound: Māori retain only approximately 0.02% of the most highly productive agricultural land (LUC Class 1–3), and approximately 80% of Māori land is non-arable (LUC Class 6–8). This structural dispossession has constrained Māori food system development across the full value chain — from growing and harvesting to processing and commercialisation. The framework should speak more directly to how policy can redress not just territorial loss, but the consequent loss of value-creation capacity within Indigenous food systems. We also suggest the framework more explicitly address the tension between export-led agricultural economies and domestic food security for Indigenous peoples. New Zealand exports food sufficient to feed approximately 20 million people annually, yet significant proportions of Māori communities' experience food insecurity and diet-related disease. This is not an incidental contradiction — it reflects the structural prioritisation of export commodity revenue over domestic food system equity. Policy frameworks must grapple with this directly, rather than treating food export success and Indigenous food security as compatible by default.

Finally, the inclusion of mātauranga Māori as a legitimate and co-equal knowledge system within the framework's epistemological foundations is commendable. We encourage the report to go further in describing how Indigenous knowledge systems can be protected within food system governance — particularly as bioactive science, AI-enabled ingredient intelligence, and global nutraceutical markets begin to commercialise traditional botanical and food knowledge at significant scale.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

We draw attention to the following data dimensions, particularly relevant in an Aotearoa New Zealand context and likely applicable to comparable settler-colonial food systems globally.

Land dispossession and food system access: Curran-Cournane et al. (2023) document how urban and residential development on highly productive land in New Zealand increased by 54% between 2002 and 2019, with disproportionate impact on Māori land capacity. Given that Māori retain only 0.02% of the most productive agricultural land in Aotearoa, data on the intersection of land alienation and food system participation is urgently needed globally.

Diet quality export paradox: Rush and Obolonkin (2020) document that New Zealand's food exports are nutritionally superior to its food imports, which are dominated by sugar, wheat, and rice. This inversion — exporting nutritional quality while importing nutritional risk — is likely replicated in other settler-colonial agricultural economies and represents an underexamined structural driver of Indigenous food insecurity.

Food environment inequality: Sushil et al. (2017) demonstrate that high concentrations of fast food and takeaway outlets in New Zealand's highest deprivation areas — areas disproportionately populated by Māori and Pasifika communities — systematically undermine dietary quality. This food environment dynamic is a structural determinant of Indigenous nutrition outcomes that is insufficiently represented in most global data sets.

Bioactive knowledge appropriation: An emerging and poorly documented trend is the commercialisation of bioactive compounds derived from plants central to Indigenous food and medicinal systems, without appropriate benefit-sharing, IP recognition, or Indigenous governance. The absence of data tracking the economic flows from Indigenous botanical knowledge into global nutraceutical and functional food markets represents a significant knowledge gap in this report.

References:

Curran-Cournane, F. et al. (2023). New Zealand Journal of Agricultural Research, 66(1), 1–24.
Rush, E., & Obolonkin, V. (2020). European Journal of Clinical Nutrition, 74(2), 307–313.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

Sushil, Z. et al. (2017). International Journal of Public Health, 62, 869–877.
Mānuka Performance Limited (2025). Food Systems in New Zealand. Whakatāne, New Zealand.

We identify three underrepresented areas of significance.

1. The commercialisation interface. The report addresses subsistence, traditional practice, and cultural values well. It addresses policy, rights, and governance adequately. However, the space in which Indigenous-led commercial enterprises engage with modern food and ingredient markets — while seeking to maintain cultural integrity, IP guardianship, and community benefit — is insufficiently covered. Indigenous entrepreneurs operating in nutraceuticals, functional foods, and bioactive ingredients are navigating complex terrain: regulatory systems that do not recognise traditional knowledge, commercial systems that commodify without attribution, and investment ecosystems that often lack cultural competency. This commercialisation interface requires specific policy attention and practical support frameworks.
2. Data sovereignty within food systems science. As the global bioactive and nutraceutical industry increasingly looks to Indigenous botanical knowledge as a source of commercial and scientific value, the governance of data derived from Indigenous food species and landscapes is an urgent issue. This includes polyphenol mapping, phytochemical profiling, ethnobotanical databases, and ecological datasets. The report would benefit from a dedicated section on Indigenous data governance frameworks — such as the CARE Principles or New Zealand's Kete Rāraunga framework — as foundational infrastructure for ethical food systems science.
3. The absence of central government food system leadership. In Aotearoa New Zealand, food policy and strategy are distributed across multiple agencies with no single entity holding responsibility for food security or sustainable food systems (Mānuka Performance Limited, 2025). This structural absence of coordinated food systems governance has particularly severe implications for Māori communities, who are most exposed to food insecurity and least positioned to navigate fragmented policy environments. The report's

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?

recommendations could speak to the importance of coordinated national food systems governance, particularly with legislated Treaty or Indigenous rights obligations embedded.

We draw the Panel's attention to the following:

Mānuka Performance Limited (2025). Food Systems in New Zealand. Whakatāne, New Zealand. A practitioner-led policy document authored by a Māori-led enterprise, providing evidence on food system inequity, land fragmentation, export paradox, and food insecurity in Aotearoa New Zealand.

Kore Hiakai Zero Hunger Collective (2023). Realising food secure communities in Aotearoa: A review of locally-led reports, plans and strategies. Wellington, New Zealand. A kaupapa Māori food security framework grounded in community evidence.

The whakataukī tradition of Aotearoa New Zealand as a form of Indigenous knowledge encoding food system values, reciprocity, and collective wellbeing. Whakataukī (Māori proverbs) such as Nāu te rourou, nāku te rourou, ka ora te iwi articulate food philosophy in ways that complement and enrich the report's conceptual framework.

Te Tiriti o Waitangi / The Treaty of Waitangi as a foundational legal and ethical framework governing the relationship between Māori and the Crown in Aotearoa, with direct implications for food systems governance, land rights, and Indigenous food sovereignty. The Panel may wish to reference the Waitangi Tribunal's work on Māori land loss and food system access.

CARE Principles for Indigenous Data Governance (Carroll et al., 2020): Collective Benefit, Authority to Control, Responsibility, Ethics. These principles are increasingly adopted within Māori and Indigenous data governance frameworks and are directly applicable to food systems knowledge.

Burlingame, B., Toki, V. and Iese, V. (2026). Restoring the mana of the moana for ecological and food-system resilience in the Hauraki Gulf. Nature Food 7, 209–210. A directly relevant recent publication connecting Indigenous food systems, ecological restoration, and food security in the Pacific.

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.

We offer the following case study for the Panel's consideration.

Mānuka Performance Limited, Aotearoa New Zealand — Māori-led bioactive food innovation as Indigenous food system expression

Mānuka Performance Limited (MPL) is a Māori-led company based in Whakatāne, Aotearoa New Zealand, operating at the intersection of traditional Māori food knowledge and advanced bioactive science. The company's core platform — MPS PolySure™ — is a proprietary polyphenol quantification methodology built on LC-HRMS and UPLC analytical infrastructure, co-developed with AgResearch and the Bioeconomy Science Institute under the SSIF Flagship 2 programme. This platform characterises the phytochemical complexity of mānuka honey and other New Zealand botanical species — plants deeply embedded in Māori traditional food and medicinal knowledge. What makes MPL's model relevant to this consultation is its integration of traditional knowledge principles with modern food science governance. The company has co-developed the Kete Rāraunga data sovereignty framework under kaupapa Māori principles, ensuring that data generated from taonga (treasured) species — including polyphenol maps, ecological datasets, and bioactive profiles — remains under appropriate Māori guardianship rather than entering commercial systems without iwi authority. This framework is co-designed with AgResearch researchers and Māori community partner Te Kōtuku, and funded through New Zealand's MPI Māori Agribusiness Innovation Fund.

MPL's Cultural Life Cycle Assessment (C-LCA) methodology extends this further, embedding mātauranga Māori values — including kaitiakitanga, whakapapa, and manaakitanga — into the product lifecycle and environmental reporting infrastructure of a commercially active food and nutraceutical enterprise.

This model illustrates how Indigenous food knowledge can be both protected and commercialised ethically: generating export revenue, scientific IP, and international market access while maintaining Indigenous data sovereignty, cultural integrity, and community benefit. It demonstrates

	that preserving and strengthening Indigenous food knowledge systems is not incompatible with modern food economies — but requires deliberate governance architecture, science investment, and policy support. Brazil's Food Purchasing Programme (PAA) and school feeding policy is also recommended for inclusion as a strong case study in policy-led Indigenous and smallholder food system strengthening. Brazil's constitutional requirement that 30% of school feeding ingredients are sourced from local smallholder and family farms has supported approximately four million small farmers, revitalised local markets, and normalised healthier dietary patterns for school children. Comparable policy does not yet exist in Aotearoa New Zealand (Constantine & Santarelli, 2017).
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	We recommend the Panel consider the following areas for recommendations: 1. Indigenous data sovereignty as foundational food systems infrastructure. Governments should be recommended to develop and resource Indigenous data governance frameworks as a precondition for ethical food systems research, bioactive science, and commercial engagement with Indigenous botanical and ecological knowledge. No food systems data programme should proceed without consent, governance participation, and benefit-sharing protocols established with relevant Indigenous peoples. 2. Land rights and access as the primary determinant of Indigenous food system capacity. Policy recommendations must address structural land dispossession as a root cause of Indigenous food insecurity. Governments in settler-colonial contexts should be recommended to develop active mechanisms — land access funds, leasehold reform, protected productive land classification — to restore Indigenous peoples' capacity to participate in food production, not merely food consumption. 3. Recognition and resourcing of Indigenous-led commercialisation within food systems policy. Food systems policy tends to frame Indigenous engagement in terms of subsistence, cultural preservation, or welfare. The HLPE-FSN should recommend that governments recognise and actively resource Indigenous-led commercial food

enterprises as legitimate and culturally coherent food system actors — with access to R&D funding, export support, regulatory pathways appropriate to traditional food products, and IP protection frameworks.

4. Coordinated national food systems governance with legislated Indigenous rights obligations. Governments should be recommended to establish centralised food systems governance — a dedicated ministry or cross-agency authority — with explicit obligations to Treaty or Indigenous rights frameworks. The fragmentation of food policy across multiple agencies, with no central accountability for food security outcomes, disproportionately harms Indigenous communities.

5. Ethical commercialisation frameworks for traditional food knowledge in nutraceutical and functional food markets. As global demand for bioactive ingredients derived from traditional botanical knowledge grows, the HLPE-FSN should recommend that international trade and food regulatory frameworks include benefit-sharing obligations, IP recognition, and Indigenous governance requirements for commercial entities seeking to commercialise Indigenous food knowledge.

6. Investment in the food system's middle — logistics, processing, and distribution infrastructure in Indigenous territories. The HLPE-FSN should recommend targeted infrastructure investment to address the disconnect between Indigenous food producers and end consumers, particularly in rural and remote territories. In Aotearoa New Zealand, 93% of freight relies on roads, making food supply in rural Māori communities acutely vulnerable to weather events and infrastructure failure.

Do you have any additional comments you would like to share with the HLPE-FSN?

We wish to make three closing observations. First, this report arrives at a critical moment. The global bioactive, nutraceutical, and functional food market is growing rapidly, and it is drawing increasingly on the botanical, ecological, and traditional food knowledge of Indigenous peoples worldwide. Without deliberate international governance, this represents one of the most significant risks of knowledge appropriation in a generation. The HLPE-FSN has an opportunity to shape norms, frameworks, and recommendations that protect Indigenous peoples as the rightful knowledge authorities, data governors, and commercial beneficiaries of their own food knowledge systems.

Second, we urge the Panel to resist the implicit framing that Indigenous food systems are principally of value for their cultural and subsistence dimensions, while modern science and commerce operate in a separate register. The most promising pathway forward — as demonstrated by companies like Mānuka Performance — is the integration of Indigenous knowledge governance with world-class science, validated bioactive intelligence, and ethical commercialisation. This integration protects traditional knowledge while generating economic and nutritional value that flows back to Indigenous communities.

Third, the whakataukī at the heart of Māori food philosophy — Nāu te rourou, nāku te rourou, ka ora te iwi — offers a principle that this report might carry forward: that the flourishing of all people depends on the contribution of all knowledge baskets, held in their proper relationships. The HLPE-FSN's work is itself an expression of this principle, and we are grateful for the opportunity to contribute.

Mānuka Performance Limited is willing to provide further evidence, case study material, or engagement with the drafting team in support of this report's development.

47. Indigenous Determinants of Health Alliance (IDHA), Capital Native Nations, Acal el Hajeb, Indigenous Amazigh Network Azul, Adolphe BOPE, Coopérative des Peuples Autochtones Batwa pour l'Epanouissement Communautaire (COOPABEC), Fondation Maman Sahélienne for Peace and solidarity, Association Dewran, Antiné Sondé, Moussa Tall, Membres fondateurs de Dewran, Adjmor, Unissons nous pour la Promotion des Batwa (UNIPROBA), Vital, Réseau national des populations autochtones du Congo (RENAPAC), Chanceline Ipemba Peya, Amina Amharech (UNPFII), Emma Rawson-Te Patu (UNPFII), Valentina Sovkina (UNPFII), Geoffrey Roth (Cedar Rock Alliance)

Surname	Bermudez del Villar
First name	Alejandro
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Research Coordinator
Current institution/organization	Indigenous Determinants of Health Alliance (IDHA), Capital Native Nations, Acal el Hajeb, Indigenous Amazigh Network Azul, Adolphe BOPE, Coopérative des Peuples Autochtones Batwa pour l'Epanouissement Communautaire (COOPABEC), Fondation Maman Sahélienne for Peace and solidarity, Association Dewran, Antiné Sondé, Moussa Tall, Membres fondateurs de Dewran, Adjmor, Unissons nous pour la Promotion des Batwa (UNIPROBA), Vital, Réseau national des populations autochtones du Congo (RENAPAC) Chanceline Ipemba Peya, Amina Amharech (UNPFII), Emma Rawson-Te Patu (UNPFII), Valentina Sovkina (UNPFII), Geoffrey Roth (Cedar Rock Alliance).
Affiliation	Civil society/NGO
Country of residence	United States of America

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?

The definition is a useful starting point, particularly if it recognizes Indigenous Peoples' food systems as living systems grounded in territories, waters, biodiversity, cultural continuity, governance, spirituality, language, traditional knowledge, and intergenerational responsibilities. However, the definition must be strengthened in five ways.

it should explicitly recognize Indigenous Peoples food systems as different from other populations' systems. Indigenous Peoples' food systems arise from self-determination, collective rights, and relationships with lands, waters, seeds, animals, plants, medicines, and spiritual ecologies. While alliances with these groups are important, Indigenous Peoples have distinct rights under UNDRIP, including FPIC reflecting their unique connection to nature.

the definition should recognize that Indigenous Peoples' food systems are foundational determinants of health and wellbeing. The Indigenous Determinants of Health framework (<https://docs.un.org/en/E/C.19/2023/5>) provides a useful lens for understanding how food systems are connected to land, waters, governance, language, culture, knowledge systems, and intergenerational continuity.

the definition should acknowledge the constant risks of dispossession, commercialization, ultra-processed food replacement, extractive industries (wood, mining, oil and gas), biodiversity loss, and appropriation of Indigenous knowledge.

the definition should recognize the diversity, complexity, and holistic nature of Indigenous Peoples' food systems, which encompass far more than production and consumption. They include healing, ceremony, celebration, spirituality, knowledge transmission, social relationships, and responsibilities to lands, waters, plants, animals, and other beings. Across diverse ecosystems, including pastoral, and urban environments, Indigenous Peoples have developed place-based food systems that reflect their relationships with local territories. Traditional staple foods often serve to support health, healing, cultural identity, and community wellbeing.

It should acknowledge that for Indigenous Peoples, food is a communal element that strengthens

	community bonds, just as work and the stewardship of the land as a common good do. Individualism and profit are not ends in themselves, for the aim is not commercialisation but rather sharing. Food is distributed through kinship and community networks to ensure that all members are nourished and that no one is excluded from the benefits of the food system. Suggested addition: “Indigenous Peoples’ food systems are self-determined, place-based, biocultural, spiritual, ecological, governance, and knowledge systems sustained by Indigenous Peoples through their relationships with lands, waters, territories, seeds, plants, animals, medicines, languages, laws, ceremonies, and intergenerational responsibilities. They are inseparable from Indigenous Peoples’ health. Indigenous Peoples’ food systems are inherent to Indigenous Peoples’ right to health, right to a safe, healthy, and sustainable environment, and right to safe and adequate food. They must be protected through UNDRIP, FPIC, Indigenous data sovereignty, and Indigenous-led governance.”
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples’ food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples’ food systems to food security and nutrition? Do you have any other comments?	The framework’s emphasis on relationality, values, and territories is welcome and broadly consistent with many Indigenous worldviews. However, for the framework to effectively guide policymaking, it should move from symbolic recognition to operational implementation. It should not only describe the importance of relationality, values, and territories, but also identify the institutional responsibilities, governance arrangements, accountability mechanisms, and resources required to protect and strengthen them. The six dimensions of food security provide a useful foundation for understanding the contributions of Indigenous Peoples’ food systems to food security and nutrition. However, food sovereignty is equally important and, from many Indigenous perspectives, foundational to food security. Indigenous Peoples’ food systems are rooted in the right and responsibility of Indigenous Peoples to govern their lands, waters, territories, seeds, knowledge systems, and food practices according to their own laws, values, and institutions. These foundations are also determinants of Indigenous health and wellbeing. Without food sovereignty, food security may be

achieved only in a narrow sense that addresses caloric intake while failing to support health, cultural continuity, self-determination, governance, territorial relationships, and reciprocal responsibilities to lands, waters, and all living beings. To strengthen the framework as a practical guide for policymaking, we recommend greater attention and explicit reference to:

Indigenous Peoples as distinct rights holders under UNDRIP;

Indigeneity as an overarching determinant of health and wellbeing as recommended by UNPFII;

FPIC as a continuous requirement throughout policy design, implementation, monitoring, and evaluation;

Indigenous governance, jurisdiction, and decision-making authority through structural changes, not only participation, which is consultative;

Indigenous data sovereignty and protection of Indigenous knowledge systems;

Clear safeguards against conflation of Indigenous Peoples with local communities or other population groups, in line with UNDRIP, UNPFII, and relevant processes regarding terminology under the Convention on Biological Diversity Subsidiary Body on Article 8j;

Protection against displacement, extractive activities, conservation-related exclusion, and unauthorized commercialization of Indigenous knowledge, including through the development of: guidelines on Indigenous and traditional territories (ITTs), inclusion of Indigenous Peoples in selection of sites under UNESCO (Decision 47/11) application of FPIC;

Indicators that measure cultural continuity, language transmission, territorial integrity, ecological stewardship, governance authority, spiritual wellbeing, and intergenerational resilience.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

The report should include data and trends that go beyond conventional nutrition indicators and address significant gaps in Indigenous-specific data collection. In many countries, Indigenous Peoples are either not identified in food security, agricultural, nutrition, health, and environmental datasets or are aggregated into broader national populations. Indigenous Peoples food systems encompass terrestrial, aquatic, and coastal and marine ecosystems, so that "IP Food Systems" is not just land-based guidance. This limits the ability to assess inequalities, monitor outcomes, evaluate policy effectiveness, and support evidence-based decision-making. The report should therefore recommend Indigenous-led, disaggregated, contextualized, rights-based, and culturally grounded data systems consistent with Indigenous data sovereignty principles.

Additional data areas that would strengthen the report include:

- availability of, access to, and governance over traditional lands, waters, forests, fisheries, grazing routes, seed systems, and sacred sites;
- Indigenous Peoples' agency over food systems, including decision-making authority, implementation of Free, Prior and Informed Consent (FPIC), territorial governance, and participation in food-related policy processes;
- availability and reach of culturally appropriate capacity-building, legal literacy, and rights-awareness programs related to FPIC, Indigenous governance, intellectual property, data sovereignty, and food systems decision-making
- loss of access to traditional foods and medicines resulting from conservation restrictions, extractive industries, infrastructure development, militarization, privatization, climate change, displacement, and environmental degradation;
- replacement of traditional diets by ultra-processed foods and associated increases in diabetes, metabolic disease, cardiovascular disease, obesity, undernutrition, and micronutrient deficiencies;
- disruption of the historical balance between traditional foods, physical activity, seasonal livelihoods, and ecological relationships due to colonization, sedentarization, land dispossession, and other imposed lifestyle changes, contributing to

region-specific patterns of chronic disease and declining health outcomes
food insecurity among urban Indigenous Peoples, displaced Indigenous Peoples, migrant Indigenous Peoples, nomadic and pastoralist Indigenous Peoples, and Indigenous Peoples divided by state borders;
impacts of climate change, biodiversity loss, drought, floods, fires, contamination, ocean acidification, and ecosystem degradation on Indigenous food systems;
The introduction and spread of non-native flora and fauna represent challenges with impacts on Indigenous Peoples' health, particularly in remote and rural region
criminalization of subsistence practices, cultural burning, fishing, gathering, hunting, pastoral mobility, and seed stewardship;
Indigenous language loss as a food systems issue, recognizing that ecological knowledge, food preparation practices, planting and harvesting protocols, and cultural teachings are often transmitted through Indigenous languages;
Indigenous knowledge transmission between generations, including the continuity of food-related cultural and ceremonial practices and ecological stewardship;
mental, spiritual, collective, and intergenerational health impacts associated with food system disruption;
Indigenous-led indicators measuring food sovereignty, territorial integrity, governance authority, cultural continuity, language revitalization, ecological stewardship, biodiversity protection, and intergenerational wellbeing.
The report would benefit from indicators that capture the relationships between food systems, territorial integrity, governance authority, language continuity, cultural practices, biodiversity stewardship, and collective wellbeing. Existing work on Indigenous Determinants of Health provides useful examples of how such indicators can be developed and applied.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

The report discusses dietary transition, market dependency, imported foods, ultra-processed foods, agrochemicals, corporate control, and the hidden costs of current food systems. These points are especially visible in sections 2.5, 2.6, and Chapter 3. However, the role of commercial determinants of health could be developed more explicitly, including corporate food systems (extractive models prioritizing short-term productivity and profit over ecological stewardship, resulting in monocultures and degraded watersheds), seed and intellectual property regimes, food aid dependency, and market structures that displace Indigenous food systems and enhance agrochemical dependency. In fact, dependency on agrochemicals, such as pesticides contrasts with Indigenous knowledge systems, which understand ecosystems as capable of maintaining balance through reciprocal relationships among plants, animals, insects, soils, waters, and other beings. Indigenous stewardship practices have traditionally sought to work with these ecological relationships rather than relying primarily on external chemical interventions.

Additionally, the report recognizes connections among food, land, biodiversity, culture, spirituality, health, and traditional medicine. However, these connections could be integrated more explicitly through an Indigenous Determinants of Health lens. Indigenous Peoples' food systems should not be analyzed only as contributors to food security and nutrition and disease prevention, but also as determinants of collective health, biodiversity stewardship, cultural continuity, maternal and child wellbeing, language transmission, spiritual wellbeing, and intergenerational healing, reflecting the reciprocal relationships among Indigenous Peoples and their plant and animal kin.

Equally important, while the report is grounded in FAO/CFS processes and includes important recommendations on territorial rights, FPIC, Indigenous governance, and co-creation, it could provide stronger guidance on institutional accountability. This should include safeguards to prevent conflation of Indigenous Peoples with local communities or other vulnerable populations, mechanisms for Indigenous-led monitoring, clearer FAO/CFS implementation responsibilities, and

	accountability measures to ensure that FPIC, UNDRIP, Indigenous data sovereignty, and Indigenous governance are operationalized rather than treated as general principles. This recommendation applies also to nature-based solutions and technological practices aimed at achieving siloed environmental or climate goals, such as carbon markets.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Key references and sources to consider include: United Nations Declaration on the Rights of Indigenous Peoples; UNPFII 2023 study, Indigenous determinants of health in the 2030 Agenda for Sustainable Development; UNPFII 2024 study, Improving the health and wellness of Indigenous Peoples globally: operationalization of Indigenous determinants of health; UNPFII 2025 study, Evaluating institutional structures to improve the health and wellness of Indigenous Peoples globally: the Indigenous determinants of health measurement instrument; UNPFII 2026 study, Restoring Indigenous health by connecting systems through the Indigenous determinants of health; CBD Decision 16/19 on Biodiversity and Health; WHO World Report on Social Determinants of Health Equity; Indigenous Peoples' Food Systems Coalition materials from UNFSS and UNFSS+4; Indigenous data sovereignty literature, including the CARE Principles; State of Worlds Indigenous Peoples, 2017; 2018;health 2015; lands 2021; climate 2025; The Indigenous World 2025; In addition, CFS should acknowledge and apply, in this document and all documents, that as of 3 November 2022 the term "Indigenous Peoples" is capitalized per the UN Editorial Manual in accordance with UN Member State negotiations of General Assembly resolution 77/203 Rights of Indigenous Peoples.

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.

Capital Native Nations / Piscataway food and land-based initiatives in the DMV region: This can show how urban and peri-urban Indigenous Peoples maintain food, land, cultural, and governance relationships despite displacement and invisibility. Indigenous pastoralist and nomadic food systems in Africa and the Sahel: These examples are essential for geographic balance and for addressing mobility, women's knowledge, climate adaptation, and food sovereignty.

We note the importance of organizing examples according to the 7 sociocultural regions from which Indigenous Peoples identify themselves, in line with procedures of UNPFII and SB8j.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

Although the draft report already provides a foundation for recommendations on territorial rights, FPIC, Indigenous governance, biocultural food systems, and Indigenous knowledge systems, it is necessary to strengthen the final report. HLPE-FSN should ensure that its recommendations are operational, measurable, and grounded in Indigenous Peoples' rights and self-determination. Thus, HLPE-FSN could make recommendations in the following areas:

Rights and governance: Recognize Indigenous Peoples as distinct rights holders and require full and continuous implementation of FPIC in all policies, research, investments, conservation measures, climate actions, and food system programs affecting Indigenous Peoples' food systems.

Non-conflation: Establish safeguards to ensure Indigenous Peoples are not conflated with local communities, minorities, smallholders, rural populations, or other vulnerable groups. Indigenous Peoples may share concerns with these groups, but they possess distinct collective rights under UNDRIP. Indigenous-led decision-making: Move beyond consultation toward Indigenous-led governance and co-governance, including advisory or decision-making mechanisms composed of representatives chosen by Indigenous Peoples themselves.

Indigenous health and wellbeing: Develop monitoring and evaluation approaches that assess how food policies affect Indigenous health, wellbeing, self-determination, territorial integrity, language continuity, culture, biodiversity stewardship, and intergenerational knowledge

transmission. Existing work on Indigenous Determinants of Health provides useful tools and indicators that can support this effort.

Indigenous data sovereignty: Require Indigenous governance over the collection, ownership, interpretation, storage, use, and dissemination of data concerning Indigenous Peoples' food systems, health, territories, biodiversity, and knowledge.

Knowledge protection: Protect sacred, secret, medicinal, genetic, ecological, ceremonial, and food-related knowledge from appropriation, commercialization, extraction, digitization, or unauthorized use. Knowledge-related recommendations should be grounded in FPIC, Indigenous governance, and benefit-sharing.

Territories and mobility: Protect lands, waters, territories, pastoral mobility routes, forests, fisheries, seed systems, sacred places, and gathering areas as foundations of Indigenous Peoples' food security, nutrition, health, and self-determination.

Financing: Recommend long-term, direct, flexible, and Indigenous-led financing for food systems restoration, governance, infrastructure, youth and elder knowledge transmission, seed systems, territorial monitoring, and Indigenous-led research.

Climate and biodiversity safeguards: Ensure climate, conservation, biodiversity, and nature-based solution policies do not cause displacement, dispossession, exclusion from territories, criminalization of subsistence practices, or restrictions on Indigenous food systems.

Institutional accountability: Recommend that FAO, CFS, IFAD, WFP, WHO, CBD, WIPO, UNFCCC, and other relevant bodies coordinate implementation, report on progress, and establish Indigenous-led accountability mechanisms.

Commercial determinants of health: Address the role of ultra-processed foods, agrochemicals, corporate seed systems, intellectual property regimes, land conversion, and market structures that displace Indigenous food systems and contribute to malnutrition and noncommunicable diseases.

Monitoring and indicators: Develop indicators that measure not only food security and nutrition, but also Indigenous Peoples' agency, territorial integrity, governance authority, language transmission, cultural continuity, spiritual wellbeing, biodiversity

	stewardship, and intergenerational resilience. Interinstitutional partnership: Recommend that CFS work with and call upon UNPFII for future guidance and engagement in CFS proceedings and knowledge development tools, and for CFS utilize UNPFII outcomes.
Do you have any additional comments you would like to share with the HLPE-FSN?	Recommend also that CFS' work on Indigenous Peoples' Food Systems not conflict with efforts under CBD SB8j.

48. The Nature Conservancy, United Kingdom of Great Britain and Northern Ireland

Surname	Brugere
First name	Cecile
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Global Freshwater Fisheries Equity Advisor
Current institution/organization	The Nature Conservancy
Affiliation	Civil society/NGO
Country of residence	United Kingdom of Great Britain and Northern Ireland
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	It might be useful in the definition to expand the description to describe how the reciprocal and connected nature of 'food systems' are within the other 'systems' of IP knowledge and perceptions for a given IP and this means food systems are not always directly swappable or easily replaceable. Food systems are often deeply rooted in cultural and religious traditions, and for this reason, food systems are not interchangeable. The current definition might touch on this through the word "reciprocity" but it is not clear. A more explicit mention in addition to "delicate balance" will emphasise the importance and often unique food systems of IPs. It might be useful to differentiate the type of "food" in the second sentence by including mention of "wild" and "domesticated" foods (or FAO's 2021 Wiphala Paper definition of "generated" vs "produced" food). This suggestion is aimed at the report's audience who will have to consider and account for the differences in governance and management between "wild food" and "domesticated food" systems.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?

Although Indigenous People's mobility, ecological knowledge and tenure rights in relation to "Fisheries" are mentioned, it is not clear if this refers to inland/freshwater or coastal/marine fisheries specifically. We would like to suggest that this is clarified in the report wherever 'fisheries' are mentioned as freshwater or inland fisheries play a particularly important role in Indigenous People's food systems and knowledge. The fisheries and Indigenous communities of the Amazon basin are a case in point. For example, in the Negro River (Brazil), locally caught fish make up 75% of the animal protein consumed by the Indigenous People living by the river (Begossi et al., 2019). This source of protein is especially important for remote riverside and Indigenous communities of the Amazon, whose weekly frequency of fish consumption is, on average, 23% higher than that of settlers and urban communities (Miranda, 2024). Similarly, subsistence fishing plays a key role in the daily diets of Indigenous and rural communities across the Colombian Amazon, who consume between 100 to 500 g of freshwater fish per person per day (Fabr  & Alonso 1998, Ochoa 2003, Agudelo et al. 2006, Rodr guez 2010, cited in Agudelo C rdoba, 2015). There, recent studies have also demonstrated the in-depth ichthyological and ecological knowledge of Indigenous People, such as the congruence between the fish names and classification of indigenous groups and formal taxonomy (Bogot -Gregory et al., 2024a, 2024b). Although it is increasingly recognized that Indigenous Peoples' knowledge is fundamental for fisheries science (Jones et al., 2024) and for the sustainable use and conservation of aquatic resources for food security (Bogot -Gregory et al., 2024a), it is seldom accounted for in fisheries management (Moffat et al., 2025). Deforestation, pollution from mining and agriculture, hydropower megaprojects and natural resources over-exploitation are threatening the aquatic ecosystems to which Indigenous Peoples' diets and knowledge are deeply tied (Agudelo C rdoba, 2015; Begossi et al., 2019).

Sources:
Agudelo C rdoba, E. (2015). La pesca en Amazonia,

	un servicio ecosistémico en riesgo. Revista Colombia Amazónica, 8, 181-187, Begossi, A., Salivonchyk, S. V., Hallwass, G., Hanazaki, N., Lopes, P. F. M., Silvano, R. A. M., Dumaresq, D. & Pittock, J. (2019). Fish consumption on the Amazon: a review of biodiversity, hydropower and food security issues. Brazilian Journal of Biology, 79(2), 345-357. https://www.scielo.br/j/bjb/a/FHB7wBcdfqKhHTB3HrcRm6B/?format=pdf&lang=en Bogota Gregory, J. D., Amorim de Barros, N. M., & Villa Navarro, F. A. (2024a). Ethnoichthyology of the Piapoco, Piaroa, Puinave and Sikuaní ethnic groups inhabitants of the Matavén Forest (Vichada, Colombia). Acta Amazonica, 54(1), e54hu23183. https://www.scielo.br/j/aa/a/YM9fDxDkw9YzHH9WHY86GzJ/?format=pdf&lang=en Bogotá-Gregory, J. D., Jaramillo Hurtado, L. F., Guhl Samudio, J. F., & Agudelo Córdoba, E. (2024b). Ethnoecology and use of fishes by the Cubeo people from the Cuduyarí River, Colombian Amazonia. Journal of Ethnobiology and Ethnomedicine, 20(1), 101. https://link.springer.com/content/pdf/10.1186/s13002-024-00737-1.pdf Jones, B. L., Santos, R. O., James, W. R., Costa, S. V., Adams, A. J., Boucek, R. E., ... & Rehage, J. S. (2024). New directions for Indigenous and local knowledge research and application in fisheries science: Lessons from a systematic review. Fish and Fisheries, 25(4), 647-671. https://onlinelibrary.wiley.com/doi/abs/10.1111/faf.12831 Miranda, L.N.L. (2024). Do rio para o prato: o que influencia o consumo de peixe na Amazônia? Dissertação de Mestrado, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil. Moffat, K., Snook, J., Paul, K., & Frid, A. (2025). Inclusivity of Indigenous knowledge systems in fisheries management. Fish and Fisheries, 26(4), 669-687. https://onlinelibrary.wiley.com/doi/full/10.1111/faf.12905
Are there other references, publications, or different kind of knowledges, especially	IPBES Indigenous Knowledge reports - https://www.ipbes.net/ilk-messages-from-assessments

Indigenous Peoples' knowledge, which should be considered?

Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.

We would like to suggest the following:

- 1) The Columbia River Inter-Tribal Fish Commission might be interesting to consider as an example of a bilateral governance and management of a transboundary resource (wild fisheries). It might be used to showcase the intentional national and international legal governance of an IPFS, which addresses most of the six key elements in the report's conceptual framework. There is mention of the Mi'kmaq First Nations on Page 41, however, this is in reference with national policy only. (note. Page 41 mentions 'British Colombia First Nations' when it should be "British Columbia First Nations").
- 2) The case of 'fisheries reserves' in inland waters of Namibia might be a useful addition where they have worked with local communities and integrated their knowledge into fisheries design and management. References here include: 1) Hackenberg, B., Hay, C., Robertsen, J., & Blaser Mapitsa, C. (2022). Namibian Experiences Establishing Community Fish Reserves. Land, 11(3), 420.
<https://doi.org/10.3390/land11030420> Namibia Nature Foundation's website
<https://nnf.org.na/programmes/freshwater-and-inland-fisheries/>
- 3) In the Amazon, an innovative initiative saw the collaboration between The Nature Conservancy, Indigenous Peoples and local fishing communities and other organisations to map formal and informal fishing agreements in place in Indigenous and other territories across the Amazon Basin. Fishing Agreements are a key tool for the sustainable management of inland fisheries. Informed by Indigenous and local knowledge, this mapping exercise identifies gaps and opportunities for increasing or maintaining aquatic connectivity, which is key for healthy and resilient freshwater ecosystems and aquatic food systems. Source, including full report:
<https://www.freshwaterfisheries.org/en/stories/amazon-fisheries-mapping-management-and-monitoring-initiatives/>
- 4) In British Columbia, Canada, the Indigenous Fishers First group and initiative strives to deliver sustainable, tech-driven, and culturally grounded

	solutions for sustainable and equitable aquatic food systems in coastal Indigenous communities. Their activities, which promote localized fish value chains that empower coastal Indigenous communities, can inspire with other IP food systems, including those based on freshwater fisheries. Source: https://indigenousfishersfirst.com/newsletter-and-blog-posts/
--	---

49. Sistema Nacional para el Desarrollo Integral de la Familia (DIF), México

Surname	Villegas
First name	Marianelly
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Directora de Atención Alimentaria
Current institution/organization	Sistema Nacional para el Desarrollo Integral de la Familia
Affiliation	Government and other public institution
Country of residence	Mexico
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Sí, se considera que la definición operativa propuesta en el borrador, es sólida ya que no solo es una visión lineal y económica de las cadenas de valor agroindustriales.
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	Se considera que, en gran medida, se recogen los elementos clave para orientar las políticas públicas. El marco permite entender que la desnutrición o la obesidad en estas comunidades no se resuelven simplemente "enviando más alimentos" (enfoque de disponibilidad), sino respetando su comunidad y protegiendo sus territorios como determinantes estructurales de su salud.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Actualmente la Dirección General de Alimentación y Desarrollo Comunitario del Sistema Nacional DIF, solo cuenta con la información compartida por los Sistemas Estatales DIF, cuenta con los datos de cobertura y distribución de los programas alimentarios derivados de la EIASADC 2026, por lo que no tenemos una sugerencia que agregar.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Se identificó que en los Capítulos 1 y 2 se dedica un espacio considerable a la descripción etnográfica y espiritual de las prácticas de recolección. Aunque es valioso para sentar contexto, se genera cierta redundancia.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Recomendamos revisar los siguientes documentos: • Foro Global de Pueblos Indígenas sobre Nutrición y Sistemas Alimentarios (Plataforma Global de la FAO): Documentos de posición política generados directamente por las organizaciones indígenas globales (como el Foro Internacional de Mujeres Indígenas - FIMI). • Informes del Mecanismo de Expertos sobre los Derechos de los Pueblos Indígenas (MEDPI) de la ONU: Específicamente sus estudios sobre el derecho a la tierra y el territorio en relación con la soberanía alimentaria. • White, P. S., & Gachie, P. (2022). The Traditional Knowledge Digital Library: Safeguarding indigenous foodways against biopiracy. <i>Indigenous Knowledge Systems Journal</i>, 14(2), 112-128. (Discute los marcos de propiedad intelectual para evitar la apropiación indebida de germoplasma y variedades de semillas nativas).
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	El HLPE-FSN maximizaría el impacto transformador del reporte si orienta sus recomendaciones finales hacia los siguientes puntos de inflexión política y presupuestal: • Reformas a las Directrices Nacionales de Alimentación (Guías Alimentarias): Recomendar que las Guías Alimentarias y Nutricionales de los países dejen de ser ajenas al contexto local, e integren dietas basadas en los sistemas tradicionales locales (como la canasta básica alimentaria orientada a la milpa).

50. Food Plant Solutions, Australia

Surname	Hingston
First name	Karalyn
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Executive Officer
Current institution/organization	Food Plant Solutions
Affiliation	Civil society/NGO
Country of residence	Australia
Do you have any additional comments you would like to share with the HLPE-FSN?	Food Plant Solutions (FPS), an Australian, science-based programme operating across 60 countries, whose mission is to build a healthy, sustainable agrifood systems that nourishes people and the planet. FPS works alongside existing food system organisations rather than in parallel to them: designed to complement and strengthen what others are already doing at a community level. Our resources are unique in that they treat agriculture and nutrition as one integrated topic. Drawing on the world's most comprehensive edible plant database, over 35,000 plants catalogued across 50 years of science; our plain-language guides help communities understand not only how to grow locally adapted plants, but why they matter nutritionally. Other resources address growing or nutrition in isolation. FPS does both. Delivered through trusted local partners, these resources address food security, climate resilience, nutrition outcomes, and community development and empowerment through a single, low-cost approach that scales without duplication. We recently presented at a World Food Programme forum in Rome alongside FAO, IFAD and Rotary International, and have a three-year MOU with World Vision International, reflecting both our global reach and practical application of the programme.

51. Department of Food and Nutrition,

Surname	NAMBIAR
First name	VANISHA
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Professor and Head, (i/c),
Current institution/organization	Department of Foods and Nutrition, The Maharaja Sayajirao University of Baroda. Vadodara. Gujarat. India
Affiliation	Government and other public institution
Country of residence	India

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?

Indigenous peoples are communities that have historical continuity with pre-colonial or pre-invasion societies, maintain distinct cultural, social, economic, and political institutions, and seek to preserve and transmit their ancestral territories and identities to future generations. However, India does not officially use the term "Indigenous Peoples" in law or policy. Instead, the Constitution recognizes many such communities as Scheduled Tribes (STs). The Government of India generally considers all Indians indigenous to the country and therefore avoids assigning "Indigenous" status to only specific groups. However, many tribal communities are regarded internationally as Indigenous Peoples because they possess characteristics similar to those recognized globally.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

While the 6 dimensions of Food security do help, these are not sufficient for Indigenous Peoples. As for them food is not merely a commodity or nutrient source. and they are deeply interconnected with:

- Culture
- Spirituality
- Traditional knowledge
- Community governance
- Ancestral territories
- Biodiversity
- Identity and well-being

Therefore, understanding Indigenous food security requires additional dimensions beyond availability and access. In addition, for the indigenous people (Tribals, as we call them in India), Relationality, Values, and Territories are also important.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

In India, Scheduled Tribes (STs)—often considered the country's Indigenous Peoples (Adivasis)—constitute about 8.6% of the population yet experience disproportionately high rates of: Child stunting, Wasting, Anemia, Poverty, Food insecurity, Land displacement, Loss of traditional food systems (NFHS-5 and 6 Data)

The drivers are increasingly linked to:

1. Industrialization
2. Mining expansion
3. Infrastructure projects
4. Forest diversion
5. Urbanization
6. Climate change
7. Market penetration and processed foods
8. Erosion of Indigenous knowledge systems

Mining is perhaps the single largest disruptor of Indigenous food systems in India.

- Forest clearance
- Water contamination
- Wildlife decline
- Loss of gathering areas
- Displacement

Major Mining States in India are
State Districts

Odisha Keonjhar, Sundargarh, Koraput, Rayagada
Jharkhand West Singhbhum, Ranchi, Latehar,
Hazaribagh

Chhattisgarh Dantewada, Bastar, Surguja, Kanker
Madhya Pradesh Singrauli, Balaghat

Maharashtra Gadchiroli

Goa North and South Goa

These districts contain substantial tribal populations and have experienced significant land-use changes associated with mining and industrial development.

The evidence from India and globally suggests that Indigenous food insecurity is not primarily a problem of food production. Rather, it is increasingly a problem of territorial loss, ecological degradation, cultural disruption, and unequal development pathways. Industrialization, mining, infrastructure expansion, and urbanization are transforming tribal food systems from biodiverse, locally controlled systems into market-dependent systems with poorer nutritional outcomes. Protecting Indigenous food systems therefore requires policies that integrate food security, nutrition, biodiversity conservation, land rights, cultural continuity, and self-determination.

References:

Fernandes W. (2007). Singur and Nandigram to Tribal Areas: Land Acquisition, Displacement and Rehabilitation.

Baena P et al. (2023) In Brief: The White/Wiphala Paper on Indigenous Peoples' Food Systems. In: Science and Innovations for Food Systems

Transformation. National Academies Press.

Swiderska, K., Argumedo, A., Wekesa, C., Ndalilo, L., Song, Y., Rastogi, A., & Ryan, P. (2022). Indigenous Peoples' Food Systems and Biocultural Heritage: Addressing Indigenous Priorities Using Decolonial and Interdisciplinary Research Approaches. *Sustainability*, 14(18), 11311. <https://doi.org/10.3390/su141811311>.

<https://global.oup.com/academic/product/in-the-belly-of-the-river-9780195671360?cc=in&lang=en&>

Temper, L., & Martínez-Alier, J. (2013) The god of the mountain and Godavarman: Net Present Value, indigenous territorial rights and sacredness in a bauxite mining conflict in India

Journal: Ecological Economics, 96, 79–87.

DOI: 10.1016/j.ecolecon.2013.09.011.

Behera, M., & Padhi, S.R. (2022) Tribal Movements against Mining-induced Displacement in Odisha: The Case of Dongria Kondh's Niyamgiri Movement

Journal: Journal of Land and Rural Studies

DOI: 10.1177/0972558X221096265.

Rout, S. (2022) Global Local Linkages in Contemporary Environmental Movements: Networking, Diffusion and Scale Shift in the Niyamgiri Movement of Odisha

Journal: Sociological Bulletin

DOI: 10.1177/00380229221081979.

Bocha, K., & Srinivas (2019) The Livelihood Practices and Sustenance among Dongria Kondhs of Odisha

Journal: IJRDO Journal of Social Science and Humanities Research.

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Mentioned in previous sections
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Mentioned above
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	one of our study- Tribal Women-Led Agri-Nutri Model in Kawant, Gujarat One of the most relevant examples associated with Prof. Vanisha Nambiar is the integration of nutrition into the Mahila Kisan Sashaktikaran Pariyojana (MKSP) among tribal women farmers in Kawant block (now in Chhota Udepur district), Gujarat. The project linked agriculture, nutrition education, kitchen gardens, women's empowerment, and dietary diversification. Nambiar V, Nagdev S. Agri-Nutri Nexus: Integration of Nutrition in the Mahila Kisan Sashaktikaran Pariyojana (MKSP) among Tribal Women Farmers of Kawant Block, Gujarat. Proceedings of the 47th Annual Conference of the Nutrition Society of India, 2015. Our current project funded by the tribal action sub-plan- Project Poshan Shakti, it is valuable to include evidence-based success stories from tribal communities in India that demonstrate how community participation, women's groups, local foods, and convergence approaches have reduced malnutrition. Community Women Leaders ↓ Traditional Tribal Foods ↓ Kitchen Gardens + Forest Foods ↓ Nutrition Education ↓ Growth Monitoring ↓ Digital Tracking

	↓ Reduced Malnutrition ↓ Improved Tribal Child Nutrition Government of Odisha. Odisha's Community-Driven Model to Combat Malnutrition in Particularly Vulnerable Tribal Groups (PVTGs). Digital Knowledge Repository, Ministry of Tribal Affairs.
Do you have any additional comments you would like to share with the HLPE-FSN?	Map of indigenous people across the globe or country Wise with their key features can be helpful to understand various gaps and concerns in food systems and FNS

52. Mercya Eco Farm, United Republic of Tanzania

Surname	Charles
First name	Agnes
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Agriculture field officer. Founder and project lead, Mercya eco farm
Current institution/organization	mercya eco farm
Affiliation	Other
Country of residence	United Republic of Tanzania

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?

Response on the Proposed Working Definition of Indigenous Peoples' Food Systems.

The proposed working definition of Indigenous Peoples' food systems is broadly relevant and reflects key elements such as the close relationship between people, land, biodiversity, and traditional knowledge. It appropriately recognizes that food systems are not only about production, but also about cultural values, environmental stewardship, and intergenerational knowledge transfer. From my perspective, one important strength of this definition is its holistic approach, which connects food production with ecological sustainability and community identity. This aligns well with the realities of smallholder farming systems in many rural areas, where food production is deeply integrated with cultural practices and local ecological knowledge. However, I would suggest that the definition could be further strengthened by explicitly emphasizing the role of community-led seed systems and farmer-managed biodiversity conservation. In many contexts, indigenous and traditional food systems rely heavily on informal seed exchange networks, which are essential for resilience but are often under-recognized. Additionally, it may be valuable to highlight the dynamic and evolving nature of indigenous food systems, as they continuously adapt to climate change, market pressures, and environmental challenges while maintaining core traditional principles. Overall, the definition is strong and comprehensive, and with slight emphasis on community seed systems and farmer-led biodiversity management, it would better capture the lived realities of indigenous and local farming communities.

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

Response on the Conceptual Framework for Indigenous Peoples' Food Systems.

The conceptual framework presented is comprehensive and well-aligned with the six dimensions of food security, as well as principles established in previous HLPE-FSN reports. It provides a strong foundation for understanding Indigenous Peoples' food systems by emphasizing relationality, values, and territories, which are critical in capturing the socio-cultural and ecological dimensions of food systems.

The inclusion of relationality is particularly important, as it reflects the interconnectedness between people, land, biodiversity, and knowledge systems. This is essential for policy making that seeks to be inclusive, sustainable, and context-specific. The focus on values and territories also strengthens the framework by recognizing that food systems are deeply rooted in cultural identity and land stewardship practices.

From a policy perspective, the framework is highly relevant and can effectively guide food security and nutrition strategies, especially in contexts where indigenous and local knowledge systems play a significant role in food production and resilience. However, I would suggest a few additional considerations that could further strengthen the framework. First, there could be more explicit emphasis on community-led seed systems and farmer-managed biodiversity, as these are critical components of resilience in many indigenous food systems. Second, it may be important to highlight climate change adaptation more explicitly, given its increasing impact on food security and traditional agricultural practices. Lastly, stronger attention to the role of youth engagement in preserving and transforming indigenous food systems could enhance long-term sustainability.

Overall, the framework is robust, policy-relevant, and well-structured, and with these minor enhancements, it could even more effectively support inclusive and sustainable food security and nutrition policies globally.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food

Additional Trends and Data on Indigenous Peoples' Food Systems

security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

Although there is increasing recognition of Indigenous Peoples' food systems, available data remains limited and often fragmented. To strengthen the report, several additional trends and types of data could be included to better capture food security, nutrition outcomes, and inequalities affecting Indigenous Peoples.

1. Nutrition and Health Disparities Data

Evidence from multiple regions shows that Indigenous Peoples experience disproportionate levels of food insecurity, undernutrition, and diet-related non-communicable diseases compared to non-Indigenous populations. These include higher rates of stunting among children, micronutrient deficiencies, obesity, and diabetes, often driven by dietary transitions away from traditional foods and increased reliance on processed market foods. These indicators should be systematically disaggregated in national and global nutrition datasets to better reflect Indigenous realities.

2. Loss of Access to Traditional Foods and Land

A critical data gap relates to the declining access to land, forests, fisheries, and grazing areas that sustain Indigenous food systems. Land dispossession, environmental degradation, and climate change are reducing availability of traditional food sources, yet global food security datasets rarely capture land-use change impacts specifically on Indigenous diets and nutrition outcomes.

3. Food Environment and Market Dependency Trends

There is growing evidence that Indigenous communities, particularly in rural and remote areas, are increasingly dependent on market-based food systems. These environments are often characterized by high food prices, limited availability of nutritious foods, and increased consumption of ultra-processed foods. However, there is limited longitudinal data tracking how this "nutrition transition" specifically affects Indigenous Peoples over time.

4. Climate Change Impacts on Food Systems

Climate change is increasingly disrupting Indigenous food systems through changing rainfall patterns, loss

of biodiversity, shifting animal migration routes, and reduced agricultural productivity. While global climate datasets exist, there is a lack of localized, Indigenous-specific monitoring systems that link climate impacts directly to food security, nutrition, and cultural food practices.

5. Inequality and Structural Drivers

Data on structural inequalities—such as income disparity, education access, health services, and infrastructure—remains insufficiently integrated into food security analysis for Indigenous Peoples. These factors strongly influence food access and nutritional outcomes but are often analyzed separately rather than within a holistic food systems framework.

6. Need for Community-Led and Participatory Data Systems

There is a growing recognition that Indigenous Peoples should not only be subjects of data collection but active producers of data. Participatory monitoring systems, community seed bank records, and Indigenous-led food system mapping could provide more accurate and culturally relevant data.

References

FAO (2015). The State of Food Insecurity in the World. Food and Agriculture Organization of the United Nations.

FAO & Alliance of Bioversity International and CIAT (2021). Indigenous Peoples' Food Systems: Insights on sustainability and resilience. Rome.

Kuhnlein, H.V., Erasmus, B., & Spigelski, D. (2013). Indigenous Peoples' Food Systems & Nutrition. FAO.

Lemke, S. & Delormier, T. (2017). Indigenous Peoples' food systems, nutrition and gender: conceptual and methodological considerations. *Maternal & Child Nutrition*, 13(S3).

FAO (2021). White/Wiphala Paper on Indigenous Peoples' Food Systems.

World Health Organization (2015). Global nutrition and non-communicable disease trends.

Booth, S. & Smith, A. (2014). Food security and Indigenous Australians.

Gundersen, C. (2008). Measuring food insecurity in Native American populations.

Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?

Additional References, Publications, and Knowledge Systems to Consider

Yes, there are several additional sources of knowledge that should be considered to enrich the understanding of Indigenous Peoples' food systems beyond conventional academic and institutional literature.

1. Indigenous Peoples' Knowledge Systems

Indigenous knowledge is a critical source of evidence that is often transmitted orally through generations. This includes traditional ecological knowledge related to seed selection, soil fertility management, seasonal forecasting, agro-biodiversity conservation, and sustainable harvesting practices. Such knowledge is context-specific, adaptive, and deeply connected to cultural and spiritual values, yet it remains under-documented in formal literature.

2. Community-Based and Farmer-Led Documentation

Local farmer groups, community seed banks, and grassroots organizations generate valuable experiential knowledge through daily agricultural practices. Field-level records, community seed exchange systems, and participatory learning processes provide practical insights that are often missing in formal research publications.

3. Grey Literature and NGO Reports

A significant amount of relevant information exists in the form of reports from NGOs, development agencies, and community-based organizations. These include project evaluations, case studies, and field assessments that document real-life experiences of Indigenous and smallholder farming systems.

4. Oral Histories and Cultural Narratives

Oral traditions, storytelling, songs, and cultural practices are important repositories of knowledge about food systems, seasonal cycles, and

	environmental stewardship. These forms of knowledge should be recognized as legitimate sources of data and insight. 5. Participatory Research and Citizen Science Increasingly, participatory action research and citizen science initiatives are generating valuable data through collaboration between researchers and Indigenous communities. These approaches help ensure that knowledge production is inclusive, ethical, and locally relevant. 6. Academic and Interdisciplinary Studies In addition to mainstream agricultural research, interdisciplinary studies combining anthropology, ecology, nutrition, and climate science provide deeper insights into the complexity of Indigenous food systems. To fully understand Indigenous Peoples' food systems, it is important to adopt a pluralistic knowledge approach, which values: ☞ Indigenous and traditional knowledge ☞ community-generated evidence ☞ academic research ☞ and experiential field knowledge This integrated approach ensures more inclusive, accurate, and culturally grounded policy development.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	1. PE Peru – Andean Indigenous Food Systems & Native Potatoes Peru provides a strong example of how Indigenous food systems can be preserved and promoted through the conservation of native crops, particularly potatoes. Indigenous communities in the Andes maintain thousands of potato varieties adapted to different altitudes and climates. Initiatives such as the Papa Arariwa (Potato Guardians) and collaborations with research institutions like CIP (International Potato Center) have supported in-situ conservation, food diversity,

and improved nutrition.

These systems contribute to food security by maintaining dietary diversity and improving resilience against climate shocks.

2. BO Bolivia – Agroecology and Indigenous Food Sovereignty

Bolivia has promoted Indigenous food systems through national policies recognizing “food sovereignty” and supporting agroecological farming. Indigenous communities in the highlands continue to cultivate quinoa, potatoes, and native grains using traditional knowledge systems.

Quinoa commercialization has also improved income and nutrition, though balancing market demand with local food access remains a key policy lesson.

3. NZ New Zealand – Māori Food Systems Restoration

Māori communities have been actively restoring traditional food systems (kai Māori), including fishing practices, native plant harvesting, and land stewardship (kaitiakitanga). These practices are increasingly integrated into environmental governance and education systems.

This has contributed to improved cultural nutrition, identity, and healthier diets based on traditional foods.

4. CA Canada – First Nations Food Sovereignty Initiatives

First Nations communities in Canada have developed successful food sovereignty programs focusing on hunting, fishing, wild food harvesting, and community gardens. Programs such as community freezer systems and land-based education have improved access to nutritious traditional foods. These initiatives also address high rates of food insecurity and diet-related diseases in Indigenous populations.

5. NA Namibia – Indigenous Livestock and Dryland Food Systems

Pastoralist communities such as the Himba and Herero have maintained resilient livestock systems adapted to arid environments. Traditional grazing systems and drought-resistant livestock breeds

contribute to food security in harsh climates.
Community-based rangeland management has helped sustain both nutrition and livelihoods.

6. IN India – Tribal Food Systems and Millets Revival
India has seen a revival of traditional millet-based diets among tribal communities, supported by government programs like the International Year of Millets 2023. Indigenous crops such as finger millet, sorghum, and foxtail millet are highly nutritious and climate-resilient.

These efforts are improving nutrition outcomes, especially in regions affected by malnutrition and anemia.

7. KE Kenya – Maasai and Pastoral Knowledge Systems

The Maasai pastoral system is a strong example of Indigenous livestock-based food systems adapted to semi-arid environments. Traditional knowledge in herd management and milk-based diets contributes to resilience, although land pressure and climate change are major challenges.

Community-led grazing management initiatives are helping sustain livestock productivity and food access.

Cross-cutting Lessons

Across these cases, key success factors include:
Recognition of Indigenous land and resource rights
Protection of traditional knowledge systems
Promotion of agro-biodiversity (seeds, crops, livestock)

Integration of Indigenous foods into nutrition programs

Strong community governance systems

Support for climate-resilient traditional practices

These case studies show that Indigenous Peoples' food systems are not only culturally important but also essential for: ➤ nutrition diversity

➤ climate resilience

➤ food sovereignty

➤ and reduction of all forms of malnutrition.

From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?

Areas for HLPE-FSN Recommendations

From my perspective, there are several key areas where the HLPE-FSN could further strengthen its recommendations to support Indigenous Peoples' food systems, food security, and nutrition outcomes.

1. Protection of Indigenous Food Systems and Biodiversity

HLPE-FSN could place stronger emphasis on policies that protect indigenous food systems, including community rights over land, seeds, forests, and water resources. This should include explicit support for community seed banks and the conservation of agro-biodiversity as a foundation for resilient food systems.

2. Recognition and Integration of Indigenous Knowledge

There is a need for clearer recommendations on how indigenous knowledge systems can be formally recognized and integrated into national and global food and agricultural policies. This includes bridging traditional knowledge with scientific research in a respectful and participatory way.

3. Climate Change Adaptation and Resilience

HLPE-FSN reports could further highlight targeted strategies for supporting Indigenous Peoples in adapting to climate change. This includes promoting climate-resilient indigenous crops, ecological farming practices, and locally led adaptation strategies.

4. Food System Equity and Inequality Reduction

Recommendations could more strongly address structural inequalities affecting Indigenous Peoples, including income disparities, unequal access to services, and exclusion from decision-making processes. Strengthening equity-focused food system governance is essential.

5. Nutrition Transition and Health Outcomes

There is a need for policies that address the negative impacts of dietary transitions from traditional foods to ultra-processed foods. HLPE-FSN could recommend interventions that promote traditional diets, school feeding programs based on local foods, and nutrition education rooted in cultural practices.

	6. Support for Community-Led and Youth-Led Initiatives Greater emphasis could be placed on supporting grassroots organizations, farmer-led innovations, and youth involvement in sustainable food systems. These actors are key drivers of innovation and long-term sustainability at the local level. 7. Participatory Data and Monitoring Systems HLPE-FSN could recommend the development of participatory and Indigenous-led data systems to improve the quality, relevance, and ownership of food systems data. This would help address current gaps in disaggregated and context-specific evidence.
Do you have any additional comments you would like to share with the HLPE-FSN?	Additional Comments to HLPE-FSN. I would like to commend the HLPE-FSN for this important and timely work on Indigenous Peoples' food and knowledge systems. The report provides a strong foundation for understanding the complexity, value, and diversity of indigenous food systems in relation to global food security and nutrition challenges. One key additional observation is the importance of further strengthening the link between indigenous food systems and community-led implementation mechanisms. In particular, greater emphasis on locally driven seed conservation initiatives, farmer-managed biodiversity, and participatory governance structures would enhance the practical application of the report's findings in policy and programming. Furthermore, it would be valuable to highlight the role of grassroots and emerging community initiatives in generating real-time evidence and innovations in sustainable agriculture. These actors often operate at the frontlines of food systems transformation and can provide practical insights that complement academic and institutional research. Overall, this report is highly relevant and impactful, and I encourage continued efforts to ensure that Indigenous Peoples and local farming communities are meaningfully engaged not only as knowledge holders but also as active partners in shaping global food systems policy.

53. Indigenous Services Canada, Health and Social Sector, Mental Wellness Health Promotion, Canada

Surname	Lambert
First name	Leslie
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
Current institution/organization	Indigenous Services Canada, Health and Social Sector, Mental Wellness Health Promotion
Affiliation	Government and other public institution
Country of residence	Canada
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The report is comprehensive and reaffirms the six dimensions of food security (availability, access, utilization, stability, agency, and sustainability), and nutrition, while introducing “relationality” as a foundational concept in Indigenous Peoples' food systems (IPFS). This framing emphasizes the importance of values, identity, spirituality, and rights connected to food systems and Indigenous Peoples' territories. A key strength of the report is its recognition of both market and non-market values of IPFS, including the production of food and the cultural and social benefits of food systems. It also includes knowledge related to food systems, as well as ecological and sustainability aspects that are vital to people's wellbeing. The current view of food systems overemphasizes market value with little or no consideration to the other aspects. It is positive to see examples of foods and food systems used by Indigenous Peoples in Canada, including First Nations and Inuit. There may be an opportunity to further strengthen the report by incorporating additional examples and case studies from Canada's First Nations and Inuit. Given that the IPFS provides a multifaceted framework (natural, social, production and human capital) beyond the current market measures/food economy on which to develop food security and sovereignty and if the FAO is looking for international examples with which to evaluate this model, Canada's Nutrition North Canada may be a promising consideration. Please see link for recent program information: How Nutrition North Canada strengthens food security and sovereignty, builds up

food economies and bolsters food ecosystems -
Canada.ca

54. Indigenous Services Canada, Office of Population Public Health, Environmental Public Health, Canada

Surname	Marushka
First name	Lesya
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Senior Policy Analyst
Current institution/organization	Indigenous Services Canada, Office of Population Public Health, Environmental Public Health
Affiliation	Government and other public institution
Country of residence	Canada
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	The proposed definition of Indigenous Peoples' food systems (IPFS) is comprehensive and emphasizes interconnected relationships between people, food, territories, knowledge, governance, and nature. To further strengthen the definition and enhance its applicability across diverse Indigenous contexts, the following considerations may be helpful: • This definition could more explicitly acknowledge the diversity of Indigenous Peoples globally, recognizing that each Indigenous group has unique food systems, governance structures, cultural practices and knowledge systems, shaped by their unique ecological, geographical, historical and cultural contexts. For example, in Canada, Indigenous Peoples comprise First Nations, Inuit, and Métis Peoples, each with diverse food system and relationships to their traditional territories. • While the definition refers to "nature" and "territories," Indigenous food systems are often deeply connected not only to land but also to waters (rivers, lakes, oceans) and coastal ecosystems. These relationships are particularly important for many coastal and northern Indigenous communities, whose food systems depend on aquatic and marine environments. • The definition could more explicitly reflect the concept of Indigenous food sovereignty, which is increasingly recognized as a foundational aspect of Indigenous food systems. Indigenous food sovereignty encompasses self-determination,

The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?

governance, stewardship responsibilities, cultural continuity, and the right of Indigenous Peoples to define, manage, and sustain their own food systems.

In 2020, the HLPE-FSN broadened the understanding of food security by proposing six dimensions: availability, access, utilization, stability, agency and sustainability. The two additional dimensions, e.g., agency and sustainability, complement the traditional four dimensions and are particularly relevant in the context of Indigenous Peoples' food systems.

- Agency refers to people's ability to make decisions about the foods they consume, how food is produced, harvested, processed, distributed, and governed.
- Sustainability refers to the long-term environmental, social, cultural and economic viability of food systems for present and future generations.

In the context of Indigenous Peoples' food systems, achieving all six dimensions of food security in culturally appropriate ways is grounded in relationality. This foundational principle encompasses Indigenous values, identities, spirituality, rights, responsibilities, and reciprocal relationships with lands, waters, food systems, and all living beings.

The integration of the six dimensions of food security with relationality provides a strong and holistic framework for guiding policy-making related to food security and nutrition and better reflect the complexity of Indigenous food systems. Together, these elements move beyond a narrow focus on food supply and better reflect the complexity of Indigenous food systems.

One additional consideration may be to more explicitly recognizing Indigenous food sovereignty to emphasize Indigenous Peoples' rights to define, govern, and sustain their own food systems.

Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.

With respect to Indigenous Peoples in Canada, several national and regional studies provide valuable information on Indigenous food systems, food security, nutrition, traditional food use, and related health outcomes. These sources may help strengthen the report.

1. The First Nations Food, Nutrition and Environment Study (FNFNES) collected comprehensive information on traditional foods, dietary patterns, nutrition, food security, environmental contaminants, and access to traditional food systems among First Nations adults living on reserve across Canada. The study documents significant regional differences in food security, traditional food consumption, dietary quality, and environmental exposures, while highlighting the nutritional, cultural, and social importance of traditional foods. The report Summary of Findings and Recommendations for eight Assembly of First Nations regions (2008–2018), which provides a national overview of the study's key findings and recommendations. Further information is available through a special issue of the Canadian Journal of Public Health, dedicated to the methodology, findings, and implications of the study.
2. The First Nations Regional Health Survey (RHS), collects information on a broad range of health and wellness indicators among First Nations living on reserve, including household food security, dietary habits, traditional food consumption, participation in harvesting activities, and other social determinants of health. The survey provides important data on disparities affecting First Nations communities and supports First Nations-led monitoring of health and well-being.
3. Diet of Québec First Nations and Inuit Peoples
 The Institut national de santé publique du Québec (INSPQ) conducted a comprehensive research of the diets of First Nations and Inuit populations in Quebec. The report documents dietary transitions, nutritional challenges, food insecurity, and the continued importance of traditional foods to health and well-being.
4. Qanuippitaa? National Inuit Health Survey
 provides important Inuit-led data on food security, nutrition, traditional food consumption, health status, and environmental determinants of health

	across Inuit Nunangat. The survey contributes critical information on the unique food security challenges and strengths of Inuit food systems. 5. The Aboriginal Peoples Survey conducted by Statistics Canada provides valuable national-level information on food insecurity, health, social determinants of health, and well-being among Inuit, Métis, and off-reserve First Nations populations. The survey has been widely used to examine disparities in food security and access to traditional foods among Indigenous Peoples in Canada. 6. Bergeron, O., Richer, F., Bruneau, S., & Laberge Gaudin, V. (2015). The diet of Québec First Nations and Inuit peoples. Institut national de santé publique du Québec. https://www.inspq.qc.ca/sites/default/files/publications/2065_diet_first_nations_inuits.pdf
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	The draft report provides a comprehensive overview of IPFS, including their defining characteristics, governance systems, territorial rights, and knowledge systems. However, the report could be further strengthened through greater attention to the following areas: • While the section 1.6. Links between IPFS and food security and nutrition briefly explains the 2 additional dimensions of food insecurity (agency and sustainability), the report could benefit from a more comprehensive discussion of all six dimensions—availability, access, utilization, stability, agency, and sustainability—particularly from Indigenous perspectives. • While food security and nutrition are introduced in Chapter 1, greater attention could be given to the relationship between Indigenous food systems and nutrition outcomes. Indigenous food systems play a critical role in supporting dietary quality, nutritional health, and the prevention of diet-related chronic diseases, in addition to providing important cultural, social, spiritual, and environmental benefits. • The report could further explore the impacts of environmental contamination on Indigenous food systems. In many regions, Indigenous Peoples face concerns related to contaminants in traditional foods, including those associated with industrial development, mining activities, long-range environmental transport, and other sources. These

	issues can influence food security, dietary choices, harvesting practices, cultural activities, and confidence in traditional food systems. • While the report recognizes the importance of biodiversity, it could more explicitly discuss the contribution of geographical diversity to dietary diversity, nutrient adequacy, ecosystem resilience, and Indigenous food sovereignty. • Greater emphasis could be placed on the role of Indigenous youth, land-based education, and intergenerational knowledge transmission in sustaining Indigenous food systems. These elements are critical for maintaining food-related knowledge, cultural continuity, language revitalization, and long-term food system resilience.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	In addition to the references already cited in the report, consideration should be given to the following Indigenous scholars, organizations, and publications. Dr. Tabitha Robin (University of British Columbia, Canada) Dr. Robin's research focuses on Indigenous food systems, Indigenous food sovereignty, nutrition, health equity, and Indigenous research methodologies. Her work examines the relationships among food, culture, land, identity, and well-being, while supporting Indigenous-led approaches to health and nutrition. Publications and research profile: https://scholar.google.com/citations?view_op=list_works&hl=en&hl=en&user=Tzj-6S4AAAAJ Dr. Priscilla Settee (Cumberland House Swampy Cree First Nation, Saskatchewan, Canada) Dr. Settee is an internationally recognized Cree scholar whose work focuses on Indigenous food sovereignty, Indigenous knowledge systems, social justice, education, and sustainable development. Her publications provide important Indigenous perspectives on food systems, governance, and cultural continuity. Key references: • Settee, P. (2013). Pimatisiwin: Global Indigenous knowledge systems. JCharlton Publishing.

- Settee, P., & Shukla, S. (Eds.). (2020). Indigenous food systems: Concepts, cases, and conversations. Canadian Scholars.
- Settee, P. (2018). Indigenous food sovereignty in Canada. In M. K. Nelson & D. Shilling (Eds.), Traditional ecological knowledge: Learning from Indigenous practices for environmental sustainability (pp. 175–187). Cambridge University Press. <https://doi.org/10.1017/9781108552998.011>

Dr. Harriet V. Kuhnlein (McGill University, Canada)
Dr. Kuhnlein is internationally recognized for her pioneering work on Indigenous food systems, nutrition, food security, and health. Her research has substantially advanced understanding of the role of traditional foods in supporting Indigenous health, well-being, and food sovereignty.

Additional references:

- Kuhnlein, Harriet, Bill Erasmus, Dina Spigelski, and Barbara Burlingame. 2013. "Indigenous Peoples' Food Systems & Well-Being: Interventions & Policies for Healthy Communities" edited by H. V. Kuhnlein. 237–56. Retrieved (<https://www.fao.org/4/i3144e/i3144e.pdf>).
- Kuhnlein HV. Food system sustainability for health and well-being of Indigenous Peoples. Public Health Nutr. 2015 Sep;18(13):2415-24. doi: 10.1017/S1368980014002961. Epub 2014 Dec 19. PMID: 25522932; PMCID: PMC10271446.

The First Nations Food, Nutrition and Environment Study (FNFNES)

The FNFNES collected comprehensive information on traditional foods, dietary patterns, nutrition, food security, environmental contaminants, and access to traditional food systems among First Nations adults living on reserve across Canada.

Inuit Tapiriit Kanatami (ITK)

Inuit Tapiriit Kanatami is the national representational organization for Inuit in Canada.

- Inuit Tapiriit Kanatami. (2021). Inuit Nunangat food security strategy. https://www.itk.ca/wp-content/uploads/2021/07/ITK_Inuit-Nunangat-Food-Security-Strategy_English.pdf

	This strategy provides an important example of an Indigenous-led and rights-based approach to food security and food sovereignty. Métis National Council (MNC) The Métis National Council is the national and international representative organization of the Métis Nation in Canada. • Métis National Council. (2025). Métis National Council Nature Strategy: Restoring Relationships With All Our Relations [PDF]. Métis National Council Banerji A, Pelletier VA, Haring R, Irvine J, Bresnahan A, Lavallee B. Food insecurity and its consequences in indigenous children and youth in Canada. PLOS Glob Public Health. 2023 Sep 27;3(9):e0002406. doi: 10.1371/journal.pgph.0002406. Erratum in: PLOS Glob Public Health. 2024 Jul 22;4(7):e0003552. doi: 10.1371/journal.pgph.0003552. PMID: 37756390; PMCID: PMC10530329.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	The following case studies in Canada on Indigenous Food Systems may be considered: 1. Indigenous Guardians programs across Canada support Indigenous-led land stewardship and directly contribute to food system sustainability. These programs are widely recognized as a successful model of Indigenous environmental governance linked to food systems and nutrition security. • Indigenous Leadership Initiative (ILI). Indigenous Guardians Programs in Canada. https://indigenousleadershipinitiative.org/guardians/ 2. The Northern Healthy Foods Initiative (Manitoba) improve access to local, healthy and traditional food in northern and remote communities. It is a community-based program works to increase capacity for local food production by creating greenhouses, community gardens, and on-the-land hunting/fishing training. • The Northern Association of Community Councils (NACC). Northern Healthy Foods Initiative https://naccmanitoba.com/our-work/northern-healthy-foods-initiative

	3. The Wiiche'iwaymagon Buying Alliance is an Indigenous-led food sovereignty initiative spanning Ontario, Manitoba, and Nunavut. It unites First Nations, Tribal Councils, and food rescue charities to bulk-purchase healthy food and delivery services, dramatically cutting costs for remote northern communities. • Wiiche'iwaymagon Buying Alliance. Wiiche'iwaymagon Alliance: Food Security For All https://wiicheiwaymagon.ca/about-us 4. Inuit Nunangat food security strategy integrate food sovereignty, climate change, and cultural continuity, emphasizes Inuit governance of food systems, and promotes traditional food harvesting and local food systems. It represents a strong example of an Indigenous-led policy development. • Inuit Tapiriit Kanatami. (2021). Inuit Nunangat food security strategy. https://www.itk.ca/wp-content/uploads/2021/07/ITK_Inuit-Nunangat-Food-Security-Strategy_English.pdf 5. The First Nations Food, Nutrition and Environment Study (FNFNES) is one of the largest Indigenous food systems studies conducted globally and has informed policy and programming across Canada. • First Nations Food, Nutrition and Environment Study (FNFNES) Team. (2021, October 20). First Nations Food, Nutrition and Environment Study (FNFNES): Key findings and recommendations for decision-makers. https://www.fnfnes.ca/docs/CRA/FNFNES_Final_Key_Findings_and_Recommendations_20_Oct_2021.pdf
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	The following case studies in Canada on Indigenous Food Systems may be considered: 1. Indigenous Guardians programs across Canada support Indigenous-led land stewardship and directly contribute to food system sustainability. These programs are widely recognized as a successful model of Indigenous environmental governance linked to food systems and nutrition security. • Indigenous Leadership Initiative (ILI). Indigenous Guardians Programs in Canada. https://indigenousleadershipinitiative.org/guardians/

2. The Northern Healthy Foods Initiative (Manitoba) improve access to local, healthy and traditional food in northern and remote communities. It is a community-based program works to increase capacity for local food production by creating greenhouses, community gardens, and on-the-land hunting/fishing training.

- The Northern Association of Community Councils (NACC). Northern Healthy Foods Initiative <https://naccmanitoba.com/our-work/northern-healthy-foods-initiative>

3. The Wiiche'iwaymagon Buying Alliance is an Indigenous-led food sovereignty initiative spanning Ontario, Manitoba, and Nunavut. It unites First Nations, Tribal Councils, and food rescue charities to bulk-purchase healthy food and delivery services, dramatically cutting costs for remote northern communities.

- Wiiche'iwaymagon Buying Alliance.
Wiiche'iwaymagon Alliance: Food Security For All <https://wiicheiwaymagon.ca/about-us>

4. Nutrition North Canada is a Government of Canada program that helps improve access to nutritious foods in isolated northern communities through food subsidies. It also supports the Harvesters Support Grant, Community Food Programs Fund, Nutrition Education Initiatives, and Food Security Research Grant, which promote access to traditional foods, local harvesting, community food programs, nutrition education, and food security research.

5. Inuit Nunangat food security strategy integrate food sovereignty, climate change, and cultural continuity, emphasizes Inuit governance of food systems, and promotes traditional food harvesting and local food systems. It represents a strong example of an Indigenous-led policy development.

- Inuit Tapiriit Kanatami. (2021). Inuit Nunangat food security strategy. https://www.itk.ca/wp-content/uploads/2021/07/ITK_Inuit-Nunangat-Food-Security-Strategy_English.pdf

16. From your perspective what are the areas on

which the HLPE-FSN could make recommendations in its report?

The report could consider recommendations in the following areas:

- Recognize and promote traditional foods as important contributors to food security, nutritional health, physical well-being, cultural continuity, identity, and overall health and well-being of Indigenous Peoples.
- Improve monitoring and management of environmental contaminants affecting Indigenous food systems and traditional foods, and support Indigenous-led and community-based environmental monitoring programs.
- Increase investment in Indigenous-led food, nutrition, health, and environmental monitoring programs to strengthen evidence-based decision-making, support self-determination, and address emerging challenges affecting Indigenous food systems.
- Support monitoring of climate change impacts on Indigenous food systems and invest in Indigenous-led climate adaptation and resilience strategies
- Support the protection, revitalization, and intergenerational transmission of Indigenous Knowledge systems, languages, harvesting practices, food traditions, and cultural teachings
- Promote opportunities for Indigenous youth engagement in harvesting activities, food systems, land-based learning, and knowledge transmission through Elders, Knowledge Keepers, and community mentors.

The report could consider recommendations in the following areas:

- Recognize and promote traditional foods as important contributors to food security, nutritional health, physical well-being, cultural continuity, identity, and overall health and well-being of Indigenous Peoples.
- Improve monitoring and management of environmental contaminants affecting Indigenous food systems and traditional foods, and support Indigenous-led and community-based environmental monitoring programs.

	• Increase investment in Indigenous-led food, nutrition, health, and environmental monitoring programs to strengthen evidence-based decision-making, support self-determination, and address emerging challenges affecting Indigenous food systems. • Support monitoring of climate change impacts on Indigenous food systems and invest in Indigenous-led climate adaptation and resilience strategies • Support the protection, revitalization, and intergenerational transmission of Indigenous Knowledge systems, languages, harvesting practices, food traditions, and cultural teachings • Promote opportunities for Indigenous youth engagement in harvesting activities, food systems, land-based learning, and knowledge transmission through Elders, Knowledge Keepers, and community mentors.
Do you have any additional comments you would like to share with the HLPE-FSN?	The report would benefit from greater inclusion of Indigenous-led evidence, community-based research, and case studies demonstrating successful efforts to preserve, revitalize, and strengthen Indigenous food systems in practice. Additional consideration of nutrition outcomes, food safety, biodiversity, environmental health, and Indigenous concepts of health and well-being would further strengthen the report.

55. Department of Agriculture Government of Tuvalu, Tuvalu

Surname	Mami
First name	Evolini
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Acting Director of Agriculture
Current institution/organization	Department of Agriculture Government of Tuvalu
Affiliation	Government and other public institution
Country of residence	Tuvalu
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	None
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual	Yes, I think the framework will cover the key elements to guide policy making at food security.

framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Apert from the Department of Agriculture, Department of Health, Culture Department, Department of Local Government should include in this collecting information, but if there is no data available in a country, it is a need to conduct a baseline survey to get more information about indigenous Peoples' food system.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	At recommendation part of the report

56. Philippine Daily Inquirer (PDI), Philippines

Surname	Rauto
First name	Ryan
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Program Officer
Current institution/organization	PDI
Affiliation	Civil society/NGO
Country of residence	Philippines
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	No
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food	Yes, but i have no other comments about this.

security and nutrition? Do you have any other comments?	
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	The number of indigenous people submitting applications is insufficient to provide them with food subsidies.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Not all indigenous people have the ability to purchase sufficient and nutritious food due to poverty.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Indigenous traditions and cultures must be taken into account.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Important lessons based on healthy foods can be explained to the indigenous people, and they can be made to understand that it is very important for them to have access to sufficient and clean food.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	In my opinion, I learned about the indigenous people from the residents of Barangay Turda.
Do you have any additional comments you would like to share with the HLPE-FSN?	In my opinion, I have no comment to add about the HLPE-FSN

57. Universidad Nacional de Rosario (UNR), Argentina

Surname	Gonnella
First name	Marisa
Are you contributing in a personal capacity or on behalf of an organization or team?	Personal capacity
Current position	Investigacion
Current institution/organization	UNR
Affiliation	Academia
Country of residence	Argentina

The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Cuando se relaciona la identidad, el territorio y aquello que es posible en esos territorios, es decir el territorio comparte de las dimensiones culturales. lo que se come, lo que nutre y cuida de la naturaleza es lo que predomina en las definiciones. Sin embargo, tiene una arista de riesgo con evidencias históricas, ¿en el territorio que estén será esa relación con la naturaleza? ¿Porque riesgo? porque bajo ese fundamento es posible pensar que por ejemplo se encuentran las tierras de reserva y la tensión con las nociones de pequeños productores seguirán presentes y ambos producen alimentos ambas forman siempre se encuentran en márgenes para las producciones industrializadas. Históricamente las tensiones por la tierra se producen entre pequeños productores y tierras comunales, aunque finalmente ambos tipos de productores se ven perjudicados
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food security and nutrition? Do you have any other comments?	El marco aborda las dimensiones, sin embargo, es preciso enfatizar en las políticas públicas que aseguran la tenencia de la tierra. En el informe IPDRS ultimo hay ejemplos de derechos vulnerados. Producen en armonía con la naturaleza y cultura queda particularidades a los territorios siempre que es posible tener garantizada el acceso a tenencia y propiedad.
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Compartir informe para poder analizar la recopilación de datos como por ejemplo Acceso a la tierra y territorio en Sudamérica, DÉCIMO INFORME del https://ipdrs.org/publicaciones/libros/ ,las dimensiones de tenencia de la tierra, leyes y cumplimientos de la Estados de las mismas. Las bases de datos de FAO son confiables, pero se precisa cruzar datos con diferentes bases en las dimensiones comunes. Un trabajo que frecuentemente hacen los investigadores. Pero el flujo de información también depende de los censos de los países y el relevamiento que realizan desde la perspectiva de visibilidad de las poblaciones en la vulnerabilidad y no solamente desde la perspectiva de la productividad

Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	Siempre es difícil conseguir datos acerca de los territorios y producciones de las poblaciones indígenas ya que hay Estados que no relevan información desglosada referida a las poblaciones indígenas y descendientes, es decir cómo se presentan y piensan las diferentes generaciones descendientes de pueblos originarios
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	Al respecto sería interesante solicitar las organizaciones indígenas que consideran experiencias exitosas que les hayan posibilitado mejorar sus vidas
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Quizás recomendaría solicitar a las organizaciones de pueblo originarios sus perspectivas para futuros informes.

58. Philippine Daily Inquirer (PDI), Philippines

Surname	Migalang
First name	Lawrence
Are you contributing in a personal capacity or on behalf of an organization or team?	On behalf of a team/organization
Current position	Program Officer
Current institution/organization	PDI
Affiliation	Civil society/NGO
Country of residence	Philippines
The report proposes a working definition of Indigenous Peoples' food systems. Do you have any observations on this definition?	Natives need to preserve their traditional food such as root crops, wild animals and honeybees and others
The report introduces a conceptual framework informed by key principles established in previous HLPE-FSN reports (HLPE, 2020) and grounded on the six dimensions of food security. The conceptual framework highlights the importance of relationality, values and territories to understand Indigenous Peoples' food systems. Do you think the framework captures the key elements to guide policy-making aimed at improving the contribution of Indigenous Peoples' food systems to food	A policy can be made to preserve the food resource but it is difficult to implement it because of the increase in their population that needs food resources for their families, so the policy to preserve its resources is violated and one of the depletion is also the learning of non-natives to get food resources.

security and nutrition? Do you have any other comments?	
Data on Indigenous Peoples' food systems are limited. What are additional trends and data, especially capturing impacts on food security and nutrition and inequalities/distribution issues affecting Indigenous Peoples, that could be included in the report? Please provide full references.	Not all natives receive aid or food from the government because those who live in remote areas or mountains are rarely reached by news or accessible there are some of them who do not mix unless they are natives.
Are there any other issues concerning Indigenous Peoples' food systems and food security and nutrition that have not been sufficiently covered in the draft report? Are topics under- or over-represented in relation to their importance?	the issue of the indigenous people from where they get their food is the gradual destruction of the resources that are the source of their food due to its destruction by changing the use of the land or mining in the mountains that is the source of their food resource.
Are there other references, publications, or different kind of knowledges, especially Indigenous Peoples' knowledge, which should be considered?	Many of the natives also know how to use social media because most of them, young or old, have cellphones, This is where they promote their traditional activities and beliefs. Others of them have also become influencers because they earn a lot here, but despite the large income, there is something that is violated because it disturbs the sacred beliefs of the natives and places.
Could you suggest case studies and success stories from countries that were able to preserve, strengthen and promote Indigenous Peoples' food and knowledge systems? The HLPE-FSN is especially interested in examples that contribute to balance geographical representation in the report and that address issues related to all forms of malnutrition.	there is a study that the traditional foods of the natives have helped the said survival of the non-natives, they have learned to eat herbs and plants that can be eaten even animals called exotic is also a practice to eat by the non-natives, but according to science it has a bad effect on health especially when eating exotic foods, so even if it is edible, it can also be forbidden and eaten.
From your perspective what are the areas on which the HLPE-FSN could make recommendations in its report?	Sitio Kinaragan Barangay Duale Limay, Bataan

57. Ministry of Agriculture and Land Reclamation, Egypt