

Agroecology and sustainable food systems researchers' inputs for the CFS policy convergence process on "Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition"

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Dear Ambassador Emadi,

Writing as North America-based scientists who work in food systems from a variety of social and natural science disciplines, we would like to convey our appreciation to the CFS for undertaking this policy convergence process. We previously submitted feedback on the V0 of the HLPE report "Agroecology and other innovative approaches" and now welcome these subsequent steps as an important affirmation of agroecology in international policy circles. Our prior submission, "[Comment by transdisciplinary team of scientists working in food and agriculture systems](#)" (Iles, Montenegro, Shattuck, Wittman et al.) was signed by 24 researchers who broadly endorsed our recommendations. In this letter, signed by 41 scientists, we take the opportunity to briefly communicate our assessment of the final report.

The HLPE in our view, has provided a strong accounting of agroecology in comparison to other models of agricultural production. We appreciate the range of case studies and field data demonstrating that agroecology can, with proper institutional and economic support, advance CFS goals to ensure food security sustainably and equitably. Attention to "agency" was a particularly welcome inclusion, and we echo the call for CFS to consider the emerging importance of this concept as a fifth pillar of food security and nutrition. Going forward, it is essential that the recommendations and any policy designs based on them reflect the report's emphasis and focus on agroecology, rather than a watered-down endorsement for "all innovative approaches." Rights-based frameworks including the right to food, rights of Mother Earth, peasant rights, and food sovereignty can help anchor agroecology in political, environmental, and ethical commitments needed to transform the food system.

Q1. Do you think that the recommendations in the HLPE report accurately reflect the findings of the report?

The report does an impressive job of defining agroecology and explaining its expansion from farm-level practices for harnessing biological and ecological processes, to a fully-fledged food systems approach founded on social movements and political ecology. It therefore provides a robust foundation for developing policies and institutions to transition to agroecological farming systems. The recommendations overall should emphasize agroecology as a highly effective approach for rebuilding food systems. But many of the recommendations do not do so.

Most importantly, the recommendations should clearly distinguish between agroecological approaches and other innovations. The report states that "a major transformation of food systems is needed to achieve food security and nutrition globally" and that major shifts in

policies at all levels are necessary to promote food systems that reconcile human and ecosystem health (p. 116). In achieving a more sustainable pathway, the HLPE report notes that sustainable intensification and agroecological approaches reflect “diverging narratives on the priorities for transition,” where the latter aim to be more transformative. The recommendations, however, fail to reflect the HLPE’s clear findings that the sustainable intensification (SI) category of approaches “privilege technological and productivity-oriented innovations in order to improve resource efficiency while reducing the negative environmental and health impacts of current food systems” and that SI and related approaches “start from a premise that yield per unit of land needs to increase (Pretty et al., 2018), which is what the intensification part of the ‘sustainable intensification’ label implies” (p. 61). These approaches typically do not seek to shift the political economies in which food systems are embedded.

By contrast, the report notes, agroecological approaches “aim, at their most ambitious, to redesign the whole food system (highest level of Gliessman’s transitions, Figure 2). They embrace more territorially-specific visions, taking into account environmental, health, social and cultural conditions in a given location... They give a central place to the social, cultural and political dimensions of transitions towards SFSs, to power dynamics and governance issues. They address not only ecological and health impacts of food systems but also power asymmetries and socio-economic inequalities... As such, they are embedded in a human rights-based framework” (p. 61). Agroecology can also enhance yield and yield stability, which can be documented through rigorous accounting methods such as land equivalence ratios to account for the variety of crops, fibers, fodders, and other products generated in polycultural systems (Vandermeer 2011).

We therefore strongly feel that the recommendations to policymakers must better reflect this stark division between SI and agroecology, approaches that are grounded in very different visions of the future of food systems, including what the main characteristics of a sustainable food system that supports food security and nutrition (FSN) should be. If the goal is to advance pathways that see equity as a precondition for FSN, the report shows that agroecological approaches provide the vision and methods for doing so. We need policy to support agroecology’s multi-sectoral interventions that address the whole agricultural and food system, that prioritize confronting structural inequalities, and that actively empower a plurality of knowledge makers as experts in understanding and making decisions about their food systems. Policymakers should understand that agroecology offers something qualitatively different than many “other innovative approaches” which may cement system lock-ins and pose obstacles to the broader transformations required.

Closely related, the recommendations should more strongly encourage public policies and investments that support agroecological transitions. The report states that “market forces, left to themselves, will not result in transitions to SFS” (p. 90). While the recommendations currently suggest that states and IGOs redirect subsidies (recommendation 2 (a) i), and support local and regional markets (recommendation 2 (c) i), the recommendations should be more directive as to the types of public policies that can support sustainable pathways towards agroecology. The report finds that public funding generates high returns on investment (p. 108), and that

expanding agroecological research and development “depends on adequate public funding” (p. 109). Following the findings of the report, recommendations for public funding priorities to support a pathway towards sustainable food and agricultural systems should include:

- The inclusive development of national food system policies that support goals towards sustainable food and agricultural systems (p. 111).
- Public funding for horizontal peer-to-peer learning for the production of collective knowledge and strengthening local organizations that scale out farmer-managed research (p. 109)
- Public policies that support local nested markets to improve livelihoods (p. 104)
- Redirecting subsidies from high-input monocultures to support for small- and medium-sized producers that manage multi-functional landscapes (p. 100)
- Assess existing farming systems based on their contribution to ecosystem services, social inclusion, and creation of sustainable livelihoods and develop appropriate metrics that drive public policies to include ecological footprint (p. 100)

In addition to these policies, the FAO (2018) recently published a set of recommended public policy reforms necessary to promote agroecology such as encouraging agroecological production through public procurement policies, and ensuring that sanitary and phytosanitary regulations do not prevent agroecological production.

Finally, one of the most innovative contributions of the HLPE report is its inclusion of agency as a metric for assessing the sustainability of food and agriculture systems. Assessing agency should be included in the recommendations for states, IGOs, and other stakeholders in considering support for various transition pathways.

Q2. Do you think that major problems are missing from the HLPE recommendations?

A principal concern we have is that the 2nd overarching recommendation (“Support Transitions to Diversified and Resilient Food Systems”) does not say anything about *agroecology*, while clearly tackling issues relevant to it. Given the objective of the report, it would be very helpful to see agroecology explicitly connected to achieving diversified, resilient food systems.

Government interventions for agroecology — such as regulation and policy incentives — are in general not highlighted enough; depending on market mechanisms to drive agroecological transitions is grossly insufficient. Also missing from the recommendations are explicit actions on key drivers that are likely to slow down or hamper innovations, as recognized in the report (p. 69). These include governance and economic, resource, social and cultural, and knowledge factors, a few of which we highlight here:

- *Economic policy.* Redirecting subsidies and incentives to support transitions to sustainable food systems is a start. But much more attention should be given to restructuring underlying economic policies that currently create constitutive surplus. A return to supply management and principles of “parity” are currently being revived in US farm policy debates. Such measures include price floors, grain reserves, land set-asides, conservation incentives, and other measures that discourage over-production, and

garner fairer prices for farmers. Transitions to agroecology will be very difficult to achieve so long as policies encourage the production of cheap commodities instead of food.

- *Corporate power.* The influence of corporate power over domestic and international policy since the 1960s has contributed greatly to the consolidation of ownership and control in agriculture and concomitant decline of smallholders and family farmers. More concerted attention should therefore be devoted to reducing corporate power across the food supply chain. Policies we recommend include strong, properly enforced anti-trust laws to break monopolistic or oligopolistic situations in sectors from seeds to animal production; reforms to liberalized trade regimes and corporate tribunals that give multinational firms authority over governments; and "true cost accounting" that requires industry to internalize the costs of environmentally and socially damaging practices.
- *Intellectual property.* The recommendations should be stronger on the role of intellectual property rights in shaping the political economy of agriculture. Doing so would achieve greater internal coherence with the report's support for "harnessing the use of recent developments in digital technologies." Such digitalization and dematerialization of agricultural organisms currently threatens to erode farmers' rights and appropriate indigenous knowledge with IPR, a legal handmaiden to this dispossession. As the report seeks to affirm traditional knowledge and farmers' rights, care should be taken to achieve policy coherence, beginning with foundational recommendations on exploring alternatives to intellectual property in agriculture.
- *Industrial inputs.* The recommendations do not clearly call for movement towards eliminating use of and reliance on destructive inputs such as chemical pesticides and fertilizers in favor of nurturing agroecological practices that provide equivalent services.
- *Nutrition.* Recommendation 2.3 states "Promote healthy and diversified diets as an avenue to support transitions" but mainly relies on education and marketing to do so. More attention should be given to public investment in building infrastructure to connect agroecological farmers with markets that support biodiverse foods and in sustaining agroecological farmer livelihoods to help farmers thrive. For example, the Brazilian city of Belo Horizonte has made progress in this area (Chappell 2018). Equally important, the actions and policies of corporate and government actors regarding consumer products (eg. processed foods) are ignored even though limiting the ability to market high sugar, high fat, and high salt foods can enable greater consumption of agroecologically produced foods.
- *Access.* The recommendations begin to acknowledge the importance of women's rights in agriculture: this is an important development but is not enough. The recommendations should clearly require policies that assure maximum access, equality, and inclusion for all people — not only women — in agroecological farming systems. Farmers and eaters from diverse racial, ethnic, gender, disability, socio-economic, and other backgrounds should be able to participate fully in those systems. They require antidiscrimination laws, supports, and reparations for historic exclusions.
- *Agency.* All policies for fostering agroecological transitions must affirm smallholder, peasant, Indigenous, and family farmers, along with their allied movements, as central agents in changing food systems, instead of governments and experts being expected to take the leadership/decision making role. Their human rights should not be overlooked.

Finally, what is “missing” is policy coherence. The current recommendations appear to avoid the lessons in the report (eg. p 61 and Table 4), where it is recognized that a family of agroecological approaches (including agroforestry, organic, permaculture, etc) emerges from fundamentally different philosophical and ideological commitments than those of "Sustainable Intensification" (SI) approaches. To issue recommendations that support both is therefore misleading to policymakers: the market priorities, trade and IP rules, and privilege accorded to technoscience in SI will tend to systematically undercut advances in agroecology.

Q3. Can you give examples of policies related to agro-ecological systems and other innovation systems for sustainable food systems that ensure food security and nutrition? How were these policies formulated and what was their impact?

In assessing policy options, the CFS policy convergence process should focus its attention not only on specific individual policies but on the need for **overarching policy coherence and integrated, rights-based policy frameworks** to enable the **coordinated structural transformation** of food and agricultural systems across multiple dimensions. These frameworks must demand progress towards equity, social, economic and environmental sustainability and climate-resilience. Consistent with the findings of the HLPE report, a coherent policy approach requires emphasizing policy measures that both *support agroecology* and *reverse current system lock-ins* that drive agriculture towards industrial-scale overproduction, environmentally destructive farming methods, loss of rural livelihoods, poor health and poverty among farmers, Indigenous and rural communities.

In addition to the policy recommendations identified in Question #2 above, key elements to embed in an integrated policy framework to ensure policy coherence include:

- Support for and strengthening of peasant, Indigenous, small-scale and family farmers, women, workers and their organizations.

The overarching policy priority here is a firm commitment by states and international bodies to the peasant farmers, Indigenous and rural communities whose contributions to agroecology and SFS are paramount, yet whose survival is at risk — in particular their health, social and physical environments, food and livelihood security and even their lives. Key policy measures to sustain these communities include ensuring: their secure access to land, water and seeds; farmers' rights to save, exchange, sell and breed seeds; support of farmer and worker cooperatives; guarantees of fair wages and safe working conditions for food and agricultural workers; and a rights-based policy platform that recognizes both human rights and the holistic rights of Mother Earth.

To continue or transition to agroecological practices, farmers require secure and stable access to resources, as well as the ability to strengthen local and community organizations and maintain traditional cultural practices and relationship to the natural world, free from violence and oppression. Thus policy measures are also required to prevent and end state, parastatal and private interests' ongoing violence against these communities and associated social formations. This covers not only the direct physical and political violence they face —

executions, imprisonments, etc. — but also the economic, social and cultural violence currently taking place in the form of land, water and seed grabs.

- Strengthening of local and national capacity in agroecological research, extension and education.

Policy initiatives should prioritize farmer-to-farmer learning and respectful, horizontal collaboration among farmers, Indigenous peoples, and scientists throughout the research and co-learning process. Communities and farmers should be empowered to identify research questions, and to design and lead experimentation and extension processes. A transdisciplinary cross-agency approach is needed to engage diverse ministries and departments (e.g. health, agriculture, environment, science & technology), and must be grounded in shared commitment to respectful participatory collaboration with communities. Priority areas for collaborative research include adapting agroecological approaches to climate change, transitions away from reliance on pesticides and chemical fertilizers, and participatory development of locally adapted seeds, cultivars and livestock breeds within diversified systems. Collaborative research is also needed on social and market innovations that strengthen farmer, community, and ecosystem health and well-being.

- Establishment of institutional supports, economic and trade policies, and financial mechanisms.

Policy measures must redirect substantial resources to farmers to transition to agroecology. Examples include financial incentives and supports (credit lines, crop insurance, grain reserves, price bands, certification and marketing infrastructure, etc.), as well as appropriate technical assistance as needed in agroecological production and agro-processing. Simultaneously, perverse incentives, such as government subsidies for chemical inputs and the over-production of commodity crops, must be eliminated. Public agencies and research institutions should be required to justify time, resources, and expenditures on environmentally and socially unsustainable agricultural systems — which amount to indirect government subsidies to agribusiness. These indirect subsidies should be gradually removed or switched to support agroecology. In accord with the internationally recognized precautionary and polluter pays principles, governments can create public funding mechanisms with independent oversight and financial contributions from polluting industries, to enable widespread adoption of agroecology.

Significant policy reforms in regional and global trade arrangements are also urgently required to enable farmers and rural communities to meet their food and livelihood security needs, and to end policies that encourage structural overproduction which in turn leads to export dumping, collapse of local production and loss of rural livelihoods in countries of the Global South.

Policies to curtail the excessive influence of agribusiness corporations over public research, extension, regulatory and trade policies, as well as the increasing monopoly control over markets, are likewise critical to opening up space for agroecological transitions; a number of policy measures to accomplish this have been identified in our answer to Question 2. Initiatives to strengthen local markets and build relationships between producers and consumers, such as public procurement programs for schools, hospitals and government agencies should be considered as well.

- Specific policy examples

Translating the HLPE report into actual policy and practice changes will benefit greatly from learning how highly successful large-scale agroecology programs achieved massification and were scaled across territories (e.g. Brescia 2017; Mier y Terán et al. 2018). While farmer and eater movements tend to play leading roles in driving the creation of these programs, many government policies have been important in supplementing and reinforcing civil society-led grassroots initiatives.

Numerous specific policy examples exist that have strengthened local and national capacity to transition towards agroecological practice and systems. In 2018, for example, the World Future Council reviewed 51 policies from 25 countries that had all been nominated for “best policy promoting agroecology and sustainable food systems.” The eight award winners and an additional 10 national policy examples offer insights into creative and effective policy approaches (Wilkie 2018) .

Q4. Are there any other thoughts that you think should be taken into account by the CFS as part of this policy convergence process?

First, the CFS can use this report as an excellent opportunity to press for transformative policies that advance transitions to agroecology worldwide. The recommendations do not actually map out how agroecological transitions might be supported to proceed. For example, governments and researchers might join with farmers and social movements to take a series of steps towards achieving agroecological systems. Agroecology cannot be attained all at once; farmers and food distributors must be encouraged by a structured policy process to ratchet up their engagement with agroecology through learning and adaptation over time. Instead, the recommendations highlight a number of disparate measures that might be taken to improve research and development, education, linkages of farmers to markets, and involvement of farmers in land management. A much more systematic approach should be taken to tie together the policy recommendations in a transitions framework.

Second, at the international policy level, it is clear that the past few years have seen strides in both sustainable agriculture and human health/nutrition that the CFS could leverage. The CFS Food Systems and Nutrition Guidelines represent a historic first in establishing a holistic food systems approach to achieving the right to food. The CFS/HLPE Agroecology report is similarly groundbreaking in asserting that agroecology is an evidence-based approach to progressing on sustainable production, livelihoods, social equity, human health, and ecological integrity. When brought together, these two CFS efforts could provide a robust foundation for policy guidelines that connect agroecology and global public health/nutrition to the role of smallholders, indigenous peoples, farm workers, and food workers who are “innovators” in both. The UN Declaration on the Rights of Peasants, the International Treaty on Plant Genetic Resources for Food and Agriculture, and the post-2020 framework of the Convention on Biological Diversity all provide opportunities to gain traction on *enacting* agroecology in the multidimensional environments to which agroecology clearly contributes.

Third, we would like to reaffirm the science, practice, and social movement dimensions of agroecology. These are deeply entangled such that science may inform policy processes (this letter being a case in point) but agroecology science is itself a student of farmer knowledge and experience, of rural communities' resilience, and of ongoing struggles by social movements to protect and revitalize agroecological ways of life. We therefore hope the policy convergence process will prioritize participatory approaches that include these communities, with attention to gender, race, and geographical balance in that representation. Moreover, since participants do not enter such dialogues on equal footing of power and legitimacy, we encourage the CFS to pursue *co-created* spaces where typically marginalized communities are not merely invited to the table, but help convene the space, allowing them to define the shape and structure of the policy conversation to begin with.

Respectfully,

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