

Feedback on HLPE Recommendations from Report 14 – FAO

Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition

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

Mostly yes. The report gives solid evidence on agroecology being one of the most comprehensive approaches towards SFSs and FSN, as shown in Table 4. CFS recommendations could give greater emphasis on the specific promotion of agroecology and limit the references to approaches that still don't show solid evidence on their contribution to SFSs and FSN.

At the same time, while the recommendations largely reflect the general findings of the report, specific findings that could facilitate priority-setting and action by Member Countries could be further incorporated. Other specific suggestions are detailed in the below question.

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

External inputs

The summary and recommendations related to external inputs in agroecology (e.g. fertilizers and pesticides associated with “modern” crop varieties) are distinctly mentioned in **points 22 and 26**.

The focus is mostly on the “synthetic inorganic fertilizers” as the major source of yield gains, but also highlighting its negative impacts on the environment.

However, the summary should have a broader context on soil health and plant nutrition (diversification) leading to animal and human health. Another important addition could be the use of organic and biological by-products of agroecological systems, which are locally produced through, for example, animal feed among others. The use of organic fertilizers can be part of an integrated component and strategy that can lead to agroecological transitions.

As identified in the report, there should be some concrete (though not exclusive) recommendations for pathways to shape the transition towards SFSs for FSN:

- (i) How to improve fertilizer use efficiency?
The efficiency of fertilizer use should be measured as part of an integrated system (soil health, biodiversity, recycling, governance). Currently, there is a lack of integrated indicators taking into account the impacts of yield, human and environmental health simultaneously. Additionally, the crucial role of government policies and regulations to create an enabling environment for transition should be emphasized.
- (ii) How to strengthen resilience?
Strengthen the need to promote innovations and tools based on agroecological approaches to reduce reliance on external inputs and increase system resilience.

Biodiversity

Recommendation 2a which states that support is given to “*diversified and resilient productions systems that preserve and enhance biodiversity, as well as the natural resource base*” is too broad and does not easily lend itself to actionable recommendations without the need for further expansion and analysis. In relation to FSN in this same recommendation, it would be beneficial to include “*biodiversity underpinning key ecosystem functions and services, as well as the natural resource base*”.

Soil Health

Recommendations could be more specific in terms of protecting and enhancing soil health to help countries better prioritize these thematic areas. Soil health is fundamental to sustainable agriculture and supports ecological processes that are negatively affected by conventional agriculture using large amounts of fertilizers, pesticides and other agrochemicals such as animal medication. Currently Recommendation 2a ii) focuses on protecting and enhancing soil health, as well as common natural resources at different levels. Similarly, Recommendation 2a iv) could greatly benefit from being more specific and including “soil health in agriculture and food systems”.

Plant Nutrient management

In the current recommendations, there is no mention to alternative solutions. Recommendations could focus on local use of organic fertilizers including manure towards more sustainable food systems in agroecology. In addition to the linear transition towards SFSs, multiple transition pathways could be identified and suggested, depending on the different national contexts. The implementation of the recently endorsed **international Code of Conduct on the sustainable use and management of fertilizers** could also serve as a guideline for countries that do not have yet all the appropriate regulatory policies related to fertilizers.

Research and Knowledge

Recommendations do not address the incorporation of local knowledge as one important source in the reconfiguration of knowledge generation and public/private research. This notion is included in Section 1 (d), so it would not be a new concept in the report. For example, recommendation 3 b) could read:

*b) develop and support multidisciplinary **systems** research **that combines science with local knowledge**, conducted through innovation platforms that foster co-learning between practitioners and researchers, and horizontal dissemination of experience among practitioners (e.g. farmer-to-farmer networks, communities of practice and agroecological lighthouses);*

Similarly, it would be important to incorporate the notion of participation in recommendation 3 d), as one of the hindering factors in extension is the “top down” approach in the generation and dissemination of agroecological knowledge:

*d) ensure that training programmes for agricultural extension and public health workers are promoting **cross-sectorial participatory** learning processes and the use of adequate technologies as well as a better understanding of the role of agroecological practices for nutrition and human, animal and environmental health;*

Similarly, the adoption of technologies should avoid “top down” introduction and emphasize the role of context-based or locally-created technologies. One of the hindering factors in technology transfer in

agroecology is that often technologies are created with a “one size fits all” as opposed to the ones based on local conditions, socio-ecological specificities and adaptation:

*e) establish and develop effective **horizontal** technology transfer mechanisms to enhance the adoption of **locally-created** technologies in agroecological and other innovative approaches by farmers/producers and other stakeholders involved in various stages of value chains of food commodities;*

General recommendation

In the draft recommendations we need to ensure all sectors of food and agriculture are properly addressed and use adequate sector specific terminology. E.g. ‘farmers/producers’ should be ideally replaced with ‘agricultural producers’.

3. 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?

Success factors of the policies mentioned below are linked to:

- Existence of institutional mechanism that enable participatory and inter-sectorial policy design, implementation and monitoring;
- Strong partnerships between agricultural producers (and their organizations) with academia, research organizations and public institutions;
- Empowerment of women and youth as key actors in agroecology development processes
- Access to markets and to natural resources;
- Embedding agroecological programs across Ministries (Agriculture, Health, Environment, Education, among others).

Brazil

This recent study examines the impact of Brazil’s Public Procurement programs targeting agroecological production (in particular the National School Feeding Program), as a driver for: 1) shifting family farms from low agrobiodiversity and input-intensive farming systems to highly diversified farming systems (**increasing diversity in crop and livestock varieties and species**) and (2) increasing significantly the cultivated area under diversified farming systems. Because of farm diversification and household autonomy, farm household resilience has increased (Valencia et. al, 2019).

<https://doi.org/10.1007/s13593-019-0572-4>

France

Agroecology in France (first page there is a summary):

<http://agriculture.gouv.fr/telecharger/58144?token=84c0ffff0caf34ea89f434e9745865a2>

France is promoting agroecology in the CAP 2020 negotiations:

http://www.arc2020.eu/wp-content/uploads/2019/02/181214_cap-2020_french-position_en.pdf

India's National Agroforestry Policy

India is the first nation in the world adopting an agroforestry policy. The National Agroforestry Policy, which deals with the practice of integrating trees, crops and livestock on the same plot of land. The policy aims to solve the problems that the agroforestry sector is facing at present, including adverse policies, weak markets and a dearth of institutional finance. Agroforestry has the potential to achieve sustainability in agriculture while optimizing its productivity and mitigating climate change impact. The benefits of agroforestry include restoring barren land, reducing poverty and malnutrition by significantly increasing yields, feeding animals, protecting running water, conserving biodiversity, protecting wildlife, and holding and repairing soils. The new policy talks of coordination, convergence and synergy between various elements of agroforestry, scattered across various existing missions, programme and schemes under different ministries—agriculture, rural development and environment. The policy would be implemented through an integrated agroforestry mission or board.

<http://www.indiaenvironmentportal.org.in/files/file/Agroforestry%20policy%202014.pdf>

India - Andhra Pradesh State

The State Government supported program Zero Budget Natural Farming (ZBNF) has been adopted by 580,000 farmers. A recent independent assessment made by the Center for Economic and Social Studies shows: i) production cost of ZBNF farms are significantly lower than non-ZBNF farms; ii) yield differences between ZBNF and non-ZBNF farms are not significant; iii) ZBNF farmers have significantly increased their net income as a result of reduction of production costs; iv) ZBNF farmers reported better soil health, crop health, resilience, economic empowerment and dignity of labor. The Andhra Pradesh Government aims at scaling up ZBNF to reach 6 million farmers by 2024.

<http://apzbnf.in/wp-content/uploads/2019/10/CESS-FINAL-KHARIF-REPORT-ZBNF-19.8.19.pdf>

China

Agroecology is seen as a key component of China's concept of 'ecological civilization'. In May 2015, the State Council of China released the National Strategic Plan for Sustainable Agriculture Development (2015–2030), followed by the State Council's Guidelines for accelerating the transformation of China's agriculture development mechanisms in August 2015. These seek to protect China's ecosystems and to promote agroecology. Several key national projects that use agroecological approaches, e.g. to protect grasslands, conserve soil and water and reforestation, have been initiated. Six hundred designated agroecology demonstration counties and more than 1,000 villages have been identified for development as model agroecological villages.

Uruguay

On December 11, 2018, Uruguay approved the Law to formulate the National Agroecology Plan. The Honorary Commission in charge of drafting the Plan held its first meeting on September 2019 in the Ministry of Livestock, Agriculture and Fisheries.

Experiences showcased through the Future Policy Award (World Future Council)
<https://www.worldfuturecouncil.org/wp-content/uploads/2018/10/FPA-2018-Brochure-for-web.pdf>

Africa fertilizer policy

The African Union ministers of agriculture recognized the strategic importance of fertilizer in achieving the African Green Revolution to end hunger in 2006. In Abuja Declaration on fertilizers, the African Union Member States targeted to increase the level of use of fertilizer from 8 kg/ha (in 2005) to an average of at least 50 kg/ha by 2015. The reality in 2016 was an average 16 kg/ha of fertilizer use (doubled) while yield maintained mostly stagnant. However, the increasing amount of fertilizers for high value crops or large scale farms has major environmental issues and the increase rates in N₂O emission is higher than other continents. Such cases where large political support was not successful could reinforce the need of other alternative policies related to “less invested” agro-ecological systems and other innovation systems for sustainable food systems that ensure food security and nutrition. On the debate on whether incremental changes vs. structural changes regarding the use of external inputs, there is a need to tackle this issue at a sub-regional or country context-specific level.

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

- a. The recommendations should address the obvious draw backs of the “Green Revolution” or high external input dependent plant and animal agriculture that did not achieve the expected increase in yield in Sub Saharan Africa and a commitment to restore ecosystems that have been negatively impacted by conventional agricultural practices.
- b. Highlighting the very close alignment between the 10 Elements of Agroecology and the 13 agroecological principles despite development through independent assessment processes.