

## Background note for informal discussion #3: Agroecological and other innovative approaches (including relevant tools such as digitalization)

Wednesday 27 May 2020, 15:00-17:00

Zoom link: <https://fao.zoom.us/j/94800039603>

**Meeting ID: 948 0003 9603**

**Password: 076493**

### *Overview*

1. The second informal discussion (held on 22 May) showed strong agreement that identification of context relevant pathways must start with assessments of food systems. The most appropriate innovative approaches will depend on the outcomes of food system assessments.
2. A number of stakeholders raised concerns that the Zero Draft diverges substantially from the intended topic of the policy process by not focusing sufficiently on agroecological approaches. Others maintained that agroecology should not be given priority over other innovative approaches, as all approaches could potentially be useful. Several stakeholders proposed that the policy recommendations be more specific about comparing/assessing agroecological versus other innovative approaches.
3. Some stakeholders felt that the Zero Draft gave too much importance to digitalization (pointing out that it is a tool, not an approach), while others felt that it was an important topic that needed to be fully addressed.

### *HLPE report evidence base*

4. The HLPE report recalls that innovation has been a major engine for transformation of agriculture and food systems over the last century. It also points to the growing recognition that many technological innovations in agriculture have generated significant negative externalities and that innovation in agriculture and food systems needs to address major social and environmental challenges to foster transitions towards sustainable food systems that enhance food security and nutrition.
5. According to the HLPE report, there is a need to close implementation gaps by making existing innovations more affordable, more accessible, especially for the poorest, and more adapted to different local conditions – whether political, social, cultural, economic or environmental. The Zero Draft states that innovations must be appropriate to the context, affordable, accessible, and respond to the needs of family farmers.
6. The report defines an innovative approach to sustainable food systems for food security and nutrition as “a well articulated and widely practised set of principles, practices and

methods that is intended to foster transitions towards more sustainable food systems that enhance FSN and is set within an overarching philosophy and a strategic vision for the future” (page 57).

7. The HLPE report describes several innovative approaches to sustainable food systems and clusters them in two main categories: (i) *sustainable intensification of production systems and related approaches* (including climate-smart agriculture, nutrition-sensitive agriculture and sustainable food value chains); and (ii) *agroecological and related approaches* (including organic agriculture, agroforestry and permaculture).
8. The report develops a comparison of these approaches through several steps. It first derives a set of 14 principles shaping transitions towards sustainable food systems that enhance food security and nutrition based on an examination of the innovative approaches (Table 2). The principles in Table 2 were amalgamated to generate a set of 9 characteristics<sup>1</sup> (Table 3). Finally, Table 4 compares the innovative approaches based on these 9 characteristics. The results of this comparison are analysed with reference to the five levels of transition towards sustainable food systems (Figure 3). The report thus finds that agroecological and related approaches are more focused on transforming food systems (level 5), while sustainable intensification and related approaches are more focused on input use efficiency (level 1).
9. The HLPE report identifies digital technologies as one area where there are important diverging perspectives and looks specifically at precision agriculture, big data and automation, and alternative web platforms. It finds that digital information systems already facilitate farmer-to-farmer exchanges in a number of countries, and more could be done by reducing the digital divide. The report also highlights concerns that digital technologies increase dependency on a few input and retail companies, which may decrease resilience and equity of food systems. It expresses concern that digital agriculture may lock food producers and citizens into asymmetrical power relationships with large companies who own the platforms and equipment and control the data.

*Details of stakeholder feedback on the Zero Draft and comments from the open meeting (April 14)*

10. Stakeholders have requested a clearer distinction between innovative approaches, innovations, and technologies, remembering that innovations are not only technological but also social and/or organizational. Many stakeholders called for a clearer differentiation of the main innovative approaches presented in the report, both in the preamble and the final CFS policy recommendations, including their potential to bring about transformative change.
11. It has been proposed by several stakeholders that Draft 1 of the policy recommendations should include an assessment framework to evaluate different innovative approaches based on the HLPE framework for innovative approaches to sustainable food systems for food

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<sup>1</sup> 1) Regenerative production, recycling and efficiency, 2) Biodiversity, synergy and integration, 3) Economic diversification versus specialization, 4) Climate adaptation and mitigation, 5) Knowledge generation and technology transfer, 6) Human and social values: Equity, 7) Human and social values: Labour versus capital intensification, 8) Connectivity (value chains/circular economies) versus globalization, and 9) Governance: rights, democratization and participation.

security and nutrition (Figure 5 in the HLPE report). They highlight the importance of assessing impacts on sustainability (in particular environmental and social dimensions), sustainable food systems, human rights, environment and economic conditions, equity, social protection, cultural impacts, agency and ecological footprint.

12. There are strongly divided opinions over the balance in emphasis between agroecological approaches on the one hand, and other innovative approaches on the other. Agroecology was highlighted by several stakeholders as being capable of transforming food systems, promoting resilience and the right to food. Many stakeholders called for a strong reference to the Ten Elements of Agroecology, approved by the FAO Council. Some stakeholders called for the recommendations to promote biotechnologies and said that other innovative approaches (and not only agroecology) were capable of creating employment. Some stakeholders have emphasized the possibility of co-existence between different innovative approaches.
13. Several stakeholders highlighted that farmers need to choose the innovative approaches which are most appropriate for them. Other stakeholders underlined that governments should be accountable for the choices available to farmers. Several stakeholders called for a levelling of the playing field between different innovative approaches.
14. A number of stakeholders felt that digitalization was mentioned more often than other equally important topics in the Zero Draft, and believed it should not, on its own, be considered an innovative approach. Others welcomed the idea of promoting digitalization to enhance FSN but wanted further discussion on the risks and challenges it entailed, which may lead to greater inequality and vulnerability. Some stakeholders agreed that a regulatory framework and appropriate safeguards for digitalization are needed but asked whether this was more appropriate for FAO's vetted Digital Council. Clarity was requested on the meaning of "appropriate safeguards" for digitalization.

*Questions to guide discussion to explore convergences*

1. Do you agree with the HLPE report's two broad categories of innovative approaches: i) agroecological approaches and ii) sustainable intensification approaches?
2. Do you agree with the HLPE report's finding that agroecological and related approaches are more focused on transforming food systems, while sustainable intensification and related approaches are more focused on input use efficiency?
3. Are there any tools or technologies, for example digitalization, that could contribute to both of these approaches, and if so under what conditions?
4. Digital technologies are clearly here to stay but are not without their risks and challenges. What should be the focus of any possible recommendation(s) on digitalization in relation to sustainable food systems that enhance food security and nutrition?