

New Zealand comments on HLPE Report on Agroecological and other Innovative approaches

General comments

- New Zealand notes that there is no definitive set of practices that could be labelled as agroecological. Rather, agricultural practices can be classified along a spectrum and qualified as more or less agroecological, depending on the extent to which agroecological principles are locally applied.
- It is important therefore, that the HLPE report resists the call by others to define agroecology and agroecological practices. The report should, as we believe it currently does, provide a useful and comprehensive contribution to discussions on different pathways towards sustainable agriculture and food systems that enhance food security and nutrition.
- New Zealand's situation demonstrates it is difficult to label countries with a single definition of sustainable agriculture. New Zealand farmers use a range of approaches to sustainable agriculture. A majority of our approaches appear to be further along the agroecological spectrum than simple sustainable intensification, as New Zealand agriculture currently meets many of the criterion to be labelled agroecological, including:
 - Cultural – Mataranga Māori and integration of indigenous rights in resource management
 - Participatory decision making
 - Clear land tenure rights
 - High animal welfare standards
 - High resource efficiency and productivity through use of innovation and technology fit to the local context
 - A focus on better accounting for the full ecological footprint of farming and reducing externalities around nitrates, water quality, soils.
- However, in many New Zealand farms we use external inputs such as fertilizers and pesticides, which appear to preclude many of our farms being labelled agroecological. Our interpretation of this report is that it doesn't matter – and rather it is the sustainable development outcomes that are important in our context.

Specific feedback:

- We agree that given the huge diversity of food systems across and within countries, and the diversity of the challenges and constraints they face, context-specific pathways towards sustainable food systems can be developed, and that these transition pathways may be grounded in different narratives, leading to different sets of options for how change is realized (p.53).
- We support the observation (p.46) that “feeding the world” , though sometimes framed as a question of calories or production, should ideally take account of the fact that meeting kilocalorie energy requirements does not translate automatically into nutritional security, as some forms of calorie consumption (e.g. foods with high sugar, salt or fat content) can worsen nutritional status.

- We support the inclusion of ecological footprint as a fourth operational principle for SFSs (as presented in figure 5, and discussed on p.65), as a way to consider the environmental externalities, both positive and negative, of agriculture and food systems related not only to how food is produced but also to how much is consumed and how it is processed, transported and sold.
- We recognize that the concept of ecological footprint has been effective in communicating issues around sustainability but is subject to criticism, especially regarding its usefulness in guiding policy decisions and the effect of aggregating different aspects in a single indicator, resulting in calculation methods continuing to be developed and refined.
- A further challenge, but one worth highlighting is the value of taking into account nutritional quality of different food products in the calculation of ecological footprint. For example, NZ research (Loveday, 2019) shows that, when adjusted for protein quality, the GHG footprint of peanuts increases by 130 per cent and decreases for cow's milk by 24 per cent.
- We note that assessing the yield gap between "industrial" and agroecological systems is an active area for research, and that, although several studies suggest that there are comparable yields, higher yield stability, and increased profitability for those using agroecological methods (p.48), other studies suggest poorer outcomes in terms of yield and various other outcomes. As the report rightly concludes, further research is required, in a wider range of socio-ecological conditions.
- The report highlights that agroecological approaches tend to be more labour-intensive, as opposed to capital-intensive. It may be useful to give further consideration to the possible implications of this in the context of the difficulty in attracting young people into agriculture, ongoing movement of people from rural to urban areas, and ageing populations.
- The report identifies several "lock-ins" that may prevent the transition towards agroecological systems (p.48-49), including: "trade and agricultural policies that encourage the export orientation of agriculture." It may be helpful to further explore why/if trade necessarily needs to be viewed as being in opposition to the goals of agroecological approaches
- Related to the above, the report discusses the emphasis on short supply chains/food circuits within agroecological approaches. It's worth highlighting that some definitions of short supply chains are based on criteria such as social relations, knowledge exchange, and number of intermediaries that may be achieved regardless of physical distance.
- The characterisation of different systems in Table 4 is quite blunt, and this is not very helpful. For example, the implication that circular economies are opposed to globalization, and that sustainable intensification is not compatible with many elements of sustainable food systems for FSN when in reality they can be (e.g. why is sustainable intensification not considered participatory?).
- As we have raised in our comments on the food systems and nutrition draft guidelines, global food systems and global circular economies need to be part of the discussion when discussing sustainable food systems for FSN. Only the most extreme end of the agroecological spectrum appears to (unhelpfully) be opposed to international trade, and in New Zealand's opinion, the sole reliance on local value chains is not the answer in all contexts to meet the global FSN challenge.

Analysis of Recommendations

New Zealand likes the preamble to the recommendations and would like to support the view that ‘no-one-size-fits all’. In so doing, New Zealand also thinks that it is important that the recommendations are considered as possible policy options that countries may deem appropriate for their specific national circumstances. The recommendations are not options that all countries must implement when considering the best and most effective ways to transform their food systems to be more sustainable to achieve food and nutrition security.

Rec 1

Concept of Agency – During CFS this was raised by some members as a “new concept” needs to be further defined and discussed.

Rec 2

Support all recommendations – no concerns.

Rec 3

Support all recommendations – no concerns

Rec 4

4(d) – legal protection for customary land, tenure rights for small-scale food producers and food insecure people, through national regulation of large-scale land acquisitions –Recognising the legal issues for small scale farmers in some country contexts, this recommendation could have unintended negative consequences when applied uniformly across all country contexts. It is not the size of the land that is important but how it is utilised – and the impact on rights of a given country policy. The concerns should be addressed through adherence to the international legal frameworks without forcing regulation of land acquisitions on everyone.

Rec 5

5(a) – New Zealand would support work that builds on internationally agreed guidelines and methodologies. Including the technical work undertaken by international organisations like OECD and FAO.

Response to specific questions

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

Yes, New Zealand fully supports the expertise of the HLPE team and the comprehensive process run by the HLPE team to develop the report.

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

No, the HLPE has run an open process, and developed a reasonably balanced set of recommendations based on the extensive feedback received and their own expertise. We note from the discussions at CFS plenary that there are concerns that the HLPE report and recommendations go too far in promoting or dismissing different approaches, but overall we think there is an appropriate balance.

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?

- Thirty years ago the New Zealand government made a bold move to remove all agriculture based subsidies, forcing the sector to adapt almost overnight. While, at the time, this caused many challenges for rural communities, the result has been to create a market-driven, agile grassland grazed system, built around an agro-ecological environment that serves a diversity of social groups.
- Current agriculture policy puts social wellbeing at the heart of a healthy grassland system creating an agro-social-ecological system. The benefits of this policy approach include economic, social capital, and social networks that deliver solidarity and security, employment, nutrition, biodiversity etc. These systems are complex and place livestock grazing systems at the nexus of food security and human, environmental and societal development.
- The incorporation of mātauranga Māori – our indigenous knowledge framework - into our agriculture policy establishes the intricate, holistic and interconnected relationship with the natural world and its resources. The cultivation of indigenous knowledge and language places significant value on the belief that healthy land creates healthy people.

Freshwater management policy:

- More stringent long term water quality objectives for nutrients, sediment and microbial pathogens - Regional councils set limits and output controls catchment-by-catchment by 2025 to achieve this objectives.
- Immediate nationwide input controls to halt the decline in the short term:
 - Stock exclusion and riparian setback rules
 - Agricultural intensification controls
 - Winter grazing rules
 - Tighter standards for wastewater treatment plants
 - Drinking water source protection rules.

Climate change policy:

- The Government has agreed a framework to drive our climate change policy towards low greenhouse gas emissions and climate resilience in New Zealand. The framework has a focus on:
 - leadership at home and internationally
 - a productive, sustainable and climate-resilient economy
 - a just and inclusive society.

- The Zero Carbon bill provides an overarching framework for climate change policy in New Zealand. It does this by doing four key things:
 - Set a new greenhouse gas emissions reduction target to reduce nitrous oxide and carbon dioxide emissions to net zero by 2050. For methane from agriculture and waste, the target doesn't have to be reduced to zero to stabilise the climate. The target for methane is a reduction of 10 percent below 2017 levels by 2030, and within a target range of 24-47 per cent below 2017 levels by 2050. The Government will receive future advice from the Climate Change Commission on refining this range.
 - Set a series of emissions budgets to act as stepping stones towards the long-term target. The Climate Change Commission will advise on these budgets and the Government will consider it when it sets budgets.
 - Require the Government to develop and implement policies for climate change adaptation and mitigation.
 - Establish a new, independent Climate Change Commission to provide expert advice and monitoring to help keep successive governments on track to meeting long-term goals. At the moment we have a Climate Change Committee, created in the interim to provide advice before the Commission can be established.

Pricing of agriculture emissions:

- The Government proposed through consultation that livestock emissions are priced at the farm level from 2025. This means that farmers would calculate and pay for their emissions annually, and put in place actions to reduce emissions.
- A farm-level livestock pricing scheme allows for much greater recognition of all the ways farmers can reduce their emissions.
- The Government is proposing to price fertiliser emissions at the importer/manufacturer level from 2025 – meaning that importers and manufacturers of fertiliser would be responsible for paying for those emissions.
- Fertiliser is treated differently from livestock emissions because the science isn't good enough yet to account for practices that reduce emissions at the farm level.

Sustainable land-use package:

- Budget 2019 includes investment of \$122m (€70m) to support farmers and growers to transition smoothly to more productive and sustainable land use and farming systems. This aims to ensure:
 - farmers and other land users can meet environmental bottom lines and remain prosperous
 - every farmer has a way forward to achieve these goals including changing land use if necessary, and
 - the impact of changing land use on land users, their families and communities is managed in a just and sustainable way
- The package includes measures to:
 - Provide practical advice, information, tools and support for farmers and growers to improve operations on the ground

- Support Māori landowners and agribusinesses to realise greater value and sustainability from their land
- Build primary industry advisor capabilities and pathways
- Improve on-farm emissions data
- Upgrade relevant decision support tools, like Overseer.

Funding schemes:

- The **Primary Growth Partnership (PGP)**, which was aimed at helping farmers continue to achieve efficiency improvements. It mobilised \$708 million of public and private finance (each project is at least 50% privately funded) to fund projects enhance sustainability and produce climate benefits (including emissions reductions) while boosting sector productivity and profitability, and delivering long-term economic growth.
- The PGP has now been folded into the **sustainable food and fibres futures** fund, which has just begun to develop an evidence base on regenerative agriculture to understand where best to invest for the largest current and future benefit.
- The **Sustainable Land Management Hill Country Erosion Programme (HCEP)** aims to protect New Zealand's estimated 1.4 million hectares of pastoral hill country classified as erosion prone. It provides funding to councils for the development of four-year erosion control projects. A total of NZD 35.8 million has been approved for the period 2019-23. Selected projects include: the development of whole farm plans to manage erosion on farms with highly erodible land, the development of agroforestry plans, poplar and willow planting, land retirement from production to revert to native bush, and soil conservation and sustainable land management programmes. Although the main purpose of the HCEP is to reduce erosion, it also contributes to the sequestration of carbon in small-scale forests and through planting of poplars and willows.
- The **Sustainable Land Management and Climate Change (SLMCC) Research Programmes** help agricultural and forestry sectors with the challenges arising from climate change. The SLMCC Research Programme invests in targeted basic, applied and policy research including the impacts of climate change and adaptation to climate change; mitigation of agricultural and forestry greenhouse gas emissions; cross-cutting issues, including economic analysis, life-cycle analysis, farm, catchment and systems analysis and social impacts; and policy research to address targeted policy questions. In 2019, the Government committed NZD 1.56 million for eight new projects, including NZD 500 000 to develop practical actions for farmers to adapt to climate change, NZD 150 000 for the NZAGRC to help rural advisors improve climate change knowledge. And NZD 140 000 to develop better tools to measure and assess drought conditions.

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

The HLPE report is only one contribution to the policy convergence process – including the recommendations.

The process in developing the guidelines needs to be inclusive and cover the different pathways towards sustainable agriculture and food systems that enhance food security and nutrition

elements. The guidelines need to feature different country contexts – we suggest highlighted as country case studies. New Zealand would be willing to share such a case study with the CFS if necessary.

The role of the CFS is to provide a toolbox of different approaches that can be applied by countries, including and highlighting trade-offs that may occur when choosing to implement a particular practice versus another.