

**Thematic Working Group on Agriculture, Food Security and Land Use**

**Online Exchange Forum | Embedding Agroecology Elements in Nationally  
Determined Contributions (NDCs)**

**23.09.2020**

**10:00 - 11:30 CET (Europe & Asia) // 16:00 - 17:30 CET (Africa & America)**

This document summarizes the key points and questions addressed during the online sessions held on 23 September 2020. We invite you to watch the recordings, available in the 'Additional resources' section below, for more information.

**FAO**

Eduardo Mansur

- Increasing evidence demonstrates that agroecology has significant mitigation and adaptation potential. Currently, 12.5% of countries explicitly mention agroecology in their NDCs, and many others include sustainable agriculture principles and practices without naming them specifically.
- Through its global work on agroecology, FAO has identified 10 elements of agroecology (*Diversity, Co-creation and sharing of knowledge, Synergies, Efficiency, Recycling, Resilience, Human and social values, Culture and food traditions, Responsible governance, Circular and solidarity economy*) to guide policymakers, practitioners and stakeholders in planning, managing and evaluating agroecological transitions.
- The holistic approach offered by agroecology elements applied to agri-food systems can foster transformative changes towards greater resilience, healthier ecosystems, social and economic development, and better nutrition. Most countries currently consider only the food production stage in their NDCs. There is an opportunity to further scale up agroecology's climate and development potential by including food system approaches.
- The sustainable management of natural resources is key to increase resilience to climate change, protect biodiversity and the environment, and contribute to global efforts to reduce poverty, hunger and malnutrition.

**FAO & Biovision**

Martial Bernoux & Martin Herren

- In 2020, FAO, Biovision and their partners published *The potential of agroecology to build climate-resilient livelihoods and food systems*, which highlights the links between agroecology and climate change by providing evidence on the technical (i.e. ecological and socio-economic) and policy potential of agroecology to build resilient food systems.
- Robust evidence shows that agroecology increases climate change resilience through increased adaptive capacity and mitigation co-benefits. Agroecology increases biodiversity, improves soil health, and supports the co-creation and sharing of knowledge and traditions.
- Case studies conducted in Senegal and Kenya as part of the study demonstrated higher resilience for agroecology-based farms compared to conventional farms.
- Recommendations from the study include: promoting agroecology as a climate change adaptation strategy; emphasizing agroecology's systemic nature to harness its full transformative resilience-building potential; embracing complexity; strengthening the co-

creation of knowledge; supporting multi-stakeholder dialogues and inclusive policy development processes; seizing the 2020/21 NDC revision opportunity to incorporate agroecology in the next NDC cycle.

## **International Fund for Agricultural Development (IFAD)**

### Sebastien Subsol

- As part of IFAD's engagement in the Scaling Up Agroecology Initiative, a stock take of agroecology in IFAD's portfolio was undertaken, focusing on the following three elements of agroecology: efficiency, diversity and recycling. This exercise revealed that 13% of IFAD's projects fully embrace agroecology, and 47% are partially related to the promotion and use of agroecological practices.
- IFAD supports agroecology through projects in Burkina Faso (Neer-Tamba project) and Niger (PRODAF / Programme d'appui à l'agriculture familiale). Both projects promote the use of agroecological techniques and contribute to scaling up these techniques at national level through new extension systems (farmers to farmers exchanges, farmer field schools) where climate change is mainstreamed and agroecology is promoted as one of the solutions. Examples include the promotion of assisted natural regeneration of useful trees, especially legumes, that capture nitrogen in the atmosphere and fix it in the soil.
- The mitigation potential of both projects was assessed using the EX-ACT tool developed by FAO to estimate the carbon balance of the projects. In Niger, it is estimated that the project will result in a reduction of 5 million tonnes of CO<sub>2</sub>e by 2030, a significant proportion of the country's conditional NDC target to reduce emissions by 33 million tonnes (all sectors combined). In Burkina Faso, it is estimated that the project will result in a reduction of 1.6 million tonnes of CO<sub>2</sub>e by 2030, a significant proportion of the country's conditional NDC target of 10 million tonnes (agriculture sector only).
- One of the lessons learned from these projects is the importance to work with country-specific data, and to connect the data with national and policy levels. This means not only the NDCs, but other policies as well, for example the National food security policy in Niger, to highlight key co-benefits and help decision-makers.

## **Senegal**

### Lamine Diatta

- There are three main challenges to including agroecology in Senegal's NDC: 1. Agroecology is cross-cutting between various land use and production systems. 2. Existing longer-term national and sectoral policies can't immediately be revised to include agroecology and align with a shorter term NDC (need to make provisions to take advantage of those policy revision processes to mainstream agroecology). 3. Lack of guidance and tools to efficiently integrate agroecology into each phase of the NDC (definition, development, implementation, monitoring & evaluation).
- There is a need for a common understanding of what agroecology is, how it differs from other concepts, and how to mainstream it into policies in a sustainable manner.
- The three main entry points for scaling up agroecology nationally are: 1. Creating an enabling environment for the adoption of agroecology systems and practices (by producing more evidence of agroecology's impacts and developing tools on how to mainstream agroecology into policies). 2. Increasing advocacy for agroecology to foster ownership of stakeholders, policymakers and farmers (including through the provision of trainings). 3. Creating an enabling environment for the development of bankable agroecology projects (by using tools and methods to assess the mitigation and socioeconomic potential of agroecology).

## **World Wildlife Fund (WWF)**

### Martina Fleckenstein

- WWF, UNEP, EAT and Climate Focus recently launched the report *Enhancing NDCs for food systems*, which considers how food systems (from production to consumption and disposal) are reflected in the NDCs. This report reveals that few NDCs address the topics of food loss and waste, food processing and diets. The next NDC cycle provides an opportunity to integrate food system approaches in the NDCs for climate mitigation and adaptation. The report suggests measures to do so, as well as relevant indicators.
- Ways to reduce food systems emissions include: improving production methods, reducing land conversion and emissions from livestock; reducing food loss and waste; shifting to healthier and more sustainable diets. These measures combined could result in emissions reductions of up to 18.54Gt of CO<sub>2</sub>e per year.
- The opportunity is now to integrate sustainable production, food loss and waste, and consumption/diets in the NDCs, especially through agroecology elements. We do not want to miss this opportunity and have to wait another 5 years until the next rounds of NDCs.

## **Questions & Answers**

*How to apply and scale up agroecological practices in larger countries containing different agroecological zones?*

When talking about adaptation and resilience, the size of the country does not matter, because agroecological practices are very context specific. Agroecological practices should have clear benefits for farmers, otherwise they will not be applied nor scaled up.

*Does scaling up agroecological practices lead to stagnation or lower productivity, also negatively affecting food security?*

Not necessarily. For example, in countries where there are mainly drylands and where lots of chemicals are used for agricultural production, adopting and scaling up agroecological practices can have a significant positive impact on production levels, which also contributes to increasing food security. For this to happen, it is important that the right metrics and key figures are produced and used by governments and policymakers to support the uptake of agroecological practices by producers, and that innovative practices based on research are promoted.

*How can we put agroecology at the heart of transformative policies for food systems?*

Members of the Committee on World Food Security (CFS) are currently working on policy recommendations to provide advice and incentives to policymakers to promote agroecology. Some ideas include: developing good metrics and monitoring and evaluation systems for tracking the economic, social and environmental benefits of agroecology, applying bottom-up approaches, and renewing the agriculture curricula for capacity building and training on agroecological practices. The Nationally Determined Contributions also constitute powerful tools to bring about global change, as they cover almost all countries, emissions and production systems worldwide. Advocating for NDCs that recognize agriculture and agroecological practices is key to influence policies that are aligned with the 1.5 and 2 degree targets. A progressive approach to the agroecological transition, whereby agroecology elements are not included all at once in national policies, strategies and the NDCs, but rather included progressively in line with an increase in ambition with each NDC cycle, should also be considered.

*What are some of the barriers to the implementation of agroecological practices?*

In many countries such as Kenya, the term agroecology is not yet widely known, especially at government level. Even in countries such as Senegal where agroecology has been discussed and integrated in national policies for a long time, implementation may still be lacking because there are

not enough resources to provide extension services and trainings on agroecological practices. It is also not easy to explain how the different elements of agroecology interact, and the transition to agroecology is overall resource intensive. It should be mentioned that in some instances, agroecological practices are adopted and used, but simply not recognized as such.

## **Additional resources**

### ***Agroecology***

The 10 elements of agroecology guiding the transition to sustainable food and agricultural systems  
<https://www.fao.org/3/i9037en/i9037en.pdf>

The potential of agroecology to build climate-resilient livelihoods and food systems  
<https://doi.org/10.4060/cb0438en>

- Summary in English: [www.fao.org/3/cb0486en/cb0486en.pdf](http://www.fao.org/3/cb0486en/cb0486en.pdf)
- Summary in French: [www.fao.org/3/cb0486fr/cb0486fr.pdf](http://www.fao.org/3/cb0486fr/cb0486fr.pdf)
- Summary in German: [www.fao.org/3/cb0486de/cb0486de.pdf](http://www.fao.org/3/cb0486de/cb0486de.pdf)

Agroecology info pool <https://www.agroecology-pool.org/>

Tool for Agroecology Performance Evaluation (TAPE)  
<http://www.fao.org/publications/card/en/c/CA7407EN/>

The future of agriculture? Integrating agroecology and climate-smart agriculture  
<https://ccafs.cgiar.org/research-highlight/future-agriculture-integrating-agroecology-and-climate-smart-agriculture#.X3YB8hTivIU>

The contribution of agroecological approaches to realizing climate resilient agriculture  
<https://cdn.gca.org/assets/2019-12/TheContributionsOfAgroecologicalApproaches.pdf>

La Aurora: Agroecological production of cereals and meat in an extensive farm in the south of Buenos Aires  
<http://www.fao.org/agroecology/database/detail/en/c/443569/>

### ***Food Systems***

Enhancing NDCs for food systems  
[https://wwfeu.awsassets.panda.org/downloads/wwf\\_ndc\\_food\\_final\\_low\\_res.pdf](https://wwfeu.awsassets.panda.org/downloads/wwf_ndc_food_final_low_res.pdf)

### ***Recordings***

Embedding agroecology elements in NDCs (Europe & Asia)  
<https://fao.zoom.us/rec/share/bCwvB2zKurD5-rzuks5aBGlmRdmRnmQE3diYI2ba6qBgPB0tbKzKQO7IDdH4snsu.3pTECb917w7eFXJo>

Embedding agroecology elements in NDCs (Africa & America)  
[https://fao.zoom.us/rec/share/Zi\\_Gs3FxM4ne1YT\\_PTC5YpTI\\_Jd9apiYp2ZajSUIROHiBNhhyw9yxDOeMqUfRKYN.RLfVI1yObWy8KSMD](https://fao.zoom.us/rec/share/Zi_Gs3FxM4ne1YT_PTC5YpTI_Jd9apiYp2ZajSUIROHiBNhhyw9yxDOeMqUfRKYN.RLfVI1yObWy8KSMD)