Workshop on scaling up agroecology



Food and Agriculture

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Summary report of the highlevel workshop convened by IIED-Practical Action on scaling up agroecology to achieve the SDGs



Objectives and framing

The aim of this workshop was to explore the potential of agroecology to achieve growth, resilience, poverty reduction and food security with a range of development organisations from civil society, research and government, in the context of the Sustainable Development Goals (SDGs). Thirty people from sixteen different organizations attended the workshop. The specific objectives were to develop pragmatic ideas on how to scale up agroecology to millions more smallholder farmers and identify areas of joint work, and partnerships that could take those ideas forward.

Having been left out of the MDGs, agriculture is back in the spotlight with SDG 2. Not only do the SDGs set the target to end hunger and malnutrition by 2030, but also to double the agricultural productivity and incomes of small-scale food producers, whilst maintaining the genetic diversity of our food crops and livestock and delivering sustainable food systems. To achieve all this and ensure we reach the ultimate target of 'leaving no one behind', we need a system-wide approach to sustainable agricultural development.

For the purposes of this discussion, and to enable all organisations present to engage fully, we considered agroecology as a set of principles and a scientific discipline (rather than a political movement). To ensure we moved beyond a discussion of the definition and efficacy of agroecology, the opening sessions summarised the existing evidence, potential trade-offs, and gave examples of the use of the principles. They also included a presentation on smallholder agriculture and sustainability in China – a country with the greatest number of smallholder farmers and which currently feeds 20% of the world's population from just 7% of the world's arable land.

Finally, to focus the discussion on scale in order to achieve the SDGs, Practical Action raised the challenge of scaling up agroecology through market systems, leveraging the power and dynamism of the private sector, with examples from Peru and Bangladesh.

Output one: key challenges in scaling up agroecology

- 1. **A negative image.** There is a negative image associated with agroecology in the minds of some governments, donors, researchers and farmers, who view it as not modern or scientific, and not capable of achieving food security and poverty reduction at scale.
- 2. A time lag. There is often (but not always) a delay before the benefits of agroecological systems are realised: for example, for soil fertility improvements or yield increases. Farmers need incentives and support to overcome this 'time lag' and therefore to make the necessary investments in sustainable production systems.
- 3. Weak knowledge and advisory systems. There is a lack of, or disconnect in, the knowledge systems and advisory systems required to support agroecology and build the capacity of farmers. There is also a dire shortage of research on agroecological systems which are highly context specific. Research funding tends to be concentrated on commodity-based, patentable solutions rather than learning how knowledge can be used to improve production systems in different contexts.
- 4. **High demand for labour.** Many agroecological systems have a high initial demand for labour. Some are more labour intensive in general. Where manual labour cannot be substituted with mechanised labour this may be a serious constraint, particularly in Africa. Where mechanisation is possible (e.g. in Systems of Rice Intensification (SRI) for weeding), the cost of mechanisation may also be a serious hurdle.
- 5. **High transaction costs.** Due to their higher diversity, agroecological systems tend to have a greater number of products (crops or livestock), each with a smaller volume for sale or processing. This in turn limits market opportunities. They also require high levels of knowledge and experimentation, to adapt practices to local conditions. Smallholder farmers may not be able to take

the risk of investing time and effort in learning and experimentation, while they increase their confidence with newly adopted practices and reach acceptable volumes for sales or processing.

- 6. Incongruence with key national government priorities and political interests. Agroecology does not require the type of support that governments can easily contract or deliver, such as subsidies for inorganic fertiliser. As such it does not favour existing relationships with large input or output companies or large scale commercial investors in the agricultural sector even if there is a development of markets related to organic inputs.
- 7. Lack of mechanisms for landscape level coordination. Many agroecological practices need scale (across many farms) to work. For example, integrated pest management depends on insect ecology and populations across the landscape. Achieving scale requires collective action, which again increases transaction costs.
- 8. **Inappropriate incentive systems in research.** The diversity and context specific nature of agroecology does not lend itself to readily-comparable statistical analysis that give some types of researchers the results and publications they need. It does not fit well with commercially supported research which is oriented towards maximising output of one commodity.

Access to land and gender implications were identified as issues which were relevant to most of the challenges. For example, security of land tenure is needed for farmers to make long-term investments such as agroforestry. The higher labour intensity of agroecology is exacerbated by unrecognised and unremunerated work of female farmers and compounded by the weaker position of non-organised women farmers in many market systems.

These challenges require in-depth and location-specific analysis. What are the bottlenecks? What innovative mechanisms can be developed to address these bottlenecks? Is it possible to build upon relevant existing processes such as COP21 and the growing use of *Climate Smart Agriculture* (CSA)?

Workshop responses to the key challenges

Several of these challenges were discussed in working groups in order to identify concrete issues and possible actions. The output was as follows:

Group A: Addressing the Time Lag

Opportunity / Response

The Goal: A transition to agroecological practices that shortens the time taken to realise the benefits

- Engaging in national policy processes to improve local research, programming and policy, with a focus on 'transition strategies'
- · Need to identify:
 - o the drivers of adoption i.e. who benefits
 - practical levers to help farmers make the transition, such as:
 - transition funding mechanisms (e.g. carbon finance)
 - knowledge and advisory systems
 - safety nets
 - practices/systems with immediate or short-term benefits that help to build farmers' confidence so that other elements of sustainable practices can be gradually added.

Actions

Evidence will be key to achieving this

- · Participatory action research by NGOs.
- Research should cross-validate NGO learning
- Academic research on agroecological practices

Donors can use their engagement with governments to support the transition, including specific actions such as:

- Funding research to address the time lag
- Support to farmer organisations to make the transition

Disseminating organisations should use the evidence:

- for advocacy
- to support capacity building strategies

Partnerships: Action research to collaboratively engage in developing and advocating for change on specific leverage points that promote the transition; e.g. organic fertilizers, forestry laws, extension curricula, production 'scheduling' across multiple farmers, etc. Facilitating experimentation and learning by farmers (e.g. through Farmer Field Schools) is likely to be an important component of such research.

Group B: Policies that promote agroecology conflict with national government priorities

Opportunity / Response /Action

Export promotion encourages foreign direct investment and bolsters the influence of agri-input companies (large commercial interests)

Promote agroecology as part of national development frameworks in agricultural policy

Develop evidence of increased impact of agroecology on resilience, productivity and profitability, quantity and quality

Use scheduled conferences to inject agroecology into official structures (e.g. Malawi's CAg taskforce)

Promote agroforestry across Agriculture & Forestry Departments – i.e. bring the sectors together

Propose agroecology as a focus for GACSA (Global Alliance for Climate-Smart Agriculture)

Increase relevance of research by strengthening district identification of research and advisory needs under NAPs, LAPAs & decentralisation (e.g. in Kenya)

Group C: The negative image of agroecology

Also discussed:

- Opportunities for strong business cases which facilitate scaling up agroecology
- How to build positive links with the climate change agenda

Opportunity / Response

Some commercial farmers as well as some researchers & policy makers see agroecology as backward. Some donors see agroecology as a social and political movement.

Changing the image of agroecology:

- Presenting it as a modern and scientific system that can help deliver win-win solutions for achieving the SDGs
- Linking it to CSA / climate change
 - o to deliver climate resilient outcomes
 - to generate quantitative data on land / labour productivity
- Linking up the vast array of ongoing activities in order to form a more robust evidence base which is also useful to farmers
- · Mainstreaming agroecology in public channels
- Making it the norm education, awareness, values
- · Focus on values as the starting point

Actions

- Discussions with donors and policymakers at different levels (improved engagement)
- Joint papers by several organisations
- Participatory action-oriented research in collaboration with farmers and NGOs
- Aggregate existing knowledge hubs to expand reach and breadth of knowledge
- Sourcing knowledge brokering / facilitating
- Participatory guarantee systems to develop consumer trust
- Focus on inherent added values nutrition, quality
- Procurement in schools nutrition, markets

Mapping of existing initiatives

This included:

- 1. major initiatives of participants' own organisations (where many, then examples)
- 2. significant initiatives of other organisations

An impressive array of initiatives was identified by workshop participants, spanning policy, research and development. Whilst this mapping appears significant – in number and scale of initiatives – it may actually be very small as a proportion of global investment in agriculture and number of farmers and researchers involved. A write-up of the mapping is available as a separate Excel file.

Call to action

IIED and Practical Action call upon you and your organisations to work together to ensure that we can meet the triple challenge presented by the SDGs: food security, ending poverty, and tackling climate change. By jointly working to address the systemic barriers to utilising agroecological principles in farming systems, we can ensure that millions more smallholder farmers can 'step up' in agriculture and not be left behind by rural development policies. Specifically, we call on all actors to:

- Identify specific constraints and bottlenecks in national systems which can be collaboratively
 addressed to open up opportunities for successful scaling up of agroecology. Examples include
 viable credit systems, subsidies, certification, exploiting the seasonality and diversity of
 production systems to minimise transaction costs.
- 2. This activity includes the innovation and testing, at reasonable scale, with **communities** and **private sector actors**, with a view to:
- 3. Developing strategies for transition and upscaling of more diverse agroecological farming systems:
- 4. Understanding, recognising and managing risk;
- 5. Building evidence 'from the bottom up' of what works, and what does not.
- 6. Recognising the differentiated ecological, economic, social and political contexts that exist, these actions need to be adapted to different locations and countries, and include comparative analysis for smart and transferable learning outputs. This may also include:
- 7. Joint papers by different organisations
- 8. Collaborative action to research and demonstrate the climate benefits of agroecology

We ask those present to support the ongoing collaboration in this area with some immediate actions:

- 9. Improve the mapping add geographical information and details of activities
- 10. To use the mapping to form partnerships for joint action in the coming months
- 11. To share this report, activity mapping and your own reflections on this workshop with others to build stronger evidence and examples for more action
- 12. To explore holding a follow up workshop in one year, perhaps hosted by another organization