Briefing

Natural resource management; Climate change

Keywords:
Forest and Farm Facility, climate resilience, producer organisations, nature-based solutions

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Forest and Farm Facility

Issue date
November 2019

Thriving in diversity: smallholders organising for climate resilience

With their ability to mobilise 1.5 billion smallholder producers, forest and farm producer organisations (FFPOs) can help drive a paradigm shift away from large-scale monocultural systems, which are vulnerable to climate change and highly inequitable. FFPO businesses embody greater diversity and equity, pursuing market opportunities for a diverse basket of their members' products. Rather than focus on profit maximisation alone, they have a wide set of environmental, social and economic goals. And because diversity and equity are fundamental for climate resilience at local and global scales, strengthening FFPOs is integral to delivering urgent, bold and equitable climate change adaption and mitigation actions. Public and private sectors alike must therefore provide: the necessary technical and business support, access to finance and support for cross-sectoral policies to scale up FFPO-led climate adaptation actions.

Policy pointers

Policymakers and practitioners must recognise that organised forest and farm smallholders offer an environmental, social and economic diversity that is the bedrock of climate resilience.

Governments, private sector actors and researchers all need to invest more to understand how to make integrated production systems more climate resilient and suitable for smallholder producers and forest and farm producer organisation (FFPO) businesses.

The public and private sectors should increase their technical, financial and policy support for FFPOs to help them upscale diversified, climate-resilient land use practices more efficiently.

They should also work together to ensure inclusive access to finance and increase investment in incubating diversified FFPO businesses.

The global climate is changing rapidly, with droughts, floods, storms, pests and diseases becoming increasingly frequent and severe. And the world's 1.5 billion smallholder farmers are among the most vulnerable to these changes.[1]

The Global Commission for Adaptation has called for 'urgent, bold and equitable' adaptation actions to build resilience.[2] Business as usual is no longer an option. But what is the alternative? Monocultural industrial systems concentrate wealth and power within the increasingly vulnerable production systems of the world's forest and farm landscapes. To ensure bold and equitable adaptation actions within forest and farm landscapes, we need to move towards inclusive, diverse production systems that empower smallholders. As well as distributing wealth and power within diverse and resilient landscape mosaics, such systems also provide food for more than 70% of the world's population.[3]

Diversity for resilience

Nurturing diversity is fundamental for building resilience in social–ecological systems and is an important and effective climate change adaptation strategy for agriculture and managed forests.[4–6] Diversity can reduce environmental impacts related to monoculture production — such as biodiversity loss, soil degradation and high chemical inputs — by enhancing pollination and water infiltration, suppressing pest outbreaks, dampening

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pathogen transmissions and improving soil fertility. This improves ecosystem health and service provision and increases climate resilience. It also helps maintain economic returns in the face of greater climate variability and extreme events.

In developing countries, where trade is limited and production mainly consumed locally, diversified farms provide more secure access to a greater variety of sources of food, renewable energy, fibre, construction materials, health and cosmetics. The potential income streams from these products also provide a buffer against climate impacts.[7]

Diversification spans a spectrum of options — from genetic variations in a monoculture crop, to mixed planting of different species via crop rotation, polyculture or agroforestry, to restoring natural forests adjacent to farms. It can also occur at different scales — from farm-level ancestral or agroforestry practices to creating a mosaic of connected land (such as indigenous peoples' territories) that is managed and used for different purposes.

Large-scale industrial farming and forestry models have reduced diversity and ecosystem services and increased vulnerability to climate change.[8,9] Smallholder production systems tend to be more diverse, but farmers often lack the organisation, technical know-how and access to markets and finance to make their businesses work at scale for climate resilience.

Driving diversification at scale

FFPOs are associations of formal or informal producers created to help and organise their members. Many FFPO members are smallholders who own forest and farm businesses, individually or collectively, and work in diversified production systems. By recruiting and organising producers as members, FFPOs help aggregate larger product volumes. They also provide technical services such as planting advice for different species, and business and financial services such as training or loans from joint savings funds.[10]

FFPO businesses are inherently diverse:

Environmentally. The diversity of agricultural production increases as farm size decreases.[11] Also, biodiversity on land managed by indigenous peoples and local communities is declining less rapidly than on other lands, making smallholders and indigenous peoples the world's stewards of climate-resilient crop varieties, breeds and tree species.[12,13]

Socially. Being membership-based, FFPO businesses require social cohesion and common values to function. They work with many producers — including women and youth — who have different aspirations and interests in diverse groups of products. Empowering their members to collectively make decisions, FFPOs usually pursue a wide spectrum of social, environmental and economic values for the common good, often trading off economic value in favour of social or environmental ends.

Economically. Many conventional agriculture and forestry business models focus on maximising economic profits by increasing uniformity and production per unit of land, labour or capital. This often leads to specialisation around a narrow set of products over large geographical areas in the pursuit of economic scale efficiencies. FFPO members, on the other hand, use different ecological niches to maximise productivity across subsistence and commercial options. And because their members have to live with the consequences of their decisions, FFPO management systems often use natural resources sustainably to achieve their economic, social and environmental objectives.

To compete with conventional businesses that do not invest in environmental and social values as part of their core business, FFPOs may build their businesses and product branding around concepts such as fair trade or environmental sustainability, which reinforce their common good values and help them secure market niche and attract price premium.

Product diversification is often FFPOs' only low-cost option for ensuring steady cash flow and minimising risks, including climate risks (see Box 1). A crop rotation and agroforestry system, for example, provides products at different times of the year, helping smallholders — who tend to rely on local produce — boost their household nutrition and wellbeing.

Diversification as an adaptation strategy

Smallholder farmers are already experiencing the impacts of climate change and related events. In a 2019 knowledge demand survey of 41 FFPOs in six countries, 85% ranked climate change as one of their members' and businesses' main concerns.[14] Many FFPOs have already taken actions to manage climate risks (Box 2). By sequestering carbon through increased forest cover, improving soil quality, increasing yield and restoring forests around key watersheds, these adaptation actions also contribute to climate change mitigation,

agriculture productivity, food security and biodiversity conservation.

Such emerging actions are crucial for climate-resilient forest and farm landscapes. But FFPOs are not getting the policy, technical and financial support they need to accelerate and scale them up.

Empowering FFPOs to scale up adaptation

The Forest and Farm Facility, a global partnership between the Food and Agriculture Organization of the UN (FAO), IIED, the International Union for the Conservation of Nature (IUCN) and Agricord, has been working to strengthen FFPO capacity to address climate resilience. Since early 2018, it has worked with the Netherlands' Ministry of Agriculture, Nature and Food Quality, Rabobank, Dutch development bank FMO, Tropenbos International and Hivos to shape 'Forests, Farmers and Agriculture, Sustainable Together: An Alliance for Action'. Part of this alliance's mission is to enable FFPOs to implement integrated and diversified food and forest production systems to meet increasing food demand and conserve forests while mitigating and adapting to climate change. Through a series of scoping studies and multi-stakeholder meetings in Kenya, Ghana, Zambia and the Netherlands in 2019, the alliance partners identified their main priorities. These are the building blocks for empowering FFPOs to drive urgent, bold and equitable climate adaptation actions.

Broadening and deepening technical knowledge on synergetic landscape approaches. Research on rural extension services and agriculture often focuses on a narrow set of species.[15] Few research institutes and government agencies offer technical support on integrated climate-resilient forest and farm crop management; and there is little accessible research on how smallholders can assess climate risks and design optimised, diversified and resilient production systems. Further research would deepen our understanding of how to make integrated production systems more climate resilient and suitable for smallholder producers and FFPO businesses. Extension services for smallholder farmers promoting more crop and seedling varieties and diversified climate-smart production systems would also help them diversify.

Enhancing incubation platforms for market access and bankability of diversified FFPO businesses. Smallholder farmers and forest and agriculture business managers need to know how to manage, produce, add value and access markets for a wide range of products. FFPOs need technological and financial support to manage the complexity of diversified businesses, multiple value chains and the business risks related with unprecedented rates of global warming and rapid climate change.

Improving inclusive access to adaptation funds and innovative finance mechanisms. Smallholder farmers and their collective businesses are already adapting, but they need financial support from the public and private sectors. Governments must devolve climate finance to give FFPOs better access, as less than 10% of public sector climate finance reaches local communities.[16] At the same time, few private sector companies offer financial options for FFPOs or reward diversified businesses. Some banks require borrowers to show they can produce a certain

Box 1. How FFPOs help their members increase diversification at scale

- Engaging in policy advocacy to secure tenure and access rights to diverse landscapes involving both farms, forests and other natural resources
- Sharing knowledge and experience on diversified forest and farm management
- Developing shared savings to invest in new production systems
- Increasing collective business scale to improve access to markets for diverse products, and
- Standardising quality across farmers to ensure repeat business within the market.

Box 2. Examples of how FFPOs are working with nature to manage climate risks

- Increasing diverse vegetation cover on slopes to reduce the risk of landslide from heavier rainfall (Nepal and the Philippines)
- Improving organic composting from tree components to increase soil fertility and water retention (Kenya and Zambia)
- Investing in early warning systems, diversifying product portfolios to include drought-tolerant native species and restoring forests near key watersheds to adapt to more frequent and severe drought and high temperatures (Guatemala)
- Providing technical training on climate-smart agriculture and drought-tolerant seedlings (Ghana and Vietnam)
- Investing in tree censuses to help aggregate and make more tree products for the market as a new diversification strategy (Kenya, Ghana, Zambia, Togo and Madagascar), and
- Diversifying traditional agroforestry systems to reduce the risks from drought to businesses (Ecuador, Bolivia).

Source: These examples are based on the findings of the IIED/FFF survey.[14]

quantity of a single product. For FFPOs managing a diversity of products, individual products may not meet minimum loan requirements, but their members' collective set of products provides a healthy balance sheet. Increasing public finance for FFPOs could also help leverage innovative private sector financial products that reward rather than penalise diversified businesses.

Harmonising, revitalising and developing cross-sectoral enabling policies for integrated FFPOs. Governments often design agriculture, forest and climate change policies in silos. This results in conflicting objectives and creates barriers for diversification. Heavy fertiliser subsidies, for example, can dissuade farmers from implementing more climate-resilient agroforestry systems. Governments must harmonise policies to support diversified production systems and businesses. This should include guaranteeing secure tenure for smallholders, because secure land and natural resource rights underpin producers' ability and willingness to invest in diversified businesses, increasing their long-term resilience.

Organising and empowering integrated FFPOs for climate resilience

Perhaps the fastest route to upscaling climate resilience on the ground is the alliance's final priority: directing support programmes to invest in FFPOs. Smallholder producers are generally isolated — from each other, from the markets, from service providers and from policymakers. FFPOs organise smallholders, provide technical support, link them with service providers and investors and give them a strong policy voice.

There is compelling evidence that spreading best technical practices and business models and mobilising millions of smallholder farmers can deliver climate adaptation actions. FFPO members feel the urgency of climate actions and are already taking bold, innovative steps. And FFPOs are empowering smallholder producers to shape a diversified and more climate-resilient forest and farm landscape. Strengthening and investing in these FFPOs is therefore integral to delivering urgent, bold and equitable climate change adaption actions.

Xiaoting Hou-Jones and Duncan Macqueen

Xiaoting Hou-Jones is a researcher in IIED's Natural Resources Group. Duncan Macqueen is forest team leader and principle researcher in IIED's Natural Resources Group.

Notes

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Knowledge Products

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The Forest and Farm Facility (FFF) provides direct financial support and technical assistance to strengthen forest and farm producer organisations representing smallholders, rural women's groups, local communities and indigenous peoples' institutions. A partnership between FAO, IIED, IUCN and Agricord, the FFF is funded by the EU through the FAO-EU Forest Law Enforcement, Governance and Trade programme, Finland, Germany, IKEA, Sweden and the Netherlands.

Contact
Xiaoting Hou-Jones
xiaoting.hou.jones@iied.org

80–86 Gray's Inn Road
London, WC1X 8NH
United Kingdom

Tel: +44 (0)20 3463 7399
www.iied.org

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ISBN 978-1-78431-755-3

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