

Compensating farmers for ecosystem services

Lessons and an agenda for innovation

Eva Wollenberg, Timm Tennigkeit, Dhanush Dinesh, Sophia Baumert, Felicitas Röhrig,
Lisa Kirfel-Rühle, Leanne Zeppenfeldt

Executive summary

Payments for ecosystem services (PES) to smallholder farmers in low- and middle-income countries (LMICs) can increase and diversify farmers' income while also incentivizing practices for ecosystem services, including climate change mitigation and adaptation. The world's 480 million smallholder farmers produce one third of the world's food supply on one quarter of global agricultural area and often earn less than USD 1.25/day. Yet schemes for paying smallholder farmers in LMICs for ecosystem services have been limited.

The **CompensACTION Initiative** seeks to promote PES innovation at large scales to increase the incomes of smallholder farmers in LMICs while incentivizing climate action and environmental outcomes. The Initiative has five objectives:

1. Increase and diversify the incomes of smallholder men and women farmers, while also supporting long-term investment by farmers.
2. Incentivize practices for sustainable farming practices that lead to resilient and low-emission

food systems, as well as other ecosystem services on- and off-farm.

3. Deliver co-benefits with compensation mechanisms such as improved credit ratings and easy access to finance for farmers.
4. Diversify financial instruments and increase public and private funding in addition to climate finance.
5. Attract international climate finance for adaptation and mitigation action in the agricultural sector that leads to improved ecosystem services maintenance.

The unique feature of the CompensACTION Initiative is its emphasis on improving smallholders' income from PES and on smallholders' contribution to the supply of carbon credits and other ecosystem services at large scales. It focuses on increasing the supply of ecosystem services from smallholder agriculture at large scales and better linking this to public and private finance mechanisms. Implementation should be highly cost efficient to deliver maximal benefits to farmers and have robust measurement, reporting and

Executive summary

verification (MRV) to ensure environmental integrity. The Initiative will prioritize climate change mitigation and adaptation, while aiming to compensate for multiple ecosystem services.

CompensACTION will build on the experience of existing PES schemes (Table 1). Based on this experience, three levers can help achieve the objectives of the Initiative at scale: improving benefits captured by farmers; blending public and private finance for large-scale action; and supporting readiness for implementation of PES mechanisms. Three corresponding priority actions are recommended for scaling up PES schemes:

1. Foster technical innovation and disruption in PES to support low-cost, high-volume transactions that make agriculture a competitive sector for purchase of carbon and other ecosystem service credits. These actions can enhance readiness and farmers' capacity to capture a higher proportion of benefits. More private investment is likely where major disruptions or game-changing solutions occur.

Novel, low-cost MRV for multiple ecosystem services is a priority for reducing costs. Digital resources and remote sensing for monitoring ecosystem services are promising areas for MRV innovation. Cooperation across projects or countries to develop affordable MRV could help drive down the future costs of these approaches. Harmonized standards for MRV would help reduce costs of project design and integration with national reporting. In many places, activity data will continue to be the major source of data and can be delivered using voice recognition or SMS texts by phone.

2. Increase public and private investment to scale up PES to mobilize the large-scale action needed to meet climate targets, governments and public finance institutions. Investment can start by building on and complementing existing payment programs. Governments can redirect agricultural subsidies to ecosystem services and use public finance to develop innovative and diversified approaches. In addition, public finance can be used to attract and de-risk private capital. These actions should enhance the volume of finance available for payments and further strengthen readiness.

Better understanding the business case for private sector involvement and developing different options for private sector finance will be necessary to create viable investment models. Monitoring the costs and benefits of blended finance arrangements and their impacts can support improvements over time.

Setting benchmarks for blended finance performance can encourage high standards of efficiency and impact. Improved standards and transparency for corporate insetting schemes will enable these credits and payments to be more robust.

3. Support public policy reform. Overwhelming evidence suggests that the largest scale of impacts occur where policies for PES are well developed. Policies can establish 1) goals for the provision of multiple ecosystem services (e.g., carbon, water quality, soil health, agrobiodiversity, community well-being), 2) institutions for benefit distribution, 3) the setting of fair and minimum prices for carbon and other ecosystem services, 4) the enabling conditions for compensation, especially legal rights to the ecosystem services being traded and conflict management, and 5) nested accounting for project outcomes at subnational and national levels. More advanced policy options include harmonizing payment schemes, MRV methods, and ecosystem valuation within and across countries. More exploration and exchange among LMICs is needed to support integrated policy development across these five areas. Improved assessment of PES schemes can inform the development of subsequent interventions.

Beyond the three action areas, research priorities to support the CompensACTION Initiative are to better understand how PES influences farmers' incentives to use practices that support climate change mitigation, adaptation and environmental sustainability. Questions include which interventions support farmers to change their practices in different places, the resulting quality and quantity of ecosystem services delivered, who benefits, and by how much. The percentage of PES benefits captured by farmers and the percentage of added income will be important indicators. Other questions include 1) how to determine fair prices for ecosystem services, 2) what proportion of ecosystem payments should go to farmers and how can such targets be used as industry benchmarks, 3) what

Executive summary

safeguards are needed to minimize unintended negative social or environmental impacts, and 4) how can farmers generate higher incomes from multiple ecosystem services?

The recommendations and analyses in this paper are intended to serve as the basis for engagement by the G7 members and other countries and development partners to catalyse support for the CompensACTION Initiative. The Initiative is open to all countries.

Examples of actions include:

- Champion a priority action area and mobilize cooperation.
- Co-invest in a network of pilot projects with common methodology.
- Contribute to multilateral action on climate finance
- Support a common set of CompensACTION indicators or thresholds.
- Conduct research on fair prices, target levels for farmer benefits, novel MRV technology.
- Facilitate exchanges with partner countries, convene stakeholders, and encourage discussions with the financial sector.

Acknowledgements

We thank the participants of CompensACTION workshop July 5-6 2022, Carlos Borda, Andres Espejo, Jean-François Le Coq, Dirk Nemitz, Roy Parizat, Marcela Quintero, Juliane Wiesenhütter, reviewers from GIZ and BMZ, Wiebe Smit, Marlen Trolp, Bailey Rowland, Charlotte Gehren, Sadie Shelton and Bailey Rowland for valuable inputs to this paper. The contents of this paper are solely the responsibility of the authors and do not necessarily represent the views of contributing experts of the G7 Presidency. The authors of this paper gratefully acknowledge the financial support for the development of this policy brief of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), and that of Clim-Eat, the Netherlands Food Partnerships and USAID.

The G7 countries can play a leadership role in payments for ecosystem services in ways that improve farmers' livelihoods, ensure food security, meet climate change mitigation and adaptation objectives, foster sustainable land management and deliver on further Sustainable Development Goals. Payments can provide much needed incentives for climate action in the agriculture sector, while also helping to diversify and enhance farmers' livelihoods.

Citation

Wollenberg, E., Tennigkeit, T., Dinesh, D., Baumert, S., Röhrig, F. Kirfel-Rühle, L., Zeppenfeldt, L. 2022. Compensating farmers for ecosystem services: Lessons and an agenda for innovation (executive summary). CompensACTION Policy Brief.

CompensACTION Initiative

Challenges

Agricultural practices that lead to ecosystem degradation

Smallholder farmers lack income to meet basic needs

A lack of compensation mechanisms in low-income countries

Low market value for carbon and other ecosystem services

Actions

- 1 Increase benefits to farmer: Lower MRV & aggregation costs
- 2 Scale up with blended public-private finance
- 3 Use policy to set targets and standards, increase capacity and reach scale

Impact

Increased ecosystem services: climate change mitigation, resilience, biodiversity, water quality

Improved smallholder incomes, food security, well being

Our aim

Enhance payments to farmers to incentivize best practices and increase incomes

