# Resilient Roots: EU Tech Grants for Farmers

5 AUGUST 2026
Matilde Torti



Photo by Waldemar Brandt on Unsplash

## EPIS Thinktank

## Climate Policy & Environment

## February 9, 2026

## Policy Paper:

## An EU Innovation Grants Instrument to Accelerate Climate Resilience Adoption Among Smallholder Farmers in Partner Countries

Climate change is increasingly recognised as a driver of foreign policy and security risks; EU institutions have described it as a 'threat multiplier'

with serious implications for peace and security, and have called for integrating climate-related risks into security and defence policy planning (European External Action Service, 2022). Climate change is reshaping the natural and human systems worldwide, resulting in rising global temperatures worldwide through higher greenhouse gas emissions from human activities, which fuel severe natural disasters, such as heatwaves, floods, storms, droughts, and wildfires, that threaten lives and critical infrastructure (World Health Organisation, 2023). For the EU, investing in adaptation and resilience in partner countries is therefore not only an environmental or development matter: it is also a preventive stabilisation tool that can reduce the likelihood that climate impacts cause wider instability and humanitarian crises, requiring costly emergency interventions, while also strengthening global support and financing for climate resilience (European Commission, n.d.).

Against this background, smallholder farmers constitute a key intervention point. They are often highly exposed to climate shocks and have limited assets, such as insurance or savings, to recover from extreme events (Thompson, et al., 2023), despite the existence of investment programmes by other private foundations (e.g. The Rabobank Foundation). The adoption of practical resilience tools in the long term requires a capable actor such as the EU to ensure monitoring, maintenance, training and coordination with the local communities to increase its effectiveness.

This policy paper proposes a dedicated EU Innovation Grants Instrument for smallholder climate adaptation in partner countries in Africa and South-East Asia. It will do so using the existing framework provided by NDICI–Global Europe, the EU's main external financing tool, and aligned with Global Gateway investment partnerships. The facility would finance first, the adoption of climate technologies, and second, it would support the post-adoption support, through training, repair networks and technical advice.

## High exposure, low adoption

Climate change is placing smallholder farmers at great risk by disrupting the weather patterns and ecosystems. Increasingly frequently, droughts, floods, and other natural disasters damage crops and livestock, reduce yields and increase the risk of crop failure. This directly threatens the income of small farmers, who often do not have access to the necessary resources to safeguard their production, and therefore live at the poverty line (UNDP, 2025).

Despite the existence of investment programmes, climate risks are expected to increase in smallholder farming systems in the form of extreme events; yet, the adoption of climate resilience tools remains too slow. A major obstacle is practical implementation: tools are not always designed for the smallholder context; maintenance, repairs and locally accessible support needed may be lacking. As a result, despite the existence of climate

tech tools, resilience does not result in sustained resilience outcomes in practice.

## Finance as an adoption barrier: why grants matter

Finance is central to the adoption gap. Loan-based approaches can help acquire the technologies, but they often primarily benefit better-resourced and wealthier farmers. In contexts where climate change creates income volatility, debt-financed adoption of climate technologies can increase vulnerability, especially if farmers are expected to repay even after harvest failures. For this reason, grants avoid debt burdens by not generating the debt that loans can entail for smallholder farmers, especially in lower-income contexts.

A grant-based approach is also a preventive mechanism. The aim of grants is to reduce future crisis costs by funding resilience, rather than financing post-disaster recovery. Moreover, grants can be designed to avoid dependency by being time-bound, targeted at initial adoption and the immediate post-adoption phase, and linked to clear milestones, such as training completed and technology installed.

## The EU's role: external action

The European Union is already internally deploying climate technology for smallholder farmers to boost sustainability, resilience to extreme weather, and stability of income through initiatives under the Common Agricultural Policy (CAP). Key focus areas include affordable digital solutions, circular economy techniques (biomass to energy), and soil health management, with projects aiming to make these technologies accessible to small, resource-constrained farms (European Commission, 2023).

However, the EU has the institutional and financial architecture to support climate resilience beyond its institutional borders in partner countries. The Neighbourhood, Development, and International Cooperation Instrument (NDICI-Global Europe), launched in 2021, is the EU's main instrument for international cooperation and external action and its designed to contribute to sustainable development, prosperity, peace and stability worldwide. In parallel, the Global Gateway strategy sets the framework for investment partnerships that support sustainable, resilient infrastructure and explicitly includes investments in climate mitigation and resilience.

Given this existing framework, the EU is the right actor for this initiative, as it has both strategic incentives, a wide network of partners and the delivery capacity to successfully support smallholder farmers in Africa and South-East Asia.

First, the EU's own security and foreign policy interests are directly affected by climate-generated instability, so investing in resilience mechanisms abroad also represents a strategic choice. Second, the EU can operate through a wide range of established frameworks and instruments, giving it

different roots to support this initiative. Third, through coordination among Member States, it can set up common standards for transparency and monitoring, making outcomes visible and comparable across countries.

## Policy proposal: an EU Innovation Grants Instrument for climate adaptation

This policy paper proposes:

## A clear benchmark for delivering: portfolio targeting and measurable reach

To strengthen the accountability and political signalling, the project should be linked to a clear target. The benchmark is to support 260,000 farmers in Africa and South-East Asia by 2035. The allocated funds should be monitored through public reporting on allocations and outcomes, ensuring comparability across countries over time.

## Monitoring and evaluation

The effectiveness of the Innovation Grants Instrument should be tracked using a set of indicators. These should reflect:

These indicators would also signal improved livelihoods and food security, reducing the risk that climate shocks escalate into broader crises.

In conclusion, treating climate adaptation as part of EU external action is strategically necessary: if climate change is a threat multiplier, then strengthening resilience in partner countries is a form of preventive stabilisation that can reduce the risk of wider crises. Smallholder farmers are a key intervention point because they are highly exposed to climate shocks, yet adoption of resilience tools remains too slow. An EU Innovation Grants Instrument would address this gap by enabling rapid uptake of technologies without adding burdens caused by debt to partner countries, especially in fragile contexts, thereby translating EU climate-security commitments into concrete resilience outcomes.

## Bibliography


European Commission. (n.d.) Common Agricoltural Policy (CAP). CAP at a glance – Agriculture and rural development – European Commission

European Commission. (n.d.). About climate adaptation and resilience. Retrieved February 9, 2026, from https://climate.ec.europa.eu/eu-action/adaptation-and-resilience-climate-change/about-climate-adaptation-and-resilience_en

European Commission. (n.d.). Global Europe: Neighbourhood, Development and International Cooperation Instrument. https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/global-europe-neighbourhood-development-and-international-cooperation-instrument_

European Commission, Directorate-General for International Partnerships. (2023). Global Gateway. International Partnerships. Global Gateway – European Commission

European External Action Service (EEAS). (2022). The EU's climate change and defence roadmap (factsheet). https://www.eeas.europa.eu/eeas/eu-climate-change-and-defence-roadmap_en

Thompson, W. J., Varma, V., Joerin, J., Bonilla-Duarte, S., Bebber, D. P., Blaser-Hart, W., Kopainsky, B., Späth, L., Curcio, B., Six, J., & Krütli, P. (2023). Smallholder farmer resilience to extreme weather events in a global food value chain. Climatic Change, 176(11), Article 152. https://doi.org/10.1007/s10584-023-03586-1

United Nations Development Programme. (2025). Investing in smallholder farmers means investing in sustainable development. https://www.undp.org/blog/investing-smallholder-farmers-means-investing-sustainable-development

World Health Organization. (2023, October 12). Climate change and health. https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health

DOI 10.69790/epis-rep-cpe-3/77812

EPIS