



Untapped Potential

An analysis of international public climate finance flows to sustainable agriculture and family farmers

REPORT NOVEMBER 2023



Summary

Small-scale family farmers are the unsung heroes of the global food system. They produce over a third of the world's food and are key to climate adaptation, yet new analysis reveals they receive just 0.3% of international climate finance.

Climate change is hitting harvests and driving up food prices across the globe. It has helped push [122 million people](#) into hunger since 2019. We need to create more sustainable and resilient food systems that can feed people in a changing climate, but we can't do this without family farmers.

Small-scale family farms of less than two hectares produce one-third of the world's food ([32%](#)), while farms of up to five hectares located in developing countries account for [more than half](#) of the global production of nine staple crops – rice, peanut, cassava, millet, wheat, potato, maize, barley and rye – and grow almost three-quarters of the coffee and 90% of the cocoa.

Family farms are also the backbone of rural economies. Over [2.5 billion](#) people globally depend on family farms for their livelihoods. In Sub-Saharan Africa, where [up to 80%](#) of farming is done by smallholder farmers, [agriculture contributes 23% to regional GDP](#).

Family farmers are also key to climate adaptation. They are at the forefront of the shift to more diverse, nature friendly food systems which the Intergovernmental Panel on Climate Change (IPCC) says is [needed](#) to safeguard food security in a changing climate. Many are already practising climate-resilient agriculture, including approaches such as agroecology: growing a wider variety of crops including traditional crops, mixing crops, livestock, forestry and fisheries, reducing chemical inputs, and building strong connections to local markets.

Yet, new analysis of international public climate flows by Climate Focus, on behalf of family farming networks representing over 35 million family farmers in Africa, Latin America, Asia and the Pacific, reveals that only a tiny proportion is spent on family farmers and sustainable agriculture:

- Only 11% of public climate finance was spent on agriculture, forestry and fishing since 2012 – an average of US\$7 billion a year. In 2021, US\$8.4 billion was spent on the sector – around half the US\$16 billion spent on projects in the energy sector.
- Just 2% of international public climate finance – US\$2 billion – was directed at small-scale family farmers and rural communities in 2021. This amounts to roughly 0.3% of total international climate finance from both public and private sources. In Sub-Saharan Africa alone, smallholders' finance needs are estimated at around US\$170 billion per year.



- Only a fifth (19%) of international public climate finance for agriculture, forestry and fishing was used to support more sustainable and resilient practices in 2021 (US\$1.6 billion). This is a fraction of the estimated US\$300-350 billion a year that is needed.

The analysis also shows that 80% of finance for agriculture, forestry and fishing is channelled through recipient governments and donor country NGOs. This often makes it harder for family farmers' organisations to access funds because of a lack of information on how and where to apply for finance, and complex eligibility rules and application processes. Small-scale family farmers received just a quarter (24%) of spending on the sector in 2021.

Access to finance is symptomatic of a much larger problem which sees organisations representing family farmers sidelined in decision-making on food and climate. At a national level, family farmers' concerns and proposals are rarely acted upon by governments, while eligibility and financial constraints make it difficult for them to engage in international fora such as the UN Climate Summits.

There is growing awareness of the urgent need to create more resilient and sustainable food systems. Ahead of the UN Climate Summit in Dubai, the UAE Presidency is [urging governments](#) to commit to formally integrate food and agriculture into national climate plans for the first time, and scale up and enhance access to international financing for adaptation and transformation of food systems. COP28 is also expected to agree a Global Adaptation Goal and a process for agreeing new 2030 funding goals that could unlock more support and finance for food and agriculture.

It is vital that governments and funders recognise small-scale family farmers as powerful partners in the transformation of the food system and the fight against climate change. This means ensuring more climate finance goes directly to small-scale family farmers' organisations and genuinely sustainable climate resilient practices, and that small-scale family farmers have a real say in decision-making on food and climate.



Methodology

This report presents an analysis of international public climate finance flows by Climate Focus. It is based on the climate-related official development assistance (ODA) data made available by the [Development Assistance Committee \(DAC\)](#) of the Organisation for Economic Co-operation and Development (OECD).

The OECD database includes ODA, other official flows (OOF), private grants and private amounts mobilised and reported by DAC and non-DAC members. The database allows the analysis of climate finance between 2000 and 2021 based on finance flowing from funders (including bilateral flows and contributions to multilateral organisations) and finance flowing to recipients (including bilateral flows and the outflows from multilateral providers). It does not include information on disbursements of finance.

The following steps of analysis were conducted using current US\$ as currency:

1. Climate finance flowing to different sectors and regions since 2000 was assessed and a snapshot for 2021 – the most recent year for which data is available – was created.
2. The database was filtered to build a picture of climate finance flowing to the ‘Agriculture, Forestry, Fishing’ sector.
3. The ‘Agriculture, Forestry, Fishing’ sector finance data for 2020-2021 was further analysed to produce a snapshot of the most recent spending on sustainable practices and smallholder farmers and rural communities specifically targeting agriculture and food production. Keyword searches of project titles and descriptions were used to identify relevant projects, including:
 - Small-scale family farmers and rural communities using the keywords: ‘smallholders’, ‘family farms’, ‘peasants’, ‘Indigenous’, or ‘rural community’ and Spanish ‘Campesino’, ‘agricultor’, ‘agricultora’, ‘familiar’, ‘rural’ and ‘indígena’ and French ‘petits exploitants’, ‘rurale’ or ‘indigène’.
 - Sustainable practices keywords: ‘sustainable’, and translations in Spanish ‘sostenible’ and French ‘durable’ ‘sustainable’.
 - Agroecology keywords: ‘agroecology’, ‘agro-ecology’, ‘agro-ecological’, and ‘agroforestry’, ‘agroecological’, along with Spanish ‘agroecología’ and French ‘agroécologie’.



The analysis provides a conservative estimate of finance flows to the agri-food sector (agriculture, forestry and fishing) and smallholder producers. Previous estimates are significantly higher. For example, [analysis](#) by the UN Food and Agriculture Organization (FAO) estimated that the 'agriculture and land use sector' received US\$18 billion in 2018 – over twice the US\$8.4 billion estimated for 2021 by Climate Focus. While a [report](#) by Climate Policy Initiative (CPI) estimated that US\$10 billion a year went to small-scale family farmers in 2017/2018 compared to the US\$2 billion in 2021 estimated by Climate Focus.

The main reason for the difference is that the analysis by Climate Focus uses the OECD categorisation of ODA finance flow by sectors with a focus on 'agriculture, forestry and fishing' and projects that specifically mention small-scale family farmers and rural communities. This provides an estimate of the finance which is specifically targeted at supporting small-scale family farmers and food production. The FAO and the CPI analyses include finance flowing to a much broader range of sectors, including energy, that may benefit small-scale family farmers but which are not specifically targeted to them or to food production.

It is also likely that there are projects supporting sustainable practices and small-scale family farmers and rural communities that were not picked up in the analysis because the relevant keywords were not included in project titles and descriptions. This underlines the need for detailed information on finance flows to be made publicly available.

International climate finance

International climate finance broadly refers to finance channelled to activities that have a stated objective to mitigate climate change or support adaptation. This [includes](#) multilateral flows in and outside the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, as well as bilateral flows at national and regional levels. Multilateral climate funds are the largest providers of climate finance. These are international institutions funded by several developed countries with the specific objective of advancing climate goals – usually in lesser developed countries. Examples include the [Global Environment Facility](#), [Adaptation Fund](#), and [Green Climate Fund](#). Climate finance is largely dispersed as grants and concessional loans.

The first recipients of climate finance generally include national or subnational governments, development finance institutions, research institutions or non-governmental organisations (NGOs) from donor countries or those based in the recipient countries. These institutions are typically responsible for managing disbursement to final beneficiaries. Many developing countries have established regional and/or national funds which aggregate domestic, international and private resources and facilitate their management and distribution.



Climate finance for agriculture, forestry and fishing

Overseas aid spending on climate action has increased significantly in the last decade, with US\$96 billion committed to mitigation and adaptation in 2021 alone. Finance for the agri-food sector (agriculture, forestry and fishing) has also increased but remains comparatively low:

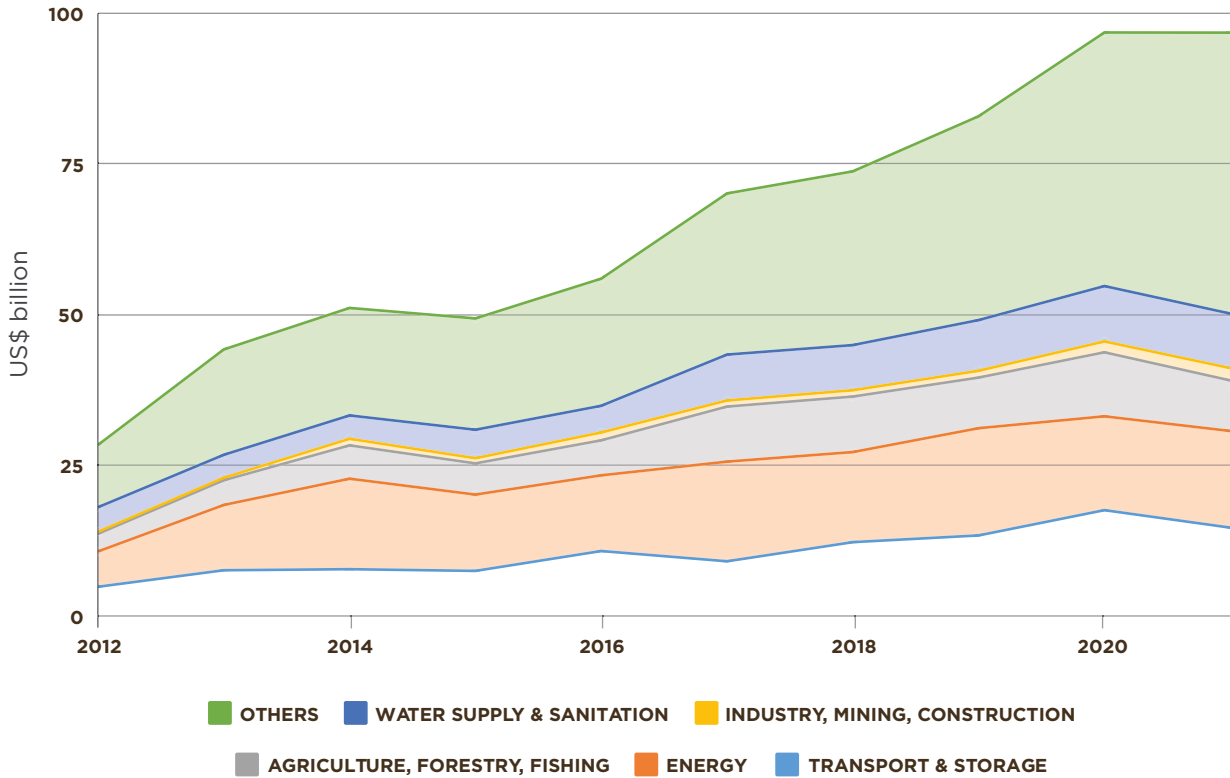
- Since 2012, the agri-food sector has received just 11% of all international public climate finance – approximately US\$7 billion a year.
- In 2021, US\$8.4 billion of international public climate finance went to the agri-food sector compared to US\$16 billion for energy. This is a fraction of the [estimated](#) US\$300-350 billion per year needed to create more sustainable and resilient food systems.

The low level of climate finance for agriculture, forestry and fishing is of concern given the impact of climate change on food production and the extent to which food and agriculture is fuelling the climate and biodiversity crisis. Agricultural productivity has already [declined by 21%](#) compared to a world without climate change, while the food and agriculture sector as a whole is responsible for 29% of [greenhouse gas emissions](#) and [80% of global deforestation](#).

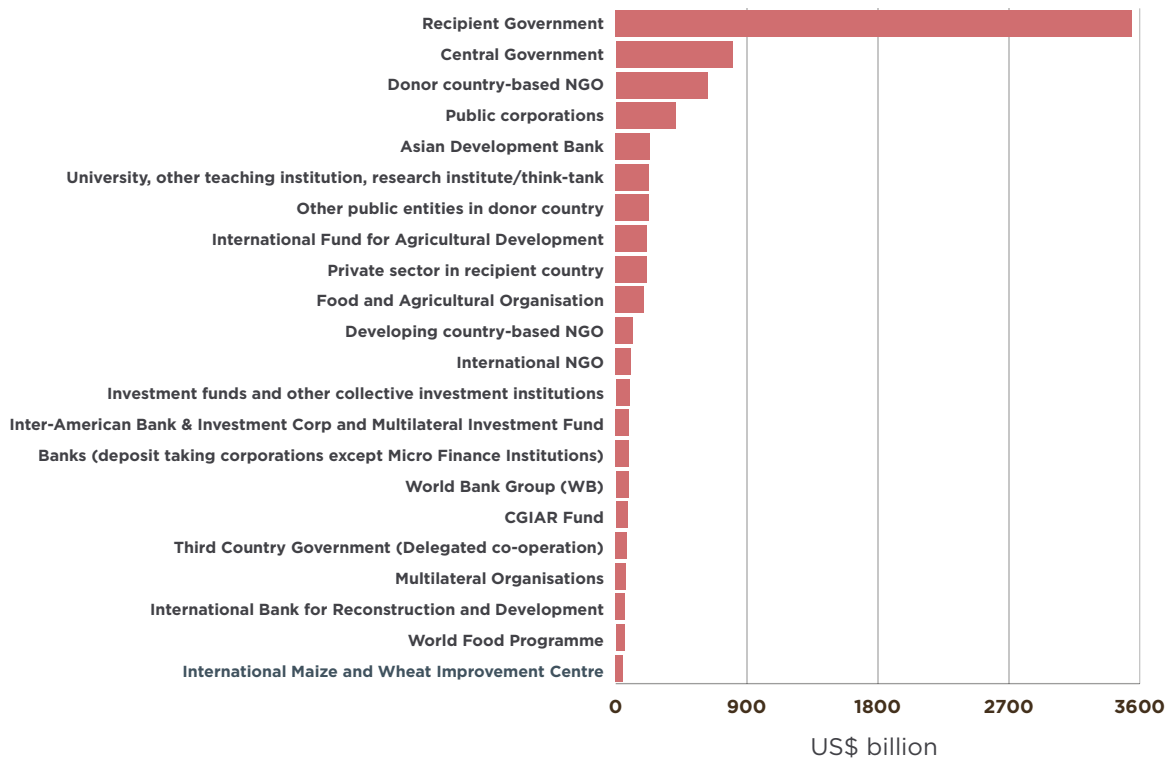
A snapshot of climate finance flows to agriculture, forestry and fishing in 2021 reveals that the World Bank, Germany, Green Climate Fund and European Union contributed around half (54%), amounting to US\$4 billion collectively. Nigeria, India and Ethiopia were the top recipients, receiving a combined US\$1.8 billion for agri-food projects. However, some of the world's most food insecure countries, including Sudan, Sierra Leone and Zambia, each received less than US\$20 million.



Annual public climate finance by sector from 2012-2021



Main climate finance channels of delivery for the agriculture, forestry and fishing sector



Climate finance for family farmers and sustainable agriculture

The IPCC's 2022 report on climate impacts, adaptation and vulnerability concluded that the most effective ways to create more climate resilient and sustainable food systems are to: work with nature; diversify by producing a wider variety of local crops, including native varieties, or by mixing crops, livestock, forestry and fisheries; and to create community-based solutions that build on local expertise and experience. Yet climate finance flows for small-scale family farmers and sustainable agriculture are low.

Small-scale family farmers: 2021 snapshot

Just US\$2 billion or 2% of international public climate finance was directed to small-scale family farmers and rural communities in 2021 – equivalent to a quarter (24%) of international public climate finance directed to the agri-food sector (agriculture, forestry and fishing).

Given that the vast majority (95%) of climate finance for small-scale family farmers comes from public sources, this equates to roughly 0.3% of the US\$653 billion in international climate finance from both public and private sources.

In 2021, the World Bank, African Development Bank, and the UN's International Fund for Agricultural Development (IFAD) were the main funders of smallholder agriculture and rural communities. The majority of this finance (90%) focused on adaptation, and almost half was committed to just six countries – the Philippines, Brazil, India, Mozambique, Ethiopia and Morocco – and to regional projects in Africa.

The majority of the finance (80%) was distributed via recipient governments, donor country NGOs, central donor governments, and IFAD. This approach – potentially based on the misconception that grassroots farmers' organisations lack the organisational capacity to manage large funds – often acts as a barrier to climate finance. For example, [family farmer organisations](#) often find the type of funding available fails to match their needs, that they are not eligible to apply for funds, or they lack information on where and how to apply for funds or the capacity to engage in lengthy and expensive application processes.



Powerful partners in a crisis

The [Asian Farmers Association for Sustainable Development](#) (AFA) created a rapid response loan programme to help farmers diversify production and adapt to the Covid crisis.

The revolving fund, which was managed by AFA, distributed US\$1.8 million in loans to 20,264 small-scale family farmers across eight countries via a network of national and local farmers' organisations. Loans were offered at affordable rates of interest with no collateral requirements and simple eligibility criteria, and were offered alongside advice and support on how to diversify crops and access markets. All the loans were repaid.

In Sri Lanka, Lansantha, who had no source of income at the onset of the Covid-19 pandemic, said: "For me, receiving Rs 30,000 (US\$100) at that time was like receiving Rs 300,000. We were housebound and had no income. I invested the funds in banana cultivation. I also planted turmeric, ginger and manioc. I think I earned back the Rs 30,000 by selling my manioc harvest, and I am yet to harvest bananas."



Finance flows to smallholders per region compared to total finance to the agri-food sector (agriculture, forestry and fishing) and to overall public climate finance in 2021 (US\$ billion)

Region	Total climate finance US\$ billion	Finance for the agri-food sector US\$ billion	Finance for smallholders & rural communities US\$ billion	Smallholders & rural communities % of total climate finance	Smallholders & rural communities % of agri-food finance
Africa	28.4	4.35	1.03	3.62	23.61
America	13.0	0.84	0.26	2.13	32.98
Asia	28.3	1.66	0.56	1.97	33.55
Central America & Caribbean	2.1	0.10	0.0	2.24	47.0
Europe	7.6	0.29	0.02	0.28	7.24
Middle East	1.3	0.06	0.002	0.16	3.33
Oceania	1.4	0.09	0.01	0.64	10.0
South America	2.1	0.20	0.04	2.00	21.00
Unspecified	12.5	0.79	0.07	0.53	8.35
Total / Average	96.8	8.38	2.05	2.12	24.44



Sustainable agriculture and agroecology: 2021 snapshot

Only a fifth (19%) of the US\$8.4 billion in international public climate finance spent on the agri-food sector in 2021 was used to support sustainable practices (US\$1.6 billion). This is dwarfed by the [estimated US\\$470 billion a year](#) in government subsidies which support agricultural practices that are harmful to people and the environment.

Further, US\$183 million of international public climate finance was spent on projects that included agroecology in their description – just 2.2% of spending on agriculture, forestry and fishing. The FAO says [agroecology](#) – which works with nature and empowers local communities – is one of the most promising approaches in the effort to create more resilient and sustainable food systems.

Africa received more than half the finance for sustainable practices while just 7% was spent in South America and 2% in Central America and the Caribbean. A total of US\$1.4 billion was channelled to activities mainly focusing on adaptation and US\$900 million to activities with a focus on mitigation goals. US\$680 million went to projects supporting both mitigation and adaptation.

Germany, Norway, the EU, World Bank and the African Development Bank were the largest contributors to sustainable agriculture, spending US\$813 million collectively in 2021. However, [analysis](#) shows that even the EU – one of the biggest funders of sustainable agriculture – directed almost half its climate finance spend for the agri-food sector towards conventional and industrial agriculture from 2016-18, and only 2.7% (US\$9.16 million) to projects supporting agroecology.



A close-up photograph of breadfruit plants. Several large, green, bumpy breadfruit fruits are visible, some hanging from the stems. The background is filled with large, dark green, glossy leaves. The lighting is bright, highlighting the texture of the fruits and the veins of the leaves.

Breadfruit: Fiji's super crop

Kaitu Erasito is a family farmer from Fiji. With support from the [Pacific Island Farmers Organisation Network](#), he is working with other farmers in his community to trial locally appropriate adaptation techniques.

Kaitu has planted breadfruit trees alongside other crops like pineapple and cassava to diversify production and build climate resilience. Breadfruit trees are drought resistant and are seldom uprooted by cyclones and storms. Breadfruit is also a nutritious staple food eaten across the Pacific – roasted, baked, boiled, fried, or dried and ground into flour.

To protect more vulnerable crops, such as papaya, the farmers are also using simple techniques like pruning, which both increases productivity and prevents trees from being destroyed by cyclones.

Tree planting also helps reduce emissions, as trees sequester carbon during their lifetimes.



Conclusion

Analysis of OECD climate-related finance flows reveals that the agri-food sector receives a relatively small amount of climate finance. Furthermore, only a fraction of spending in the sector is targeted at small-scale family farmers and sustainable agriculture, despite the critical importance of these for climate adaptation and mitigation, food security and sustainable development.

As the climate crisis pushes the global food system ever closer to collapse, it is vital governments recognise small-scale family farmers as powerful partners in the fight against climate change and ensure that:

- **Climate finance flows to sustainable climate-resilient practices is increased - including agroecological approaches.** This means funds to support diverse, nature friendly approaches and to create community-based solutions that build on traditional expertise and experience.
- **Small-scale family farmers have direct access to more climate finance.** Financing mechanisms and funds should be developed with farmers' organisations in order to meet farmers' needs and to ensure longer-term, flexible funding so that communities can determine their own priorities.
- **Small-scale family farmers' role as** powerful catalysts for climate action, food system transformation and the protection of biodiversity is acknowledged and they are given a real say in decision-making on food and climate at the local, national, regional and international level. This includes decisions around climate finance, adaptation planning, land reform and agricultural subsidies.



This report is published by family farmer organisations and networks representing over 35 million farmers around the globe and is supported by the [Foundation for Farmers Organisations and Restorative Action](#). The analysis was conducted by [Climate Focus](#).



The farmers networks include: Asian Farmers Association for Sustainable Rural Development (AFA), Confederation of Family Producers' Organizations of Greater Mercosur (COPROFAM), Eastern Africa Farmers Federation (EAFF), Eastern and Southern Africa Small-scale Farmers Forum (ESAFF), Maghreb and North African Farmers Union (UMNAGRI), Network of West African Farmers' and Producers' Organisations (ROPPA), Pacific Island Farmers Organisation Network (PIFON), Regional Rural Dialogue Programme (PDRR), Regional Platform of Farmers' Organizations in Central Africa (PROPAC) and the World Rural Forum (WRF).



This work was made possible through the support of the [Climate Emergency Collaboration Group](#), a sponsored project of Rockefeller Philanthropy Advisors.

