Briefing Note Twelve (January 2024) Agriculture and Food Systems in Canada's Climate Finance

Highlights

- 1. COP28 was an important milestone for advancing the nexus between food systems transformation, agriculture and climate. On the first day, 159 countries signed onto an Emirates Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action, committing to integrate food systems in their Nationally Determined Commitments by 2025. It was accompanied by the Alliance of Champions for Food Systems Transformation (Brazil, Cambodia, Norway, Rwanda and Sierra Leone) and a civil society Call to Action for Food Systems Transformation.
- 2. But there was less progress in the UNFCCC process itself. While a first Food, Agriculture and Water theme day took place at COP28, there was less progress than hoped in integrating food systems transformation in the outcomes of the Global Stocktake and in joint work in implementing climate action on agriculture and food security, adopted at COP27.
- 3. Climate smart agriculture one of four key pillars for Canada's \$5.3 billion climate pledge.

 But to date (December 2023) only \$151 million can be identified as projects committed to this goal, which is only 5% of total resources allocated from the \$5.3 billion pledge, with 80% focused on adaptation, and more than half (56%) implemented by CSOs. However, a very large share of resources allocated to date (56%) cannot be allocated to the sector priorities due to a lack of information.
- 4. Since the first climate pledge in 2016/17, support for climate smart agriculture concentrated with International Fund for Agriculture and Development (IFAD). Two-thirds of all climate smart investments since 2016/17 have been allocated as loan finance to IFAD -- \$340 million in 2020/21 under the first \$2.65 billion climate pledge.
- 5. Since 2018, Canada ranks high among DAC peers in its commitment to climate smart agriculture. As a three-year average commitment, from 2018 to 2020, Canada ranks 6th in its allocation of climate finance to agriculture, fisheries and forestry sectors (due in part to its large loans to IFAD during this period).
- 6. Overall donor support for climate smart agriculture with small holder farmers is very weak. IFAD calculates that only 1.7% of climate finance was directed to small-holder farmers for the years 2017 and 2018. A more recent study put this share at 0.3% of climate finance. According to the FAO climate change is already harming food production, with 735 million people facing hunger and 3 billion lacking access to healthy diets.

Briefing Note Twelve (January 2024) Agriculture and Food Systems in Canada's Climate Finance

1. A breakthrough in integrating food systems transformation at COP28

COP28 in December 2023 marked an important milestone for agriculture and food systems, signifying a key breakthrough on the nexus between food, agriculture and climate. The need for food systems transformation was catalyzed at this COP and "resilient food systems" were acknowledged as key adaptation measures for the first time in a UNFCCC outcome.

It is widely accepted that agrifood systems contribute about one third of human produced greenhouse gas emissions and account for about 15% of fossil fuel use annually. According to the FAO climate change is harming food production, with 735 million people facing hunger and 3 billion lacking access to healthy diets. At COP 28 the FAO laid out a road map for bringing global agrifood systems in line with the 2015 Paris agreement (keeping global warming below 1.5 degrees Celsius while addressing hunger.¹

Highlights relating to food, agriculture and climate at COP28 included:

The Emirates Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action
The Declaration, launched on the first day of COP28, has been endorsed by 159 countries including
Canada. While not a legally binding UNFCCC outcome, it commits signatories to integrate food
systems actions in their Paris Agreement Nationally Determined Commitments (NDCs) by 2025. It
commits governments to "continue to scale-up and enhance access to all forms of finance from the
public, philanthropic and private sectors - including through blended instruments, public-private
partnerships and other aligned efforts - to adapt and transform agriculture and food systems to
respond to climate change."

The Declaration was welcomed by civil society as an important first step by many governments that agriculture and food systems, including the role of small-scale farmers, are finally on the COP agenda. But at the same time, it lacked specific actions and measurable targets, including the phasing out of fossil fuels in the sector.

¹ FAO, *Achieving SDG 2 without breaching the 1.5° threshold: A global roadmap, Part I,*" December 2023, accessed at https://www.fao.org/documents/card/en/c/cc9113en and Tania Karas, "FAO's net-zero plan for food systems lack ambition, experts say," Devex, December 11, 2023, accessed at https://www.devex.com/news/fao-s-net-zero-plan-for-food-systems-lacks-ambition-experts-say-106787.

² Emirates Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action, December 2023, accessed at https://www.cop28.com/food-and-agriculture.

- The Alliance of Champions for Food Systems Transformation (ACF)

 The Alliance of Champions was launched at the same time as the Declaration. The Champions Brazil, Cambodia, Norway, Rwanda, and Sierra Leone pledged to take push a "whole of government" towards more sustainable food systems. These countries have committed to a set of defined goals in ten priority intervention areas, an accountability mechanism and a deadline to report progress by 2025. Brazil, Norway and Sierra Leone are Co-Chairs of the Alliance. Membership is open to governments beyond the five initial Alliance members.
- FAO Roadmap Global Roadmap on Achieving SDG 2 in line with the Paris Agreement

 The FAO report seeks urgent climate finance for ten priority areas, including livestock, crops, healthy diets, clean energy, fisheries and food waste, through 120 recommendations for action. The roadmap has been criticized for its incremental approach to the current industrial food system and its neglect of fossil fuels in the food system. However, it sets out some goals reducing methane emissions from livestock by 25% by 2030 over 2020 levels, achieving carbon neutrality for agrifood systems by 2035, eliminate hunger by 2030, and achieve healthy diets for all people by 2050.
- ➤ Call to Action for Food-Systems Transformation At COP28, more than 200 non-state actors, including CSOs, research institutions, farmers organizations and philanthropies, have joined a Call to Action around a shared vision and priority actions to transform food systems. Endorsers of the Call also commit to sharing their own statements of action towards this shared agenda. The Call sites 10 pathways for transformation and sets out an approach to achieve its goals. Signatories includes some major foundations such as Rockefeller, Bezos Earth Fund, and the Mo Ibrahim Foundation.
- > **UNFCCC Global Stocktake** The first Food, Agriculture and Water thematic day took place at COP28. While the attention to these issues represented a milestone, progress within the COP process

- 1. Centre our efforts on frontline food systems actors, with a particular focus on women and youth, to ensure they have voice and agency in decision-making, and to support, acknowledge, and reward their efforts in feeding the world while respecting planetary boundaries and managing ecosystems;
- 2. Promote a just transition, including by advancing equitable livelihoods and meaningfully engaging stakeholders and rightsholders in processes and plans that affect them, and addressing land and resource tenure for marginalized groups;
- 3. Respect the Rights of Indigenous Peoples and Local Communities, including their rights to Free, Prior, and Informed Consent, land, and self-determination, recognizing the leading role they play in the production of sustainable food systems;
- 4. Promote multi stakeholder collaboration and opportunities for learning, exchange and coordination between Non-State Actors and with Governments at all levels.

³ Alliance of Champions for Food Systems Transformation, December 2023, accessed at https://allianceofchampions.org/?mkt tok=Nig1LUtCTC03NjUAAAGQAqt7bqAwSs6MlXO4Qv0KJmOL05tpvIYehb3x wkxSlumgh3EeJ4KwdXHEcBsD Ob7HQdKgGsU0ZJGuG6CO3D6La-KjU TWPLzajHlBu8s1y6DKQ.

⁴ FAO, op. cit.

⁵ Karas, op. cit.

⁶ Call to Action for Food Systems Transformation, December 2023, accessed at https://climatechampions.unfccc.int/list-of-signatories-of-the-food-systems-to-call-to-action/

⁷ In implementing a collective food systems transformation agenda, we will:

continues to be modest. The UNFCCC Global Stocktake of action in support of the Paris Agreement had scattered references and includes language on implementation of multi-sector solutions, such as resilient food systems. But missing from the Stocktake are any references to emissions from food systems, reforming these systems for climate change mitigation, or any mention of climate finance. The focus is primarily on adaptation measures.⁸ Ongoing UNFCCC discussions since last year on joint work on implementation of climate action on agriculture and food security made no progress at COP28, bogged down in divisions between G77 plus China and developed countries.

Funding announcements at COP28 Accompanying the launch of the Emirates Declaration, UAE and the Bill and Melinda Gates Foundation announced \$200 million in funding focusing on agriculture research with organizations like CGIAR, scaling agriculture innovations and technical assistance to implement the Declaration. The UAE also announced a separate \$200 million to deliver on the Declaration's objectives, which includes collaboration with Italy, the United States, the United Kingdom, World Bank, FAO, IFAD, and CGIAR. Canada made no financing announcements relating to agriculture and food security.

2. Climate smart agriculture and food systems in Canada's climate finance

Climate smart agriculture and food systems is among the four thematic areas outlined in Canada's Policy Framework that are priority for the allocation of its \$5.3 billion in climate finance (2021/22 to 2025/26): "Canada will work with developing countries to support smallholder farmers and food value-chain actors, especially women, to better adapt to climate change, reduce their greenhouse gas emissions through improved access to and adoption of climate-smart agriculture and food system practices and agricultural nature-based climate solutions." ¹⁰

To date (December 2023), a total of \$151 million can be identified as projects committed to "climate smart agriculture" from the \$5.3 billion pledge. These investments are 5% of those allocated. With the sector allocation for more than \$1,749 million in commitments unknown (allocated to funds for which the sector priorities are not indicated), this amount is likely a significant under-estimate of the actual total to this thematic area. Approximately 80% of these projects are for adaptation activities. More than half (56%) of these agriculture commitments are being implemented by CSOs.

Canada has not set out its strategies or approaches in strengthening climate smart agriculture and food systems, despite a number of exploratory sessions with Canadian CSOs. Its overarching Feminist

⁸ Whitney Bauck, "Food is finally on the table: COP28 addresses agriculture in a real way," Guardian, December 17, 2023, accessed at https://www.theguardian.com/environment/2023/dec/17/cop28-sustainable-agriculture-food-greenhouse-gases.

⁹ See https://www.gatesfoundation.org/ideas/media-center/press-releases/2023/12/uae-climate-adaptation-funding-food-security.

¹⁰ See GAC, Canada's Climate Finance for Developing Countries, 2022, accessed online at https://www.international.gc.ca/world-monde/funding-financement/climate-developing-countries-climatique-pays-developpement.aspx?lang=eng#fn5

International Assistance Policy places a high priority in tackling gender-based vulnerabilities, supporting women's leadership and decision making in climate change mitigation, ensuring financing that address the particular needs and challenges of women and girls. But little mention is made of adaptation or climate initiatives directed to vulnerabilities in agriculture, forestry and fisheries.

A number of trends in climate finance for agriculture, forestry and fisheries, however, can be gleaned from Canada's allocations and disbursements for its \$2.65 billion climate pledge (2015/16 to 2020/21) and its \$5.3 billion climate pledge (2021/22 to 2022/23).

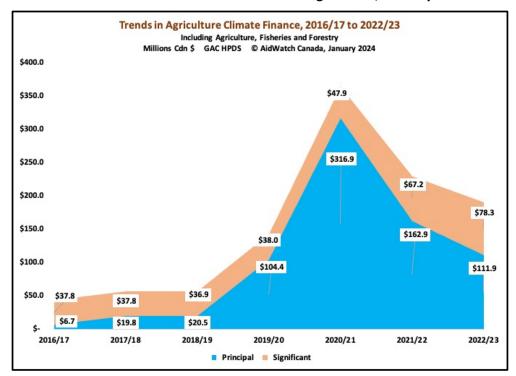
1. Trends in Canadian Climate Objectives in the Agricultural Sector

Taking both climate pledges together, Canadian climate finance directed to the broad sector of agriculture, forestry and fisheries from 2016/17 to 2022/23 was 17% of total principal purpose climate finance disbursements. Agriculture alone was 27% of adaptation disbursements and 5% of mitigation disbursements. Support for this broad sector (agriculture, forestry and fisheries) grew significantly in 2019/20 and 2020/21. (Chart One)

Support for agriculture, however, was highly concentrated in two initiatives. Two thirds (67%) of principle purpose climate finance disbursements for agriculture (\$340 million out of \$511 million) is accounted for by two large loans in 2020/21 with the International Fund for Agriculture Development (IFAD):

- > IFAD Climate Finance Loan, 2019 to 2021 \$150 million
- Additional Support IFAD Climate Finance Loan, 2019 to 2021 \$190 million

Chart One: Trends in Climate Finance Directed to Agriculture, Forestry and Fisheries



In more recent years, 2021/22 and 2022/23, 50% of the \$121 million in disbursements for agriculture in adaptation climate finance were allocated to three projects – Climate Support for IFAD (31%), VENIR - CGIAR (10%) and Support to the First Replenishment of the Green Climate Fund (9%).

Over four years, 2019/20 to 2022/23, on average 42% of all agricultural sector disbursements (GAC and Department of Finance) were related to climate smart agriculture. Including fishing and forestry, the share increases to 48%.

Civil society organizations (CSOs) implemented \$86.3 million in climate disbursements related to agriculture, forestry and fisheries between 2019/20 and 2022/23, making up 9% of these sector disbursements (principal purpose and significant purpose). Discounting the disbursements for IFAD (see above), CSOs implemented 16% of the balance of agriculture, forestry and fisheries climate disbursements in this period. Almost half (48%) of disbursements through CSOs were made in 2022/23 involving a wide range of Canadian and Foreign CSOs.

2. International Comparisons, 2018 to 2020¹¹

Canada ranks strongly among climate finance providers in allocating climate finance in the agricultural sector, in large part due to Canada's large commitments to IFAD.

- ➤ Canada ranks 6th in its total allocation of climate finance towards the agriculture / forestry / fisheries sector (three-year average commitments, 2018 to 2020, principal and significant purpose). (Annex One, Table One)
- Canada ranked 2nd, in its share of climate finance directed to agriculture, forestry and fisheries, at more than 25% of its total climate finance as reported to the DAC in 2020. (Annex One, Table Two)

3. International Fund for Agriculture Development (IFAD)

3.1 Overview

Since 2016, Canada has disbursed \$376 million in climate finance to IFAD, including both principal and significant purpose climate finance, making up 67% of Canada's overall support for principal purpose climate finance for agriculture. A major part of these disbursements (\$340 million) has been the two loans noted above. These loans were provided as a contribution to IFAD's overall climate program in support of adaptation and mitigation for smallholder farmers. Because it is a programmatic contribution, it is not possible to identify any specific IFAD programs or projects to which the \$340 million in loans were directed.

¹¹ Note that this section and the Tables in the Annex are derived from DAC statistics, which cannot be compared with those above from GAC's Historical Projects Dataset. DAC statistics are based on a calendar year and are calculated in US dollars.

IFAD is a very significant multilateral organization in climate and environmental programming in support of smallholder producers and related food systems. For its 11th replenishment cycle (2019 to 2021) IFAD exceeded its commitment that at least 25% of the Fund's US\$3.5 billion program of loans and grants would be climate-focused. A mid-term review in 2019 estimated that 34% (US\$568 million) of IFAD's total investments in that year were directed to these purposes.

IFAD has a target of 40% of its resources be directed to projects and activities that are climate focused for the 12th replenishment period (2022 to 2024).¹² Allocating US\$246 million to climate related projects in 2022, IFAD reported that only 30% of its resources were allocated to climate finance. Of this amount 96% was directed to adaptation projects.¹³ IFAD management has taking action to exceed the 40% goal in 2023 and 2024.

More than half (56%) of IFAD's adaptation climate finance supports smallholder crop and food production. A further 36% is directed to other agricultural and ecological support resources, 8% to industry, manufacturing and trade, and 0.5% to water and wastewater systems. 14

Geographic allocations have been Sub-Saharan Africa -48%; Asia/Pacific -37%; Latin America and the Caribbean -3%; and Other Regions -12%.

Canada two loan programs has been allocated to these core IFAD program for climate focused activities. 16

IFAD provides both grants and loans in its program financing with partner countries. Of the US\$2.3 billion allocated since 2016 for all projects, only 19% of this finance was in the form of grants, 11% were deemed highly concessional loans, 52% were concessional loans, and 18% were loans on ordinary terms. ¹⁷ Grant finance is a key resource for least developed countries and civil society partners. A 2018 evaluation synthesis recommended that grants be scaled up: "More grant funds should be mobilized for longer-term partnership-building with CSOs, farmers' organizations, indigenous groups and the private sector in the

2022?p | back url=%2Fes%2Fweb%2Fknowledge%2F%3Fenlta%3D3%26stest%3D7%26delta%3D10.

¹² IFAD, *Climate Action Report 2020*, November 2021, accessible at https://www.ifad.org/en/web/knowledge/-/climate-action-report-2020. For IFAD12, the focus will be the following: 40 per cent of financing will be directed to climate (25 per cent in IFAD11),90 per cent of projects designed will be focused on improved adaptation and targeting, 35 per cent of projects will be gender transformative (25 per cent in IFAD11), 60 per cent of new designs will prioritize nutrition (previously 50 per cent) and young people; five projects will pilot the specific targeting of persons with disabilities, 10 projects will have indigenous peoples as the main target group and five projects will integrate information and communications technologies for development (ICT4D) or digital agricultural approaches. (See https://webapps.ifad.org/members/eb/135/docs/EB-2022-135-R-4-Rev-1.pdf.

¹³ IFAD, *Climate Action Report, 2022*, November 2023, accessed at https://www.ifad.org/es/web/knowledge/-/climate-action-report-

¹⁴ Climate Action Report, 2020, op. cit.

¹⁵ Climate Action Report, 2020, op. cit.

¹⁶ For examples of IFAD's climate focused projects see Annex One, IFAD Climate Finance by Projects (January 2019 to December 2020, in *Climate Action Report 2020*, accessible at https://www.ifad.org/en/web/knowledge/-/climate-action-report-2020 For projects approved in 2022, see IFAD Climate Action Report, 2022, op. cit., pages 32 to 38.

¹⁷ See https://www.ifad.org/en/lending-data.

form of SMEs to strengthen their capacities, particularly in countries where governments are less supportive of the use of loans for these activities.... [S]upport to CSOs should take a long-term perspective on institutional effectiveness and sustainability beyond the project level, for example through support of CSO apex or umbrella organizations.¹⁸ There is no indication that grants have been scaled up in 2022.¹⁹

3.2 IFAD Climate Programs

A flagship IFAD program for channeling climate and environmental finance to small scale farmers has been IFAD's Adaptation for Smallholder Agriculture Program (ASAP) launched in 2012. It is the largest global fund dedicated to supporting adaptation of poor and smallholder farmers to climate change, with resources totalling US\$316.2 million. As of April 2021, US\$205 million out of this US\$316 million has been disbursed to 42 projects.²⁰ Canada contributed Cdn\$10 million in the start-up for this Program in 2014.

In January 2021, IFAD launched ASAP+, an enhanced version of ASAP, with a target of mobilizing US\$500 million in a three-year window, 2022 to 2024. It will form an important part of the Rural Resilience Program, a broad and holistic program of work on the themes of climate change, youth, food security and the environment. ASAP+ has been developed outside the core financing of IFAD and currently has four donors (Qatar Fund for Development, Governments of Austria and Ireland, and Germany's BMZ). As of 2022, US\$91.7 million has been raised for ASAP+. Canada's loans will not be applied to this initiative.

IFAD taps existing climate finance sources such as the Adaptation Fund, the Green Climate Fund and the Global Environmental Facility. By December 2020, it had mobilized US\$145 million from these sources. It is also the lead agency managing the Global Environment Fund's Resilience Food Systems program, being implemented in 12 dryland regions of Sub-Saharan Africa.²² n 2022, the GCF approved the Inclusive Green

¹⁸ IFAD, "Building partnerships for enhanced development effectiveness – a review of country-level experiences and results: Evaluation synthesis," March 2018, accessed at https://www.ifad.org/documents/38714182/40240768/ESR+partnerships for+web.pdf/b12c21eb-3a5a-40f3-89e7-ee0b15990c34.

¹⁹ See IFAD, Climate Action Report, 2022, op. cit.

²⁰ See https://climateinitiativesplatform.org/index.php/Adaptation for Smallholder Agriculture Programme; IFAD, Climate Action Report 2020, November 2021, accessible at https://www.ifad.org/en/web/knowledge/-/climate-action-report-2020; and IFAD, Thematic evaluation of IFAD's support to smallholder farmers' adaptation to climate change, July 2020,

 $[\]frac{\text{https://www.ifad.org/documents/38714182/41120203/IOE+Approach+Paper+TE+of+IFAD+Support+to+Smallhold er+Climate+Adaptation 11+July+2020.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203/IOE+Approach+Paper+TE+of+IFAD+Support+to+Smallhold er+Climate+Adaptation 11+July+2020.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203/IOE+Approach+Paper+TE+of+IFAD+Support+to+Smallhold er+Climate+Adaptation 11+July+2020.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203/IOE+Approach+Paper+TE+of+IFAD+Support+to+Smallhold er+Climate+Adaptation 11+July+2020.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e?t=1605607227000}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-3c9d5c27ae4e}{\text{https://www.ifad.org/documents/38714182/41120203.pdf/2755f264-e84a-fdd2-5064-$

²¹ The Rural Resilience Program has three main pillars: 1) increasing adaptation for smallholder agriculture programs, 2) the Initiative for Sustainability, Stability, and Security in Africa (3S Initiative) as an African-led initiative for increasing opportunities for poor rural youth, and 3) the Green Climate Fund Umbrella Program for the Great Green Wall Initiative of the Sahel (GCF-GGWI), progressing history since its conception in 2007. See https://trcjha.com/wp-content/uploads/2022/04/TRCJHA-2021-0003.pdf. For more on ASAP+ see Teresa Welch, "IFAD launches \$500 million fund to channel climate finance to smallholders," DevEx, January 25, 2021, accessed at https://www.devex.com/news/ifad-launches-500m-fund-to-channel-climate-finance-to-smallholders-98973

²² IFAD, *Climate Action Report 2020*, November 2021, accessible at https://www.ifad.org/en/web/knowledge/-/climate-action-report-2020

Financing Initiative project, which is a large project that received a GCF grant of US\$114.7 million and leveraged an additional US\$81.3 million.²³

IFAD's climate finance has a comprehensive and inclusive approach to addressing climate risk, scaling adaptation to reach all poor smallholders, supporting off-farm strategies to diversity livelihoods, strengthening disaster risk management and early warning systems, weather index insurance for smallholders, and the management of the natural resources of soil, pastures and coastal areas.

3. Climate-smart agriculture central to climate initiatives

A priority for climate smart agriculture is central to a human rights and climate justice approach to Canada's initiatives for tackling the climate emergency. Smallholder farmers are among the most vulnerable populations for climate change impacts. In Asia and Africa, smallholder farmers provide up to 80% of the food produced, but with livelihoods that often rely on a single crop for income. They are disproportionately affected by unpredictable weather patterns, shifting seasons, increasing natural disasters and other climate risks.

Yet, they receive limited attention in investments in rural infrastructure, access to credit and viable markets; they have limited voice in policy debates on setting governments' climate priorities. In a study by IFAD and the Climate Policy Initiative, a mere 1.7% of climate finance was directed to smallholder farmers in developing countries (for the years 2017 and 2018).²⁴ In more recent study for farmers' organizations and networks, the researchers found that small holder farmers are on the front line of climate change producing 35% of the world's food, but they have received just 0.3% of climate finance.²⁵

The UN's scientific body, the International Panel on Climate Change (IPCC), in its 2022 Sixth Assessment Report, highlighted significant impacts of climate change on agri-food systems. They suggested that "globally 10 percent of the current suitable area for major crops and livestock are projected to be climatically unsuitable in mid-century and 31 to 34 percent by the end of the century under [current] high emission scenarios." Moreover, they point out that the potential to compensate global crop production losses would become increasingly problematic after 2°C warming.²⁶

²³ IFAD, Climate Action Report, 2022, op. cit. page 34.

²⁴ Chiriac, D., Naran, B., and Angela Falconer, *Examining the Climate Finance Gap for Small-Scale Agriculture*, IFAD and Climate Policy Institute, November 2020, accessed at https://www.ifad.org/en/web/knowledge/-/publication/examining-the-climate-finance-gap-for-small-scale-agriculture

²⁵ Climate Focus, Untapped Potential, An analysis of international public climate finance flows to sustainable agriculture and family farmers, a report prepared for family farmer organizations and networks, November 2023, accessed at https://www.ruralforum.org/wp-content/uploads/2023/11/GSCC Family Farmers ENG-1.pdf.

²⁶ Campbell, B., Climate change impacts and adaptation options in the agrifood system – A summary of recent IPCC Sixth Assessment Report findings. Rome, FAO 2022, accessed at https://doi.org/10.4060/cc0425en.

A 2023 FAO report documents how changing climate conditions compound inequalities for women in agriculture.²⁷ Agriculture and food systems are significant employers of women globally. In Sub-Saharan Africa and some Asian countries women make up more than half the agricultural labour force. But women face significant barriers with limited access to essential resource such as land tenure, services, finance and digital technologies. Discriminatory norms limit women's access to essential climate information. Women in rural areas have limited resilience capacity and restricted options in responding to climate change, resorting to short term coping strategies. Women working in agriculture "tend to do so under highly unfavourable conditions," compounded by climate induced weather shocks.

The IPCC also pointed to the high potential for maladaptation solutions to climate change, exacerbating existing inequalities, especially in the context of agriculture, forestry and fisheries practices. For example, short term irrigation technologies can affect longer term water access for smallholders unable to afford such technologies. Adaptive strategies can also affect longer-term livelihoods, where for example, a shift from pastoralism to a locked-in dependence on crops is impacted by increasingly severe droughts. The IPCC suggests that strategies and actions that combine agricultural development and climate adaptation should be carefully implemented. They need to take full account of medium- and long-term economic and environmental trade-offs, including the importance of simultaneously addressing drivers for structural vulnerabilities (poverty, inequalities, gender).²⁸

²⁷ FAO, *The Status of Women in Agrifood Systems*, Rome, 2023, accessed at https://www.fao.org/3/cc5343en/cc5343en.pdf.

Annex One

Table One: Top Ten DAC Providers, Support for Climate Objectives in Agriculture, Three Year Average, Principal and Significant Purpose, 2018 to 2020 (Commitments)

	Provider	Total Dollar Amount (Millions US\$)	Climate Agriculture Share of Total Climate	Climate Agriculture Principal Purpose Share of Total Climate Agriculture
1	Germany	\$379.9	25.0%	47.3%
2	United Kingdom	\$294.1	19.3%	90.3%
3	France	\$218.3	14.4%	89.0%
4	United States	\$141.9	9.3%	63.4%
5	Netherlands	\$132.1	8.7%	54.3%
6	Canada	\$102.1	6.7%	90.7%
7	Japan	\$85.6	5.6%	18.9%
8	Sweden	\$68.6	4.5%	68.9%
9	Switzerland	\$40.7	2.7%	36.4%
10	Norway	\$33.1	2.2%	67.3%
	Top Ten Total	\$1496.4	90.0%	65.7%
	Total Climate for Agriculture	\$1,662.2		

Source: DAC Climate Finance CRS; Agriculture includes agriculture, fisheries and forestry sector codes

Table Two: Top Ten DAC Providers, Agriculture Climate Finance as Share of Provider Total Climate Finance, Three Year Average, Principal and Significant Purpose, 2018 to 2020, Commitments

(Including only providers with total three-year average climate finance higher than \$25 million)

	Provider	Climate Agriculture as Share in Total Climate Finance
1	Luxembourg	38.0%
2	Canada	25.6%
3	Ireland	24.5%
4	Belgium	20.2%
5	United Kingdom	19.5%
6	Netherlands	18.6%
7	Switzerland	15.7%
8	United States	13.6%
9	Sweden	13.1%
10	Spain	12.6%
	Total Agriculture Climate Finance	11.3%

Source: DAC Climate Finance CRS; Agriculture includes agriculture, fisheries and forestry sector codes