Family farming and climate-resilient agrifood systems
Family farming plays a critical role in addressing the current challenges posed by climate change.

Producing about 80 percent of the world’s food in value terms, family farmers have unique potential to lead the transition towards more inclusive, effective, sustainable and climate-resilient agrifood systems. Rooted in their communities and understanding local ecologies, they are also well positioned to offer contextualized, comprehensive, and long-term solutions to tackle the increasingly serious climate crisis.

Food and agricultural production practices applied by family farmers – including agroecological and integrated systems; recycling of nutrients, energy and waste; natural pest control; crop diversification; and efficient management of natural resources and soil health – present promising opportunities to address climate change, given that they allow high-level adaptation capacity to new environmental circumstances. This adaptation capacity is embedded in the local knowledge that is being continuously renewed through observations and farmers’ experimentation.

The application of these practices will reduce the need for external inputs, lower production costs and strengthen resilience and economic viability. They will also generate positive externalities and contribute to climate change adaptation and mitigation.

Empowering family farmers as part of climate actions at global, regional, national and local levels across agrifood systems will therefore be fundamental, while also dependent on national and local ecosystems and the cultural and socioeconomic contexts.

Climate change has impacts on family farming.

Despite family farmers’ key role, evidence shows they are often more vulnerable to the effects of climate change. Given the structural inequalities that result from poverty and social exclusion, they face multiple barriers and have limited resources to adapt. They may lack access to assets, information, technology, markets, and financial support for climate-resilient farming. A key constraint regarding limited and uneven access to productive natural assets, such as water and land, is further amplified by climate change.
The United Nations Decade of Family Farming 2019-2028 (UNDFF) promotes family farming as key for climate-resilient agrifood systems by:

- Promoting integrated public policies improving and securing family farmers’ access to and sustainable use of natural resources, value-adding activities and marketing strategies.

- Strengthening family farmers’ capacities (knowledge and practices) to support the transition towards more sustainable production practices, allowing the conservation and renewal of natural resources.

- Dedicating specific attention to the empowerment of farmers and local communities, embracing both traditional good practices and innovations and building on science-based evidence.

- Promoting the integration of equality, inclusiveness and diversity of country-level climate change strategies and actions.

- Improving country-level, integrated climate decision-making processes with the effective involvement and participation of family farmers.
In Argentina, Brazil, the Dominican Republic and the Plurinational State of Bolivia, family farmers receive technical assistance to adopt agroecological practices and to produce organically, boosting their income and enabling them to access new markets.

In Cambodia, Ecuador, Kyrgyzstan, Nepal and Nicaragua, women and young farmers receive training on sustainable management of natural resources, agroecology, biodiversity and organic agriculture.

In Cuba, climate initiatives include methods of biological pest control, development of drought-resistant seeds, and strengthening of agroforestry systems.

In Brazil, El Salvador and Türkiye, different initiatives are designing ecosystem and landscape restoration, reforestation, and afforestation programmes.

Different climate-resilient strategies and sustainable production practices have been adopted, such as permaculture nutrition gardens in Eswatini, rooftop cultivation and soil-less cultivation in Egypt, kitchen gardening in India, and biofertilizers in Indonesia and Peru.

In Indonesia and Portugal, community training centres for farmers are implementing demo site plots and professional training using agroecology and regenerative approaches in agriculture.

In Japan, different initiatives are involving livestock farmers in the mitigation of greenhouse gas emissions, supporting small-scale forest producers and developing strategies to reduce the environmental impact of the aquaculture industry.

Madagascar is piloting an agricultural insurance project to support farmers who are coping with the effects of climate change, improving the resilience of farmers and promoting financial inclusion.

In Mexico and Paraguay, rural communities and Indigenous Peoples receive support to adopt new technologies to work with forest products and to make their economic activities more sustainable.

In Spain, payments for environmental services contribute to greater crop diversification and advances in environmental preservation, biodiversity protection and soil improvement.

In Sierra Leone, Timor-Leste and Zimbabwe, rural youth have access to green jobs and are participating in the transition to the green economy.

Putting family farmers at the centre of the transition to climate-resilient agrifood systems: successful experiences ©FAO