



A Framework for Climate Resilient Farming in the Pacific

Pacific Farmer Organisations (PFO)

PFO is the umbrella body for national farmer organisations in the Pacific Island Countries and Territories (PICTs). Agriculture is the main livelihood of the majority (typically 70%+) of the Pacific Islands population. Farmer organisations play a critical role in supporting small farmers to connect, influence, and access information and technologies to improve livelihoods. PFO is a key partner in supporting farmers and rural communities to respond to the challenges of climate change.

PFO is a vibrant and growing network of national farmer organisations that are supporting improved livelihoods for their members and rural communities generally. PFO began operating in 2008 comprising a small group of farmer organisations in five countries, and has grown to embrace 30 member organisations and over 90,000 farming households (55% of members are women farmers) in 12 PICTs (Fiji, Vanuatu, Tonga, Samoa, Cook Islands, PNG, New Caledonia, Timor Leste, Marshall Islands, Federated States of Micronesia, Solomon Islands and Kiribati). PFO's secretariat is based in Fiji with a satellite office in Hawaii.

PFO's **vision** is to make Pacific farmer organisations vibrant, viable and sustainable organisations. Its **mission** is for farmer organisations to be the driving force in securing financial and sustainable livelihoods for rural households in the Pacific.

Supporting farmer organisations and their members to adapt to climate change are necessary conditions for achieving the vision and mission. PFO is seeking to expand and intensify its framework to ensure food secure, resilient and prosperous livelihoods for rural households among its member organisations.

Adaptation Strategy

Since the PICT's contribution to global warming is minuscule, they have no choice other than to adapt and increase resilience. A range of adaptive measures can be deployed with the support of farmer organisations, governments, civil society organisations, and development partners.

Climate change impacts are likely to increase in severity over time and affect the food security and livelihoods of a large number of people. The most significant effects in the short-term are extreme weather events (floods, droughts, cyclones and storm surges). In the longer-term ocean warming and acidification may have catastrophic impacts on Pacific coral reefs and marine ecosystems critical for Pacific economies and livelihoods. This will make agriculture even more important.

The longer-term impacts of rising temperatures, rising sea levels with resulting saltwater inundation and coastal erosion, and ocean acidification and changing rainfall patterns, are likely to pose serious challenges for pacific farmers. These effects are already being felt by PFO members. For example, in Vanuatu, farmers in the northern part of the chain are no longer able to produce vanilla due to climate change. Additionally, on the weather coast of Guadalcanal in the Solomon Islands, the staple sweet potato is rapidly being pushed to its

margins of production due to increased annual rainfall threatening food security for remote populations with few other choices. Climate change is likely to exacerbate already very negative trends in nutrition (particularly of mothers and children) and escalating non-communicable disease and rural–urban migration. There is increasing evidence these climate-driven migrations and economic pressures can increase the potential for civil unrest and conflict.

The poorest and women are likely to be the most impacted. PICTs are already vulnerable to global economic shocks and depend on increasing amounts of food imports. This vulnerability will intensify with increased climate change induced shocks to global food production and trade. Managing and adapting to climate variability in the short term is seen as the best way to prepare for longer-term impacts. Doing so requires intensive and sustained support for farmers to build their capacity to adapt.

Adaptation Measures

Climate resilience must be addressed with other environmental issues such as soil and water degradation, marine resource depletion, pests and diseases, and biodiversity loss. There are three categories of adaptation applicable over different time scales:

- **tactical** adaptation involving short-term adjustments – “no-regrets” measures – to boost resilience and accommodate climate variability;
- **systemic** adaptation involving multiple incremental changes that deliver social, economic and environmental benefits; and
- **transformational** adaptation approaches involving fundamental long-term changes to agricultural systems, involving new technologies, structures, systems of governance and changes in the location of activities.

There is an extensive menu of adaptation options applicable in different PICTs, agro-ecosystems and time scales. These include: climate resilient crop species/varieties; improved soil health and water management; integrated pest and disease management; increased crop diversity; agroforestry and tree-based cropping systems; strengthening indigenous knowledge and farmer innovation capacities; institutional capacity building; strengthening agricultural research and extension; food processing and storage to underpin food security; and many others.

Pacific farmers will need to be at the centre of innovation and adoption if adaptation measures are to succeed. Improved linkages and partnerships are crucial if PICTs are to successfully address the many threats they face regarding climate change, and related food and nutrition security challenges. PFO is a leading regional organisation with the capacity to play a pivotal role in this regard.

The Framework

PFO has unique strengths as a facilitator and enabler of climate adaptation among Pacific Island rural communities. It provides national Farmer Organisations (FOs) with network contacts, information and technical expertise needed to adapt to changing climate and extreme weather events. The PFO member organisations have local networks with trusted relationships between the government, farmers, farmer groups and communities, and the ability to implement locally specific and appropriate responses.

PFO is a well-established and sustainable organisation with deep engagement into remote and isolated rural areas, enabling it to support widely and locally responsive dispersed national farmer organisations in their efforts to build climate resilience and to recover from extreme weather events and other natural disasters. PFO also gives farmers a voice in regional and

international climate change forums, and helps to raise awareness about the challenges they face. This plays a key advocacy role in influencing policy and mobilising support for climate adaptation.

PFOs emerging framework for climate resilient farming in the Pacific has been developed over the last ten years in parallel with the expansion and development of PFO as a network institution, and with the help of several technical and financial partners. Its **objective** is to protect and enhance the livelihoods for Pacific farmers by helping them adapt to the threat of changing climate and natural disasters. The livelihoods of women and girls, particularly in the Pacific, are often dependant on sectors such as agriculture and water resources, where climate change impacts are acute. FOs and PFO are well placed to work with women farmers and with a gender lens to address climate change challenges and build resilience.

The framework has three pillars:

Pillar 1: Climate Resilient Farming Households

PFO adopts a decentralised approach in which national FOs and their members identify priority adaptation needs and plan activities which are supported through cost sharing arrangements and technical backstopping from national and regional agencies, and where appropriate in partnership with the private sector. This typically works as a multi-year objective and results-oriented framework which is implemented through an annual planning and budgeting cycle, which is subject to regular reporting, monitoring and a performance assessment. All feasible options for climate adaption are eligible for support and may include:

Options	Examples of current work	Gaps
Improved access to information (including climate and weather information) and agriculture technologies on climate change adaptation.	<ul style="list-style-type: none"> Diversification of staple crop varieties adapted to climate change (e.g., increased rainfall or drought); Value chains more resilience to climate change (e.g., value adding) 	<ul style="list-style-type: none"> Increase women farmers' access to climate-smart information; Empower women farmers organisations
Training for farmers and their advisors to make timely and informed decisions about managing climate and other risks.	Member FOs have extensive lead farmer networks that are mobilised to train farmers and enable farmer to farmer extension.	Training of trainers in climate smart agriculture and on farm trials / innovation; Gender-smart agriculture framework to plan, implement and assess gender-responsive agriculture
Preparation of guidelines and training materials tailored to national FOs' priorities.	Wide range of materials published in local languages targeting different audiences.	cover all aspects of adaptation including mobilising indigenous and farmer innovation knowledge
ICT4D Partnerships to disseminate and receive information to/from rural communities and develop their capacity to utilise this for improved decision-making.	PIFON has worked with Pacific ICT business to test tools for farmer surveys and mobile phone messaging; FOs with extensive experience in radio programming and social media tools to reach farmers; enhanced databases.	Possibilities for ICT-mobile phone linked early warning systems and seasonal forecasts delivered to farmers via mobile phone and crowd sourcing crop failures and disaster information; Better data collection, management and data-based decision making

Access to technologies and inputs required for the adoption of climate-smart farming methods.	Innovative work on breadfruit and indigenous nut farming systems; papaya value chains.	Addressing gender gaps in access to and relevance of agriculture technologies
Collaboration with agricultural research and extension agencies to conduct on-farm trials and demonstrations.	Current work under the FORI program working with NARES, private sector in FO led research on agroforestry and agroecology	Apply these partnerships to wider climate change related challenges to Pacific agriculture and resilience.
Assistance to communities and households in disaster preparedness and recovery.	FOs well established networks and decentralised field workers have been able to be mobilised effectively	Build DRR capabilities among FOs
Support to vulnerable and disadvantaged groups (including women, youth and people with disabilities) to facilitate their participation in the above activities.	FO have wide reach to communities and expanding skills in vulnerability mapping and analysis.	Support FOs to better consider the differences in the resources available to men and women, their roles, labour burdens and the constraints they face.

PFO and its member organisations have well-established and transparent procedures for implementing sub grant funding in climate adaptation activities at grassroots level. These are specified in annual letters of agreement, annual workplans and budgets, financial reporting and performance evaluation protocols.

Pillar 2: Farmers' Voices

Pacific farmers often struggle to have their voices heard in dialogue on the policies and enabling environment which affects their livelihoods. This is also the case in climate change adaptation. PFO supports national farmer organisations to engage in policy formulation regarding climate change and other key issues, and also facilitates their participation in regional policy forums that enable farmers voices to be heard. Activities that are supported and facilitated by PFO include:

- Convening multi-stakeholder platforms, in particular enabling the voice of women and other small farmers, to gather and analyse information about climate challenges and adaptation measures and communicating these to policy-makers.
- Conduct annual farmer forums in each country to raise awareness about key issues of concern to farming communities.
- Raising the profile of farmer organisations in the Pacific and giving farmers a voice in local, national, regional and international forums.
- Supporting knowledge sharing, advocacy, sensitisation, learning and policy advancement.

Pillar 3: Stronger Farmer Organisations

Pacific farmer organisations vary in their capacity to deliver results for their members. Many are relatively small, immature and isolated from their peers. Capacity building is therefore an important part of PFOs mandate, and includes a range of activities guided by a PFO self-assessment tool, such as training for office-bearers, strengthening administrative and financial management systems, monitoring and reporting (to members, PFO and development partners), conduct of annual general meetings, membership surveys, and capacity-building for knowledge management. Stronger farmer organisations are a critical requirement for effective adaptation.

PFO is expanding its membership by engaging with new countries and farmer organisations in the Central and Northern Pacific, including the Micronesian states (Marshall Islands, Federated States of Micronesia and Kiribati) and Francophone territories (New Caledonia, Tahiti, Wallis and Futuna). This, along with national level expansion to new members (for example a new FO has recently joined from the highlands of PNG) creates an ongoing need for capacity building and network development among new member organisations.

Expected results

1. New technologies appropriate to the needs of small farmers in the Pacific
2. Farmer organisations empowered with new knowledge of climate change adaptation and increased organisational capacity
3. Better policy and planning at government level through informed dialogue with farmers and women in particular
4. New partnerships and networks for climate change adaptation to solve challenges in participatory ways
5. Information and climate smart agriculture technologies reaching over 100,000 farming households across the Pacific

Cost Estimates

PFO is seeking support from development partners amounting to around **USD 3.6 million per annum** to further develop and maintain the framework for climate resilient farming across 12 countries in the Pacific. At least 70 percent of this amount is allocated to activities undertaken by national FOs for the direct benefit of their members and rural communities generally, mostly under Pillar 1. About 20 percent is allocated to regional or multi-country activities and around ten percent contributes to management costs and overheads.

			Comments
Number of PFO members	HHs	100,000	Expected to increase from current 90,000
Participation in CC activities	%	60	
Number of participants	HHs	60,000	
Investment per HH	USD	300	IFAD projects typically invest USD 200-500/HH
Total investment cost	USD'000	18,000	Over five years
	Percent	USD'000	
Pillar 1	50	9,000	All at country/FO level
Pillar 2	5	900	All at country/FO level
Pillar 3	15	2,700	All at country/FO level
Other	30	5,400	Regional-level activities and management costs
Total	100	18,000	
		3,600	per annum

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