

Theme of the Case Study

Early Warning and Early Action

Country

8 countries in the Pacific

Case location

Cook Islands, Kiribati, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

Background

This case study outlines a community-centred early warning early action regional project in the Pacific, successfully implemented using an inclusive multi-level partnership model. The project has catalysed further collaborative community centred early warning systems and climate services work. As part of this, an institutionalized approach to forecast-based financing is being analyzed.

Between 2014 and 2016, Red Cross National Societies, communities, governments and regional organizations worked together on a meteorological project to improve the livelihoods of Pacific Island communities by delivering effective weather, climate and early warning services through an 'early warning early action' approach. Under the coordination of the Secretariat of the Pacific Regional Environment Programme (SPREP), working together regionally with the International Federation of Red Cross and Red Crescent Societies (IFRC), the Finnish-Pacific (FINPAC) project took an all-inclusive approach by partnering with stakeholders at regional, national, island, community and household levels to develop community early warning systems (CEWS) that were specific to the context and mechanism of each community thus ensuring that the system and the warning/response information produced were people-centred and well understood. Project partners included the World Meteorological Organisation (WMO), National Meteorological Services (NMS) and National Disaster Management Offices (NDMO). CEWS were established in eight Pacific countries.

Because of the partnerships approach taken, the FINPAC project has successfully brought together the relevant stakeholders at regional, national, island, community and household levels to develop community early warning systems (CEWS), thus having readied a springboard for continued collaborative work on community-centred climate services and early warning systems in the Pacific. It has become clear that early disaster preparedness action to support communities prior to disasters saves lives and livelihoods and reduce the economic impact on governments.

However, most current financing mechanisms available to governments for disasters are activated and accessed once certain disaster impact thresholds have been realized, which means financing is not readily available to support disaster preparedness action prior to disasters. While governments, with support from development partners, have made investments in climate information services and strengthened EWS with improved forecast communication to end users, a gap remains in the systematic update and use of available forecast information at scale for concrete early action at different levels of authority, including community level.

One aspect of furthering the successful implementation of CEWS under the FINPAC project is a feasibility analysis undertaken around forecast-based financing (FbF) in the Pacific. FbF is a method for funding and enabling earlier action in advance of a disaster, based on forecast-based triggers. FbF involves developing Early Action Protocols (EAP) agreed between multiple national stakeholders. These EAPs outline roles and responsibilities and allow access to dedicated disaster preparedness resources when a forecast is issued. FbF potentially provides a means to support community actions in preparedness for extreme events, as part of CEWS.

What did the action seek to change?

A community early warning system is a community-led initiative to use climate and weather information to disseminate warning messages to alert the community of a disaster before it happens and take actions to prepare. However, it is often that work to support CEWS is done in isolation of national and sub-national early warning systems and disaster management arrangements. The FINPAC pilots aimed to develop a model to better link CEWS national and provincial early warning systems. By delivering effective weather, climate and early warning services, particularly due to changing effects of climate change, the project sought to improve livelihoods of Pacific Island communities.

Feasibility work on FbF seeks ultimately to make funding available to governments and the Red Cross to support anticipatory action as well as response. With a view on very extreme events on the horizon, institutions as well as communities need to take action over large areas. An integrated national-to-community EWS requires i) national mechanisms such as SOPs and action plans that systematically link warnings and climate information provided by NMS to early preparedness actions at multiple scales, and, ii) available funding (at multiple scales) to support early actions in the window of time between a credible warning and a potential disaster.

What were the key actions taken to achieve this change?

In the eight countries, partnerships for project oversight and implementation were formed between NMSs, NDMOs, Red Cross National Societies, provincial authorities and communities. These multi-organization teams worked together to design, conduct and review participatory workshops, training and exercises to identify community priorities and knowledge related to disasters. Information was then used to develop a community early warning system unique to the respective community.

In 2016, a scoping study was undertaken to assess feasibility of FbF in three Pacific countries (Solomon Islands, Papua New Guinea and Fiji). Based on findings of the study, in 2017 a Roadmap for FbF for drought preparedness was undertaken in the Solomon Islands. The Roadmap includes suggestions for embedding an FbF approach in national disaster management arrangements.

For one community champion in Kiribati the most significant change from the FINPAC project process was bringing people together to share their thoughts and worries about the changing weather pattern.

"[It gave the] community a chance to talk about their past experiences on impact of climate change. It is a time for sharing different views, experience and possible responses for multi hazards," he said.

Marshall Island community member

"Developing CEWS was never talked about before and actually nobody did anything until we meet with FINPAC (SPREP, Red Cross), their approach was very inclusive (government, chiefs, youths, women, elderly, people with disabilities). It has helped them to speak their mind for a safer Jenrok and Marshall Island. WHY, now people in my town really get more active and not being shy to explain their CEWS"

What were the essential steps taken along the process to bring about this change?

Step 1	Identify, organise and train implementation teams under collaborative partnership approach with roles and responsibilities identified at various levels:
	 Regional Oversight Committee and regional implementation team were formed (SPREP and IFRC)
	National Oversight Committee (led by NMS, supported by SPREP) and National Implementation Teams (led by Red Cross National Society with support from IFRC and Red Cross Climate Centre)
	Community Oversight Committee and Community Implementation Team or their cultural and contextually appropriate equivalents, many of which com- prised existing formal community disaster/climate change committees that were strengthened
	Training of trainers of National Implementation Team and Community Implementation Team was undertaken to build capacity in participatory community consultations and developing community disaster preparedness and response plans.
Step 2	Community consultation, design and implementation of Community Early Warning Systems in eight countries
	National and Community Implementation Teams undertook community consultation and design of CEWS initiatives aimed at strengthening all four components of EWS: risk knowledge, monitoring, response capability, warning communication.
	A Community Disaster Preparedness and Response Plan was developed in each community. Activities identified in the action plan were then carried out.
	Simulation exercises and handover to test and practice carrying out key actions in community disaster preparedness and response plans.
Step 3	A scoping study for FbF in the Pacific was undertaken in 2016 and determined that this method for a 'forecast-based' activation of financing for early actions was feasible in some Pacific Island countries.
Step 4	Drought thresholds established under the Solomon Islands National Drought Plan were developed by Solomon Islands Meteorological Service (SIMS), supported by SPREP and WMO, in collaboration with Red Cross work on FbF triggers. Drought thresholds form the basis of an FbF trigger system.
Step 5	A Roadmap for an FbF pilot in the Solomon Islands for drought hazard was developed to support the Government of the Solomon Islands and Solomon Islands Red Cross to implement a pilot programme for communities, provincial authorities and national authorities to apply forecast information for early action at scale.

A representative from the Solomon Islands Meteorological Services said that the implementation process strengthened relationships within the organization as well as with various stakeholders:

"Now we are keen to have more insight into community that would improve our engagement," the representative said.

What SFDRR principles¹ were applicable to this change process?

- Principle 1 Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate
- Principle 2 Decision-making to be inclusive and risk-informed while using a multihazard approach
- Principle 3 Support from developed countries and partners to developing countries to be tailored according to needs and priorities as identified by them

Participant from Vanuatu Red Cross Society at FINPAC Practitioners workshop, 2016 in Fiji:

"The most significant change that took place for my organization through being part of the project was the expansion and increased visibility of Vanuatu Red Cross Society in communities and islands, strengthened partnership with partners at national, provincial and community level, support capacity building for VRCS staffs and volunteers, identifying focal points and contact in the community. I choose this story because it reflects on the VRCS strategy and operation plan strengthened VRCS partnership across the country.'

What were the Achievements and the Impacts?

Community: The community pilots themselves increased preparedness and response capacity of communities. For example, in the Solomon Islands, over an eight-month period, Solomon Islands Meteorological Service (SIMS), Solomon Islands Red Cross Society (SIRCS), the Solomon Islands National Disaster Management Office (SINDMO) and local media worked together to develop a low-cost, low-tech community early warning system for floods. The resulting community early warning system uses a truck horn as a siren and a solar-powered three-colour emergency light (red, yellow and blue) based on the colour coding used by SINDMO for national alerts. This is linked to a low cost low technology solar powered flood siren system. While the light system is designed to monitor and warn the community of flood events, it can also be used for other hazards such as tropical cyclones and tsunamis. A simulation exercise was conducted to test the community early warning system and the community's response procedures. In the week following, a real tsunami warning was activated for Solomon Islands and all community members were evacuated following their community response and evacuation plan.

Partnerships: FINPAC created awareness in technical institutions on the importance of investing in community early warning and demonstrated that partnership with 'last mile' institutions (such as Red Cross) ensures that technical information is being understood by communities. With the partnerships approach taken, the FINPAC project has successfully brought together the relevant stakeholders at regional, national, island, community and household levels to develop community early warning systems (CEWS), thus having readied a springboard for continued collaborative work on community-centred climate services and early warning systems in the Pacific.

Sustainability: Forward looking efforts have resulted in the Roadmap for a Forecast-based Financing pilot in the Solomon Islands for drought hazard, developed to support the Government of the Solomon Islands and Solomon Islands Red Cross to implement a pilot programme for communities, provincial and national authorities to apply forecast information for early action at scale.

Solomon Islands Meteorological Service is now the first Met Service in the Pacific to be producing a national version of the Early Action Rainfall Watch (EARW) for the Solomon Islands Red Cross and other national humanitarian organizations. The Solomon Islands national EARW was made possible through a partnership between the Australian Bureau of Meteorology, SPREP and the Red Cross Climate Centre. Similar consultations are underway in Vanuatu, Fiji and Papua New Guinea.

e.g. Primary responsibility of the State, Shared responsibility, Protection, All-of-society-engagement, coordination mechanism, empowering local-decision makers, Multi-hazard approach and inclusive risk-informed decisionmaking, Sustainable development, Local and specific risks.

The IFRC and SPREP have formalized the collaboration and partnership on EWEA support work, including forecast-based financing, climate risk management and accessing climate finance. A similar arrangement is currently discussed with the Geosciences, Energy and Maritime (GEM) Division of the Secretariat of the Pacific Community.

Red Cross in the Pacific: IFRC is formally represented as a member of the Pacific Resilience Partnership Taskforce, which oversees the implementation of the Framework for Resilient Development in the Pacific (FRDP). Red Cross Red Crescent Climate Centre is now a member of the Pacific Islands Climate Services Panel tasked with advising the Pacific Meteorological Council.

FINPAC has raised the profile of the Red Cross as key DRR actors in the Pacific, whose strength is the global-to-local network of staff and volunteers reaching thousands of island communities. Red Cross National Societies and the IFRC (supported by the Climate Centre) are increasingly being viewed as partners of choice to technical institutions at national and regional level. As a result, the community voice is elevated in DRR policy and practice.

What were the key Lessons Learnt?

- Collaboration within existing partners in the Pacific is crucial to ensure sustainability and ownership of respective partners.
- For CEWS and FbF to be sustainable, systems must be institutionalized into national disaster management arrangements.
- Work within the resources and mechanisms that exist do not reinvent the wheel.
- CEWS that are designed and developed with communities strengthen their coping capacity to effectively prepare for and respond to disasters.

What were the Good Practices arising from this action?

Good Practice 1	Effective and efficient use of resources: Through the close collaboration and coordination between the implementing partners, resources were made available in an efficient way and of most benefit to the communities, where duplication of efforts was reduced to a minimum. In addition, each party would add value to the project respective of their knowledge, expertise, and experience.
Good Practice 2	Ownership and involvement: The early and continuous involvement of implementing partners gave each partner the opportunity to influence the design of the project. Ownership was further strengthened throughout the project cycle in the implementation of various workshops, meetings and communication, allowing for peer exchange and learning as well as reconfirming needs.
Good Practice 3	Full engagement of communities: Working through and strengthening of the existing network of volunteers and relationships with the communities in an inclusive approach ensured that communities were involved in the decision-making. Actions were identified by and based on the needs of the communities, which further strengthened ownership and sustainability. As such, the communities felt empowered to understand and act upon the receiving of the weather forecasts and warnings.

Policy Relevance to DRR in Action

The FINPAC project and the proposed FbF approach contributes to the four Priorities of Action in the Sendai Framework for DRR: 1. Understanding disaster risk, 2. Strengthening disaster risk governance to manage disaster risk, 3. Investing in disaster risk reduction for resilience, 4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

The project promotes preparedness for extreme climate events, contributing directly to SDG 13 on Climate Action.

Key Messages from this Case Study

- There is significant value and efficiency in national and regional technical institutions forming formal partnerships with intermediary organizations which have the networks and expertise to ensure that information is effectively communicated to the most vulnerable people, especially communities in remote locations.
- FbF is not separate to but complements ongoing and pipeline investments in climate information services, impact-based forecasting and early warning systems in the Pacific, by making the link to action on the ground.
- The Red Cross has niche expertise in supporting community early action components of an FbF system. The expansive branch and volunteer network offer sustainability in early action. The Red Cross provides community and local level linkages to national level climate services. The Red Cross is auxiliary to public authorities in the humanitarian field, endorsed through a Red Cross Law or Act in each country, and positioned to influence policy through work in International Disaster Law.

The FINPAC project successfully implemented community early warning system pilots in eight Pacific countries through an inclusive partnership approach with relevant stakeholders that worked well to ensure the interests of the communities. Taking this into the second stage for sustainability and scaling up, Forecast-based Financing approach is being piloted in the Solomon Islands. A third stage envisages recommendations to include FbF in Pacific governments legislation and policy.

References for this Case Study



FbA Discussion Paper



Forecast-based Financing in the Pacific



FINPAC project brochure



White paper: FbF Roadmap for the Solomon Islands



EARWatch brochure

Collaborators for this Case Study:

Solomon Islands Red Cross,
Government of Solomon Islands,
Secretariat of Pacific Community GEM,
Secretariat of the Pacific Regional Environment Programme,
Red Cross Red Crescent Climate Centre,
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