



REPUBLIC OF VANUATU

**NATIONAL ADVISORY BOARD
ON CLIMATE CHANGE AND
DISASTER RISK REDUCTION**



**C/- VANUATU METEOROLOGY AND GEO-HAZARDS
DEPARTMENT**

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CC/DRR Project Brief Form

Project Title: Enhancing Early Warning Systems to build greater resilience to hydrometeorological hazards in the Pacific SIDS (Fiji, Papua New Guinea, Solomon Islands, Timor-Leste and Vanuatu)	
Implementing Organisation/s: World Meteorological Organization (WMO)	Project Contact Details: Mary Power Acting Director Development and Regional Activities Director, Office for Resource Mobilization and Development Partnerships World Meteorological Organisation Ph: +41 22 730 8003 MPower@wmo.int
Duration: 5 years	Status: Concept note stage
Total Funding: The Project total amount for all five countries will be between USD 10 million and USD 50 million. The estimate of costs for the main components is under-way. Estimate for Vanuatu will be provided at a later stage.	Funding Source/s: Green Climate Fund
Mode of financing: Grant	Location & site/s: Vanuatu
Scope: EWSs for hydrometeorological hazards including tropical cyclones, floods, drought and sea predictions. Country specific areas of focus will be identified during country consultations during the preparation of the project proposal	Project Type:
Sectors & Themes: Adaptation to climate change , Disaster risk reduction, early warning systems.	Other Government & Partner Agencies: <ul style="list-style-type: none"> ▪ Vanuatu met services ▪ Vanuatu Disaster Risk Management Office ▪ Other key stakeholders to be identified during consultations
Lead Government Department: Vanuatu Meteorological Service	NAB Approval sought: [Please tick] <ul style="list-style-type: none"> • Concept stage v • Site selection • Final endorsement

- To seek project funding
- Partnership/implementation
- Continuation/extension of existing project

Objective/s: [100 words max]

The Project aims to enhance Early Warning Systems (EWSs) in the Pacific SIDS (Fiji, Papua New Guinea, Solomon Islands, Timor-Leste and Vanuatu) , thereby contributing to building greater resilience to hydrometeorological hazards in the region. The proposed scope of the hazards for which EWSs will be created or enhanced is severe weather – including tropical cyclones, floods, drought and sea predictions. The warnings will be issued and acted upon hours, days, weeks and - in the case of drought - months ahead of the hazard occurring.

Description: [1-2 paragraphs per topic max]

The section below outlines general components and activities of the project for the five participating countries. Country-specific activities will be identified during national consultations in order to take into account their specific hazards, vulnerabilities and capabilities.

Component 1: Strengthening hydrometeorological hazard monitoring and forecasting infrastructure and capabilities including for monitoring river basins, monitoring, forecasting and providing early warnings for floods.

The objective of this component is to support installation, operation and maintenance of adequate observing and forecasting infrastructure and programmes for monitoring hydrological and meteorological hazards including rapid and slow onset events.

Main activities under this first component include:

- Expansion of observing and monitoring network, improvement of telecommunication systems, improvement of hydrological and meteorological data and related hazard data collection, storage, processing, management and transmission systems;
- Improvement and establishment of infrastructure, facilities, technologies and systems for now-casting, to monitor and provide early warnings for very rapid developing and moving severe weather events such as lightning, thunderstorms, heavy and intense rainfall. Technologies and facilities include Doppler radar system, lightning detectors, etc.
- Development and operation of adequate programmes and information systems (e.g. production of quality real-time data and models for hydrometeorological hazard modelling and forecasting including severe weather, tropical cyclones and floods modeling, forecasting and provision of early warnings.
- Development of hydrological products including current stream flow condition, ground water level and salinity, seasonal water outlook which can be used as drought trigger;
- Trainings to strengthen human resources capacity and capabilities in various areas such as leadership, hydrological and flood modelling, forecasting, installation, operation and maintenance of monitoring and forecasting infrastructure, programmes and systems.
- Strengthening quality management systems for NMSs and NHSs for EWSs and services.

Component 2: Improvement or/and establishment of new and additional EWSs facilities and infrastructure in the provinces

The objective of this component is to ensure back-up early warning centers for tropical cyclones. It includes:

- Establishment of backup national early warning centers;
- Improvement of facilities and infrastructure for EWSs and services at the provincial government level, local district and area council level, and local community level. This activity include new and/or upgraded infrastructure, information technology and communication support system, in the provinces.

Component 3: Strengthening analytical capabilities and incorporation of risk information in emergency planning and warnings

This component aims to improve understanding of risks associated with country-/region-specific hazards. It will focus on:

- Vulnerability assessments of social, economic and environment underlying disaster risk drivers. This activity includes analysis and identification of information gaps and development of a database such as for social, economic and environment data (housing data, land tenure and management, poverty data, gender, urbanization patterns, demographic changes, institutional arrangements and update and/or development of

associated social, economic and environmental vulnerabilities maps;

- Vulnerability assessments of physical/geographical disaster risk zones. This activity include collection and analysis of bathymetric and topographic data at new and additional high risk zone, not covered by other projects or programmes;
- Public awareness training and workshops to disseminate risk information to decision makers (local governments, local councils and communities) and the general public including women, girls, youth, children and disable people.

Component 4: Dissemination and communication of and accessibility to, consistent, timely and authoritative warnings

The objective of this component is to improve dissemination and accessing mechanisms in order to consistently communicate warnings in a manner that is timely and of quality, and that reach those at risk. This component will also address quality of warnings. Key activities include:

- Strengthening national to provincial coordination mechanisms: Review and improve institutional arrangements, and develop or improve standard operating procedures from national to province level;
- Enhancing communication/dissemination systems including construction and/or expansion of the reach of existing communications networks;
- Strengthening "communication champions" understanding of warnings and risks associated with hydrometeorological hazards.
- Strengthening understanding of warnings and risks associated with hydro-meteorological hazards. This includes "communication champions" providing training to public sectors, private sectors, provinces, local/area/district council and general population ;
- Running workshops and consultation meetings to improve the format and dissemination strategies used for EWSs, to maximize the likelihood of their effective use in communities and by industry.

Component 5: Strengthening community-based preparedness and response capabilities

The objective of this component is to support the development and delivery of meaningful, and actionable warning information, driven by requirements of disaster risk reduction and management decision processes and operations, based, decided and developed by local and village community women, girls youth, children; disable people, and people disproportionately affected by disasters taking into full consideration social and cultural characteristics of the community.

Building community response capabilities and resilience through greater inclusion of communities and NGOs/CBOs in the development of EWSs, implementation of improved communication mechanisms and tailoring of the warnings issued for impending hydrometeorological events;

- Strengthening local and village communities' understanding of, and access to, warnings and risks information associated with hydrometeorological hazards. This includes "communication champions" providing training to local, village and remote rural islands (last mile) communities;
- Developing community level integrated hydro-meteorological hazards/disaster plan.;
- Strengthening provincial to village and local communities coordination mechanisms: Review and improve institutional arrangements provinces and village and local communities level.

Component 6: Strengthening disaster risk governance to manage disaster risk

This component aims to strengthen policy, legal and regulatory frameworks pertaining to DRM and DRR including partnerships. Activities under this component will focus on:

- Consultations and assessments to review national, both public and private capacities, gaps and needs with respect to EWS governance (policy, legal and regulatory frameworks) and development of an action plan to address the gaps;
- Strengthening existing or developing new partnerships with national stakeholders in EWSs, spanning both public and private sectors;
- Running workshops to increase understanding by EWSs stakeholders of their respective roles and responsibilities as specified in the national DRR and DRM policies, legislative and institutional frameworks.

Component 7: Strengthening the capacities of regional institutions:

In addition to activities and investments at country level, the Project will include activities and

investments at a regional level in order to leverage opportunities offered by regional cooperation to increase the efficiency of national EWSs.

- Development of, and improving access by the Pacific SIDS to regional weather and climate monitoring and prediction products
- Enhancing regional training capabilities;
- Enhancing the capacities of regional inter-governmental organizations to support NMSs and NMSs and early warning capabilities.

How will it be implemented?

As the accredited entity, WMO will provide general oversight for the preparation, implementation and management of the Project including monitoring and financial management to ensure consistency with its project management policies and procedures as well as the GCF fiduciary standards. WMO will enter into agreement with national and regional partners to execute the Project.

At national level: Countries will have responsibility for the implementation of country activities in collaboration with relevant regional technical partners, as appropriate. For instance, Vanuatu will be responsible for implementation of project activities in Vanuatu. The Vanuatu Meteorological Services will manage implementation of such activities including coordination with other national and implementing partners as well as monitoring of progress and expenditure and reporting to WMO (Project implementation Unit).

A Project Steering Committee will also be set up as the oversight organ for the whole project. It will be composed of country representatives as well as representatives from implementing partners.

How does the project link to GoV priorities

The medium- to long-term goal of the Vanuatu Climate Change Adaptation Strategy (NCCAS) 2012-2022) is to position Vanuatu to cope well with the current and anticipated impacts of climate change by reducing the vulnerability of and enhancing the adaptive capacities of its people, environment, social and economic resources and systems. The strategy seeks to achieve this goal through a number of measures including: (i) Identification and analysis of climate risks, (ii) provision of appropriate and priority adaptation strategies and actions at all levels (based on the analysis above and taking into account social, equity, institutional, policy, technical, environmental, economic, financial, gender and other relevant considerations), (iii) strengthen the governance and institutional arrangements. The project is aligned with this strategy and will contribute to achieve its priorities.

The project is also consistent with the National Adaptation Programme for Action (NAPA) that has identified sea level rise and hydrometeorological hazards including floods and droughts as a priority issue for Vanuatu.

Consistency with Vanuatu needs and GoV strategic priorities will be ensured during the project preparation phase.

Progress to date and current activities:

The Project is at the concept note stage. The concept note will be discussed with the GCF to ensure alignment with its priorities and receive feedback for subsequent phases.

Following this step, WMO will start the preparation of the full funding proposal in collaboration with participating countries. This phase will include extensive consultations with the five participating countries in order to ensure that the proposal development process is country-led and that the project addresses their specific priorities.

Outputs: (Will be defined for each country during the next phase)