

STRATEGIC RECOMMENDATIONS FOR ADDRESSING TSUNAMI RISKS

SOUTH PACIFIC TSUNAMI AWARENESS WORKSHOP

FORUM SECRETARIAT, SUVA, FIJI, 1-3rd JULY 2004

WORKSHOP STATEMENTS:

Tsunamis are an underrated hazard that have and can have a major impact on Pacific island countries. Recent tsunami events in PNG and Vanuatu demonstrate the vulnerability of our nations to the destructive nature of tsunamis.

There is an urgent need to improve our understanding of the risks from tsunamis and to learn from regional and international institutions, and our bi-lateral and multi-lateral partners of the various options available to mitigate the risk.

In recognizing the limited development of risk reduction infrastructure and national capacity building, the Workshop resolves that a regional strategic approach is required.

Consequently, the participants of the South Pacific Tsunami Awareness Workshop held 1-3 July 2004 in Suva, Fiji resolve that SOPAC consider the recommendations in relation to the development of the Pacific Regional Strategic Action Plan for Disaster Risk Reduction.

EMERGING THEMES and MEASURES OF SUCCESS:

1. Involve all countries and national stakeholders to build capacity and develop human resources to support the data information needs in tsunami risk reduction.
2. Establish partnerships to integrate regional risk management tasks within the CHARM framework.
3. Build international and intra-regional cooperative relationships to support tsunami risk reduction activities (modeling, risk assessments, best management practices, data sharing, warning systems etc.).
4. Advocate to ensure Information Technology and Communication (ICT) infrastructure sufficiently supports regional and national requirements for tsunami warning services

THEME 1. TSUNAMI HAZARD & RISK IDENTIFICATION

- Data Collection & Information Use to Reduce Risk
- Tsunami Hazard & Risk Assessment
- Early Warning
- Mitigation Option

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TABLE 1. Theme 1 Objectives, Outcomes and Activities

Objective	Expected Outcomes	Activities to achieve Objective
<p>1. To establish a regional Tsunami Warning System (TWS) in order to provide early warning for regional earthquakes under PTWC magnitude threshold</p> <p>Basic components of the TWS:</p> <ul style="list-style-type: none"> - Data observation network (seismic and water level stations to monitor seismicity and sea levels) - Data transmission and receiving systems for TWS evaluation, and data sharing amongst nations - Data processing system at center for acquiring, archiving, and tsunamigenic evaluation (operating 24h/7d) - Dissemination of warnings 	<p>< 2 yrs:</p> <ul style="list-style-type: none"> • Technical proposal for the creation of a Southwest and Central Pacific TWS. Coordinated by the TWG-SP <p>> 2 yrs:</p> <ul style="list-style-type: none"> • Establishment of a Regional TWS capable of responding to Pacific needs • All South Pacific countries become members of ICG/ITSU • Clearinghouse for distribution of information/data 	<p>< 2 yrs:</p> <p>Conduct Feasibility Study with existing observational data and communication infrastructures</p> <p>> 2 yrs:</p> <ul style="list-style-type: none"> • SP countries establish networks and infrastructure for early warning system in the region • SOPAC with support of ITIC to liaise with countries in encouraging ICG/ITSU membership. • PDC in coordination with SOPAC and ITIC to establish clearinghouse for distribution of information/data
<p>2: To identify areas at risk and to develop hazard mitigation plan for each of these areas.</p>	<p>< 2 yrs:</p> <p>Historical earthquake and tsunami database for region based on international guidelines that would support early warning and tsunami risk management (Member countries of WG, GTDB Project, NZ, Australia, ITIC, PDC)</p> <p>> 2 yrs:</p> <ul style="list-style-type: none"> • Production of maps/inventories on vulnerable sites/areas of the region • National/Regional Reports on Tsunami risk assessment and management for the region • Incorporate Tsunami Risk Assessment to National Disaster Mgmt Plans (Member govts with international support) 	<p>< 2 yrs:</p> <p>SP countries with support of SOPAC and GTDB Project, ITIC and PDC to collect data on</p> <ul style="list-style-type: none"> - historical seismicity, tsunami, and volcanic events. - economics, population, critical infrastructure and lifelines, and other environmental hazards <p>> 2 yrs:</p> <p>SP countries with support of SOPAC to assess potential tsunami impact and undertake modeling for at-risk areas</p>

TABLE 2. Theme 1 Activity Work Plan for the next 2 years

What	Who	How	When
Conduct Feasibility Study with existing observational data and communication infrastructures	All South Pacific countries	Consultancy Study that will:- 1. Identify and evaluate existing seismic and sea-level stations in order to determine their possible application in the TWS operations and needs for additional stations 2. Identify and evaluate technologies for real-time data transmission and receiving (commercial telephone lines, VHF radio links, satellite channels) 3. Identify and select real-time data processing system (based on existing systems – PTWC, ATWC, JMA, CPPT, etc.) 4. Select warning criteria (based on analysis of historical data) 5. Develop warning dissemination system (communication plan)	SOPAC to initiate within the next 6-12 months
Tsunami Data Collection to Identify Areas at Risk	All Countries	NDMO to take initiative with support of SOPAC, GTDB Project, ITIC and PDC	Start within the next 18months

THEME 2. PREPAREDNESS FOR EFFECTIVE RESPONSE

- Linking Early Warning to Effective Response
- Development and Strengthening of Response Systems and Tools with Other Partners
- Prevention, Preparedness, Response and Recovery

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TABLE 3. Theme 2 Objectives, Outcomes and Activities

Objectives	Expected Outcomes	Activities to achieve Objectives
1. Develop Framework for Effective Response System for Preparedness and Emergency Response To Tsunamis	1.1 Guidelines available for developing plans	1.1.1 Conduct user questionnaire surveys 1.1.2 Develop guidelines for developing plans
	1.2 A timely response to tsunamis	1.2.1 Develop national tsunami response plans
	1.3 Tsunami-ready community	1.3.1 Develop partnership for acquiring educational material 1.3.2 Development of education programme and target key stakeholders (e.g. community, politicians, first responders). 1.3.3 Incorporation of training in formal and informal education 1.3.4 Develop national education strategy (tsunami)
2. Develop regional and national capacity (technical and management)	2.1 Provision of accurate and timely information	2.1.1 Raise tsunami awareness at national and community levels 2.1.2 Conduct table top exercises 2.1.3 Conduct an assessment on current capability of communication network 2.1.4 Communication / Media 2.1.5 Networking with national and regional partnership

TABLE 4. Theme 2 Activity Work Plan for the next 2 years

What	Who	How	When
Conduct Feasibility Study	All SP Countries, SOPAC, ITIC & PTWC	A. Present Feasibility Study Proposal at the STAR meeting coordinated through SOPAC.	Sept 2004
Strengthen Current Educational Programmes	PNG	A. Review and strengthen education curriculum material	Start within the next 18months
Develop Guidelines for National Tsunami Response Plans	All Countries Target A Samoa, Tonga SI & Vanuatu	A. Coordinated through SOPAC & raised to Governing Council B. Bring in facilitators eg ITIC & its partners	SEPT 2004 SOPAC Governing Council Meeting
Raise Tsunami Awareness at national and community levels	All countries	A. Collate materials as available from other partners B. Engage media, press releases, run workshops C. Include in National Disaster Awareness week as a Theme D. Strengthen on-going efforts	On-going
Conduct Questionnaire Survey	All Countries	A. Send out surveys forms to Points of Contacts	Annually in the first quarter

