

1. Policy and Organization

The Cabinet has overall responsibility for disaster management and usually calls special Cabinet meetings to consider necessary relief, rehabilitation and reconstruction programmes after national disasters. The Minister responsible for National Office for Disaster Relief and Rehabilitation, is Hon. Dr. S. Lungi Kavaliku, who is also the Deputy Prime Minister and Minister of Works, Education and Civil Aviation.

The two important bodies of the National Disaster Advisory Committee (NDAC) and the National Office for Disaster Relief and Rehabilitation (NODRR) are responsible for the Minister responsible for Disaster Relief and Rehabilitation (Minister i/c DRR).

The National Disaster Advisory Committee (NDAC) advise the Minister in-charge on policy issues, programmes and finance, and which are eventually submitted to Cabinet for a decision. The NDAC consists of Heads of Government Departments and NGOs with the key members being the Chief Secretary & Secretary to Cabinet, Director of Works, Director of Civil Aviation, Secretary for Foreign Affairs, Director of Health, Director of Agriculture, Police Commander, Commander of Tonga Defence Services, Harbour Master and representatives of Tonga Red Cross Society, World Vision, and Tonga Council of Churches. The Secretary of the NDAC is a Deputy Secretary of the Prime Minister's Office. All funds for disaster relief and rehabilitation are controlled by the Prime Minister's Office. Activities of the NDAC are controlled also from the Prime Minister's Office, under the authority of the Deputy Prime Minister and Minister responsible for Disaster Relief and Rehabilitation.

The National Office for Disaster Relief and Rehabilitation is managed by a Senior Works Supervisor who is responsible to the Director of Works. This Office maintains supplies and provisions (tents, clothing etc.) for disaster relief purposes.

Each of the key Government Departments and NGOs that work on Disasters have standing procedures on measures to be implemented before, during and after disasters. A National Disaster Plan has been drawn up and it needs further modifications prior to its formal adoption.

The NDAC ideally meets on a regular basis, however in practice, meetings are mostly convened in the event of a national disaster. All the NDAC members report to the Committee, and as well information are usually sought from relevant non member representatives, such as the General Manager Tonga Telecommunications Commission, Tonga Electric Power Board and Tonga Water Board. Each member of NDAC are supported by staff and resources of their own department in implementing their responsibilities on disaster relief, rehabilitation and reconstruction.

2. Prevailing Hazards

The types of hazards to which Tonga is vulnerable are tropical cyclones (including storm surge and salt spray), earthquakes, volcanism, tsunami, and droughts. Fires are a problem, but not at national problem level. Of the above, tropical cyclones are the most frequent, cause the most damage, and affect the most population.

The following is a summary of prevailing hazards:

Type	Location	Affected Population
Tropical Cyclone	Throughout Tonga	All
Earthquake	Throughout Tonga	All
Volcanism	Ha'apai, Vava'u, Niuaus	Aprox 30%
Drought	All (particularly small islands)	All
Tsunami	Coastal Barrier	Aprox 50-90%

3. Recent Natural Disasters

Examples of recent disasters include:

Type	Location	Affected Population	Losses
"Kina" 1993	Ha'apai / Tongatapu	70%	Aprox \$P300,000
"Isaac", 1982	All of the group	All	Aprox \$P5M
Earthquake, 1977	All	All	unknown
Volcanic Eruption	Niuafoou, late 30s	5%	unknown
Drought, late 1980s	Ha'apai	10%	unknown

4. National Socio-Economic Conditions

Tonga comprises 170 islands, of which 36 are inhabited. The total land area is 747 sq km. The population of Tonga is estimated at 99,420 (1994). The Gross Domestic Product (GDP) is A\$125M, and per capital income is A\$1297 (1990).

5. Availability of Assistance to Other Countries in the Field of Natural Disaster Reduction

Tonga has, in the past, provided both financial and resource assistance to other Pacific island countries during times of disaster (e.g. Fiji, 1993, Western Samoa, 1990, 1992), as well as providing facilities for aid collection and distribution to neighbouring countries. For example, During 1992 Cyclone "Val" in Western Samoa ~~close~~ the port and aerodrome facilities, and Tonga was used as a collection distribution and administrative centre for New Zealand relief to Western Samoa. Tonga had joined other countries in sharing the grief following the New South Wales Bush Fires 1993 and the Los Angeles Earthquake, 1993, by donating T\$20,000 each to assist with reconstruction works.

6. International Assistance Required for Natural Disaster Reduction

Expertise: Foreign assistance to help prepare and implement a comprehensive national disaster plan is urgently required. Follow up assistance is required to advise on areas of the disaster plan, particularly development planning, hazard assessment, public education and awareness, and training disaster response personnel.

Technology: Computers and equipment, particularly associated with meteorological and geological monitoring and warning, are required, as are improved international and domestic communications links.

Resources: Emergency supplies such as tarpaulins, stoves, first aid, etc are always required. Other equipment such as chainsaws portable satellite communication equipment, reverse osmosis water distilling devices, etc are also needed.

SECTION B: STRATEGIES AND ACTIVITIES

1. Steps Toward Achieving the 3 Main Decade Targets

- (a) **Comprehensive national assessments of risks from natural hazards, with these assessments taken into account in development plans;**

The main threat to Tonga is from tropical cyclones, and risk assessment of such hazards is reasonably well known, although far from comprehensive. Tropical cyclones affecting Tonga generally come from the north or west of the group. Tropical cyclones are more frequent in the area around Tonga during El Nino years. Similarly, droughts are generally confined to the smaller islands of the group, and are most common during El Nino years. Risk from other hazards such as earthquakes, tsunamis and volcanoes

are poorly known. At present there is only an informal arrangement for including risk of tropical cyclones in national development plans.

(b) Mitigation plans at national and/or local levels, involving long term prevention and preparedness and community awareness:

Government is to shortly enact legislation giving the Tonga Electricity Board greater powers in clearing trees on private property from around power poles and structures, to minimise damage and disruption to power supply during tropical cyclones. With assistance from the government of New Zealand there is movement toward a common building code to encompass both earthquakes and tropical cyclones.

The local NGOs have conducted 2 workshops for all NGOs in Tonga on disaster preparedness with assistance from AIDAB and Australian NGOs. The first was in September 1987, and the second in October 1990. There are plans to follow these with workshops aimed at a community level, particularly women. The reports of both workshops have been published and are available to the public in both English and Tongan.

The Tonga Electricity Board undertakes a public education campaign just before and during the tropical cyclone season to advise the public what is required prior to and during a tropical cyclone. This includes clearing trees from wires, switching off power during a cyclone, not touching fallen wires after a cyclone, etc. The public are advised by way of announcements over the local radio and television, and newspaper advertisements.

A foreshore protection project is presently being discussed with the government of France, however no firm details on the scope or nature of this proposal have been reached as yet.

(c) Ready access to global regional, national and local warning systems and broad dissemination of warnings

Warnings for tropical cyclones affecting Tonga are received from the South Pacific Regional Tropical Cyclone Warning Centre (TCWC) in Nadi, Fiji. The Tonga Meteorological Service translate all warnings and advisory messages into Tongan, add supplementary information if necessary and disseminate these messages to the media for immediate broadcast. Warnings are also provided, in English, via the short wave service of Radio New Zealand. When windspeed reaches 60 knots at Nukunono, the satellite antenna for international telecommunication is lowered for protection purposes and communication with the TCWC is thus discontinued. Alternative measures are being discussed to maintain communication when windspeed is over 60 knots.

TROPICAL CYCLONE COMMITTEE FOR THE SOUTH PACIFIC

Tonga has become a member of the Tropical Cyclone Committee for the South Pacific since it was established in 1980. This committee is a working group of the World Meteorological Organization for

2. Present National Plan for Natural Disaster Reduction

At present there is no national plan for natural disaster reduction in place in the Kingdom of Tonga.

3. Legislation Introduced and Enacted in Relation to Natural Disaster Reduction

Legislation relating to Tonga Electricity Board authority to clear trees from power lines, and a comprehensive building code are presently being prepared, but have not as yet been enacted. The marine act of 1987 is now in force, and regulations for safety at sea, specifically requirements for safety equipment for commercial and pleasure boating, are presently being drafted with the assistance of the Forum Secretariat.

4. Disaster Mitigation Activities Completed or Underway

* monitoring, prediction and warning:

Title of Project:	Climate Monitoring Equipment Upgrade (Forum Countries)
Status:	Underway
Participating Institutions:	Australian Bureau of Meteorology, Tonga Meteorological Service.
Cost of project:	AUD1.3M (throughout the Pacific)
Sources of Funding:	Australian International Development Assistance Bureau (AIDAB)
Implementing Agencies:	Australian Bureau of Meteorology PO Box 1289K Melbourne Vic 3001 Australia Fax: (613) 669 4168

Plans to Fully Achieve Decade Targets by the End of 1999

Tonga has not been active in IDNDR until very recently, and at the moment there are no plans in place aimed at meeting specified targets for the decade. However, it is hoped that a plan incorporating current and new plans can be enacted to improve the prospects for meeting IDNDR targets.

SECTION C: INTERACTIONS

1. Publication on IDNDR Related Subjects

Reports of two workshops conducted by Tonga Association of Non Government Organisations (TANGO) have been published. The workshops were titled "Disaster Preparedness Workshop for Non Government Organisations". These can be obtained from the Tonga Red Cross or the Tonga Council of Churches in both English and Tongan.

2. Current or Planned Partnerships and Cooperation Related to IDNDR with Other Countries

The government of Tonga is working closely with the United Nations Department of Humanitarian Affairs (UNDHA) South Pacific Programme Office (SPPPO) in Suva to implement a project titled Tonga Disaster Reduction Programme (TDRP). Tonga is also included in the UNDHA-SPPPO South Pacific Disaster Reduction Programme (SPDRP) which is a regional programme for the South Pacific region.

Activity related to disaster mitigation have taken place to date without access to IDNDR framework or a national disaster plan. The absence of such guidance has meant that the limited mitigation project, while themselves successful, have not benefited from the local, national and international linkages that would occur if an overall national framework or action plan were in place. Future activities should be planned within the IDNDR framework.

3. Review of the IDNDR

All activity undertaken so far in relation to disaster reduction have occurred outside the framework of IDNDR on an "as needed" basis. Tonga has now fully embraced the concept of disaster reduction by seeking membership to IDNDR. The next priority for Tonga to establish a comprehensive national disaster plan as a framework for future activity.