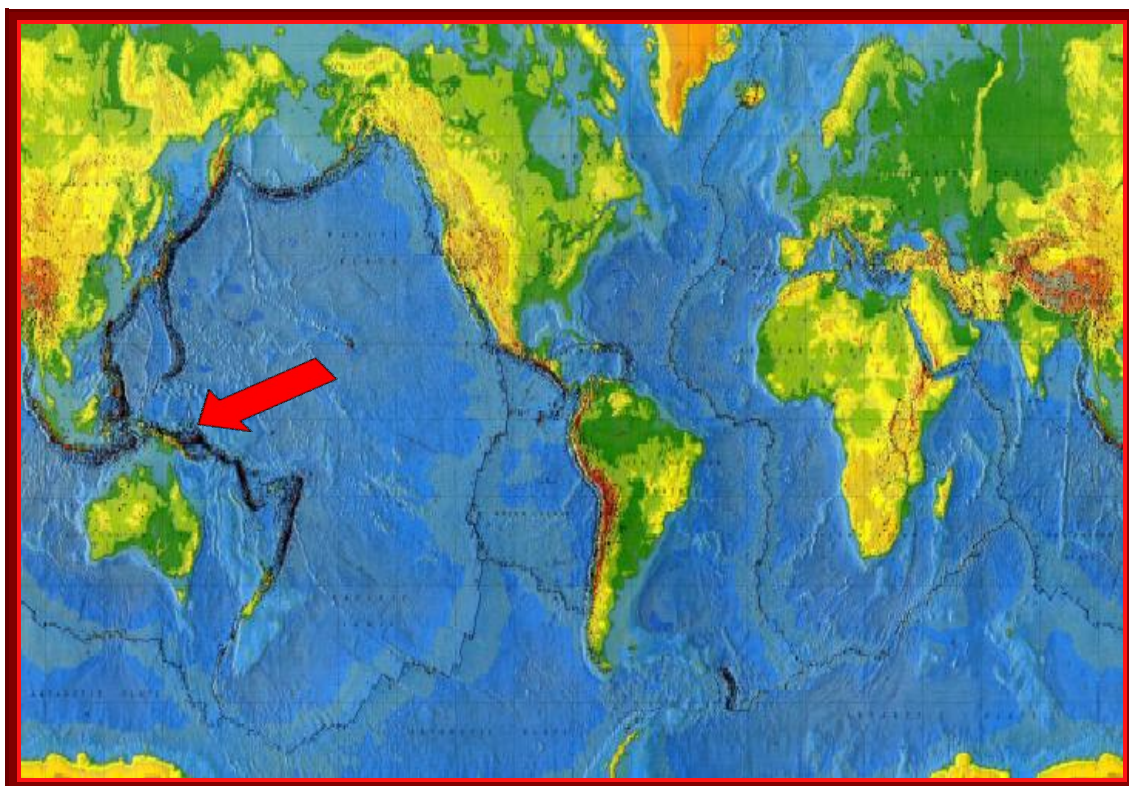




Independent State of Papua New Guinea



Country REPORT



Located at latitude 0 to 14 degrees south and longitude 141 to 160 degrees east.

EMERGENCY & DISASTER MANAGEMENT AND DISASTER RISK REDUCTION IN PAPUA

NEW GUINEA

Prepared By

National Disaster Centre

Papua New Guinea

Tel: +675 325 0239/325 0410,
Facsimile: +675 325 4186
Email: info@pngndc.gov.pg,
Website: <http://www.pngndc.gov.pg>

1. Introduction.

Papua New Guinea is an independent state located at latitude 0 to 14 degrees south and at longitude 141 to 160 degrees east. It has a land mass area of 462,840 square kilometers and a total population of over 5.0 million people. About 80% of the people live in the rural areas, whilst the other 20% live in urban centres. It gained its political independence from Australia on 16th September 1975.

English is the common language used by government as medium of instruction in schools and for business purposes. The two other official languages are Pidgin and Motu. Pidgin is a lingua franca or can best be described as corrupted English developed in colonial times, which now has a formal grammar and dictionary. Apart from those three (3) languages there are also over 750 different dialects being spoken in various provinces and districts of Papua New Guinea.

Geographically the country occupies half of the large southwest Pacific Island of New Guinea and an archipelago of other islands, ranging size from the 38,000 square kilometers of New Britain, down to small atolls. The mainland is dominated by a rugged spinal mountain range rising to 5,000 meters above sea level in which most of the population lives.

Elsewhere the population is concentrated in the most fertile land. No area is completely uninhabited and no land is un-owned. The three major seas that surround the country are; Coral Sea in the southern part, Solomon and Bismarck seas in the northern part of the country. These three seaways contain rich resources ranging from migratory fish, lobsters, clamshells, coral reef fish and other marine resources including oil.

Papua New Guinea is a tropical country and is surrounded by warm seas over which its winds blow. The country has a generally hot and humid climate. However, conditions vary greatly from one area to another. This is because of the effects of the mountainous topography and the two major prevailing air streams, the southeast trade winds and the northwest monsoon.

The effects of El Nino and La Nina phenomenon within the regional climatic pattern to some degree influence the weather pattern in Papua New Guinea. The general temperature of the country ranges from 14 degrees Celsius in the highlands areas to 32 degrees Celsius in the coastal areas.

However, whole year round, the highlands of Papua New Guinea is cool. Due to the nature of the country's location, PNG sometimes experiences extreme weather patterns, which develop to destructive storm surge and are quite disastrous for both urban and rural centers.

2. Emergency and Disaster Management in Papua New Guinea.

2.1. Disaster risks in Papua New Guinea:

Due to its unique geo-climatic conditions Papua New Guinea (PNG) is prone to a various natural hazards including earthquakes, volcanic eruptions, tsunamis, cyclones, river and coastal flooding, landslides, and droughts. According to a study conducted by Geo-Science Australia for 26 Asia-Pacific countries, PNG is ranked as one of the most disaster prone countries in the region.

The study ranked PNG within the top 6 of these countries as having the highest percentage of population exposed to earthquake hazard, as well as having one of the highest total populations exposed to earthquake in the Asia-Pacific region. PNG also ranked close behind the Philippines, Indonesia, and Vanuatu in having the highest percentage of population exposed to severe volcanic risks.

In addition, there is high risk of technological and human-caused disasters from oil spill, industrial pollution, unregulated and destructive land use practices and infrastructural development, as well as a rapid growth in population. Societal crisis such as civil unrest and HIV/AIDS have also made their presence known in Papua New Guinea.

In PNG natural disasters have consistently affected key sectors of the economy such as agriculture, infrastructure and community livelihoods. In the period between 1997-2002, 63 major calamities were reported in PNG that affected 4.1 million people. These events combined have resulted in damage and losses amount to approximately of K 131 million. Over the past 25 years, the country has had 508 earthquake-related fatalities, 9 deaths from volcanic eruptions, 3,210 from tsunami/wave surges, 47 from cyclones, 58 from flooding, 314 from landslides, and 98 from drought.

The social and economic ramifications of these many hazards is multiplied when overlaid with the high levels of vulnerability of people due to the lack of infrastructure, low human development indicators, and a high population growth rate. The highlands, with 2.2 million people, are subject to weather extremes of heavy rainfall and drought.

Increasingly, landslides are occurring from population pressures on uncontrolled land use. The coastal areas and the many coral atolls are low-lying and nearly 500,000 people in 2,000 coastal villages are vulnerable to weather extremes and inundation. Over 80 percent of the population live in a rural environment and are susceptible to extremes of climate (rains and drought) related to the El Niño Southern Oscillation (ENSO).

Scientific evidence suggest that frequency and intensity of El Niño events has increased over the last 50 years and a major El Niño event may result in severe drought conditions in most parts of PNG. Climate change is also likely to exacerbate the risk of natural hazards by causing extreme weather events more frequently and sea-level rise to magnify the impact of storm surges and waves on coastal areas.

The northern portion of New Guinea mainland and the islands are vulnerable to volcanoes, tsunami, coastal flooding, landslides, earthquake and rising sea level. Similarly, with the Highlands interior and other upland areas of the country, frost, hailstorms, drought, bush-fires, and landslides are frequent.

However, just as flooding and drought conditions are experienced in the entire New Guinea Islands, tropical cyclones are also common along the southern and the far eastern coastal and island region of Papua New Guinea. On the other hand, human-caused disasters maybe categorized under technological, industrial and biological hazards.

2.2. Role of Disaster Risk Management in achievement of the MDGs and NGDSP goals:

Disasters and development are highly inter-related. Large-scale disasters and frequent localized disasters erode development gains and compromise PNG prospects for achieving the Millennium Development Goals (MDGs) particularly Goal 1, 6 and 7. The table below identifies the adverse impact of disasters on achieving the MDGs.

<p>GOAL 1: Eradicating extreme poverty and hunger. Extreme poverty and hunger have many consequences for the human condition in general and specially in relation to disaster risk reduction. These broadly include the increased likelihood of population living in more hazard-prone areas, less protection again disaster impact, lowered coping capacity during and after the hazard event,</p>
<p>GOAL 6 Combating HIV/AIDs, Malaria and other diseases: Economically and socially marginalized (especially women, children and elderly people) and highly disadvantaged infected people including population living with HIV/AIDs often suffer greater impact during a hazard event, and in its aftermath. With basic infrastructures damaged and interrupted, water-borne diseases escalate rapidly.</p>
<p>GOAL 7: Ensuring Environmental sustainability: The link between disaster occurrence and environmental degradation is quite prominent. Deforestation and soil erosion increase, mudslides, landslides and flash flooding. Desertification increase drought. Climate Change and variability is one of the causal factors of extreme weather events. Degradation of the resource base leads directly to less access to resource-based livelihoods, migration to marginal and other more hazard-prone areas.</p>

Moreover, disasters impact the overall development, and recurrent and expensive disaster relief, recovery and reconstruction operations drain away resources that could otherwise be used for the development of the country. The Aitape/Sissano tsunami alone cost the country K 31 million. Cyclone Guba inflicted an economic loss of K100 Million. The 1997 drought affected 2.3 million people and forced the government to spend huge amount of public funds amounting up to K 29 million in drought response. It is crucial to note that disasters could arrest or reverse progress toward meeting planned

PNGDSP targets by inflicting deaths and injuries, destroying infrastructure, eroding livelihoods, savings and physical capital. Therefore to attain the goals and visions envisaged in the PNGDSP it is imperative to pursue disaster risk reduction.

2.3. Priority strategies for Disaster Risk Management:

The Government of PNG recognizes the country's vulnerability to natural disasters and is committed to reducing disaster risk for sustainable development. In the year 2005 the PNG government developed a strategic framework for disaster risk management (Papua New Guinea Disaster Risk Reduction and Disaster Management National Framework for Action 2005-2015) which is consistent with global and regional DRM policy instruments/frameworks. The Government will pursue implementation of the strategies already outlined in the framework.

The overarching strategy to manage disaster risks will be to systematically incorporate hazard consideration into development planning and budgetary process. The government will also intensify efforts to improve resilience against all forms of hazards so as to minimize the overall social and economic impact. The Governance arrangements relating to disaster risk management will be further strengthened through promulgation of a new DRM legislation and dissemination of 'DRM protocols'.

One of the major focuses of the government will be to improve the existing early warning systems and enhance community preparedness through public awareness and education programmes. Capacity building of provinces to effectively manage disaster risks will be a top priority for the government in the next five years that will include setting up Provincial Disaster Offices with necessary equipment, trained personal and appropriate funding.

An effective and timely response system will be put in place through the establishment of Rapid Response Teams both at the National and Provincial Levels with deployment kits and readily available funding for emergency response. Upgrading nationwide communication network, establishment of a country-wide GIS database, making risk information available for development decision, development of mitigation measures to adapt to climate change will also be priorities for the Government.

2.4. The legal and institutional framework for disaster management in PNG:

There are statutory definitions for various disaster management terminology and political and financial demarcations outlined in the *Disaster Management Act Chapter 403*. Legislative provisions have proved insufficient and would have to be reviewed in light of recent strategic considerations. But as a rule of thumb, the term "disaster" applies when the respective disaster management authority at the ward, district, local, provincial or national level has to go beyond its political and/or administrative jurisdiction to seek assistance when responding to disaster events.

Disaster managers were “responsive” as opposed to being “proactive”. Management of disasters practiced at most levels of government was uncoordinated resulting in inefficiencies. The practice in the past was based on what happens during and after disaster events and not on what could have been done well before disaster events to increase the chances of minimal damage to life, property, economy, and the environment.

For instance, according to non-conclusive data compiled internally by the National Disaster Centre, between the period 1997-2002, over K70 million was spent on humanitarian costs and, although this figure is debatable, it is symptomatic of the above practice.

One can only wonder as to how much disaster preparedness, prevention, and mitigation projects could have been funded out of this government appropriation. Suffice it to say that this approach has now changed to what we refer to as “A Step Ahead” approach which involves proactive planning and implementation of mitigating disasters, and disaster risk management initiatives.

The Government through the National Disaster Committee and the National Disaster Centre is determined to reduce risk in Papua New Guinea. It has a set of disaster management arrangements, systems and plans in place to manage and coordinate disasters in the country.

The existing Emergency and Disaster Management arrangements of Papua New Guinea are as outlined below:

2.5. The Disaster Management Legislation:

The Disaster Management Act 1984 (revised 1987) provides the mandate for the Centre through the National Disaster Committee. The “National Disaster Centre” (NDC) is established under the Disaster Management Act and the National Disaster Committee.

The Centre acts as the executive arm of the National Disaster Committee and is responsible for carrying out its day-to-day responsibilities. The Minister for Inter-Government Relations and Ministry of Provincial and Local Government Affairs is the responsible government ministry directly responsible for disaster management in Papua New Guinea.

The DM act is being reviewed to strengthen collaboration and coordination across Government and with Provincial, District and Local levels as well as with partners and other stakeholders with a view to greater efficiency and effectiveness in relation to all phases of the DRM cycle: prevention, mitigation, preparedness, response, relief, recovery, rehabilitation and reconstruction.

2.6. The National Disaster Committee – Membership & Role:

The National Disaster Committee is made up Departmental heads of various government departments including; Health, Works, Defence, Police, Foreign Affairs, National Planning, DAL and Donor and NGO reps. The Committee's responsibilities as stipulated in the Act are to:

- i) Supervise the national state of preparedness for emergencies and disasters and report on it to the National Executive Council;
- ii) Maintain the National Emergency Plan;
- iii) Assign responsibilities for disaster related activities to Departments and other bodies;
- iv) Advise NEC if assistance required;
- v) Lay down guidelines for the preparation and format of provincial disaster plans;
- vi) Approve grants;
- vii) Foster public awareness of the effects of natural hazards & measures which can be taken to reduce their effects;
- viii) Supervise establishment of stockpiles of relief supplies; and
- ix) Advise the National Executive Council of all the circumstances and on the advisability of declaring a National Emergency.

The National Disaster Centre is responsible for providing secretariat support to the Committee and coordinate with the above departments and agencies in mitigating the effects and impacts of disasters in Papua New Guinea.

2.7. Role of the National Disaster Centre:

The National Disaster Centre was established by an Act of Parliament to manage and coordinate all disasters and emergencies in Papua New Guinea. The office is headed by Director General, who is appointed by the National Executive Council (NEC).

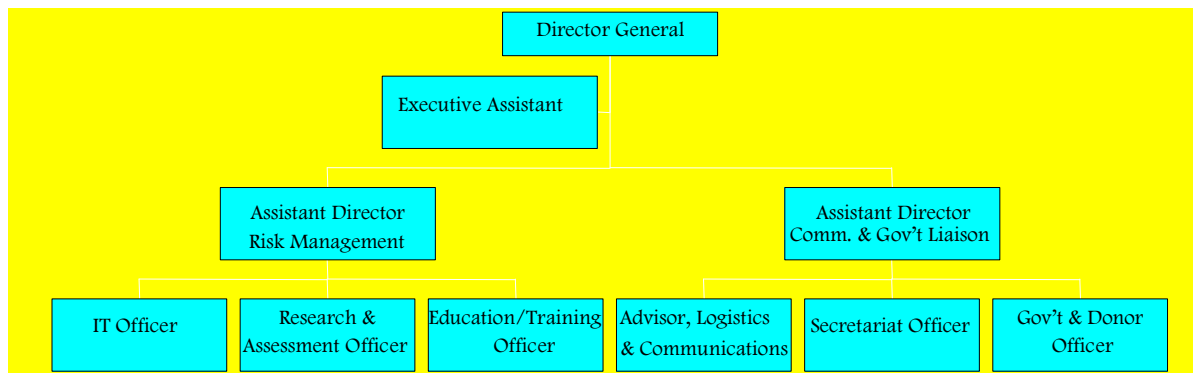
There are two divisions that made up the centre. Risk Management Division is responsible for preparedness and mitigation of disasters and emergencies, and the Government & Community Liaison is responsible for corporate affairs as well as deals with disaster response and emergencies in the country. Each of the division is headed by an Assistant Director.

The responsibilities of the National Disaster Centre as stipulated in the Act are to:

- i) Advise National Disaster Committee on all disaster management and disaster risk management matters ;
- ii) Coordinate national relief efforts;
- iii) Act as the secretariat to National Disaster Committee and its sub-committees;

- iv) Maintain a network of disaster management liaison officers;
- v) Report annually to National Disaster Committee on its activities;
- vi) Provide advice and support for Provincial Disaster Committees;
- vii) Assist with disaster management training for all levels and sectors when appropriate;
- viii) Implement policies and decisions of National Disaster Committee.

Responses to emergencies or disasters roles lie with each respective Provincial Authorities. Both the National Disaster Centre (NDC) and the Provincial Disaster Committees have the primary responsibility for implementing and coordinating the disaster counter measure activities before, during and after disaster and emergency situations.



2.8. The Provincial Disaster Committees – Membership & Role:

The Provincial Disaster Committees are established by Section 9 of the DM Act of 1987. The membership is comprised of the:

- Head of the Provincial Administration or in case of NCD, Manager of the National Capital District Commission as Chairman;
- Provincial Police Commander or in case of NCD, Commander NCD/Central;
- Provincial Works Manager or in case of NCD, City Engineer;
- Provincial Health Advisor (Officer) or in case of NCD, Health Officer;
- Officer-In -Charge of Provincial Affairs;
- Officer-In-Charge of Delegated Functions; and
- NGOs rep and other co-opted Members
- the provincial Disaster Coordinator is the secretariat to the Provincial Disaster Committee (PDC).

Provincial Disaster Coordinator is the secretariat to the Provincial Disaster Committee (PDC).

The basic roles and functions of the Provincial Disaster Committees are to: -

- i) Provide and render advice to the Provincial Executive Council (PEC) through the Governor in ensuring that development plans for the province take into account hazards prone to the Province;
- ii) Conduct assessments on particular hazards prone or common in the province;
- iii) Prepare contingency plans for respective hazards and supervise the state of preparedness for emergencies in the Province;
- iv) Foster public awareness on natural phenomena and mitigation measures; and organize training of relief workers in the province.

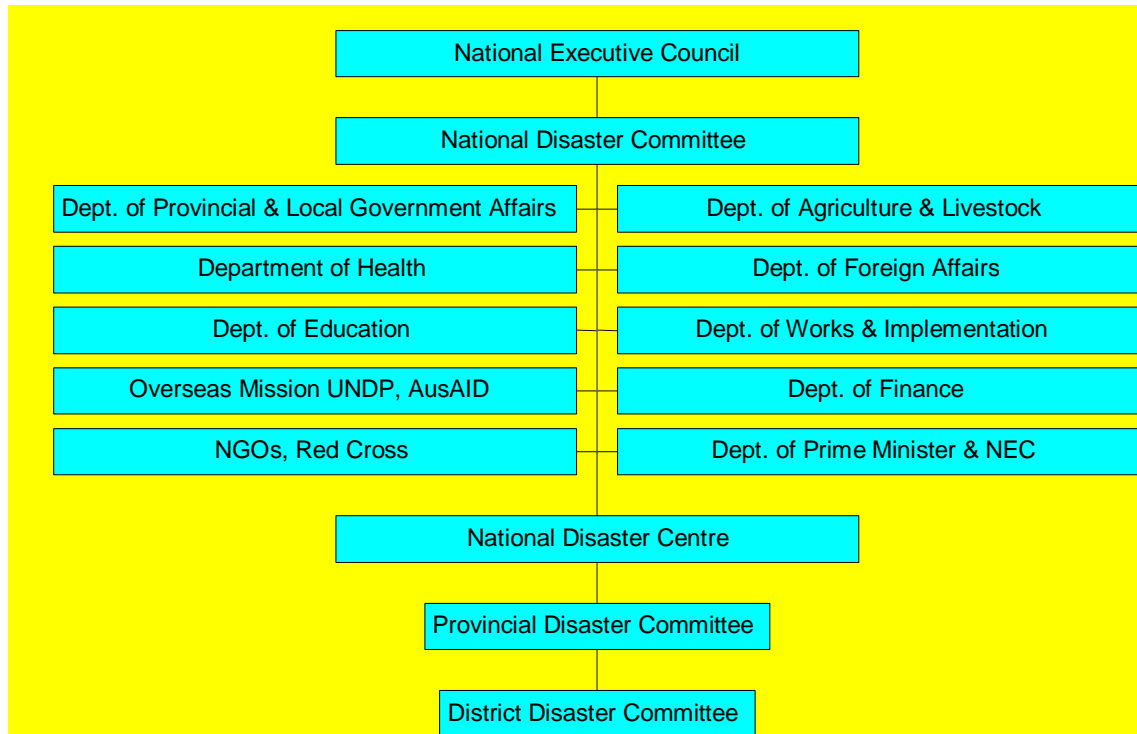
2.9. The National Disaster Management Plan:

The National Disaster Centre has in place a Disaster Management Plan since 1987. However, this Plan is currently under review and is expected to be completed and endorsed by the Government in 2009. The responsibility for Programming and Projects Planning to reflect the aims and the objectives of the National Disaster Management Plan is vested on the National Disaster Committee (NDC).

The National Disaster Management Plan provides guidance and direction for disaster management activities for all stakeholders and partners throughout the country, including all levels and sectors, both government and non-government. The plan has an aim, objectives and outlines the roles and responsibilities for various government levels, departments, agencies, authorities and communities. It encourages self –reliance, as it is one of the greatest assets in coping with the threat of disasters.

The plan and Act compliment each other, and they have other supporting documents such as the Mitigation Policy, Five Year Cooperate Plan, Supporting Work plans, Standard Operating Procedures, and National and Provincial Response Plans, and the PNG Disaster Risk Reduction and Disaster Management National Framework for Action 2005—2015.

Structure and Functions



The National Executive Council (NEC) comprising of members of the National Parliament makes final decisions for any disaster policy matters. The National Executive Council is guided by the National Disaster Committee, which comprises of heads of key National Government agencies who are vested with additional responsibility of Disaster Management.

Such departments include; Provincial & Local Government Affairs, Finance, Health, Works, National Planning, Foreign Affairs, Defence, Police, Red-Cross and Prime Minister and National Executive Council. The Chairman of the committee is the head of Department of Provincial & Local Government Affairs.

This committee is the decision making body of any emergency or disaster matters. When there is a matter concerning other departments, NGO's or churches they are co-opted. The PNG Disaster Management Act also allows the other Departmental Heads, NGOs and the national Churches as Co-opt members.

The Foreign Missions are represented by UNDP. Adhoc sub-committees are formed for the purpose of mitigating the disaster at hand e.g. Water Sub-Committee to advise on water matters and the Awareness & Preparedness Committee to advise on the type of information to be disseminated to the public on how best to avoid heavy impacts of disasters, Disaster Education & Training Committee to advise on disaster training.

Membership is comprised of technical and specialized government and non-government officers in the disaster related fields. Similar arrangements are made at the provincial level with the Provincial Disaster Committee (PDC) except that instead of the Secretaries of the departments, the advisors or managers of the line departments become members of the Provincial Disaster Committees.

Sub-committees or working groups are established for the special occasions or purposes, e.g. when a disaster occurs, and these are abolished when the purpose for which they were instigated does no longer exist. The National Disaster Awareness and Preparedness Committee, however, was formed in 1998 during the Aitape Tsunami, and this has been maintained to date due to the important functions it has to fulfill.

The committee comprises of technical and specialized government and non-government officers in the disaster related fields. The Papua New Guinea Disaster Management system is headed by the National Disaster Committee who is responsible to the National Executive Council through the Minister for Inter-Government Relations.

2.10. Non-Government Organizations' (NGO's):

NGOs those are active in Disaster Management in PNG include the PNG Red Cross Society, OXFAM, World Vision, Salvation Army, CARE, church groups and the Council of Social Services. These organizations are very active in the country with disaster and emergency programmes and have representative members in most of the Provinces and Districts in the country. As part of effective coordination and monitoring of short term and long term responses, only registered NGOs are now permitted to involve in any emergency or disaster situation.

2.11. Disaster Management Team (DMT):

The Government of PNG and the UN system have also established a Disaster Management Team (DMT) mechanism, which comprises all the key agencies working on DRM with Government, development partners and NGOs, and is chaired by the Resident Coordinator with OCHA providing secretarial support.

Some Disaster Management Team activities include: following up on the implementation of the UNDAC Mission recommendations; ensuring that the existing national contingency plan is still understood and relevant ; ensuring that coordination mechanisms are in place; and becoming the Inter-Agency Standing Committee in case of a disaster.

This mechanism and the support of the UN system have enabled good progress on preparedness activities and clear coordination with government, and will prove especially important to support the roll out of the protocols by providing training, awareness raising and coordination support. This will enable the protocols to be

properly understood and disseminated and enable them to facilitate a more clear and predictable response to a disaster.

2.12. Mitigation Policy:

The National Disaster Mitigation Policy was approved by the National Executive Council (NEC) in 2003 and was launched in 2004. It changed the emphasis in disaster management from disaster response to preparedness and mitigation. NDC had been promoting the policy in its provinces with DM partners.

2.13. The National Disaster Awareness and preparedness Committee:

The committee is a sub-committee of the National Disaster Committee and was established in early 1999. The committee is a coordinating and advisory body that has no executive powers.

The function of the committee are to promote awareness and preparedness of natural and other hazards throughout PNG, provide technical advice of the highest possible stand to the Government of the PNG and other civil authorities in regard to natural and other hazards, to encourage and coordinate scientific investigations that are relevant to natural and other hazards in PNG and to improve communication and cooperation amongst those concerned with disaster reduction.

3. Disaster Risk Reduction in Papua New Guinea.

3.1. Disaster Risk Management Initiatives:

Management of disasters practiced at most levels of government was uncoordinated resulting in inefficiencies. Disaster managers were “responsive” as opposed to being “proactive”. The practice during the past was based on what happens during and after disaster events rather than what could have been done well before disaster events to increase the chances of minimal damage to life, property, economy, and the environment.

A “Step Ahead” is the new approach the National Disaster Centre is taking to manage and coordinate disasters in the country. It is compatible and consistent with regional, international and United Nations where it emphasizes on strategic disaster and risk management. The new approach the centre is emphasizing and concentrating on is prevention, preparedness and mitigation. Since 2000 the focus has been on Mitigation through pro-active planning, awareness and resource allocation.

Disasters cannot be stopped but their impact can be reduced and they can be managed through proper and effective planning, networking and partnership. Some of the Risk Management activities already and currently being undertaken are as outlined below:

3.2. Disaster Risk Reduction Programs:

- Ongoing Training and Awareness Programs at all levels
- Development and Implementation of CHARM
- Development of Disaster Management and Contingency Plans at all levels
- Approval of Disaster Mitigation Policy
- Improvement of Emergency Communications at all levels and with Technical Agencies
- IT improvement in Provinces
- Preparedness Communities Fund – (AusAID)
- Capacity Building of Technical Agencies; Early Warning – (EU)
- Integrating Climate Change Adaptation and Disaster Risk Reduction with Environmental Science at University of Papua New Guinea
- Integrating Disaster Management into Education curriculum
- Establishment of Emergency Operation Centre’s in all Provinces
- Creation/Establishment of Climate Change Office

3.3. Training Programs:

One of the major objectives of the NDC is to build the capacities of staff of the provincial authorities through the provision of trainings. The staff of NDC provide training to provincial officials mainly on two topics; introduction to disaster management and initial damage assessment. Introduction of disaster management course provides information and skills necessary for participants to understand and fulfill their assigned roles in disaster management while initial Damage Assessment provides individuals with the skills and knowledge to conduct Indian damage assessment. Both courses were highly interactive and have been conducted over the years in various provinces.

3.4. Risk Reduction Activities on Rising Sea Level (Global Warning):

Global warming is a global phenomenon that has adverse impact in most of the island countries in the world today. Many of the outer islands including coastal areas in Papua New Guinea are currently affected by the rising sea level caused by global warming. It is a slow onset disaster whose impacts are already been experienced in all the Maritime Provinces where some islands have already sank. In many coastal villages sea level has claimed up to 300 to 400 metres of the once beautiful sandy beaches. Sea level rise is a global issue and is currently one of the major issues that is being discussed and addressed internationally by third-world countries.

Considering its importance, Papua New Guinea has been represented by the Prime Minister himself attending several international conferences and has signed a global agreement on global warming disaster risk reduction. Despite numerous ongoing discussions at the international, national and provincial levels there PNG is yet conduct a proper assessment to determine the impacts of the sea level rise and data collected to clarify the elements at risk.

The Prime Minister's enthusiastic and commitment on the issue of Climate Change has lead to a recent creation of an Office of Climate Change under the Department of Prime Minister and National Executive Council.

Papua New Guinea National Disaster Centre in collaboration with the relevant agencies including Department of Environment & Conservation, University of Papua New Guinea, and Provincial Disaster Offices has already commenced with remedial actions to assist the communities affected by the impacts of rising sea level.

Some of the remedial actions already undertaken are assisting the affected provinces with community awareness programmes on impacts of rising sea level, data collection and drafting of relocation/resettlement policies and action plans. One province has already developed a policy and plan, which they had already started implementing, whilst several other provinces are still in the process of developing their policies and plans.

Actually the Government of Papua New Guinea has already established an Office for Climate Change to address rising sea level/global warming issues.

3.5. Community Emergency & Disaster Management Programme:

Though the National Disaster Management Plan does not specifically spell out the existence of a Community Emergency Management Programme, based on the current PNG Reforms on the Provincial and Local Government, the Community Emergency Management Programme, is seen through short term programs, projects and activities of various sectors in each District or even lower to the council ward.

One good visible sectoral program is Health and Sanitation Programmes which not only aim to educate and create awareness in the minds of the people, but also try to contain possible outbreak of communicable diseases in the community.

Public Awareness on natural disasters immediately on hand has been one of the effective measures the communities play within their districts and council wards. The community leaders are the focal point on Community Emergency Management.

They coordinate awareness, receive and distribute emergency relief supplies on behalf the Provincial and the National Disaster Committees. As part of the review of the National Disaster Management Plan, District and Community Disaster Committees will soon be established. These committees will enhance sustainability of Community Emergency Management Programmes in due course.

3.6. Public Information Programme:

The Public Information Programme on Disaster Management in Papua New Guinea are presently being obtained, disseminated and shared by and through the following mediums: -

- Daily National Weather Services Forecasts;
- Volcano Activity reports by Rabaul Volcano Observatory;
- Earthquakes and seismic activities by Geophysical Observatory; and
- Occasionally various disaster and emergency awareness or warning issued by the National Disaster Centre (NDC).

The National Disaster Awareness & Preparedness Committee (NDAPC) is now taking the responsibility to advise the National Disaster Committee (NDC) and the National Disaster Centre on the best possible scientific information on any common hazards & disasters in Papua New Guinea. Professor Hugh Davis of University Papua New Guinea is the Chairman of the Committee.

3.7. PNG Community Emergency Management Programme (Training)

As part of the overall revitalization of the PNG National Disaster Management, several training programmes on disaster concepts, principles, skills and disaster management cycle were conducted at national level. The ultimate aim is to build in the *disaster culture* within the attitudes of Papua New Guinea citizens. This is *preparedness* through imparting knowledge and skills. The programme has already gone down to several Provinces.

Key people or citizens have been trained and they in turn will train or impart the knowledge and skills to others. In so doing everybody in the community will recognize their individual responsibilities and have a commitment to disaster *preparedness* and *responses*. The programme also intends to enhance the *traditional copying mechanism* practiced in Papua New Guinea society so that *self-reliance* is practiced as part of the daily life and in times of emergency responses.

Some of the trainings already been conducted are;

- Introduction to Disaster Management,
- Initial Damage Assessment,
- Emergency Operation Centre,
- Community Based Disaster Management, and;
- CHARM – Comprehensive Hazard Assessment & Risk Management Process.

CHARM is the key risk management process that is currently utilized in the country to manage disasters. The CHARM process is to identify and prioritize hazards and develop prevention, mitigation, preparedness measures to reduce impact of these hazards. It is more like diagnosing a sickness and prescribing a medicine to cure to sickness.

3.8. UNDP's DRM programme:

Under its Nation Building through Crisis Prevention Program (NBCPP), UNDP is working closely with the National Disaster Centre (NDC) towards improving its disaster management and preparedness capacities both at the national and provincial level. A baseline study on disaster risk management was completed in 2009. The study provided crucial information to UNDP in expansion of its programming in DRM. A DRM Adviser has been appointed to provide technical support to strengthen NDC's disaster risk management capacities.

UNDP's capacity development efforts at the national level will be complemented by tangible risk reduction activities in three high risk provinces including Autonomous Region of Bougainville, Oro and Eastern Highlands. Through a consultative process comprehensive DRM work plans have been developed for these three provinces. The activities that are being implemented in the provinces include; strengthening of provincial DM offices, establishment of fully operational provincial disaster committees,

training of district and provincial staff on DRM issues, development of preparedness and response plans and awareness generation programs.

3.9 Disaster Risk Management Mainstreaming Programme:

On the 14th September 2010, the National Disaster Center, announced the official launch of the 'Disaster Risk Management Mainstreaming Programme' in the country. The programme aims at establishing and supporting strategic activities for DRM mainstreaming into development planning and budgeting process so that there is a greater prominence and acceptance of disasters as a development issue.

The main components of the programme are high level advocacy at all levels of decision making for DRM mainstreaming, integration of DRM elements into national and sectoral plans, strengthening of governance arrangements for effective and efficient risk management, strengthening the capacities of key technical government agencies to better address their roles and responsibilities in relation to disaster management and development and dissemination of hazards and related risk data to inform development planning.

Under the programme, a comprehensive DRM action plan will also be developed for Morobe Province. The multi-donor funded DRM mainstreaming programme is of three years duration, with a total budget close to USD1 million. The programme was jointly developed by Pacific Islands Applied Geoscience Commission (SOPAC) and the United Nations Development Programme at the request of the Government of PNG.

3.10 AusAID DRM programme:

AusAID assisted and supported the Government of PNG and its communities on numerous occasions. AusAID provided assistance to PNG to improve its management of disasters, and the assistance covered; funding of provincial disaster committees, NGOs and community preparedness activities through Prepared Communities Grant Account, and provision of an advisor, funding of the current twinning arrangement between Rabaul Volcan Observatory and Geosciences Australia.

Through the community Grant Account Scheme resources were made available for preparedness and mitigation activities to civil societies, provincial and local level governments and NGOs. The account was governed by a Board, which comprises of the FAS Department of Planning and Rural Development, Director, NDC and a representative from AusAID. The Board made funding decisions for proposals for activities covered by the guidelines. This account was reviewed and is no longer in operation.

3.11. Hazard maps in PNG:

In 1983, at the time of the seismic crisis in Rabaul, the authorities produces a hazard map showing which area were at greater risk from volcanic eruption, and which at moderate risk, or at little risk. The map also gave information about preferred escape routes. Similarly authorities acting on advice from RVO, have produces hazard maps for Manam, Karkar, Langila, Garbuna, Pago, Lamington and Ulawun volcanoes. Plans are afoot to prepare other hazard maps for PNG.

4. Papua New Guinea Disaster Risk Management and Disaster Management National Framework for action 2005—2015

The Papua New Guinea Disaster Risk Reduction and Disaster Management National Framework for Action 2005—2015 was formulated from resolutions of serious of international meetings in Geneva, Switzerland, in 2004 followed by Kobe, Japan in 2005. The framework outlines key pro and pre-active activities of disaster risk reduction and disaster management in Papua New Guinea.

The guiding principles of the Framework are as follows:

- (a) **Governance – Organizational, Institutional, Policy and Decision-making Frameworks:** The National Government has the key responsibility for disaster risk reduction and disaster management policy development and planning, ensuring they reflect the principles of good governance, and security within the context of sustainable development. In fulfilling this responsibility, the National Government works in close partnership with key stakeholders such as donor agencies, international organizations, international and national NGOs, corporate organizations, churches and community groups.
- (b) **Analysis and Evaluation of Hazards, Vulnerabilities and Elements at Risk:** Developing a better understanding of hazards, together with analysis and evaluation of vulnerabilities and risks, enables people to be well informed and motivated towards a culture of prevention and resilience-building.
- (c) **Effective, Integrated and People-Focused Early Warning Systems:** Warnings must be timely and understandable to those at risk, take into account the demographics, gender, cultural and livelihood characteristics of target audiences, and support effective operations by decision-makers.
- (d) **Knowledge, Information, Public Awareness and Education:** Capacity building for disaster risk reduction and disaster management is facilitated by information gathering, storage and dissemination leading to knowledge acquisition and management, education, training and professional development programmes, and information management systems and technologies which underpin the successful implementation of policies and plans.
- (e) **Planning for effective Preparedness, Response and Recovery:** While all hazards cannot be eliminated, or some even substantially mitigated, improving disaster preparedness, response and recovery can significantly reduce their devastating impact on vulnerable communities.

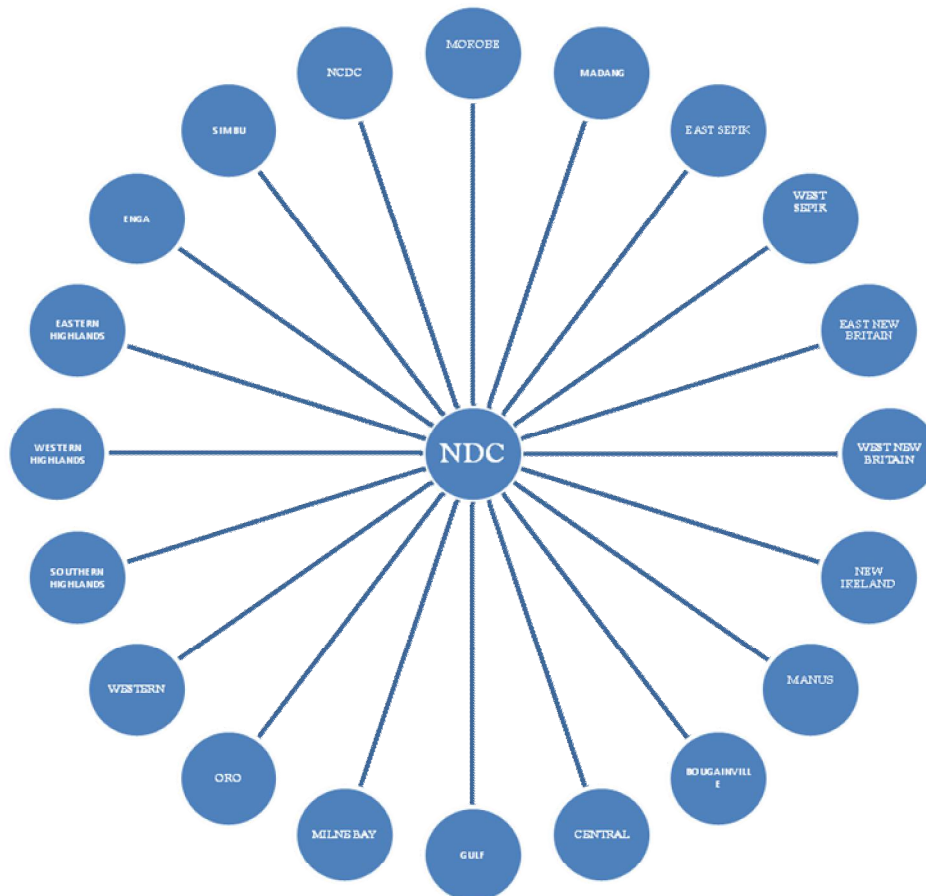
- (f) **Reduction of Underlying Risk Factors:** Risk factors relating to changing social, economic and environmental conditions need to be addressed in national sustainable development strategies or similar documents, as well as sectoral development policies, plans and programmes in order to provide a broader basis for effective disaster risk reduction and disaster management.

5. Emergency Response System.

5.1. Emergency Communications:

The National Disaster Centre has a nationwide HF Radio Communication network that links all the 19 Provincial Disaster Offices with the NDC Office. The network is integrated into Department of Health National radio network which covers the entire country that goes right down to the village level.

Apparently the country does not have a Emergency Communications Plan. The National Disaster Centre is currently in the process of developing a Emergency Communications Plan for the country. The Plan will be activated and utilized during major disaster operations.



5.2. Radio Frequencies:

The HF radio communications was and still is the primary means of communications between Port Moresby and the provinces. Other means of communications between the capital and the outlying islands are facsimile, land line and mobile telephone. These secondary communications details are provided in the Contact List in Section 2. The High Frequencies for radio communications as supplied by the Spectrum Division of Pangtel are detailed below:

Provincial HF Radio Network – Frequencies

Province	Location	Health - Hospital s, Clinics	Police		Provincial Administra tion
			Day	Nigh t	
Central	PHQ – Konedobu S/C: 1355				1355
Gulf	PHQ – Kerema S/C: 1351				1351
Milne Bay	PHQ – Alotau S/C: 1352				1352
Oro	PHQ – Popondetta S/C: 1356				1356
Western	PHQ – Kiunga S/C: 1343				1343
Morobe	PHQ – Lae S/C: 1354				1354
Madang	PHQ – Madang S/C: 1346				1346
East Sepik	PHQ – Wewak S/C: 1342				1342
West Sepik	PHQ – Vanimo S/C: 1341				1341
Manus	PHQ – Lorengau S/C: 1353				1353
New Ireland	PHQ – Kavieng S/C: 1359				1359
Autonomous Region of Bougainville	PHQ – Buka S/C: 1361				1361
East New Britain	PHQ – Kokopo S/C: 1358				1358
West New Britain	PHQ – Kimbe S/C: 1357				1357
Southern Highlands	PHQ – Mendi S/C: 1344				1344
Western Highlands	PHQ – Mt Hagen S/C: 1347				1347

Eastern Highlands	PHQ – Goroka S/C: 1349				1349
Enga	PHQ – Wabag S/C: 1345				1345
Simbu	PHQ – Kundiawa S/C: 1348				1348
National Capital District					

5.3. Standard Operation Procedures (SOPs):

During 2005 the center developed guideless for Standard Operating Procedures. The procedures are designed to assist the Centre and Provincial Disaster Officers to respond to notification of an emergency or a disaster. The guidelines are to be followed by all staff manning the National Disaster Center, Provincial Disaster Offices and the on call duty officers a the NDC's 24 hours operation room.

The procedures are aimed at ensuring a rapid and logical response to initial notification of a problem, up to the point that the Director (or anyone acting in the capacity) and the Administrator (Chairman of the Provincial Disaster Committee) is aware of the problem and takes over the operational response.

Decision on whether or not a damage and needs assessment team is needed, whether or not the Minister should be informed, and what other action should be taken by the NDC or the Provincial Disaster Office, will be made by the Director in consultation with the officers at the national level, or the Chairman, Provincial Disaster Committee at the provincial level.

5.4. Standard format for Provincial Disaster Management Plans:

The format sets out agreed and approved provincial/national policy in relation to all aspects of disaster management. The strategies and arrangements contained in this Plan reflect lessons learned from previous disasters not only from within the Province but also from other parts of the country.

The plan lays out in a comprehensive way and key physical infrastructures of the province, the main hazards and risk faced and the roles and responsibilities of concerned sectors at every level, both government and non-government in preparing for the responding to various disaster scenarios. Many provinces have already developed their own disaster management plans using the format.

5.5 Contingency Plans:

Response and preparedness planning requires outlining/development of a scenario and consensus on key assumptions about the scenario as well as the operational response environment and context that is foreseen. In this context an eCentre workshop was developed for participants from Papua New Guinea (PNG) enrolled in the ongoing 2010 PNG Contingency Planning Learning Programme being sponsored by UNHCR, OCHA, UNDP, and the PNG National Disaster Centre. The learning programme consists of 3 phases:

1. Preliminary reading and study of materials provided by the Programme
2. Attendance of a 3 day workshop on practical aspects of contingency planning (CP)
3. Implementation of a CP process and accomplishment of (at a minimum) a draft Contingency Plan in the participants' areas of concern.

The workshop was designed to expose participants to a disaster risk management approach to scenario-based contingency planning and to provide them with tools and templates for carrying out this type of planning themselves at the provincial level. Key learning points were illustrated through exercises, role plays, and hands-on planning practice wherever possible. Provinces that participated in the workshop are now developing their disaster contingency plans with the support and assistance of the National Disaster Centre.

5.6 Tsunami Response Plan:

Tsunami response procedures are designed to assist the National Disaster Center and the Provincial disaster offices to respond to tsunamis. They are to be followed by all staff manning both National and Provincial Disaster Offices, relevant agencies and the general public. These guidelines are not completed but they are meant to ensure that the NDC, Provincial Disaster Coordinator, relevant agencies and the general public know what to do after an initial notification of a tsunami alert warning.

6. Conclusion.

The Government of Papua New Guinea has approved and adopted a National Disaster Mitigation Policy as an effective mechanism and a way forward for effective disaster management in PNG. The policy provides guidance for all stakeholders within the Papua New Guinea Disaster Management system. The National Disaster Centre has embarked on the proactive approach to manage disasters in Papua New Guinea, and as such has developed series of policy documents to support this process. The Centre is operating on a five-year business plan.

This plan is supported by annual work plans for its divisions and individual staff. The National Disaster Centre is yet to finalize a review of the Disaster Management Act and the Plan. Once these reviews are completed they will be referred to the National Disaster Committee for approval, and on to the National Executive Council for final acceptance and endorsement for implementation.

The PNG Government recognizes the importance of networking and partnership as a very special ingredient for effective disaster co-operation and management in the country and has accord special effects and support of their incorporation with PNG disaster management system.

With the adaptation of all approaches and way forwards shared in this write up, and the re-assuring political support extended by the present Government, and the proposed review of the PNG disaster management systems, practice and protocols, PNG is bound to see a rather vibrant, rosy and determined disaster management outfit ready to take challenges head on and begin to intensified service delivery and meet the needs of its citizens proactively in a timely manner, and fulfill its objectives in managing disaster risk and disaster management in Papua New Guinea.