The Study on Comprehensive Disaster Prevention around Mayon Volcano

SUPPORTING REPORT (1)

(Part I: Master Plan)

IX : Institutions

SUPPORTING REPORT (1)-IX INSTITUTIONS

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SUPPORTING REPORT (1) - IX INSTITUTIONS

1. NATIONAL DISASTER MANAGEMENT SYSTEM IN THE PHILIPPINES

People think of disaster management in terms of post-disaster actions such as relief and rehabilitation. Filipinos are of no exception. Yet disaster management covers a broad scope. The Filipino government gradually broadened its scope of policy and actions regarding disaster management. This section reviews development of national disaster management system since the independence of the Philippines to present.

1.1 Institutional Development History

(1) Independence to 1970

The Philippine's approach to disaster management was mainly reactive. The government responded to the disaster, which already affected a part of the country. Disaster management efforts were centralized with little participation of local officials. In 1954, National Civil Defense Administration (NDCA) was established under the Office of the President. However, organization of civil defense units at the local level did not function well. People were content to wait for assistance coming from the national government.

(2) 1970 to 1973

In 1973, the Office of Civil Defense set up field stations in the 12 Administrative Regional Centers outside of Metro Manila. The field personnel started to convert the local civil defense units into local disaster coordinating councils and retained the leaders and members of these councils.

(3) 1974 to 1978 - Disaster Preparedness

The OCD started organizing and training the chairperson and members of the councils in the different levels. DSWD trained community leaders on relief distribution, the PNRC trained community leaders on relief distribution and DOH focused their training on barangay health workers.

(4) 1978 - Formal Establishment of the National Disaster Coordinating Council

The government formalized the Ad Hoc disaster coordinating councils at the national, regional and local levels and to allocate emergency tasks to the different

governmental units pursuant to their enabling laws. Presidential Decree 1566 was issued and National, Regional, Provincial, City and Municipal and Barangay Disaster Coordinating Councils were created. The primal idea of this decree was to strengthen the disaster preparedness and response of the government from the national down to the barangays; thereby, promoting local management assistance among the various local governments.

(5) 1990 to Present - Disaster Mitigation

In April 1994, the NDCC issued the memorandum to the RDCCs on disaster mitigation. In this memorandum, the NDCC stressed the need to replace ad hoc response with disaster mitigation as an effective means to minimize disasters in the years ahead. The NDCC instructed to review historical data on past disasters, and conduct an inventory of existing physical structures and on-going projects to determine their vulnerabilities to natural disaster affecting the region.

At present, the scope of the Philippine's disaster management system is supposed to cover Preparedness, Prevention, Mitigation, and Response.

1.2 Organization for Disaster Management

This section first presents functions of disaster coordinating councils at various levels. Second, it reviews the roles of national government, local government and NGOs regarding disaster management.

(1) Disaster Coordinating Councils

Following the Presidential Decree No. 1566, the disaster coordinating councils are organized at national, regional, provincial, city/municipal and barangay levels. The organization rate of disaster coordinating council at regional, provincial, city, and municipal levels is very high while the organization at barangay level is limited to 70%.

	Number	Number of DCCs	Organization rate (%)
Region	13	13	100
Province	77	76	99
City	67	66	99
Municipality	1,540	1,539	99
Barangay	41,932	29,138	70
Total	43,629	30,992	71

Organization of Disaster Coordinating Councils as of 1996

Source: National Disaster Coordinating Council

1) National Disaster Coordinating Council (NDCC)

The establishment of the NDCC is embodied in Section 2 of Presidential Decree 1566 (1978). The NDCC serves as the President's adviser on disaster preparedness programs, disaster operations and rehabilitation efforts. It functions as the top coordinator of all disaster management efforts. The NDCC serves as the highest policy-making body. In the discharge of its functions, the NDCC utilizes the facilities and services of the Office of the Civil Defense (OCD).

The members of the Council are the following:

-	Secretary, Department of National Defense	Chairman
-	Secretary, Department of Public Works and Highways	Member
-	Secretary, Department of Transportation and Communication	Member
-	Secretary, Department of Social Welfare and Development	Member
-	Secretary, Department of Agriculture	Member
-	Secretary, Department of Education, Culture and Sports	Member
-	Secretary, Department of Finance	Member
-	Secretary, Department of Labor and Employment	Member
-	Secretary, Department of Trade and Industry	Member
-	Secretary, Department of Environment and Natural Resources	Member
-	Secretary, Department of Interior and Local Government	Member
-	Secretary, Department of Budget and Management	Member
-	Secretary, Department of Justice	Member
-	Secretary, Department of Health	Member
-	Secretary, Philippine Information Agency	Member
-	Chief of Staff, Armed Forces of the Philippines	Member
-	Secretary-General, Philippine National Red Cross	Member
-	Secretary, Office of Civil Defense	Member and Executive Officer

The roles of NDCC member agencies are summarized below.

Agencies	Major Roles
DA	Maintains data on agricultural crops, livestock and fisheries in disaster-prone area, undertakes surveys in disaster areas to determine the extent of damage on agricultural crops, livestock and fisheries
DBM	Releases the necessary funds required for disaster operations
DECS	Supply school buildings as evacuation center, assists in the public education campaign through integration in the school curricula of subjects relative to calamities and their causes and precautionary
DENR	Reforests and control of areas prone to flood, landslides, mudflows and ground subsidence
DOF	Issues rules and regulations for the funding by LGUs for DCCs
DOH	Organizes disaster management group in hospitals, coordination of medical relief service, undertakes necessary measures to prevent the occurrence of communicable diseases and epidemics
DOLE	Organizes disaster control groups in factories and industrial complexes in coordination with DPWH and OCD, provides emergency employment opportunities to disaster victims
DILG	Oversees the organization of Local DCCs in coordination with the OCD
DND	AFP – establishes communication linkages and makes these available for disaster operations, assists the INP in providing security coverage in disaster areas, assists in the reconstruction of damaged national and local roads, bridges, and structures of facilities
OCD	Makes available the Civil Defense Center for use by the Council during disaster operations, initiates the organization of Local DCCs in coordination with DILG, develops and prepares programs of disaster preparedness training of DCCs in coordination with DSWD and DILG, conducts studies on disaster management, monitors the implementation of the various provisions of PD1566
DPWH	Restores destroyed public works such as flood control, waterworks, roads, bridges and other facilities, provides equipment for rescue and recovery operations, assists in providing transportation facilities to transport relief supplies, personnel and disaster victims, provides warning to the public on impending releases of water from dams under its control
DSWD	Organizes relief and rehabilitation services in coordination with Local DCCs, assists in the training of DCCs in all levels in coordination with the OCD and DILG, distributes donations in accordance with relief requirements, provides assistance for the rehabilitation of victims
DOT	Support for disaster management operation at hotels and restaurants
DTI	Carries out measures to maintain normal level of prices of commodities during emergencies, assures the availability of commodities in calamity areas
DOTC	Coordinates the organization of the emergency transport services, restores destroyed transportation and communication facilities such as railroads and makes available existing communications and transportation facilities for disaster operations
DOST	PAGASA – Provides typhoon forecasting and warning, PHIVOLCS – Issues advisories on earthquake and volcanic activities
NHA	Assesses housing requirements of displaced persons, provides emergency or temporary housing with adequate sanitary facilities, and rebuild destroyed areas
PIA	Coordinates with government and private media in educating the public on disaster preparedness and operations, and provides public information service to disseminate disaster mitigation measures as well as to assist in warning the public on impending disasters
PNRC	Coordinates disaster leadership training courses and assists in the training DCCs, assists in providing emergency relief assistance to victims of disasters, makes available whole blood and its derivatives in times of disasters, and interfaces its other emergency welfare services (warning, rescue, evacuation, medical/nursing, first aid, ambulance and social services) with the activities of member agencies at all levels.

Roles of NDCC member agencies

Source: National Calamities and Disaster Preparedness Plan, 1988 NDCC

2) Regional Disaster Coordinating Council (RDCC)

RDCC is established in 13 regions in the Philippines. Regional Director of Philippine National Police chairs RDCC. Its functions are summarized as follows:

- Establishment of a physical facility to be known as the Regional Disaster Operations Center (RDOC);
- Coordination of the disaster operations activities in the regions;
- Implementation of the guideline set by the NDCC within the region;
- Provision of advice to the local disaster coordinating councils on disaster management;
- Submission of appropriate recommendations to the NDCC, as necessary.
- 3) Provincial Disaster Coordinating Council (PDCC)

PDCC is organized in each province and chaired by governor. Its member consists of regional offices of various national government agencies and provincial government offices. Its functions are summarized as follows:

- Establishment of a physical facility to be known as the Provincial Disaster Operations Center (PDOC);
- Coordination of the municipalities and the cities within the province;
- Implementation within the city the guidelines set by the RDCC;
- Advises the Barangay Disaster Coordinating Council regarding disaster management;
- Submission of recommendation to the RDCC as necessary; and
- Control of CDCC and MDCC during an emergency that affects the cities and municipalities.
- 4) City/Municipal Disaster Coordinating Council (CDCC/MDCC)

CDCC/MDCC is organized in each city and municipality. Its member consists of various national government agencies and city and municipal government offices. Its functions are summarized as follows:

- Establishment of a physical facility to be known as the City/Municipal Disaster Operations Center (CDOC/MDOC);
- Coordination of the municipalities within the city/municipality;
- Implementation within the city the guidelines set by the PDCC;
- Advise the Barangay Disaster Coordinating Council regarding disaster management;
- Submission of recommendation to the PDCC as necessary.

5) Barangay Disaster Coordinating Council (BDCC)

BDCC is organized at barangay level and chaired by barangay captain. Its member consists of barangay officials. Its functions are summarized as follows:

- Establishment of a physical facility to be known as the Barangay Disaster Operations Center (BDOC);
- Coordination from the BDOC the disaster operations activities of the municipalities within the barangay;
- Implementation within the city the guidelines set by the CDCC/MDCC;
- Advise the members of Barangay Disaster Coordinating Council regarding disaster management;
- Submission of recommendation to the CDCC/MDCC, as necessary.
- (2) Roles of National and Local Governments and NGOs on Disaster Management
- 1) Pre-disaster phase
 - a. Planning for disasters

NDCC through OCD reviews and evaluates all documented plans submitted by all government entities, political subdivisions as well as private organizations as to compliance with pertinent advice/instructions and/or guidelines set forth in the National Calamities and Disaster Preparedness Plan.

b. Organizing

NDCC through OCD shall spearhead the organization of Disaster Coordinating Councils from the region down to the barangay levels in coordination with the Department of Interior and Local Government that shall act as the overseer of the councils.

c. Training

DILG in coordination with the OCD, MSWD, PNRC and other appropriate agencies conducts training of members of local disaster coordinating councils

DECS assists in the public education campaign through integration in the school curricula.

DTI trains disaster control groups and reaction teams in large buildings used for commercial purposes.

d. Stockpiling

DSWD and municipality including MSWD are responsible for stockpiling of food. DOH and municipal health office stockpile medicines and medical supplies.

e. Forecasting and Warning

Philippine Atmospheric, Geophysical, and Astronomical Administration (PAGASA) provides forecasting and warning for typhoons and flood. Philippines Institute of Volcanology and Seismology (PHIVOLCS) is responsible for volcanic hazard. PAGASA releases "Tropical Cyclone Warning" four times a day when wind speed reaches 30-60km/h. PAGASA informs LGUs and general public of typhoon by "Public Storm Warning Signal". Mass media is used for general public. For LGUs, PAGASA informs OCD and OCD communicates RDCC. Then RDCC delivers information to PDCC, likewise PDCC to CDCC/MDCC and CDCC/MDCC to BDCC. This communication route takes time. Thus PAGASA field offices provides necessary information to LGUs directly. LGUs however often receive typhoon information through mass media. CDCC/MDCC meeting is convened when necessary. Mayor as a chairman of DCC, gives evacuation order to the residents concerned. It is sometimes difficult to deliver necessary information to some barangays because there is no telephone and radio communication equipment in some barangays.

2) Emergency phase

Emergency activities include the following: rescue and engineering, evacuation, first aid and transportation service. Local disaster coordinating councils supervise emergency phase activities.

a. Rescue and Engineering Service

Local disaster coordinating councils supervise rescue and engineering activities. Rescue and engineering is mainly done by Armed Forces of the Philippines (AFP) and Philippine National Police (PNP). DPWH lends equipment and personnel to local rescue and engineering units.

b. Evacuation

Local disaster coordinating councils will be responsible for transferring of disaster victims or potential victims. The regional and provincial DCCs extend assistance to their lower level councils whenever the situation has

deteriorated beyond the capabilities of the latter to cope with. AFP assists in the evacuation activities. DECS makes available suitable school buildings as evacuation centers.

c. First Aid and Medical Services

DOH, PNRC and volunteer workers administer first aid at the disaster area.

d. Disaster Relief Services

Local DCCs in coordination with the DSWD and the PNRC are responsible for disaster relief activities. They undertake immediate survey of the disaster area, provides mass feeding, emergency housing, emergency clothing and missing persons tracing services.

e. Police Auxiliary Services

Police Auxiliary Services are organized in order to supplement the regular forces in times of disaster.

f. Emergency Transportation Services

DOTC and other government agencies, and private sector make available for use by the disaster relief teams their transportation facilities.

g. Damage Assessment

The local DCCs conduct immediate survey of the disaster area to determine causalities and damages to infrastructures, agriculture, aquatic resources, livestock and other properties. A result of the survey is sent to the next higher disaster coordinating council for transmittal to the NDCC through OCD.

- 3) Post emergency phase
 - a. Rehabilitation

The local DCCs determine the nature and extent of the rehabilitation efforts to be undertaken. The DCCs request for assistance from government agencies, private offices or individuals.

The DPWH restores destroyed public works such as flood control, waterworks, roads, bridges and other facilities under its control. Quick Response Fund of the National Calamity Fund is often used for immediate rehabilitation of the infrastructures. Restoration of locally managed infrastructures as provincial and municipal roads is made by the LGUs.

The DECS is responsible for restoration of the damaged school buildings. The DPWH assists the DECS in its restoration works.

Municipal and City Social Welfare and Development office issues calamity certificate which enables victims to obtain "calamity loan" from social security service. DSWD provides core shelter assistance, which enables victims to construct their own house themselves with technical assistance. In addition, LGUs assists the victims whose houses are damaged in repairing it by proving necessary materials and/or provides financial assistance.

b. Emergency Labor Supply

Department of Labor and Employment (DOLE) coordinates with the concerned agencies in the hiring of labor from the affected population as may be needed for the restoration, repair and construction of public buildings, roads, bridges, dams harbors, airports and other public infrastructure damaged by disaster.

4) Disaster Prevention by Land Use Regulation and Reforestation

Operation Mayon – prepared by PHIVOLCS defines the Permanent Danger Zone (PDZ). The PDZ extends six kilometres radius from the summit. No one is allowed to settle permanently in the PDZ. Once eruption becomes imminent or during alert level II, the PDZ is declared off-limits. Though any regulatory instrument does not support PHIVOLCS' declaration of the PDZ, the idea of PDZ is well known to the community. Land in the PDZ is assessed to have no value. Thus it is difficult to make investment in such area.

DENR is responsible for forest management and protection, reforestation, and soil conservation and watershed management. The amount appropriated for soil conservation and watershed management for Region V was 22 million pesos in 1997.

Cities and municipalities are responsible for formulating and updating their respective comprehensive land use plans, in conformity with the land use planning and zoning standards and guidelines prescribed by the Housing and Land Use Regulatory Board (HLRB). Province shall formulate and update their comprehensive land use plan in accordance with the national standards. The Province is required to review the land use plans of component cities and municipalities.

Local Government Code of 1991 provides that LGUs shall have a greater role in the formulation of local development plans and in the administration of service programs such as social welfare, health, agricultural extension and housing. They will also assume regulatory functions such as reclassification of lands, the implementation of National Building Code and the enforcement of environmental laws.

1.3 Organization for Disaster Prevention in Albay Province

This Section reviews the existing disaster management mechanism in the Albay Province by presenting the major activities of DCCs of various levels and NGOs.

(1) Albay Province Disaster Coordinating Council (PDCC)

In Albay Province, the Albay Provincial Disaster Coordinating Council was organized pursuant to the goals and objectives of PD1566. The Albay Provincial Disaster Coordinating Council composes of the following organizations:

- Philippine National Police (PNP);
- Provincial Social Welfare and Development Office (PSWDO);
- Department of Education, Culture and Sports (DECS);
- Provincial Health Office (PHO);
- Department of Public Works and Highways (DPWH);
- Land Transportation Office (LTO);
- Department of Trade and Industry (DTI);
- Department of Interior and Local Government (DILG);
- Armed Forces of the Philippines (AFP);
- Philippine Information Agency (PIA);
- Support and Stand-by Groups
- Philippine National Red Cross (PNRC);
- Department of Environment and Natural Resources (DENR);
- Composite Air Support Force (CASF);
- Naval District III SWAG/DRTG, PN(ND-III);
- Albay Legazpi Emergency Rescue Team (ALERT);
- PNP Maritime Police;
- Office of Civil Defense (OCD);
- Philippine Coast Guard;
- KABALIKAT CIVICOM (Volunteer Radio Communication Group);
- Department of Health;
- Philippine Port Authority;

- Bureau of Fire Protection;
- Albay Electric Cooperative (ALECO);
- Local Amateur Radio Club; and
- Local Water District



Organizational Structure of Albay Provincial Disaster Coordinating Council

(2) Establishment of Provincial Disaster Management Office (PDMO)

Albay Province was chosen by the Italian Government to be the pilot province to implement the Disaster Preparedness and Response Project (1990-1992). The Provincial Disaster Operating Center was established under this project. The Center served as the venue and hub of disaster management activities. In order to ensure continuity of the project, creation of the Provincial Disaster Management Office into an independent department was recommended. In June 1994, the resolution No. 155-95 "Institutionalizing and elevating the Albay Provincial Disaster Management Office to a Department Effective 1995" was passed in the Sannggunian Panlalawigan ng Albay (Albay Provincial Council).

The Provincial Disaster Management Office (PDMO) is the technical arm and Secretariat of the Provincial Disaster Coordinating Council (PDCC). It is an independent department of the provincial government. It is designed to strengthen the disaster management capability of the provincial government. In particular, the PDMO is set to establish an awareness at the community level and produce more disaster response managers and volunteers in promoting an efficient interventions on disaster preparedness and emergency response as stipulated in the National Calamities and Disaster Preparedness Plan. The Albay Provincial Disaster Management Office is the only permanent organization in the Philippines, designed to cope with disaster.

The budget of PDMO is appropriated from the Albay Provincial Government. The budget appropriated for 1998 is approximately 2.5 million pesos. This amount is allotted for personnel cost, research, training and other emergency expenses. The staff consists of 16 permanent employees and 9 casual employees. With this number of staff, they work 24-hours with or without calamity.

The PDMO drafted a "Disaster Management Operation Manual" in 1998. This Manual describes geographical setting of the Province, types of hazard, and the roles and functions of the agencies for disaster management operation. Action Plan on Typhoon, Fire Fighting Operation Plan, Emergency Action Plan on Sea Disaster, Mayon Volcano Alert Level, Inventory of Existing Disaster Preparedness Facilities, List of Barangay vulnerable to flood, volcanic eruption, storm surge, landslides and Inventory of rivers and creeks are attached as the annexes of the Manual.

The PDMO's tasks are described below by the three phases of disaster management operations, namely "Pre Disaster Phase, Disaster Response Phase, and Post Disaster Recovery Phase".

Pre-disaster Phase

Coordinates the activities and functions of the various agencies of the PDCC member agencies involved in this plan;

Reviews list of resources of agencies involved in disaster operations;

Establishes and maintains Disaster Operation Center as the hub of coordination, communication and emergency response;

Informs the PDCC Chairman of any impending threats per PAGASA/PHIVOLCS warning information and submits emergency/action plans;

- Releases orders and advisories for the activation of the disaster coordinating councils at the local level per recommendation of PAGASA and other warning agencies;
- Performs such other functions and responsibilities that maybe assigned by the higher DCC

Disaster Response Phase

- Maintains coordination between and among member agencies of the PDCC on a 24-hour basis;
- Monitors that support transportation facilities are pre-positioned at the PDOC and other strategic places in the three districts of Albay;
- Oversees the full implementation of the Disaster Response Plan of the PDCC and submits periodic activity monitoring and damage reports to the PDCC Chairman and higher DCC;
- Performs such other functions and responsibilities that maybe assigned by the higher DCC

Post Disaster Recovery Phase

- Prepares rehabilitation plans in coordination with the concerned departments such as PSWDO, DOH, and DPWH;
- Monitors rehabilitation activities being undertaken by the local DCCs;
- Conducts research to support future disaster preparedness and mitigation plans;

Performs such other functions and responsibilities that maybe assigned by the higher DCC.

In addition to the disaster operation, the PDMO initiates the following programs/projects:

- Disaster Preparedness, Mitigation and Prevention;
- Research and Documentation;
- Monitoring, Evaluation and Reporting;
- Training and Information;
- Communication and Transportation;
- Medical Services

The Albay Provincial Government now has a plan to establish the "Office of Public Safety". The PDMO is planned to be placed under this Office together with the Traffic Management Division.

- (3) Disaster Prevention at Community Level
 - a. Organization of City/Municipal Disaster Coordinating Council

The Study Area concerns one city (Legazpi) and nine (9) municipalities consisting of Bacacay, Camalig, Daraga, Guinobatan, Ligao, Malilipot, Malinao Sto. Domingo and Tabaco. In each city and municipality, a disaster coordinating council is organized. Most of the municipalities have disaster preparedness plan however these plans mostly consist of organization chart and simple explanation of the roles of the C/MDCC members. Few municipalities have disaster operation manual though the most municipalities have a list of evacuation center and a list of barangay prone to hazards.

The budget of CDCC/MDCC is virtually equal to the amount of 5% calamity reserve. In other words, the DCCs are not given any appropriated budget from the municipality. Few personnel are assigned as full-time disaster management officials at city and municipal level. In Tabaco Municipality, there are a few personnel assigned for radio communication on a 24-hour basis. The following table summarizes the disaster preparedness status of the municipalities concerned in this study.

Name of LGUs	DCC	Preparedness Plan	Operation Manual
Legazpi	Yes	Yes	Yes
Bacacay	Yes	Yes	No
Camalig	Yes	Yes	No
Daraga	Yes	Yes	Yes
Guinobatan	Yes	Yes	No
Ligao	Yes	Yes	No
Malilipot	Yes	No	No
Malinao	Yes	Yes	No
Sto. Domingo	Yes	Yes	No
Tabaco	Yes	Yes	No

Summary of Disaster Preparedness Status of the LGUs Concerned in the Study Area

b. Organization of Disaster Coordinating Council at Barangay Level

There are 446 barangays in the 9 municipalities and in Legazpi City in total. A barangay has a population ranging from 200 to as high as 7,000 persons according to 1995 Census of Population. Barangay Disaster Coordinating Council is organized in the most barangays.

A typical BDCC has an official staff of about 10 people, which corresponds to the number of barangay council members in most cases. It is common to have only a few paid BDCC workers. Volunteers constitute the other workforce of the BDCC. They are organized as the service teams. A service team is composed of 3 to 6 persons. This service is activated in time of imminent disaster. Hence BDCC activities are mostly reliant on higher DCCs, i.e. Municipal and City DCCs. For example, when municipal disaster coordinating council organizes evacuation drills, BDCC officials are invited to attend.

When the typhoon comes, BDCC counts on warning and other information from the municipality along with the typhoon warning communicated through mass media. Evacuation advice from the mayor is communicated to the BDCC. The BDCC then delivers the message to the area to be evacuated. The delivery of message often becomes a problem. There are some where electrification barangays is yet to be made. Neither telecommunication is available. In this case, evacuation advice is delivered by municipal officials to the near-by barangay. Then barangay disaster officials and the service team deliver the message by house-to-house visit. Approximately 50% of barangays near the Mayon Volcano have written Barangay Disaster Preparedness Plan. Disaster operation manual however rarely exists. Barangays do not appropriate any budget for BDCC activities. Necessary amount is released from the Barangay calamity reserve.

c. Disaster Management Operation by NGOs and Volunteer Groups

Network of NGO

In the Philippines, there is a network of ten national NGOs directly or indirectly involved with disaster and disaster responses The network is called "Inter-agency network for disaster response (IANDR)." IANDR consists of the following NGOs:

- Adventist Development and Relief Agency (ADRA);
- Catholic Relief Services (CRS);
- Citizen's Disaster Rehabilitation Center (CDRC);

- Council for People's Development (CPD);
- Luzon Secretariat for Social Action (LUSSA);
- National Council of Churches in the Philippines (NCCP);
- Philippine Business for Social Progress (PBSP);
- Philippine National Red Cross (PNRC);
- Philippine Rural Reconstruction Movement (PRRM);
- CARE Philippines

IANDR was established in the 1980s and responded to major disasters like July 1990 earthquake of Baguio, the Mt. Pinatubo Volcanic eruption, and a series of typhoons that struck in the 1990s.

Corporate Network for Disaster Response

Local network of NGOs and business sector was organized as "Bicol Corporate Network for Disaster Response" to develop and strengthen resource mobilization capabilities of regional NGOs in 1993. The members of the Bicol CNDR are:

- Bicol Small Business Institute Foundation, Inc. Legazpi City;
- San Miguel Corporation Beer Division, Naga City;
- Davao Union Marketing Corporation, Legazpi City;
- Simon of Cyrene Foundation, Daraga, Albay;
- Liberty Commercial Center, Legazpi City;
- Coca-Cola Bottlers Phils., Inc. Naga City;
- Philippine Jaycees, Naga City;
- Chamber of Commerce and Industry, Naga City

The activities of CNDR includes 1) stockpiling and distribution of relief goods to the evacuation centers for those affected by the eruption of Mayon Volcano in 1993 and typhoons, and 2) Coordination of the conduct of training for social workers, DSWD and DOH officials on stress debriefing.

Philippine National Red Cross (PNRC) Albay Charter

PNRC Albay Charter is a member of Albay Provincial Disaster Coordinating Council. Its Disaster Management Services is tasked to carry out relief and developmental programs for the most vulnerable population affected by emergencies and disaster.

Other NGOs in Albay Province

There are many non-government organizations registered under Security and Exchange Commission. They have different objectives, services, and activities. Most non-government organizations active in disaster prevention in the province is well coordinated with the Provincial Disaster Management Office (PDMO) through the Provincial Disaster Coordinating Council (PDCC) before, during, and after disasters. Among non-government organizations in the province, only two of them have disaster management related programs with permanent secretariat - Social Action Center (SAC), and the Bicol Small Business Institute Foundation Incorporated (BSBI).

Social Action Center

SAC is a Roman Catholic Church based non-government organization that reaches out to the whole Province of Albay and the City of Legazpi with 37 parishes as their centers. There are 19 permanent office staff and 5 Field Workers and some part-time and volunteers. Their fund for activities comes from donations from church organization, foreign donors including Germany's MISEREOR and Ford Foundation of the U.S.A.

In terms of disaster related activities, they concentrate their resources on the first and the third districts. The program consists of pre-disaster phase and post disaster recovery. Its disaster response phase activity includes communication or relay of information and maintains coordination between and among member of Provincial Disaster Coordinating Council on a 24 - hour basis.

Their activities consists of the following four types of activities.

• Education, Support Organizing and Training

This component provides the beneficiaries knowledge and skills necessary in disaster preparedness. Orientation seminars were held to target parishes and identified Core Groups or Disaster Management Teams to be trained.

• Relief Assistance/Operation

Social Action Center assists victims of calamities and disasters. The operation consists of food and clothing distribution, medical and shelter assistance. The examples of their operation include "Operation Tulong

(help)" after Mayon Eruption and Typhoon Rosing - 3,132 families from 33 Parishes (an ecclesiastic division under the care of a priest).

Rehabilitation

Assistance is made in the form of provision of materials for the destroyed houses with labor as their counterpart and loans for starting up an income generating project like carabao dispersal, "padyak" (bicycle means of transport similar to tricycle) and other livelihood projects. Their rehabilitation activities include the following:

- Sagip Buhay Tulungan Project (help and save life): a housing assistance extended to 43 families in Manito, Albay.
- Carabao Dispersal Project (Donation of Carabao): 100 beneficiaries from Camalig and Daraga and 10 beneficiaries from Mauraro, Guinobatan, Albay
- Donation of Padyak to 12 families in Polangui, Albay
- Income Generating Project of Sinamay Making (weeving): 20 families in Jovellar, Albay
- Handicraft Making: 30 families in Rapu-Rapu, Albay
- Sustainable Agriculture: 20 families in Polangui, Albay
- Linking and Networking

Social Action Center continuously coordinates with its partners in different government agencies like PDCC, DILG, PNRC, DSWD, and NGO's during its education and relief operations.

Bicol Small Business Institute Foundation Inc. (BSBI)

BSBI is a well-established non-governmental organization extending varied forms of services in the Bicol region. BSBI has 10 staff and many volunteers. It represents the non-government organization of Albay in the Regional Development Council of Region V, the Provincial Development Council (Albay Province) and the Legazpi City Development Council (City of Legazpi). It is affiliated with Philippine Business for Social Progress (PBSP), Partnership of Philippine Support Service Agencies (PHILSA), Small Economic Enterprise Development (SEED), Corporate Network for Disaster Response, (CNDR-Manila), and Woman Action Network for Development (WAND) on the national level. Their local affiliation is with Coalition for Bicol Development (CBD) – CODE – NGO and Albay Council of Social Welfare and Development Agencies (ACSWDA). It is accredited as nongovernment organization of Department of Labor and Employment (DOLE), Department of Agrarian Reform (DAR), Department of Environment and Natural Resources (DENR), Department Of Trade and Industry (DTI) Commission on Population (POPCOM), Provincial Development Council – Albay, City Development Council –Legaspi City, and Technical Education and Skill Development Authority (TESDA).

The active participation of BSBI in disaster related activities do not only cover the Province of Albay as well as the whole Bicol Region. With a strong linkage and network they established the Bicol Corporate Network for Disaster. It composes of local partners from non-government organizations, government sector and international funding institution. Their members are also non-government organization, peoples organization and business sector. Their major activities since their establishment in 1993 were as follows:

- Stockpiling and distribution of relief goods to the evacuation centers in several municipalities of the Province of Albay affected by the eruption of Mayon Volcano in 1993 and flashfloods/landslide in Manito, Albay in 1994.
- Coordinated the conduct of training on Critical Incidence for Stress Debriefing for the Foundation's Social Workers, the students of the Bicol University Social Work Department, the Department of Social Welfare and Development and the Department Of Health.
- Administered the conduct of the Stress Debriefing and psychosocial Care to the Victims of the flashfloods/landslide in the five evacuation Centers in Manito, Albay.
- Facilitated the distribution of Food for Work Assistance donated by the Italian Government and Maintained a record of the beneficiaries who received the food assistance and validated the amount of food utilized.
- Implemented the Supplemental Feeding to the children while they were in the evacuation centers in Albay Central Elementary School and Bagumbayan Elementary School in Legazpi City; Bical Sub-Camp, Tent City, Salvacion Sto.Domingo, Albay; and in Tuburan Elementary School, Ligao, Albay.
- Provided livelihood projects for disaster victims in Buang, Tabaco and in Jumpsite, Camalig.
- Facilitated the meetings of the local network especially during the disaster operations.
- Facilitated the conduct of Disaster Management Training's for the residents of some barangays near the Mayon Volcano.

• Distribution of relief goods on Typhoon Loleng's victims at Summit, P. Vera, Viga; Progreso, San Miguel; Dugui Too and Hicming Virac in Catanduanes.

Problems encountered during the conduct of the activities were lack of commodities for the victims and funds for retraining of community leaders, volunteers and staff. BSBI fund comes from donation and income from organization of training.

In addition to the above NGOs with permanent staff, there are two volunteer groups for disaster management operation. One is a volunteer radio communication group (KABALIKAT CIVICOM) and the other is volunteer rescue group (ALERT) affiliated with the PNRC.

In addition to the above two NGOs with permanent secretariat, there are two volunteer groups for disaster-related operation. One is a volunteer radio communication group (KABALIKAT CIVICOM), and the other is volunteer rescue group (Albay-Legazpi Emergency Rescue Team) affiliated with the PNRC.

Kabalikat Civicom Association (Legazpi Chapter)

It is a group of community communicators engaged in public assistance particularly during disasters and calamities to ensure public safety and convenience. The association is the communication arm of the Provincial Disaster Coordinating Council of Albay Province. It relays information to PDCC Operation Center through its own Command Center all information relative to the operations especially those requiring immediate action during disaster and calamities. There are 101 members from different profession. They responded to numerous incidents in the spirit of public service, selflessly offering their time and resources, and in some instances risking their own lives.

The association motto "The sole meaning of life is to serve humanity" were member dedicated to pursue their ideals. They have two groups, the KB 222 Tabaco Chapter for the first district and KB 40 for the second and third district of the province. Each group is headed by team leader to be designated by area coordinator and deployed at every municipality in the province giving priority to high risk/flood-prone areas as determined by the Provincial Coordinating Council. They have defined duties and responsibilities for each team including the over-all coordinator. The group does not only assist by means of communication as well as other activities and operation. Their past accomplishment undertaken among others are the following:

- Assisted victims of at least 20 vehicular accidents and rushed them to the nearest hospital using their own vehicles.
- Directly rescued fire victims through proper coordination with the Bureau of Fire Protection and helped in redirecting traffic during such disasters.
- Directly rescued of at least 10 barangays within the City of Legazpi and Municipality of Daraga during Typhoons in the past using their own vehicles and transport facilities of the Philippine Navy.
- Reported at least 5 cases of hit-and-run incidents and successfully helped in the apprehension of the suspect with the use of their communication facilities.
- Helped in the rescue of families in one remote barangay in the neighboring province of Sorsogon by timely responding to distress calls during the recent typhoon on the said area.
- Assisted the government during activities and celebration observed by the province.
- Served as the channel of communication between and among government agencies and private organizations in time of emergencies and calamities.
- Assisted the Provincial Disaster Coordinating Council during the Earthquake and Fire Drill conducted during the Disaster Consciousness Week.
- Assisted the Philippine National Police in preventing crimes through timely and adequate information transmission
- Conducted at least 10 medical mission not only in the Province of Albay and in the Province of Sorsogon as well.

4) ALERT (Albay Legazpi Emergency Rescue Team)

PNRC Albay Legazpi Chapter and the Albay Provincial Government established Albay Legazpi Emergency Rescue Team (ALERT) in 1992. The Italian Government assisted for the initial training of volunteers (35 days). There are 25 volunteers in addition to core members. Volunteers are assigned for a 3-year term. Every three years new volunteers are recruited and assigned. The volunteers are government employees and the self-employed. Employees in the private sector have difficulty in joining the ALERT because most employers prevent their employees from stay away from the office for emergency operation. ALERT works not only for disaster but also operates for sport festival.

PNRC provides ALERT with some amount of annual fund. Provincial government supplies ALERT with relief goods. ALERT lacks fund for procuring of equipment and training.

There are rescue teams in neighboring provinces; one is in Sorsogon and the other in Naga. Naga rescue team is hospital based and thus well equipped with medical equipment.

ALERT received a prize from NDCC in 1995 for its operation in Typhoon Rosing and a fire rescue.

1.4 Financial System for Disaster Prevention

Many national government agencies are involved in disaster management activities. It is difficult to aggregate the amount disbursed for disaster related activities by these agencies. According to the NDCC, the total amount of damages¹ by major disasters amounted to PHP24,967 million pesos in 1998 as shown in the table below.

Veen	Casualties			House I	Damaged	Cost of Damages	
Year	Dead	Injured	Missing	Total	Partially	(Million Pesos)	
1996	162	146	56	2,973	18,965	3,113.8	
1997	165	76	11	2,827	21,193	1,312.1	
1998	499	874	105	137,316	406,434	24,967.0	

Damages Caused by Major Natural Disasters in the Philippines

Source: Philippine Statistical Yearbook 1999, 1998 and 1997, National Statistical Coordination Board (NSCB).

The increase in damage in 1998 is mostly due to the impact of Typhoon Loleng that struck the country in October 1998.

Calamity Fund is the major national level budgetary sources for rehabilitation, reconstruction, and other works in connection with calamities. Aggregated amount of budget for evacuation is not readily available. Calamity Fund is managed by NDCC Secretariat and released by the approval of the President.

(1) National Calamity Fund

The national government appropriates certain amount of its budget as "National Calamity Fund". The appropriated amount is made available for relief, rehabilitation, reconstruction and other works. A release of the Fund is made

directly to the implementing agencies and to the LGUs in accordance with the recommendation of the National Disaster Coordinating Council and upon approval of the President. After the approval of the President, the Department of Budget and Management transfers the fund to the implementing national government agencies and to the LGUs.

Procedure in Requesting, Allocating, Releasing and Monitoring of the National Calamity Fund



¹ Damages covers crops and infrastructures

The actual amount of the National Calamity Fund released for 1996 to 1998 is summarized in Table below.

	1996	1997	1998	Average
Philippines	907,343,349	340,703,400	968,219,977	624,023,375
Region V	293,299,343	104,450,000	144,407,200	180,718,848
Albay	48,073,610	52,200,000	18,717,200	39,663,603
Legazpi City	20,023,000	20,500,000	0	13,507,667
Camarines Norte	53,502,733	300,000	0	17,934,244
Camarines Sur	81,450,000	17,000,000	108,000,000	68,816,667
Iriga City	5,028,000	0	3,440,000	2,822,667
Naga City	6,868,000	0	0	2,289,333
Catanduanes	37,790,000	3,150,000	5,000,000	15,313,333
Masbate	6,513,000	0	0	2,171,000
Sorsogon	34,051,000	11,300,000	9,250,000	18,200,333
ARMM	250,000	5,100,000	8,916,750	4,755,583
CAR	63,760,000	64,318,000	24,200,000	50,759,333
NCR	3,200,000	2,000,000	135,300,000	46,833,333
Region I	25,790,000	15,582,900	76,917,027	39,429,976
Region II	21,914,500	24,100,000	12,300,000	19,438,167
Region III	63,124,703	39,011,500	367,379,000	156,505,068
Region IV	211,777,803	31,400,000	20,600,000	87,925,934
Region VI	169,637,000	9,391,000	2,000,000	60,342,667
Region VII	9,400,000	7,250,000	2,000,000	6,216,667
Region VIII	19,640,000	4,300,000	16,200,000	13,380,000
Region IX	9,500,000	1,100,000	4,000,000	4,866,667
Region X	4,500,000	9,000,000	5,000,000	6,166,667
Region XI	6,250,000	8,900,000	32,000,000	15,716,667
Region XII	5,300,000	14,800,000	117,000,000	45,700,000

National Calamity Fund Released for the Year 1996 to 1998 by Region (pesos)

Source: National Disaster Coordinating Council, Philippine Statistical Yearbook 1997 to1999

Table IX 1.1 shows the National Government Expenditure Program by Sector for 1996 to 1998. The major findings from the expenditure program are:

- Expenditure for Water Resources Development and Flood Control was 5,430 million pesos in 1998, 2,709 million pesos for 1997 and 2,695 million pesos for 1996. In case of 1998, it is equivalent to 1.0% of the total national government expenditure; and
- Expenditure for Communications, Roads, and Other Transport amounts to at least 10% of the national government expenditure each year.

The Table IX 1.2 shows the budget of major national government agencies and special funds. The major findings relevant to disaster management and infrastructure development program are:

- 2 million pesos are appropriated for Calamity Fund, which is equivalent for 0.46% (97) and 0.37% (98) of the total appropriation; and
- 2.5 million pesos (97) and 2.3 million pesos are appropriated for Countrywide Development Fund, amounting to 0.60% and 0.43% of the total.

The NDCC does not have its own budget to disburse. It operates through its member-agencies and its local networks. Neither RDCC has its own budget. PDCC, CDCC/MDCC and BDCC disburse necessary amount from their (local) calamity fund.

(2) Financial Arrangement of LGUs for Disaster Management Operation

LGUs appropriate the amount required for disaster management activities from their revenues. Local Government Code of 1991 provides that 5% of LGU's fund shall be earmarked each year as (local) calamity reserve.

The aggregate amount of calamity reserve for Legazpi City and 9 Municiplaities and Albay Province was 4.2 million pesos in 1998. The amount of damage for public buildings by Typhoon Loleng was 200 Millions Pesos. Thus the current appropriation of calamity reserve is not sufficient for a large-scale disaster like Typhoon Loleng.

In addition to the calamity fund, LGUs shall set aside 20% of allocated IRA as "Development Fund". The Development Fund is used for infrastructure development project of the LGUs. It is however often the case that the fund is not much left for disaster related activities. Revenue, amount of IRA allocated and 5% reserve for calamity of the LGUs in the Study Area is shown in the following table.

	IRA (Thousand)	Other Revenue (Thousand)	Total Revenue (Thousand)	5% Reserve for Calamity (Thousand)	IRA/Total Revenue (%)	Population (1995)	Revenue / Population	No. of LGU Staff
Province of Albay	227,046	94,503	321,549	16,077	70.61%	1,005,315	225.85	637
City : 1. Legazpi City	134,815	96,208	231,023	11,551	58.36%	141,657	951.70	533
Municipalities: 1. Bacacay	18,732	6,297	25,029	1,251	74.84%	55,295	338.76	95
2. Camalig	18,869	7,292	26,161	1,308	72.13%	53,129	355.15	138
3. Daraga	27,599	24,181	51,780	2,589	53.30%	91,829	300.55	365
4. Guinobatan	22,760	19,989	42,794	2,140	53.19%	65,512	347.42	67
5. Ligao	27,076	17,366	44,442	2,222	60.92%	80,861	334.85	182
6. Malilipot	10,961	3,569	14,530	727	75.44%	26,834	408.47	69
7. Malinao	13,532	4,953	18,485	924	73.21%	33,872	399.50	73
8. Sto. Domingo	11,532	5,128	16,660	833	69.22%	25,586	450.72	75
9. Tabaco	27,766	27,388	55,154	2,758	50.34%	96,993	286.27	300
Total of the Study Area	540,688	306,874	847,607	42,380	63.79%	671,568	805.11	2,534

Revenue including IRA Allocation of LGUs in the Study Area, 1998

1.5 Government Infrastructure Program

The DPWH is the government agency responsible for flood control works. "Updated Medium-term Philippine Development Plan, 1996-1998" points out several objectives of the water resources sector. Among the objectives, the following are relevant to flood control:

- implement nonstructural measures such as floods plain management, zoning regulations, flood forecasting and warning and reforestation works; and
- carry out river improvement/revival program.

Construction and implementation of flood control and drainage projects in the 12 major river systems and in metro manila are stated as priority activities. Public investment achievement for Bicol Region for 1998 was 1,932,612 pesos. The public investment consists of energy, power and electrification, transportation, communication, water resources and social infrastructure. The total amount for flood control and drainage was 170,130 million pesos, which is equivalent to 8.8% of the total public investment. Likewise the public investment for Albay Province amounted to 150,594 million pesos while flood control and drainage, 38,826 million pesos. Majority of DPWH programme is allocated for road sector (around 80%) while the allocation for flood control and drainage is limited to 20%. Public Investment Achievement of Bicol Region, 1993 – 1998 is shown in Table IX-3, Public Investment Achievements of Albay Province, 1993 – 1998 is shown in Table IX-4 and 1999 DPWH Infrastructure Program is in Attached Table IX-5.

1.6 Legal and Regulatory Framework for Disaster Management

Though the government issued the different laws and rules related to disaster management, Presidential Decree 1566 issued in 1978 still acts as the framework law for disaster management in the Philippines. Legal and regulatory bases for the implementation of the Philippine's disaster management system are explained below by presenting the major provisions of the Acts, Presidential Decree, and Regulations.

(1) Presidential Decree 1566 (1978)

This Presidential Decree calls for the Philippine disaster control capability and national program on community disaster preparedness. The major provisions are:

• State policy on self-reliance among local officials and their constituents in responding to disasters;

- Organization of National, Regional, Provincial, City/Municipal and Barangay disaster coordinating councils (DCCs);
- Preparation of National Disaster and Calamities Preparedness Plan by the OCD and implementing plans by the NDCC member-agencies and local DCCs;
- Conduct of periodic drills and exercises by concerned agencies and local DCCs;
- Authority for local government units to program funds for disaster preparedness such as the organization of DCCs, establishment of Disaster Operations Center and training and equipping of DCC response teams. This is in addition to the 5% Calamities Fund under Section 324 (d) of the Local Government Code of 1991.

"Rules and regulations implementing the provisions of PD1566" defines the responsibility of each agency so tasked under the Decrees. It divides the disaster management activities into the three phases as the following: (a) Pre-emergency phase, (b) During emergency phase and (c) Post emergency phase.

(2) Republic Act 1190 (Civil Defense Act of 1954)

This Act established the National Civil Defense Administration (NCDA). The functions of (NCDA) are:

- to prepare and issue civil defense instructions; and
- to furnish guidance to provinces, chartered cities in the organization, training and operation of civil defense units in the local governments.

(3) Republic Act 7160 (Local Government Code of 1991)

The Local Government Code of 1991 increased the powers and responsibilities of local government in disaster prevention. The major provisions are given below.

- "The Sangguniang Barangay (Barangay Council) may organize community brigades, such as the Tanod Brigade and the Disaster Brigade;
- The Punong Barangay (Barangay Police) shall organize and lead an emergency group on occasions of emergency or calamity within the barangay;
- The Municipality/City Mayors and Governors shall carry out necessary emergency measures during and in the aftermath of man-made and natural disaster and calamities;
- The Sangguniang Bayan/Panlungsod/Panlalawigan shall adopt measures to protect the inhabitants of the municipality from the harmful effects of manmade or natural disasters and calamities and to provide relief services and

assistance for victims during and in the aftermath of disasters and calamities and their return to productive livelihood;

- 5% of the LGUs budget shall be earmarked for disaster management activities each year.
- (4) Republic Act 8185 (An Act Amending Section 324 (d) of R.A. 7160) 1996

This Act amends the Local Government Code which states that 5% calamity fund can only be released to the local government when the area has been declared by the President as a calamity area. This Act provides that the local sanggunian (Council) can now declare a locality as a calamity area so that the calamity fund can be disbursed for "relief, rehabilitation, reconstruction and other works or services in connection with calamities that may occur during the budget year".

(5) Presidential Decree 1067 of 1976 (Water Code)

The Water Code defined that Department of Public Works, Transportation and Communication (currently DPWH) is responsible for construction of dam, bridges and other facilities that traverse rivers and affect flow of rivers.

(6) Presidential Decree 1096 of 1977 (National Building Code)

This Decree specified the minimum requirements and standards on building design and construction for building to protect against fires and natural disasters.

(7) Executive Order No. 1035 of 1985

This Executive Order provides the procedures and guidelines for acquisition by the government of private real properties or rights thereon for infrastructure and other government development projects.

(8) Executive Order No. 72 of 1993

This Executive Order provides for the preparation and implementation of the comprehensive land use plans of local government units pursuant to the Local Government Code and other pertinent laws.

Cities and municipalities shall formulate and update their respective comprehensive land use plans, in conformity with the land use planning and zoning standards and guidelines prescribed by the Housing and Land Use Regulatory Board (HLRB). Province shall formulate and update their comprehensive land use plan in accordance with the national standards. The Province is required to review the land use plans of component cities and municipalities.

(9) NDCC Memorandum Orders

NDCC issued various memorandum orders addressed to NDCC member agencies and DCCs. The major memorandum orders are listed below:

• Memorandum Order No.89-01

(Providing for Community-based Rescue, Evacuation and Relief Operations during Disasters or emergencies and Encouraging Volunteerism from among the concerned Citizenry for such purposes)

- Memorandum Order No. 89-02 (Consolidation and Evaluation of all Reports on Damages by Typhoons and other Calamities to Prioritize and Facilitate Releases of Funds for Relief and Rehabilitation)
- Memorandum Order No. 89-03 (Establishing Procedures and Criteria for Recommending the Declaration of a State of Calamity in Disaster-Stricken Areas)
- Memorandum Order No. 89-04 (Policies and Procedures in Requesting, Allocating, Releasing and Monitoring of Calamity Fund)
- Memorandum Order No. 89-05 and 89-10 (Policies and Procedures on Foreign Assistance for Disasters)
- Memorandum Order No. 89-06 (Measures to Improve the NDCC System following Typhoon "Saling")
- Memorandum Order No. 89-07 (Measures to Improve Typhoon Warning)
- Memorandum Order No. 89-09 (Establishing Procedures and Criteria for Recommending the Declaration of a State of Calamity in Disaster Stricken Areas)
- Memorandum Order No. 89-11 (Policies and Procedures for Local Government Units Regarding Foreign Assistance for Disasters)
- Memorandum Order No. 94-03 (Implementation of a Disaster Mitigation Measures)
- Memorandum Order No. 94-04 (Creation of a Technical Working Group for the Project Proposal Entitled "Support to Disaster Preparedness and Mitigation)
- Memorandum Order No. 94-05 (Amending NDCC Memorandum Order No. 3, 1989 "Establishing Procedures and Criteria for recommending the Declaration of State of Calamity in Disaster-Stricken Areas)

- Memorandum Order No. 95-03

 (Amendment to NDCC Memorandum Order No.4, 1989 as amended on "Policies and Procedures in Requesting, Allocating, Releasing and Monitoring of Calamity Fund")
- Memorandum Order No. 95-06 (Guidelines on the Provision of NDCC Financial Assistance to Dead/Injured/Missing Victims of Disasters)
- (10) Standard Specification

DPWH Standard Specifications for Public Works and Highways, Volume II "Highways, Bridges and Airports" 1995

2. INSTITUTIONAL CONSTRAINTS AND RECOMMENDATIONS ON DISASTER PREVENTION

The Philippine Government repeatedly stated its policy of self-reliance in disaster management since the enactment of PD1566 in 1978. In this Decree, each administrative division is requested to utilize all available resources in its area before asking for assistance from higher authority. In 1989, the NDCC issued the Memorandum Order (No.1/1989) and reiterated that it was the inherent responsibility of every local official through the Disaster Coordinating Council (DCC) to implement immediately appropriate measures to minimize disaster impacts. The Memorandum Order also instructed the DCC Chairmen to encourage people's participation in the government efforts thereby fostering the spirit of "bayanihan" during disasters or emergencies.

In the Philippines, there has been a long tradition of communal irrigation system (CIS) managed by farmers. Such traditional irrigation facilities were mostly constructed utilizing local materials as wood, bamboo, grass, sand, and gravel. Barangay chairperson and wealthy farmers mostly plan the CIS facilities, farmers engage in construction work.

The government idea of community-based disaster prevention seems to have its base on the CIS. In other words, the background for promotion of communitybased approach in disaster management can be summarized as follows. Many topdown approaches may lead to inequitable and unsustainable results, and fail to address the local needs. Such approach may ignore the potential of local needs of vulnerable communities and also that of local resources and capacities.

Though the community-based approach in disaster management has been advocated in the Philippines, there are some institutional constraints to disaster management in Mayon Volcano areas. The institutional constrains in communitybased disaster management is summarized below, by categorizing them into the following three viewpoints: regulatory, operational and financial ones.

2.1 Regulatory Constraints and Improvement Plan

(1) Revision of National Calamities and Disaster Preparedness Plan

The National Calamities and Disaster Preparedness Plan was last prepared in 1988. The current Plan focuses on the structure and responsibilities of the member organizations involved in disaster prevention. The Plan should be revised so as to be a more comprehensive disaster prevention plan. The following issues should be included in the Plan.

National Calamities and Disaster Preparedness Plan Improvement

National Calamities and Disaster 1 reparenteess 1 fan improvement
Main issues and topics to be included in the National Calamities and Disaster
Management Plan
1. Introduction
• Vision, task, and purpose of the Plan
Analysis on the disaster occurrence in the Philippines
National policy on disaster prevention
• Organization, structure and operation (national and local levels) of disaster prevention
• Roles and responsibilities of the organizations and agencies related to disaster prevention
2. Standard Disaster Preparedness Plan
• Public relations plan for disaster prevention (national and local level)
Awareness raising plan for disaster prevention
3. Standard Disaster Operation Plan
• Disaster operation plan before, during and after the disaster
Disaster operation plan by responsible organizations
• Disaster operation plan by disaster type (flood, typhoon, volcanic eruption)
4. Guideline for formulation of local comprehensive disaster operation plan
• Guideline for regional, provincial, city, municipality and barangay plan
5. Monitoring and Review Mechanism for the Plan
6. Appendices
Organization chart of the National Disaster Coordinating Council
Members list of the National Disaster Coordinating Council
Roles and Responsibilities of the member organizations
• Law, Presidential Decree, Executive Orders pertinent to disaster prevention

Local Government Code (RA7160) was issued in 1991. It provided for greater responsibility of LGUs in disaster management. The new Plan stipulating the roles of LGUs shall be prepared and regularly updated.

(2) Monitoring responsibility for mud and debris flow

Responsibility for mud and debris flow is not defined in the Mayon Volcano area though currently OCD is in charge for monitoring. Though there is a Committee on Warning at PDCC, there is no specific mandate to appoint an agency responsible for mud and debris flow.

2.2 Operational Constraints and Improvement Plan

(1) Review of the government policy on budget allocation

There are many Sabo and river facilities around Mayon Volcano installed by DPWH. A little attention has however been paid to maintenance of these facilities. Review of the current maintenance activities by DPWH is required. It is recommended that more budgets for maintenance works should be appropriated.

It is therefore necessary to prioritize budget allocation for maintenance of existing facilities over newly proposed facilities.

(2) Inter-LGU Cooperation Agreement on Disaster Management

There is no cooperation agreement on disaster operations among LGUs.

Promotion of cooperation among LGUs, NGOs and private sector including Rotary Club and Lions Club in disaster management activities is to be promoted.

(3) Non-Structural Mitigation Measures are not stressed at Provincial and Municipal Levels

Enforcement of National Building Code is not done. There are many houses made of light materials and vulnerable to disasters. Similarly, comprehensive land use plans at provincial and municipal levels need to be prepared.

(4) Disaster Preparedness Plan and Contingency Plan (Operation Manual) prepared at Municipal and Barangay levels are mostly on paper only

Most LGUs in the Study Area have Disaster Preparedness Plan. Some LGUs have Disaster Contingency Plan or Operation Manual. However, the residents are not well aware of the contents of these plans. These plans shall be explained to the residents as the Study Area is situated in disaster-prone area. Unless the residents understand what assistance can be expected from the public sector and what they are supposed to do cope with disaster, the community-based disaster management can not be realized. (5) Public Education Campaign on disaster and its precautionary measures are not integrated in school curricula.

Though the National Calamities and Disaster Preparedness Plan mandates DECS as the agency responsible for public education campaign, such campaign is not integrated in school curricula.

2.3 Financial Constraint and Improvement Plan

(1) Beneficiary to pay principle

Community-based approach in disaster management stipulated by PD1566 encouraged the active involvement of LGUs and the people in disaster management.

Both national and local governments are not able to appropriate their budget sufficient for disaster management operations. Further study shall be made to enable LGUs to generate more funds for disaster management operations. One such idea may include the introduction of "calamity contribution" from the residents. The Calamity Contribution may be collected from each citizen as a source for disaster management operation. Such contribution will be charged for those who reside in danger zone.

Particulars	(in	Levels million pes	05)	Percent Distribution		
T un troubulo	1996	1997	1998	1996	1997	1998
Total	416,138	493,467	540,783	100.0	99.4	100.0
SOCIAL SERVICES	122,863	159,972	178,394	29.52	32.22	32.99
Education, Culture, and Manpower Development	74,682	95,574	109,490	17.95	19.25	20.25
Health	11,254	15,006	15,281	2.70	3.02	2.83
Social Security, Labor and Employment	10,092	11,714	13,608	2.43	2.36	2.52
Housing and Community Development	5,153	2,102	2,958	1.24	0.42	0.55
Land Distribution	0	3,169	2,507	0.00	0.64	0.46
Other Social Services	742	6,119	4,584	0.18	1.23	0.85
Subsidy to Local Government Units	20,940	26,288	29,966	5.03	5.30	5.54
ECONOMIC SERVICES	105,399	136,673	141,535	25.33	27.53	26.17
Agriculture, Agrarian Reform, and						
Natural Resources	28,874	30,363	29,845	6.94	6.12	5.52
Trade and Industry	4,429	4,637	3,302	1.06	0.93	0.61
Tourism	743	771	705	0.18	0.16	0.13
Power and Energy	1,106	945	3,669	0.27	0.19	0.68
Water Resources Development and Flood Control	2,695	2,709	5,430	0.65	0.55	1.00
Communication, Roads, and Other Transport	42,935	63,765	58,083	10.32	12.84	10.74
Other Economic Services	4,809	8,616	12,155	1.16	1.74	2.25
Subsidy to Local Government Units	19,808	24,867	28,346	4.76	5.01	5.24
DEFENSE	30,978	37,285	47,188	7.44	7.51	8.73
Domestic Security	30,978	37,285	47,188	7.44	7.51	8.73
GENERAL PUBLIC SERVICES	79,215	83,376	97,635	19.04	16.79	18.05
General Administration	31,671	28,096	32,711	7.61	5.66	6.05
Public Order and Safety	28,272	34,373	41,038	6.79	6.92	7.59
Other General Public Services	3,389	976	1,172	0.81	0.20	0.22
Subsidy to Local Government Units	15,883	19,931	22,714	3.82	4.01	4.20
NET LENDING	1,161	1,111	486	0.28	0.22	0.09
INTEREST PAYMENTS	76,522	75,050	75,545	18.39	15.12	13.97

Table IX 1.1 National Government Expenditure Program by Sector, 1996-1998

Notes: Details may not add up to totals due to rounding.

Principal amortization is included under financing account.

Source: Philippine Statistical Yearbook 1998, National Statistics Office

Particulars	Leve (in thousand		Percent Dis	tribution (%)
i atticutars	(in thousand pesos) 1997 1998		1997	1998
Total	433,817,543	546,743,816	100.00	100.00
Congress of the Philippines	2,446,761	3,045,766	0.56	0.56
Office of the President	1,378,399	1,623,445	0.32	0.30
Office of the Vice-President	83,040	83,144	0.02	0.02
Department of Agrarian Reform	1,158,582	1,442,371	0.27	0.26
Department of Agriculture	2,251,814	2,765,394	0.52	0.51
Department of Rudget and Management	436,192	599,690	0.10	0.11
Department of Education, Culture and Sports	56,056,630	78,520,483	12.92	14.36
State Universities and Colleges	10,250,888	14,632,218	2.36	2.68
C			0.06	0.05
Department of Energy	244,662	300,504	1.19	
Department of Environment and Natural Resources	5,159,543	5,649,804		1.03
Department of Finance	4,612,712	5,361,736	1.06	0.98
Department of Foreign Affairs	2,353,013	2,961,735	0.54	0.54
Department of Health	11,020,083	13,059,476	2.54	2.39
Department of the Interior and Local Government	22,879,256	30,923,948	5.27	5.66
Department of Justice	3,187,120	4,261,630	0.73	0.78
Department of Labor and Employment	2,047,381	5,027,927	0.47	0.92
Department of National Defense	39,919,620	51,898,595	9.20	9.49
Department of Public Works and Highways	53,853,321	61,923,754	12.41	11.33
Department of Science and Technology	2,812,874	3,262,550	0.65	0.60
Department of Social Welfare and Development	1,583,606	1,827,371	0.37	0.33
Department of Tourism	572,195	650,044	0.13	0.12
Department of Trade and Industry	1,357,815	1,576,118	0.31	0.29
Department of Transportation and Communications	7,116,342	11,999,026	1.64	2.19
National Economic and Development Authority	1,011,567	1,432,691	0.23	0.26
Office of the Secretary	656,334	824,377	0.15	0.15
Other Executive Offices	4,088,169	5,859,673	0.94	1.07
Joint Legislative-Executive Councils	7,010	7,650	0.00	0.00
The Judiciary	4,689,824	6,227,860	1.08	1.14
Civil Service Commission	342,784	428,384	0.08	0.08
Commission on Audit	2,352,951	3,275,817	0.54	0.60
Commission on Elections	1,973,955	3,240,299	0.46	0.59
Office of the Ombudsman	334,380	412,518	0.08	0.08
Commission on Human Rights	137,570	185,815	0.03	0.03
Autonomous Regions	2,535,821	4,976,316	0.58	0.91
Budgetary Support to Government Corporations	4,799,983	5,865,399	1.11	1.07
GATT-Related Adjustment Measures Fund	17,727,559	15,921,836	4.09	2.91
Allocations to Local Government Units	61,926,557	86,287,843	14.27	15.78
Area Development Assistance Fund	45,950	59,087	0.01	0.01
Agrarian Reform Fund	917,585	5,637,429	0.21	1.03
Calamity Fund	2,000,000	2,000,000	0.46	0.37
Contingent Fund	800,000	1,000,000	0.18	0.18
Countrywide Development Fund	2,583,450	2,324,250	0.60	0.13
DECS - School Building Program	6,656,150	3,131,142	1.53	0.57
SUCS - Computerization Program	60,000	5,151,142	0.01	0.00
· -		800.000		
Foreign-Assisted Projects Support Fund	582,398	800,000	0.13	0.15
General Fund Adjustment Fund	225,000	250,000	0.05	0.05
International Commitments Fund	885,250	1,052,644	0.20	0.19
Miscellaneous Personnel Benefits Fund	3,344,020	6,794,867	0.77	1.24
National Unification Fund	137,500	150,000	0.03	0.03
Organizational Adjustment Fund	500,000	518,513	0.12	0.09
Pole-Vaulting Strategy Fund	-	4,700,000	-	-
Poverty Alleviation Fund	2,000,000	2,500,000	0.46	0.46
Debt Service - Interest Payment	57,658,384	51,027,866	13.29	9.33
Unprogrammed Fund	20,055,543	26,454,811	4.62	4.84

Table IX 1.2 National Government Appropriations, 1997 & 1998

Source: General Appropriations Act 1997 and 1998

	(Unit : Thousand Pesos, Current Prices)							
Sub-Sectors	1993	1994	1995	1996	1997	1998	Total (%)	
1. Highways	461,017	698,482	54,505	595,085	1,182,571	1,700,260	4,691,920 (82.9)	
- Arterial roads - Secondary roads - Urban roads/ expressways	365,232 95,785 -	584,605 113,877 -	- 54,505 -	380,465 214,620 -	601,626 580,945 -	1,369,115 331,145 -	3,301,043 (58.3) 1,390,877 (24.6) - (0.0)	
2. Flood Control and Drainage	25,338	114,882	17,248	192,647	148,000	170,130	668,245 (11.8)	
3. Water Supply	32,973	81,482	3,752	-	-	-	118,207 (2.1)	
4. Urban Infrastructure	3,000	5,300	-	-	8,000	11,441	27,741 (0.5)	
5. Various Projects	26,001	7,055	890	70,657	-	50,781	155,384 (2.7)	
Total	548,329	907,201	76,395	858,389	1,338,571	1,932,612	5,661,497 (100.0)	

 Table IX 1.3 Public Investment Achievements of Bicol Region (Region-V), 1993-1998

Notes : The amounts for disaster prevention works are included in the sub-sector of "Flood Control and Drainage". Source : Department of Public Works and Highways (DPWH), Region-V

	(Unit : Thousand Pesos, Current Prices)					nt Prices)	
Sub-Sectors	1993	1994	1995	1996	1997	1998	Total (%)
1. Highways	1,874	9,824	459,574	20,250	103,587	111,768	706,877 (30.9)
- Arterial roads - Secondary roads - Urban roads/ expressways	1,874 -	9,824	124,360 335,214 -	13,250 7,000 -	81,500 22,087 -	36,768 75,000 -	255,878 (22.9) 450,999 (8.0) - (0.0)
2. Flood Control and Drainage	-	29,393	209,946	13,000	26,396	38,826	317,561 (28.5)
3. Water Supply	-	10,488	53,164	-	-	-	63,652 (5.7)
4. Urban Infrastructure	-	-	2,382	-	-	-	2,382 (0.2)
5. Various Projects	200	7,055	17,675	-	-	-	24,930 (2.2)
Total	2,074	56,760	742,741	33,250	129,983	150,594	1,115,402 (100.0)

Notes : The amounts for disaster prevention works are included in the sub-sector of "Flood Control and Drainage". Source : Department of Public Works and Highways (DPWH), Region-V

Table IX 1.5 1999 DPWH Infrastructure Program in Albay Province

(Unit: Thousand Pesos)

Projects	Provincial	Congressional Districts				
Projects	Physical Target	1st	2nd	3rd	Total	
I. Highways		21,106	61,646	146,272	229,024	
(1) Foreign - Assisted Projects		-	55,177	32,272	87,449	
1) National Arterial Roads	9.42 km (3 projects)	-	49,302	28,842	78,144	
2) Other Related Activities	Various	-	5,875	3,430	9,305	
(2) Locally Funded Projects		-	-	114,000	141,575	
1) National Secondary Roads	11.78 km (4 projects)	-	-	90,000	90,000	
2) Bridge along National Sec. Road	37.40 LM (3 bridges)	-	-	21,000	21,000	
 Regionwide Allocation for National Arterial/ Secondary Roads and Bridges 		-	-	-		
a. National Secondary Roads	5.19 km (4 projects)	18,106	-	3,000	21,106	
b. Bridge along National Arterial Road	8.00 LM (1 bridge)	3,000	6,469	-	9,469	
II. Flood Control / Drainage		36,459	9,678	8,697	54,834	
 Locally Funded Projects SWIM/Sabo Dam/River Control Regionwide Allocation for the Protection of National Roads and Bridges and Other Flood 	(16 projects)	33,500	7,678	6,697	47,875	
Prone Areas: a. River Control/ Drainage	(10 projects)	2,959	2,000	2,000	6,959	
Grand Total	-	57,565	71,324	154,969	283,858	

Note: Three Congressional Districts include respectively the following city/municipalities:

1st District = Bacacay, Malilipot, Malinao, Sto. Domingo, Tabaco and Tiwi

2nd District = Legazpi, Camalig, Daraga, Manito and Rapu-Rapu

3rd District = Guinobatan, Ligao, Jovellar, Libon, Oas Pioduran and Polangui

Source: DPWH CY 1999 Infrastructure Program, January 1999, DPWH Region-V