

NDCC's Comprehensive Emergency Management Framework

The NDCC has an all-hazards approach to disaster risk management. It follows the “golden hour” principle of consequence management that determines the time within which lives could be saved and injuries minimized. This includes the following strategies.

- **Mitigation:** insurance coverage of public and private property; safety regulations, land-use, zoning, etc; building and fire codes; legislation and local ordinances on safety of communities; dams, levees, flood control and other structural measures;
- **Preparedness:** contingency plans, e.g. fire and earthquake plans; public information, e.g. rapid dissemination of information through an emergency broadcast system, population awareness; orientation of local officials, deputized coordinators, auxiliaries, volunteers, drills and rehearsals, education and training activities; capable response units, equipment, manpower, location, contact numbers for people and resources;
- **Response:** alerts, e.g. receipt and rapid dissemination of warnings to threatened communities and populations; immediate notification of response units;
- **Rehabilitation:** emergency funding from local and national calamity funds and other sources; loans and grants from national and international NGOs; assistance from NGOs, foreign governments, etc.

Office of Civil Defense

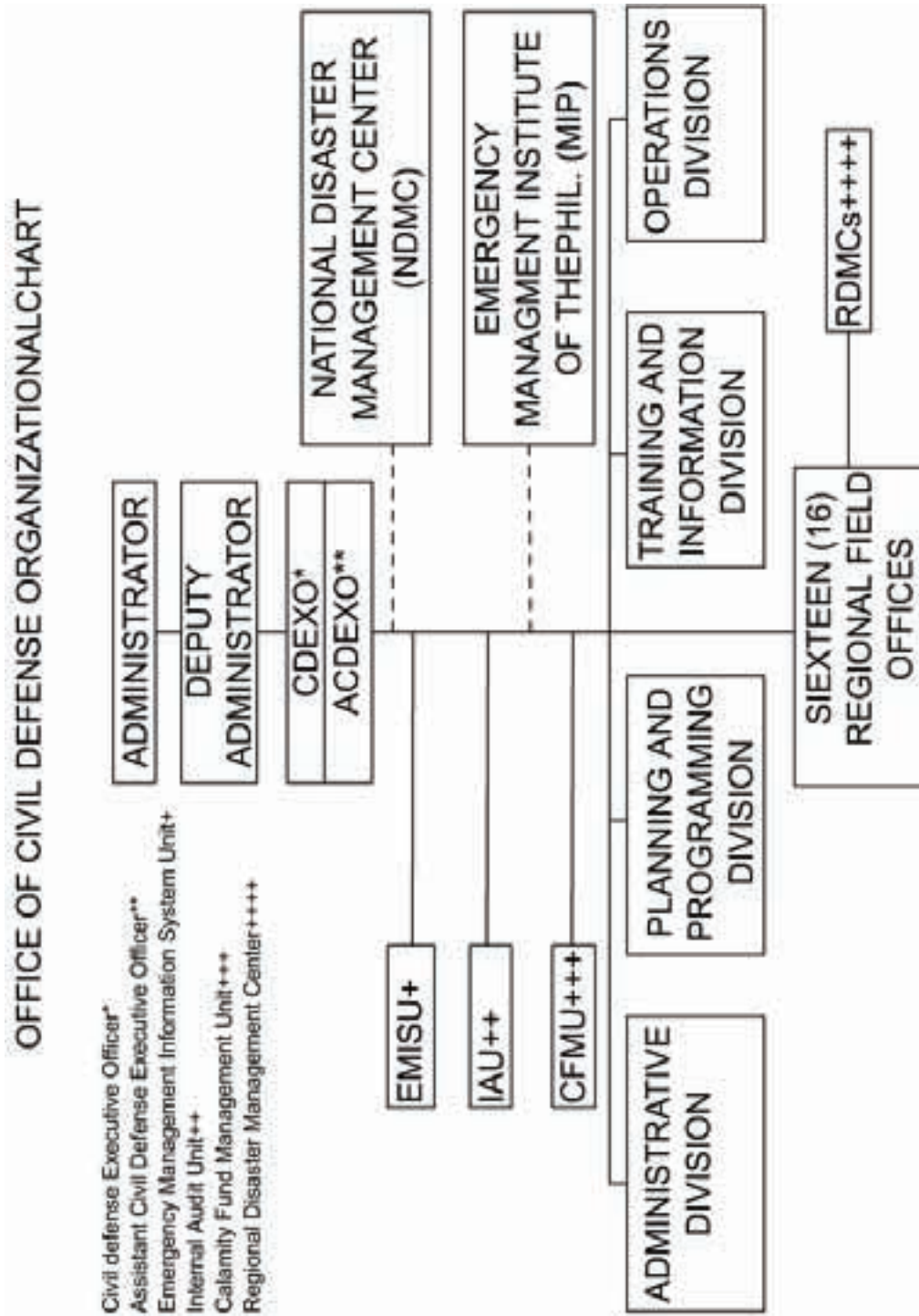
The Office of Civil Defense (OCD) is the operating arm and the secretariat of the NDCC. Its primary task is coordinating the activities and functions of various government agencies and instruments, private institutions and civic organizations for the protection and preservation of life and property during emergencies. The office executes and monitors implementation of NDCC policies and programmes and provides secretariat services to the Council. It operates and maintains the Council's National Defense Management Centre (NDMC). It has 16 Civil Defense Regional Centres (field offices) nationwide for regional operations and has designated Civil Defense Coordinators (Action Officers) at the provincial and municipal/city levels. The Regional Civil Defense offices man the operating facilities of the Regional Disaster Management Centres of the RDCCs on a 24-hour basis. The Regional Disaster Operations Centres are mostly located in the Philippine National Police regional commands.

Operations Flow: If more than three municipalities are affected, the province assists in operations. If more than three provinces are affected, the region assists in operations. If more than two regions are affected, the national assists in the operations. Coordination is usually organized by the PDCCs and member agencies of the RDCC.

Programme Thrusts and ongoing activities for 2003-2005

- Civil protection and preparedness
- Disaster operations and support services
- Risk and vulnerability reduction
- Human resource development
- International partnership and cooperation
- Emergency resource data generation
- Policy development and implementation programme
- Resource generation
- ICT development for disaster management applications

Figure 5. Organizational Structure of the Office of Civil Defense



Ongoing Activities in Disaster Risk Management in the Philippines

- Preparedness
 - Capability building for emergency response – training for collapsed structure search and rescue teams
 - Conduct of basic life support and emergency medical services training
 - Contingency planning for emergencies for local government units
 - Preparations for establishment of NDCC Preparedness Centre at Camp Aguinaldo – stockpile of relief items for 10 000 people and housing of NDCC disaster response equipment
 - Review of learning competencies in disaster preparedness for primary, secondary and collegiate level Forging linkages among NDMC and NBN4 and Philippine Broadcasting System, to work with private media and serve as primary carriers of video and audio warnings
- Mitigation
 - Non-structural
 - GSIS proposal for insurance coverage of selected local government properties
 - Working for approval of Villar Bills to amend use of 5 percent Local Calamity Funds (LCFs) for preparedness activities
 - Working for approval of Disaster Management Act of 2003
 - Commissioned World Bank study on Vulnerability of the Philippines to Disasters
 - Forged Memorandum of Agreement among DENR-DILG- LGU on strengthening partnership on devolved and other forest management functions
 - Structural – Flood Mitigation Project in Central Luzon
- Response
 - Water search and rescue operations – distribution of 28 rubber boats
 - Relief assistance augmentation
- Rehabilitation
 - Funding support to rehabilitate damaged infrastructure in affected areas
 - Kalasag Awards – given to DCCs, government organizations, NGOs and individuals for excellence in disaster management
 - Formation of 4 NDCC Technical Management Group Committees for mitigation, preparedness, response and rehabilitation and various subcommittees to conduct studies and recommend policies on various DM concerns
 - Community-based disaster management

Financial Resource Mobilization for DRM

Resources for national and local comprehensive emergency management come from either emergency funding from the Local or National Calamity Funds (LCFs, NCFs) or other sources such as loans and grants extended by local and international NGOs or assistance extended by NGOs, foreign governments, etc.

The NCF is designated through the annual General Appropriations Act (GAA) and is available for aid, relief and rehabilitation services to communities and areas affected by calamities. This includes training of personnel and other pre-disaster activities as well as repair and reconstruction of permanent structures including capital expenditures for pre-disaster operations. The following policies guide the use of the NCF

1. The NCF can be used only for the following purposes:
 - a. aid, relief, rehabilitation and reconstruction and other works or services in connection with calamities which may occur during the budget year or have occurred during the previous two years

- b. pre-disaster activities such as training, and
 - c. capital expenditures such as purchase of equipment for pre-disaster operations and rehabilitation.
2. NCF shall be used in the following order of priority:
 - a. Priority I – for urgent and emergency relief operations and emergency repair and rehabilitation of vital public infrastructures and lifelines damaged by calamities occurring within the budget year, e.g. hospitals, schools, major roads and bridges, and farm-to-market roads;
 - b. Priority II – for repair, rehabilitation and reconstruction of damaged public infrastructures which are not emergency in nature but are necessary for disaster mitigation;
 - c. Priority III – for pre-disaster activities outside the regular budgets of line agencies and proposed capital expenditures for pre-disaster operations.
 3. NCF cannot be used for the following:
 - a. repair/rehabilitation of government buildings damaged by fire, e.g. hospitals, school buildings, capitol buildings and public markets;
 - b. relief and rehabilitation requirements for specific calamities with specific appropriations under special laws, except when the appropriations have been fully expended or utilized.
 4. Release of Quick Response Funds to concerned agencies is subject to the Calamity Fund provisions of the annual GAA.
 5. Putting up of a local counterpart fund by local government units (LGUs) as follows:
 - a. 1st class – 50 percent of the total project cost
 - b. 2nd class – 40 percent
 - c. 3rd class – 35 percent
 - d. 4th class – 30 percent
 - e. 5th/6th class – exempted but request should not exceed PHP3 million

For 2003, the GAA has appropriated PHP800 000 for the National Calamity Fund. Of this, 25 percent has immediately been released to the DSWD, 15 percent to OCD and another 15 percent to the NDCC as Quick Response Fund, and 20 percent to the DPWH for reconstruction activities. The balance was reserved as a standby fund.

The President has also discretionary funds that can be drawn upon in disasters, but they also are used for other priorities, such as school construction in depressed areas. See Section 2.5.2 for more details on the LCF at municipality and barangay levels.

2.5.3 DRM coordination at municipality level and below

2.5.3.1 The Municipal Disaster Coordinating Council (MDCC)

The Municipal Disaster Coordinating Council was established by PD 1566, the Local Government Code in 1999 and reorganized in 2001 by Municipal Executive Order No. 16. It is headed by the Municipal Mayor who serves as chairman and the Station Commander of the Philippine National Police who serves as vice-chairman and action officer. Representatives from the private sector and municipal officials perform specific emergency functions and the membership includes national officials assigned to the municipality. With the 2001 reorganization, the task units were streamlined as follows:

- Health Service Committee – chaired by the Municipal Health Office, with private clinics as members,
- Security and Fire Committee – chaired by the Philippine National Police, with the Fire Service Unit and *barangay* tanods as members,
- Communication, Warning and Public Information Committee – chaired by the Office of the Mayor, with the Liga ng mga *barangay* President and all Punong *barangays* as members
- Transportation, Rescue and Evacuation Committee – chaired by the Municipal Engineers Office, with the Department of Education, Culture and Sports (DECS), Philippine National Police, Department of Public Works and Highways (DPWH), the Sangguniang Bayan and the Sangguniang Kabataan as members
- Relief and Rehabilitation Committee – chaired by the Municipal Social Welfare and Development Office (MSWDO), with the Municipal Planning and Development Office, Municipal Engineers Office, Municipal Agriculture Office, Municipal Transportation Office, and representatives from the NGO and the bus transportation sectors as members

In addition to these task units, NGO and disaster welfare desks were set up within the MDCC to coordinate NGO assistance and to provide information on disaster victims, respectively. The MDCC has the following functions and responsibilities:

- coordinate disaster operations activities;
- implement MDCC guidelines within the municipality;
- advise the *barangay* Disaster Coordinating Councils regarding disaster management; and
- submit reports and recommendations for allocation of needed resources.

The **Disaster Operations Centre** is the facility where field activities are monitored and controlled. It is made up of the:

- Intelligence and Disaster Analysis Unit – evaluates information and advises member agencies of the MDCC of an impending disaster, makes recommendations on how to prevent disaster and/or suggests precautionary measures to minimize the impacts of disasters, submits recommendations for allocation of needed resources, and prepares appropriate recommendations to relevant authorities of possible declaration of the existence of state of calamity in affected areas.
- Plans and Operations Unit – recommends courses of action to be taken based on the recommendations of the Intelligence and Disaster Analysis Unit, determines the type of service units to be utilized in the disaster area, recommends implementation of existing plans, maintains and/or supervises progress of operations, determines the necessity of utilizing additional service units, and prepares appropriate reports upon termination of operations.
- Resources Management Unit – identifies and secures possible sources of funds for disaster victims, and gathers the necessary statistics on resources such as food, clothing, construction materials, medical supplies, transportation and other relief and rehabilitation items.

Each task unit formulates its own action/operations plans that are then consolidated to form the overall Municipal Disaster Preparedness Plan.

2.5.3.2 The Municipal Disaster Preparedness Plan

The Municipal Disaster Preparedness Plan details activities to be undertaken, including funding requirements and sources, prior to, during and after an emergency. It envisions a peaceful, self-sustaining municipality of God-loving people who are cohesive, self-reliant and actively engage in confronting disasters on a total system approach – from preparedness, prevention and mitigation to emergency relief, rehabilitation, recovery and development. It aims for the optimum management of disasters by pooling resources, both human and material, and the application of practical operational technique. Its objectives are to:

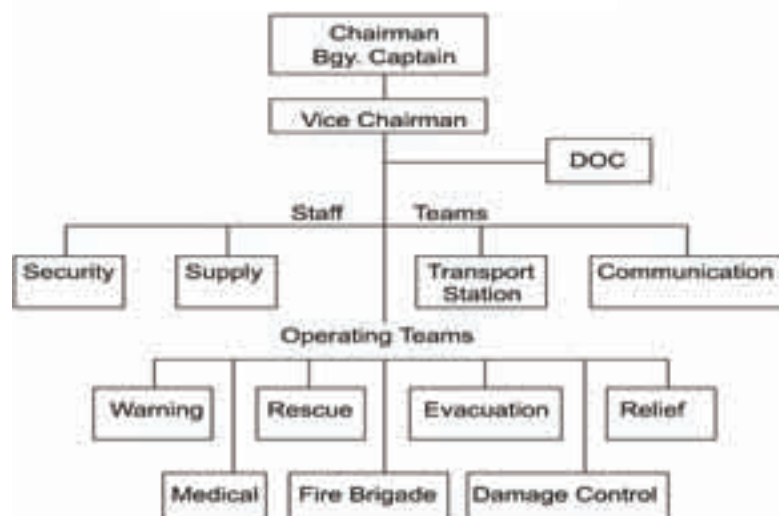
- reduce the undesirable impacts of disasters in the municipality,
- prevent or mitigate the occurrence of natural and man-made hazards,
- implement disaster management, not as a periodic reaction to individual circumstances but as a comprehensive and continuous activity.

It details the functions and responsibilities of the MDCC, the strategies for, and extent of, interventions.

2.5.3.3 The Barangay Disaster Coordinating Council (BDCC)

Prior to 1991, the *Barangay* Disaster Brigade had local responsibility for monitoring emergency situations, communicating with the municipal government, receiving and facilitating distribution of relief assistance and, in spite of lack of formal training, executing rescue operations in cooperation with the *barangay* tanods. According to the communities interviewed, the *Barangay* Disaster Brigade responded according to need and performed well because of its experience and knowledge of the community. The *barangay* brigade was replaced by the *Barangay* Disaster Coordinating Council (BDCC) in 1991, with clearly delineated roles assigned to specific people. The communities interviewed said they appreciated being clear on who has responsibility over certain tasks and the fact that they are not limited to responding to a need in times of emergency. The BDCC’s organizational structure shown below was established by the Local Government Code in 1999.

Figure 6 : The organic chart of the BDCC.



2.5.4 DRM resource mobilization at local levels

2.5.4.1 Financial Resources

Local Calamity Fund (LCF) comes from the 5 percent of estimated revenue that is set aside by the local government as an annual lump sum appropriations for relief, rehabilitation, reconstruction and other works and services in connection with calamities which may occur during the budget year. This is provided for by Section (324 (d) of the Local Government Code. Pre-requisites for the use of the Local Calamity Fund are:

- appropriation in the LGU budget as annual lump sum appropriations for disaster relief, rehabilitation and reconstruction;
- useable for calamities occurring during the budget year in the LGU or other LGUs affected by a disaster or calamity;
- passage of a Sanggunian Resolution declaring a calamity area;
- usable only for relief operations in case of fire.

Unlike the National Calamity Fund, the 5 percent LCF, as originally designed, could not be used for disaster preparedness activities of the LGUs. The authors of RA 8185 reasoned that the local government units should programme their preparedness activities in their respective budgets for the ensuing year. If unused during the budget year, this fund is added to the municipality's general fund for the subsequent year.

However, bills are pending in the Philippine Congress to allow the use of the LCF for preparedness activities. A Memorandum Circular issued by the Department of Interior and Local Government (DILG) and the Department of Budget and management (DBM) in 2003 provides for the use of the LCF for preparedness activities for human-induced threats, including terrorism. The municipality has imaginatively used this provision in funding disaster management training for *barangay* tanods by integrating disaster management into police counter-terrorism training.

Municipal development fund comes from the 20 percent of the internal revenue allotment (IRA) from the national government. The IRA is appropriated to local government units proportionate with the LGU's population and land area. This development fund supports the municipality's programmes in the agriculture, health, social welfare, infrastructure, environmental management, disaster preparedness, tourism and youth sectors, including the appropriation of development funds for each of the 45 *barangays*. Recognizing that disaster management is a key component of development, the municipal mayor utilizes the development funds to support disaster management in the relevant sectors (e.g. rehabilitation of roads and drainage systems from the infrastructure sector appropriation, medical missions from the health sector appropriation, etc.). Table 12 shows the appropriation of the municipal development fund for various disaster management-related activities.

Other sources of funds include un-appropriated funds in the municipal general funds, special budgetary allocations from the national government, donations from businesses and the private sector, and assistance from other governmental and non-governmental agencies, such as the DSWD, Philippine National Red Cross and others.

Table 12. Municipal fund for disaster preparedness, mitigation and response

Item	2001 (PHP)	2002 (PHP)	2003 (PHP)
Calamity Fund		2 041 684	2 282 171
Development Fund			
Construction/repair/rehab of drainage systems	250 000		
Repair/rehab of <i>barangay</i> roads irrigation system	600 000	300 000	361 685
Installation of water system in various <i>barangays</i>	100 000		100 000
Construction of water impounding centre operation of Bgy. Balabag Pumping Station			150 000
Repair of various <i>barangay</i> health stations			100 000
Purchase of utility vehicle	150 000	100 000	
Purchase of dump trucks	1 000 000		
Operation and maintenance of heavy equipment	100 000	300 000	300 000
Repair/rehabilitation of government vehicles		270 000	200 000
DREAM equipment	50 000		
Disaster preparedness equipment (VHF repeater system, etc.)			300 000
Purchase of fiberglass boat	250 000		
Health programmes (medical missions, etc.)	100 000	200 000	200 000
Livelihood programmes (including training)		150 000	200 000
Clean and green programmes (river and coastal cleanup portable toilets, etc.)			150 000
Public safety program			200 000
Disaster preparedness Training			100 000
<i>Barangay</i> Development Fund (for 45 <i>barangays</i>)	720 000		1 440 000
Operation of demo farm and agromet station			200 000
Municipal contribution to Jalaur-Suage Rivers irrigation system rehabilitation			100,000
Total	3 320 000	3 361 684	6 383 856

In line with the self-reliance espoused by the Local Government Code, *barangays* have their own calamity funds (5 percent of *barangay* income) for disaster relief, rehabilitation and reconstruction. When available funds are not sufficient to meet their needs, external assistance is sought from the municipal government.

2.5.4.2 Relief Goods

As agreed with members of the Economic Council, the municipality acquires goods and materials for disaster relief and rehabilitation on loan. This includes rice, canned food, medicine, clothing, cooking utensils, fuel and construction supplies. Payment is made upon the release of the LCF. The municipal government ensures that payments are made on time to maintain business proprietors' confidence. Council members also have donated goods to disaster victims even when not requested, indicating their level of confidence in the local government. Surplus goods from previous events are also additional sources of relief goods.

2.5.5 Disaster risk management tasks pursued by the municipality

Early warning. The Municipal Mayor, who is the MDCC Chairman, issues the official early warning as soon as information of an impending hazard is received, to give people ample time to undertake preparatory actions. Information sources include the Philippines

Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), National Irrigation Administration (NIA) which manages the Jalaur-Suage Rivers irrigation system, and individual reports of observed conditions from the Punong *barangays* via handheld radio sets.

Communication. Each *barangay* has a handheld radio set for communication. In distant *barangays*, there can be a problem with weak transmission signals.

Evacuation. Evacuation is carried out by the BDCC.

Damage-and-needs assessment. An initial damage-and-needs assessment is conducted within six hours of the hazard's impact to determine what response was undertaken by the local disaster coordinating council, estimate requirements for follow-up response and serve as the basis for decision-making at higher levels and for future planning. Extent of damage is reported within 12 hours of the hazard impact.

Declaration of state of calamity. Upon receipt of the damage-and-needs assessment, the MDCC Chairman recommends that the Municipal Council declare a state of calamity. This is needed for the mobilization of the calamity fund and to enable other agencies to extend assistance.

Disaster response operations. Rescue and relief teams are sent to affected *barangays* to address pressing needs the *barangays* are unable to meet.

Rehabilitation. Rehabilitation work is usually completed about 15 days after the impact of the hazard. However, for infrastructure outside the jurisdiction of the municipality, such as national and provincial roads, bureaucratic procedures can delay repair work and cause longer dislocation for affected residents. Certified seeds stored at the Municipal Demonstration Farm are distributed by the Municipal Agriculturist Office to affected farmers.

Mitigation. Several activities have been initiated to mitigate the impacts of floods. The municipal government oversees an annual clearing and cleaning of rivers and coastline. Weather forecasts from the local agrometeorological (agromet) station are disseminated to various agencies, institutions and communities to guide anticipatory actions in future climate/weather conditions. Training and symposia have been conducted on disaster management and prevention, involving community leaders and key agencies.

2.5.6 Disaster risk management in the study sites

2.5.6.1 Balud

In Balud, roles are clearly delineated and assigned. The *barangay* chairman is the BDCC Chair, supported by the seven members of the *barangay* council. The *barangay* youth organization, which supports community youth development and anti-drug activities, is involved in the BDCC transportation committee. This organizational chart is prominently displayed at the *barangay* hall.

The community recognized the improvements in the communication and transportation systems when BDCC superseded *barangay* disaster brigade. A handheld radio provided by the municipal government facilitates communication with the MDCC, other *barangays* and NGOs. Emergency transportation, such as transportation for evacuations, is now coordinated and an earth dike, constructed along the Jalaur River, has decreased the incidence of flooding in the community.

Hazard monitoring is done by everyone in the community. Water level in the Jalaur River is monitored using marked tree trunks at the riverbank as flood markers. Upstream river conditions are reported from other *barangays* by radio. Community members also observe upstream cloud conditions.

Release of water from the dam located in upstream municipalities also causes flooding, but a warning is issued by the dam operators so the community is always prepared. The May 2003 flood was however unexpected, as water level at the Jalaur River was low. The heavy rains flooded only the rice fields.

Most farmers have small huts in higher areas that they can move to when the residential area is flooded. An elevated school building, built in 2002 a few meters away from the *barangay* hall, serves as an evacuation centre (Photo 2).



Photo 3. School building used as an evacuation centre in Balud.

The *barangay* has one small row boat and four pedaled tricycles, all privately owned, that are volunteered during emergencies. Rafts made of bamboo or banana trunk are built for use during evacuations. Some members of the BDCC's evacuation team were trained in search and rescue in 1998 by the Mountain Tigers, a provincial rescue organization. Other members of the BDCC received training in disaster management in 2000. According to the respondents, a religious NGO that has been in Balud for 40 years assists in the distribution of relief goods (the NGO does not provide the goods itself).