The Southern Leyte Landslide 2006

Recovery Status Report 02
This study was conducted by the Center for Disaster Preparedness with the support and supervision of the International Recovery Platform

**Center for Disaster Preparedness**

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RECOVERY STATUS REPORT

The Southern Leyte Landslide 2006

December 2011
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Abbreviations

ABC  Association of Barangay Captains
ACCORD  Strengthening Assets and Capacities of Communities and Local Governments for Resilience to Disasters
AMRSP  Association of the Major Religious Superiors in the Philippines
AUSAID  Australian Agency for International Development
BC  Barangay Council
BDCC  Barangay Disaster Coordinating Council
BEC  Basic Ecclesiastical Community
BHW  Barangay Health Worker
BHS  Barangay Health Station
CDP  Center for Disaster Preparedness
CDRC  Citizens’ Disaster Response Center
DC  Daughters of Charity
DCC  Disasters Coordinating Councils
DENR  Department of Environment and Natural Resources
DepEd  Department of Education
DRR  Disaster Risk Reduction
DSWD  Department of Social Welfare and Development
DPWH  Department of Public Works and Highways
GAD  Gender and Development
GK  Gawad Kalinga
GOSCC  Guinsaugon Orphan Scholarship Coordinating Committee
GTZ  Gesellschaft für Technische Zusammenarbeit (German Society for Technical Cooperation)
HFA  Hyogo Framework for Action
IRA  Internal Revenue Allotment
IRP  International Recovery Platform
ISRDS  Institute for Strategic Research and Development Studies
JICA  Japan International Cooperation Agency
JRC  Japan Red Cross
LCDE  Leyte Center for Development
<table>
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>LGU</td>
<td>Local Government Unit</td>
</tr>
<tr>
<td>MAHIKA</td>
<td>Magatas-Hinabian-Kauswagan</td>
</tr>
<tr>
<td>MAO</td>
<td>Municipal Agriculture Office</td>
</tr>
<tr>
<td>MGB</td>
<td>Mines and Geosciences Bureau</td>
</tr>
<tr>
<td>MSWDO</td>
<td>Municipal Social Welfare and Development Office</td>
</tr>
<tr>
<td>NDCC</td>
<td>National Disaster Coordinating Council</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
</tr>
<tr>
<td>PBSP</td>
<td>Philippine Business for Social Progress</td>
</tr>
<tr>
<td>PGO</td>
<td>Pupil Government Office</td>
</tr>
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<td>PHCDS</td>
<td>Philippine Health Care Delivery System</td>
</tr>
<tr>
<td>PMO-FCSEC</td>
<td>Project Management Office–Flood Control and Sabo Engineering Center</td>
</tr>
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<td>Philippine National Red Cross</td>
</tr>
<tr>
<td>PSAC</td>
<td>Parish Social Action Center</td>
</tr>
<tr>
<td>PTA</td>
<td>Parents and Teachers Association</td>
</tr>
<tr>
<td>PTSD</td>
<td>Post Traumatic Stress Disorder</td>
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<tr>
<td>RBEC</td>
<td>Revised Basic Education Curriculum</td>
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<td>RHU</td>
<td>Rural Health Unit</td>
</tr>
<tr>
<td>SEA K</td>
<td>Self-Employment Assistance Kaunlaran</td>
</tr>
<tr>
<td>SLB</td>
<td>Simbahang Lingkod Bayan</td>
</tr>
<tr>
<td>SLRP</td>
<td>Southern Leyte Rehabilitation Program</td>
</tr>
<tr>
<td>SSG</td>
<td>Student Supreme Government</td>
</tr>
<tr>
<td>SSVP</td>
<td>Society of St. Vincent Paul</td>
</tr>
<tr>
<td>SVD</td>
<td>Society of the Divine Word</td>
</tr>
<tr>
<td>TESDA</td>
<td>Technical Education and Skills Development Authority</td>
</tr>
<tr>
<td>TSF</td>
<td>Telecoms Sans Frontieres</td>
</tr>
<tr>
<td>UNDAC</td>
<td>United Nations Disaster Assessment and Coordination</td>
</tr>
<tr>
<td>UNOCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>VCO</td>
<td>Virgin Coconut Oil</td>
</tr>
<tr>
<td>VISCA</td>
<td>Visayas State College Agriculture</td>
</tr>
</tbody>
</table>
CHAPTER 1: OVERVIEW OF THE CURRENT STATE OF RECOVERY

1.1 Background of the Disaster

The avalanche of rocks, mud and debris that buried the village of Guinsaugon on February 17, 2006 at about 10:45 in the morning, killing 1,126 people and displacing approximately 19,000 more, is considered to be the "deadliest single landslide disaster to occur worldwide in almost two decades" (Guinsaugon 2008 White Paper). About 45 hectares were buried under 25-40 meters of mud from Mount Canabag (CDRC and LCDE, 2006). The tragedy was described as a whole village "swallowed by the earth…. as though the barangay had disappeared from the map"(Jani Arnais, Connie E. Fernandez and Tony Bergonia, 2006).

Figure 1.1 The avalanche of debris

As early as February 10, 2006, the provincial disaster coordinating council had declared a state of calamity in the province due to bad weather conditions and continuous rain that had fallen for two weeks. Earlier, seven persons were killed in a landslide in another municipality when their bunkhouse was swept away by loose earth and rocks from a mountain. The residents of 26 villages in six municipalities of the province were evacuated and housed in temporary shelters. The residents of Bgy. Guinsaugon were also evacuated because of the bad weather conditions. However, they returned to their homes on 16 February (Thursday) after seeing signs of better weather (Citizen Disaster Response Center (CDRC) and Leyte Center for Development (LCDE), 2006).

The next day, Friday, classes resumed. The situation was normal, and the residents went about their preparations for an upcoming community celebration.
The tragedy occurred when the federation of women’s organizations in the municipality was celebrating its third anniversary. Activities were being planned and festive foods, such as lechon (roasted pig, a Filipino delicacy), were being prepared. Women from other villages came to Bgy. Guinsaugon to join the celebration.

Figure 1.2 Map of the Philippines showing the location of Southern Leyte © GNU FDL 2003
Source: http://en.wikipedia.org/wiki/Southern_Leyte

Figure 1.3 The affected communities of St. Bernard
Source: St. Bernard Municipal Engineering Office
Table 1.1 Basic Facts on the Guinsaugon Landslide

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total land area (hectares)</td>
<td>442.71</td>
</tr>
<tr>
<td>Total families before the landslide</td>
<td>321</td>
</tr>
<tr>
<td>Identified dead bodies</td>
<td>52</td>
</tr>
<tr>
<td>Identified buried alive from Guinsaugon</td>
<td>951</td>
</tr>
<tr>
<td>Identified buried alive non-residents of Guinsaugon</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Municipal Social Welfare and Development Office, Municipality of St. Bernard

The authorities recovered 52 dead bodies and 951 persons were identified by the residents as among those who were living in the village who were buried alive. In addition to this, there were women from other villages who had come to attend the anniversary celebration and became victims. The tragedy caused the death of three LGU officials, including the municipal nurse, a social worker and an official from the agriculture office who came earlier to assist with the program. Six of the seven teachers, the seventh of whom was on leave at the time, and more than 200 elementary school children were buried alive.

Had the landslide happened around noon, between 12:00 and 1:00 pm for example, there would have been more deaths. Municipal officials such as the mayor, councilmen and other agency and department heads were expected to arrive for the celebration by lunchtime. There was also a bus load of college students who were about to come to the village for a special presentation in the program.

1.2 Emergency Response

On the day of the tragedy, the people in the poblacion and neighboring barangays went out into the streets crying and asking for news about what had happened and about the fate of the people in Guinsaugon. That evening, the front plaza of the municipal hall was filled with people from Guinsaugon who survived the tragedy and from neighboring barangays who were afraid to go home to their villages, fearing that another landslide might occur. They stayed in churches, schools and vacant lots in the poblacion. They were given food, blankets and mats by host residents. The school children from Guinsaugon were taken care of by the nuns from a private school who provided temporary shelter and food. The ABC hall or the municipal legislative building was converted into a warehouse for relief.

In a national broadcast, President Gloria Macapagal Arroyo immediately ordered massive rescue and relief operations and appealed to the private sector for help (The Philippine Star, February 18, 2006). She "ordered the entire naval force in the Visayas to serve as floating hospitals and command centers in the disaster area..."and gave assurances "that the government would use all available resources to provide relief" (Manila Standard, February 18, 2006).
Immediately after the landslide, several local and international organizations extended their support for search and rescue operations. At the retrieval site, the dead bodies were placed in the village auditorium in an adjacent village, Bgy. Malibago, for identification. The residents of the community provided blankets to cover the bodies. Those who were identified were taken by relatives while those who could not be identified were buried in a mass grave in Bgy. Catmon cemetery. The LGU helped the victims of the families by providing funds for funeral services.

Due to the magnitude of the disaster and the continuous rainfall, which left rescuers "digging and searching without much success," the search and rescue operations were declared aborted on February 24 by the Governor of Southern Leyte Rosette Lerias. By the next day, February 25, almost 90% of the military forces from different countries had left the operations and command centers (Telecoms Sans Frontieres (TSF) with the United Nations Disaster Assessment and Coordination (UNDAC), 2006).

Meanwhile, because of the fear that a similar landslide might occur in the adjacent villages, 11 barangays were evacuated by February 19 with an estimated 10,000 persons seeking temporary refuge in various evacuation centers (CDRC and LCDE, 2006). Most stayed in schools in the poblacion. Seven barangays were later declared by the Mines and Geo-Science Bureau as danger zones not habitable for
settlement. The residents were forced to evacuate and remain in the evacuation centers. When classes resumed in June, the evacuees were transferred to temporary shelters made of bamboo materials that were erected on the school campus.

![Warning sign saying that the seven villages have been declared danger zones by the Mines and Geosciences Bureau](image)

**Figure 1.5** Warning sign saying that the seven villages have been declared danger zones by the Mines and Geosciences Bureau

<table>
<thead>
<tr>
<th>Evacuation Centers</th>
<th>Villages Evacuees Came From</th>
<th>No. of Evacuees</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Bernard Central School</td>
<td>Ayahag, Sug-angon, Nueva Esperanza, Hinabian</td>
<td>1,580</td>
</tr>
<tr>
<td>Cristo Rey Regional High School</td>
<td>Guinsaugon</td>
<td>648</td>
</tr>
<tr>
<td>United Church of Christ of the Philippines Church</td>
<td>Magatas, Hinabian</td>
<td>384</td>
</tr>
<tr>
<td>Iglesia ni Kristo Church</td>
<td>Atuyan, Carnaga, Himbangan</td>
<td>169</td>
</tr>
<tr>
<td>Catmon Elementary School</td>
<td>Hinabian</td>
<td>533</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,314</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Telecoms Sans Frontieres (TSF) with United Nations Disaster Assessment and Coordination (UNDAC), 2006.

The International Federation of Red Cross and Red Crescent Societies reported that the "Philippine government departments have been active in this operation at all levels since the onset...Various foreign governments also provided support." Activities carried out by various parties include (but are not necessary limited to) those shown in Table 1.3.

<table>
<thead>
<tr>
<th>Organizations</th>
<th>Support Provided</th>
</tr>
</thead>
</table>
| Philippine Government and Military | * Search and rescue and body retrieval  
* Coordination  
* Air transport and logistics  
* Medical and health monitoring in evacuation centers  
* Health education  
* Emergency sanitation in evacuation centers  
* Emergency water supplies  
* Environmental health  
* Identification of human remains  
* Case management of orphaned children  
* CISD (with PNRC) |
There were some problems and difficulties faced in the provision of emergency response. The UNDAC team observed problems with the management of information and communications. There were problems in disseminating information to local and international media related to the accuracy of information and consistency in reporting. Activities such as rescue and retrieval on site (ground zero) and relief and rehabilitation efforts during the evacuation were not coordinated, creating more confusion and stress among the families affected by the disaster (TSF and UNDAC, 2006).

1.3 Compliance of the Recovery Process with the HFA

Shortly after the provision of emergency services, the thrust of the government and other humanitarian organizations which came to help shifted from emergency response to recovery. While emergency assistance was being provided for families at the evacuation centers, recovery processes involved the identification of sites for resettlement, shelter design preparation, provision of educational services to children affected by the landslide, and health and livelihood services.

The trauma resulting from the tragedy made the LGUs, communities, support organizations, and individuals more conscious of possible disasters. This awareness is significant in promoting appropriate disaster preparedness and response behaviors.

The municipal government established measures for disaster risk reduction (DRR) by creating an office for disaster and emergency management and integrating DRR into its plans.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation</td>
<td>• The municipality established a disaster and emergency management office</td>
</tr>
<tr>
<td></td>
<td>• Disaster risk management was integrated into the development plans of the municipality</td>
</tr>
<tr>
<td></td>
<td>• Each barangay came out with a community development plan that addresses its vulnerabilities and needs for recovery</td>
</tr>
<tr>
<td></td>
<td>• A coalition of NGOs working closely with the LGU was established to coordinate DRR-related activities</td>
</tr>
<tr>
<td>Identify, assess and monitor disaster risks and enhance early warning</td>
<td>• Hazard assessments were performed in the area, resulting in the declaration of six other communities as danger zones whose residents were forced to abandon those locations for new resettlement areas</td>
</tr>
<tr>
<td></td>
<td>• The municipality has a 24-hour operations center with established radio connections between warning agencies and the communities</td>
</tr>
<tr>
<td></td>
<td>• Hazard assessments were conducted prior to the establishment of resettlement areas</td>
</tr>
<tr>
<td></td>
<td>• Hazard assessment and land use planning are being done at the community level</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------</td>
</tr>
</tbody>
</table>
| Use knowledge, innovation and education to build a culture of safety and resilience to hazards at all levels | • Community DRR trainings were offered by government agencies and NGOs  
• The municipality established a website where people can access information and express their concerns to municipal officials  
• Partnerships with NGOs, academia and the private sector were established by the municipality for trainings and conferences that enabled the LGU to share its experiences and learn from others |
| Reduce the underlying risk factors | • Communities were relocated to safer areas  
• Social safety nets were established by providing facilities in resettlement areas such as health centers, schools, barangay halls and recreation centers.  
• Livelihood activities were initiated, but were not adequate or sustainable  
• Psychosocial services remain imperative even at present |
| Strengthen disaster preparedness for effective response at all levels | • Local mechanisms established for disaster response  
• Community participation and volunteerism have been encouraged  
• Integration of DRR into municipal and community planning  
• DRR training |
CHAPTER 2: RECOVERY PROCESSES

2.1 Damage and Impact Assessments

2.1.1. Social Impacts

The greatest impact of the disaster is the fact that Barangay Guinsaugon was totally buried with family members buried alive. Ninety percent of the 330 families now living in the New Guinsaugon community lost at least one family member. As shown in Table 2.1, 20% twenty percent of the families lost two family members. Table 2.1 shows that almost 60% of families lost five members or more. There were 108 individuals, 60% of whom were male 22-59 years old, who were left completely alone, meaning that all of the members of their family died in the tragedy. Fifty (50) young children and dependent young adults (21 years and younger) were orphaned, and ten of these lost all members of their family.

Most of those who survived the tragedy were those who were not in Bgy. Guinsaugon at the time of the landslide, such as farmers working on farms or in the mountains, students studying in St. Bernard or elsewhere, and those working in other areas, such as in Manila or abroad. The municipal records show that only 73 of those who were in the village at the time of the tragedy were rescued and survived.

Table 2.1 Number of Deaths Per Family

<table>
<thead>
<tr>
<th>Number of Deaths in the Family</th>
<th>No. of Families</th>
<th>Total Deaths</th>
<th>Percentages of Families</th>
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<tr>
<td>0</td>
<td>30</td>
<td>0</td>
<td>9.1</td>
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<td>53</td>
<td>53</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>330</strong></td>
<td><strong>979</strong></td>
<td><strong>100</strong></td>
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</table>

Source of Basic Data: Municipal Social Welfare and Development Office, Municipality of St. Bernard

Table 2.2 Sole Survivors of Their Families

<table>
<thead>
<tr>
<th>Sole Survivors of Their Families</th>
<th>Number</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Female 15 years and younger</td>
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<td></td>
</tr>
<tr>
<td>Male 15 years and younger</td>
<td>5</td>
<td>4.6</td>
</tr>
<tr>
<td>Male 16-21 years old</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Female 16-21 years old</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Male 22-59 years old</td>
<td>64</td>
<td>59.3</td>
</tr>
<tr>
<td>Female 22-59 years old</td>
<td>25</td>
<td>23.1</td>
</tr>
<tr>
<td>Male elderly 60 years and older</td>
<td>9</td>
<td>8.3</td>
</tr>
<tr>
<td>Female elderly 60 years and older</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source of Basic Data: Municipal Social Welfare and Development Office, Municipality of St. Bernard
Table 2.3 Orphans 21 Years Old and Younger

<table>
<thead>
<tr>
<th>Orphans Per Family</th>
<th>Number of Families</th>
<th>Total number of Orphans</th>
</tr>
</thead>
<tbody>
<tr>
<td>One orphan/family</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Two orphans/family</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Three orphans/family</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>50</td>
</tr>
</tbody>
</table>

Source of Basic Data: Municipal Social Welfare and Development Office, Municipality of St. Bernard

The loss of family members was aggravated by the fact that almost all were lost and buried in the mud—family members, friends and neighbors, houses, land and assets, the community as a whole, including the place and the sentimental value it once had, remembrances of the past, the neighborhood and the close relationship among community members and other cultural assets of the community. Some of the survivors said they seemed to have lost their identity and reason for living, with some even wishing that they would have not survived if it meant having to be left alone. Their grief is made worse by the feeling of guilt for something they were not responsible for. Many have not recovered from the pain of losing their loved ones. Others have explicitly expressed their hatred for the mountains that caused the landslide. While some men have remarried, they have been frustrated by their inability to have any more children.

There was a change in lifestyle for all the families from the seven villages who were forced to move out when the government declared their communities to be unfit for habitation. Though previously living in a rural environment, they now live in an urban setting, in row houses considered by most residents to be less spacious than before. This new situation has some bearing on the economic conditions of the resettled families.

2.1.2. Economic Impacts

Since Guinsaugon was an agricultural community, the economic impact of the landslide was on agricultural production. At an exchange rate of 49 pesos to the dollar in 2006, the total loss in agriculture is estimated at 460,469.18 million dollars.

Table 2.4 Losses in Agriculture

<table>
<thead>
<tr>
<th>Agricultural Damage</th>
<th>Area Planted (ha)</th>
<th>Value (x1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Crops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Rice</td>
<td>150</td>
<td>2,064.750</td>
</tr>
<tr>
<td>2. Coconut</td>
<td>60</td>
<td>3,000.000</td>
</tr>
<tr>
<td>3. Abaca</td>
<td>50</td>
<td>1,000.000</td>
</tr>
<tr>
<td>4. Roots crops</td>
<td>50</td>
<td>5,400.000</td>
</tr>
<tr>
<td>5. Vegetables</td>
<td>10</td>
<td>2,405.615</td>
</tr>
<tr>
<td>6. Banana</td>
<td>30</td>
<td>3,232,500</td>
</tr>
<tr>
<td>7. Fruit trees</td>
<td>10</td>
<td>1,172.625</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>360</strong></td>
<td><strong>18,265,490</strong></td>
</tr>
<tr>
<td>B. Livestock/Poultry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Swine</td>
<td>1000</td>
<td>2,467,500</td>
</tr>
<tr>
<td>2. Carabao</td>
<td>90</td>
<td>830,000</td>
</tr>
<tr>
<td>3. Cattle</td>
<td>11</td>
<td>102,000</td>
</tr>
<tr>
<td>4. Poultry</td>
<td>21,000</td>
<td>918,000</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>22,101</strong></td>
<td><strong>4,317,500</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>22,562,990</strong></td>
</tr>
</tbody>
</table>

Source: Office of Agricultural Services, Municipality of St. Bernard

It is estimated that the landslide tragedy caused property damage amounting to P 114,800 million, or US $2.442 million, and infrastructural damage amounting to P 92,200 million or US $22.600 million (Co, 2010:21).
2.1.3. Environmental Impacts

Southern Leyte has been identified by the government’s Department of Environment and Natural Resources as among the country’s priority geo-hazard areas. Reports indicate that the province is vegetated, but prone to landslides because of its soil or ground make-up and its level of rainfall. All three factors that can trigger a landslide, such as the weak integrity of the bedrock, the steepness of the slope, and the amount of precipitation, are present in the area. There are numerous faults and fractures that run through the area, such that the rocks in the area are badly broken or fragmented and are prone to weathering and erosion. As water seeps into the fractured rocks as a result of excessive rainfall, the rocks and soil materials become saturated, causing landslides (Katherine Adraneda, 2006 and CDRC and LCDE, 2006 citing reports of the Department of Environment and Natural Resources).

A joint team from the government’s Department of Public Works and Highway and the Japan International Cooperation Agency (JICA) reported the observation that a spring and surface flow in the slide area emerged after the landslide, implying that the slope had fractured cracks before the landslide, allowing the infiltration and accumulation of ground water.

The landslide moved at high speed, ramped over and landed at a distance of more than a kilometer. The slope beyond 2 kilometers is almost flat. The area of the slide is approximately 2.6 square kilometers. The area of deposition measured from the foot of the mountain is 1.6 square kilometers, with an estimated depth of 5 meters at the rim and plus/minus 10 meters near the foot of the mountain. The volume of deposits is estimated at 8 million cubic meters if the average depth of deposition is 5 meters and 4.8 million cubic meters if the average depth is as shallow as 3 meters (Japan International Cooperation Agency and PMO-Flood Control and SABO Engineering Center, 2007).

2.1.4. Impact on Public Infrastructure

The landslide buried the whole village which had facilities such as an elementary school, barangay hall, covered auditorium, and health center. In the six other communities that were declared to be danger zones, these facilities were abandoned and have not been maintained since the relocation.

The road in Bgy. Guinsaugon was also totally damaged. It was observed that the emergency restoration of the road achieved by cutting into the foot of the slope to create a detour has weakened the base that holds the upper soil and rock layers (JICA and PMO-FCSEC, 2007). In the six other barangays, the roads remain passable since the people are still using them to transport crops such as coconut, rice and vegetables.

As a consequence of using the schools as evacuation centers, some of their facilities, such as the classrooms, toilets, and grounds have deteriorated. However, through the GTZ in collaboration with the LGU, a school improvement program was implemented, making the schools look better than before.

2.2 Institutional Arrangement

News of the landslide reached the local government unit (LGU) of St. Bernard right after the event. This was relayed at once to the province, which sent a contingent within the day, together with some volunteers such as the Philippine National Red Cross (PNRC). The news spread to the media, other government agencies, non-governmental organizations, international humanitarian organizations and foreign governments. They all worked together in conducting rescue operations, providing services during the evacuation, and achieving the relocation and resettlement of the affected communities.

Matters pertaining to disaster risk management policies, operations and responses in the Philippines are within the scope of responsibility of the Disasters Coordinating Councils (DCC) which exist at every level of government, from the national level down to the local level (regional, provincial, city, municipal and barangay DCCs). The disaster management system in place at that time and up until May 2010 was...
managed by the highest policy making body, namely the National Disaster Coordinating Council (NDCC). This was established by Presidential Decree 1566 on June 11, 1978. In May 2010, a new law, the Republic Act 10121, was enacted and this is now the legal and institutional basis for disaster risk reduction and management in the Philippines.

2.3 Recovery Funding and Management

Funds for disaster recovery can be generally categorized into two major classifications: (1) public funds that come from the government budget and allocation, as well as donations of humanitarian and foreign governments to the government agencies managing the emergency and recovery programs; and (2) private funds which are in the hands of non-governmental humanitarian organizations, private corporations striving to fulfill their corporate social responsibility and individuals providing funding support for disaster emergency and recovery.

The government has a National Calamity Fund as well as a Local Calamity Fund to be used in times of calamity. The latter is comprised of 5% of the Internal Revenue Allotment of the Local Government Units (LGU) such as the province, cities, municipalities and barangay. The calamity fund can be disbursed only upon the declaration of a state of calamity in the affected locality. There is also a Quick Response Fund from the national budget to support initial and immediate disaster response operations and the needs of the NDCC participating agencies (Co, 2010).

All government funds, whether from national or local budget allocations, as well as donations, are subject to government rules and procedures for disbursement and auditing. During the Guinsaugon landslide, funds from various government entities, and from the municipality, provincial and national calamity funds were mobilized. In addition to these, government agencies made use of their regular allotments in providing assistance to various aspects of the emergency and recovery projects. Congressional funds were also made available for recovery purposes.

On the other hand, private funds are managed by the organizations concerned and are not subject to government rules and procedures for disbursement and auditing. Those organizations were autonomous with regard to how they spent the funds, although coordination with other stakeholders was promoted to avoid the duplication of expenditures and to rationalize project funding. This explains why a resettlement such as New Guinsaugon has three main sources of funding: AUSAID, which channeled its funds through the PNRC; JICA, which channeled its funds through Habitat for Humanity; and the Gawad Kalinga (GK), which generated donations from other sources such as private corporations and individuals.

The government agencies or LGUs in collaboration with NGOs resulted in some delineation of responsibilities. For example, the LGU was responsible for securing land for resettlement, the provincial government was responsible for the roads and infrastructure, the Department of Social Welfare and Development (DSWD) provided assistance with food-for-work programs, while NGOs supported shelter construction, water supply, livelihood continuity, school activities and other services. The financial assistance provided by the DSWD in partnership with the various agencies is shown in Table 2.5.
Table 2.5 Social Welfare and Development (SWD) Services and Interventions for the 2006 Landslide Victims as of December 10, 2010

<table>
<thead>
<tr>
<th>Services/ Interventions</th>
<th>No. of Family-Beneficiaries</th>
<th>Cost (Pesos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relief assistance 1</td>
<td>3,881</td>
<td>2,795,464.00</td>
</tr>
<tr>
<td>Financial assistance for the injured and bereaved families of the dead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injured 2</td>
<td>18</td>
<td>90,000.00</td>
</tr>
<tr>
<td>Dead 3</td>
<td>866</td>
<td>8,660,000.00</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>885</td>
<td>8,750,000.00</td>
</tr>
<tr>
<td>Shelter assistance 4</td>
<td>517</td>
<td>37,637,370.00</td>
</tr>
<tr>
<td>Cash/Food-for-Work (C-FFW) 5</td>
<td>517</td>
<td>1,034,000.00</td>
</tr>
<tr>
<td>Livelihood assistance 6</td>
<td>44</td>
<td>220,000.00</td>
</tr>
<tr>
<td>Tertiary educational assistance for orphaned children 7</td>
<td>22</td>
<td>2,349,120.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,881</strong></td>
<td><strong>52,785,954.00</strong></td>
</tr>
</tbody>
</table>


1 Consisting of food items (e.g., rice, canned fish and meat, etc.), and non-food supplies (e.g., tents, water containers, clothing, etc.)

2 P15,000.00/victim.

3 P10,000.00/victim.

4 Jointly funded and implemented by the DSWD, the government of Japan (GOJ), the Habitat for Humanity Philippines (HFHP) Foundation, Inc. and by the local governments of Saint Bernard and Southern Leyte at P55,283.78 each for 100 units and P77,000.00 each for 417 units for family-beneficiaries from Barangay Guinsaugon (100 units), Ayahag (225 units), Nueva Esperanza (106 units) and Sug-acong (86 units).

5 Support service component for the shelter construction at the rate of P200.00/person/day for a 10-day maximum.

6 Self-Employment Assistance-Kaunlaran (SEA-K) for 2 sea-K Associations (SKAs) for projects such as food processing, sari-sari stores and buy and sell at P5,000.00/member or P110,000.00/SKA of 22 members.

7 Includes payments for tuition fees, uniforms, books, food, a transportation allowance and incidental expenses covering the school years 2008-2012.

8 Unduplicated count of family-beneficiaries.
CHAPTER 3: SECTOR-SPECIFIC RECOVERY AND CASE STUDIES

3.1 Resettlement: Shelter, Infrastructure and the Environment

Seven communities were relocated in six resettlement areas. Bgy. Guinsaugon, La Esperanza, Ayahag and Sug-angon were relocated in Bgy. Magbagacay. The three barangays of Hinabian, Kauswagan and Magatas were resettled in one resettlement area in Bgy. Catmon. Some of the residents of Bgy. Magatas were relocated in Bgy. Cabagawan.

The LGU purchased the land and developed the sites for the resettlement areas. On the other hand, the non-governmental and international humanitarian aid organizations were responsible for providing shelters and other facilities. Except for Bgy. Magatas, where residents were relocated to two areas, all of the barangays were relocated to one area.

Table 3.1 Location, Land Area and Distance of the Resettlement Area From the Poblacion

<table>
<thead>
<tr>
<th>Villages Resettled</th>
<th>Location of the Resettlement</th>
<th>Land Area of Resettlement (Hectares)</th>
<th>Distance From Poblacion (KM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Guinsaugon</td>
<td>Magbagacay</td>
<td>6.0222</td>
<td>1.770</td>
</tr>
<tr>
<td>New Ayahag</td>
<td>Magbagacay</td>
<td>3.1315</td>
<td>0.800</td>
</tr>
<tr>
<td>New Nueva Esperanza</td>
<td>Magbagacay</td>
<td>1.5000</td>
<td>2.000</td>
</tr>
<tr>
<td>New Sug-angon</td>
<td>Magbagacay</td>
<td>2.5980</td>
<td>1.609</td>
</tr>
<tr>
<td>New Hinabian</td>
<td>Catmon</td>
<td>4.500*</td>
<td>9.977</td>
</tr>
<tr>
<td>New Kauswagan</td>
<td>Catmon</td>
<td>4.500*</td>
<td>9.977</td>
</tr>
<tr>
<td>New Magatas</td>
<td>Catmon</td>
<td>4.500*</td>
<td>9.977</td>
</tr>
<tr>
<td>Cabagawan</td>
<td></td>
<td>2.000</td>
<td>8.850</td>
</tr>
</tbody>
</table>

Source: Assistant Municipal Planning and Development Coordinator -Designate, 2008. * Same relocation area

The four barangay that were resettled in Bgy. Magbagacay are very accessible to the poblacion. On the other hand, those in Catmon are about 10 kilometers away from the poblacion. The resettlement here is called Mahika, a title created by combining the first two letters of the names of the relocated barangays (Magatas-Hinabian-Kauswagan). While the roads within the resettlement area in Catmon are paved, some portions of the road leading to the resettlement area are rough and difficult to pass, particularly for small vehicles such as pedicabs, the main mode of public transport in the area.
To determine how the people feel about their recovery from losses due to the landslide, a survey was conducted among the residents in the seven barangays resettled. There were 310 respondents representing 30% of the total number of families who were asked to indicate their recovery status using the following scale:

1. Not yet recovered
2. Little recovery
3. Full recovery
4. "Built back better"

<table>
<thead>
<tr>
<th>Barangay</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>%R to Total Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinsaugon</td>
<td>68</td>
<td>32</td>
<td>100</td>
<td>30.30</td>
</tr>
<tr>
<td>Ayahag</td>
<td>13</td>
<td>56</td>
<td>69</td>
<td>28.99</td>
</tr>
<tr>
<td>Nueva Esperanza</td>
<td>23</td>
<td>8</td>
<td>31</td>
<td>29.52</td>
</tr>
<tr>
<td>Sug-angon</td>
<td>11</td>
<td>19</td>
<td>30</td>
<td>33.33</td>
</tr>
<tr>
<td>Hinabian</td>
<td>5</td>
<td>26</td>
<td>31</td>
<td>30.39</td>
</tr>
<tr>
<td>Magatas</td>
<td>13</td>
<td>17</td>
<td>30</td>
<td>26.55</td>
</tr>
<tr>
<td>Kauswagan</td>
<td>16</td>
<td>3</td>
<td>19</td>
<td>65.52</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>161</td>
<td>310</td>
<td>30.75</td>
</tr>
</tbody>
</table>

In the analysis, the rating scales and meanings of the average scores, as shown in Table 3.4, are used to assess the recovery status as perceived by the residents themselves. These will also be used as a
reference in discussing recovery issues. Red marks means that there has been no recovery on the element concerned. On the other hand, a green mark means that the present situation is better than before, or recovered based on the principle of "build back better."

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Status</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00-1.50</td>
<td>Not yet recovered</td>
<td>Red</td>
</tr>
<tr>
<td>1.51-2.50</td>
<td>Little Recovery</td>
<td></td>
</tr>
<tr>
<td>2.51-3.50</td>
<td>Full recovery</td>
<td>Blue</td>
</tr>
<tr>
<td>3.51-4.00</td>
<td>Built back better</td>
<td>Green</td>
</tr>
</tbody>
</table>

### Case 3.1.1. New Guinsaugon Village

Barangay Guinsaugon was resettled in Barangay Magbagacay, which is 1.77 kilometers away from the poblacion or center of the municipality. The new location is very accessible from the national road and is only five to ten minutes from the poblacion. The total land area is 6.0222 hectares or 56,338 square meters (Bgy. Guinsaugon 2008). The area is a plain with a hill at the western boundary. The land was bought by the government from a private individual while the houses were donated by three donors (Table 3.5). The houses and the land are permanently occupied by the family beneficiaries and can be inherited by family members. They contributed labor to the construction of the houses and were given food for work. The identification of families who would be occupying the units was done by lottery. After five years (in 2011), the families will receive a Certificate of Occupancy. However, they cannot sell their units or rent them out to other occupants.

<table>
<thead>
<tr>
<th>Donors</th>
<th>Description</th>
<th>No. of Duplexes</th>
<th>No. of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gawad Kalinga</td>
<td>Colorful duplex, single story, with 4x6 floor area (24 square meters)</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>JICA</td>
<td>Duplex with steel frame hardiflex; with mezzanine</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>PNRC AUSAID</td>
<td>Duplex with steel frame hardiflex; with mezzanine</td>
<td>65</td>
<td>130</td>
</tr>
</tbody>
</table>

The occupants are not expected to pay rent or amortization. However, they have to pay for their electric and water expenses. The electricity is provided by the local electric cooperatives while the water supply facilities are made available by the Plan International and the local government unit (LGU). An average family pays 60 pesos or around US$1.50 per month for water consumption to the LGU. The residents pay the LGU P10.00 per month for the collection of garbage. For toilet drainage, the houses have septic tanks made of a plastic drum. The residents have complained that some of the tanks are already full and that foul odors are already being emitted from some areas.
The survey respondents indicated that they have fully recovered in terms of most of the community services and facilities such as health and education, infrastructure, community access, churches and recreational facilities. In terms of shelter, they indicate nearly full recovery, while in terms of the
environment, they report little recovery. The latter is understandable since the resettlement area has little space for greenery, which is unlike their previous community, which had mountains and trees. However, the resettlement is safer since there is no threat of flooding or landslide. On the average, there are no red marks in Guinsaugon that says that no recovery has taken place.

What is problematic in Bgy. New Guinsaugon is not the shelter, infrastructure or environment, but the lack of recovery in people's livelihoods and incomes. As shown in Table 3.6, 28.34% of the respondents and their spouses have no job. A little more than one fourth went back into farming. The family income is also very low, with 36.84% having a monthly income of less than 2,000 pesos or approximately US $45.

Table 3.6 Occupation of Family Respondents and Spouses

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Respondents</th>
<th>Spouse</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Farmer</td>
<td>35</td>
<td>7</td>
<td>42</td>
<td>22.46</td>
</tr>
<tr>
<td>2. Fishing</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Overseas worker</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>1.63</td>
</tr>
<tr>
<td>4. Driver (pedicab, padyak, jeepney)</td>
<td>13</td>
<td>-</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>5. Storeowner, vendor</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>6. Employee</td>
<td>11</td>
<td>8</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>7. Domestic helper, laundry women</td>
<td>7</td>
<td>27</td>
<td>34</td>
<td>18.18</td>
</tr>
<tr>
<td>8. Midwife, nurse, health worker</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9. Self-employed, mason, carpentry</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10. None</td>
<td>18</td>
<td>35</td>
<td>53</td>
<td>28.34</td>
</tr>
<tr>
<td>Total</td>
<td>94</td>
<td>93</td>
<td>187</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3.7 Monthly Family Income in Guinsaugon

<table>
<thead>
<tr>
<th>Monthly Income in Thousands</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>P 2,000 and less</td>
<td>35</td>
<td>36.84</td>
</tr>
<tr>
<td>P 2,001-P 4,000</td>
<td>26</td>
<td>27.37</td>
</tr>
<tr>
<td>P 4,001-P 6,000</td>
<td>18</td>
<td>18.95</td>
</tr>
<tr>
<td>P 6,001-P 8,000</td>
<td>4</td>
<td>4.21</td>
</tr>
<tr>
<td>P 8,001-P 10,000</td>
<td>2</td>
<td>2.10</td>
</tr>
<tr>
<td>Above P 10,000</td>
<td>10</td>
<td>10.53</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3.8 Income in Guinsaugon

<table>
<thead>
<tr>
<th>Recovery Elements</th>
<th>Area 1</th>
<th>Area 2</th>
<th>Area 3</th>
<th>Guinsaugon</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Physical and Mental Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. From death of relatives</td>
<td>2.49</td>
<td>2.35</td>
<td>1.81</td>
<td>2.22</td>
<td>Little recovery</td>
</tr>
<tr>
<td>2. Sickness</td>
<td>2.62</td>
<td>1.91</td>
<td>1.66</td>
<td>2.06</td>
<td>Little recovery</td>
</tr>
<tr>
<td>3. Physical injuries such as losses of legs, sight, etc.</td>
<td>2.00</td>
<td>1.50</td>
<td>2.00</td>
<td>1.83</td>
<td>Little recovery</td>
</tr>
<tr>
<td>4. Emotional trauma</td>
<td>2.4</td>
<td>2.2</td>
<td>1.96</td>
<td>2.21</td>
<td>Little recovery</td>
</tr>
<tr>
<td>B. Family Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Loss of a house</td>
<td>2.75</td>
<td>2.47</td>
<td>2.10</td>
<td>2.44</td>
<td>Little recovery</td>
</tr>
<tr>
<td>6. Loss of household assets</td>
<td>2.66</td>
<td>2.38</td>
<td>2.00</td>
<td>2.34</td>
<td>Little recovery</td>
</tr>
<tr>
<td>7. Loss of assets for livelihood</td>
<td>2.07</td>
<td>1.71</td>
<td>1.44</td>
<td>1.74</td>
<td>Little recovery</td>
</tr>
<tr>
<td>8. Loss of livelihood and income</td>
<td>2.63</td>
<td>1.66</td>
<td>1.59</td>
<td>1.96</td>
<td>Little recovery</td>
</tr>
<tr>
<td>9. Farm lands</td>
<td>2.19</td>
<td>2.10</td>
<td>1.63</td>
<td>1.71</td>
<td>Little recovery</td>
</tr>
<tr>
<td>C. Community Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Education of children</td>
<td>3.71</td>
<td>2.46</td>
<td>2.00</td>
<td>2.73</td>
<td>Full recovery</td>
</tr>
<tr>
<td>11. Location and distance of the resettlement</td>
<td>2.82</td>
<td>2.87</td>
<td>2.00</td>
<td>2.56</td>
<td>Full recovery</td>
</tr>
<tr>
<td>12. Roads, pathways, bridges</td>
<td>3.14</td>
<td>2.94</td>
<td>2.75</td>
<td>2.94</td>
<td>Full recovery</td>
</tr>
<tr>
<td>13. Water supply</td>
<td>2.97</td>
<td>3.22</td>
<td>2.19</td>
<td>2.79</td>
<td>Full recovery</td>
</tr>
<tr>
<td>14. Electricity</td>
<td>2.97</td>
<td>3.22</td>
<td>2.38</td>
<td>2.85</td>
<td>Full recovery</td>
</tr>
<tr>
<td>15. Recreational facilities</td>
<td>2.40</td>
<td>3.00</td>
<td>2.31</td>
<td>2.56</td>
<td>Full recovery</td>
</tr>
<tr>
<td>16. Church facilities</td>
<td>3.22</td>
<td>3.93</td>
<td>3.00</td>
<td>3.39</td>
<td>Full recovery</td>
</tr>
<tr>
<td>17. Environment</td>
<td>2.54</td>
<td>2.43</td>
<td>1.47</td>
<td>2.15</td>
<td>Little recovery</td>
</tr>
<tr>
<td>D. Relationships and Governance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Case 3.1.2. The Resettlement in Ayahag, Nueva Esperanza and Sug-angon

The resettlement area for the three barangays of Ayahag, Nueva Esperanza and Sug-angon are clustered into one case because they had the same features in the old community and have now been resettled separately in the same barangay. The shelters were provided by Habitat for Humanity, with funding coming from the government of Japan. The Department of Social Welfare and Development (DSWD) provided food-for-work for the residents who contributed labor in constructing the shelters. The resettlement areas have the same rules as those in the New Guinsaugon: the families will be given certificates of occupancy, the units cannot be sold or rented and the occupants will not pay for any amortization, but will pay for their electricity and water consumption.

All three resettlements were provided with infrastructural facilities comprised of an elementary school, a barangay hall, a health center and an open court by the PNRC and the Japanese Red Cross. The roads are not paved with asphalt or cement. The septic tanks are comprised of plastic drums, many of which are already full. Some leaders indicated that seepage from the septic tanks, and the related odors, have caused frustration and quarrels among neighbors. Many households have created their own outdoor bathrooms, resulting in open sewage drainage.

### New Ayahag

This community is adjacent to the highway. Unlike before when the community was far from the poblacion, New Ayahag is only about five minutes away from the center of the municipality, giving it better access to various services. The survey respondents indicated that most have fully recovered from losses in community services and facilities, including shelters. The environment and the quality of neighborhood are regarded as better than before. Apparently, the residents of New Ayahag did not lose houses in their old communities and even received new ones in the resettlement area. The environment is also considered to be better since it is safer and has a lot of trees. The roads, though, need some improvement since the drainage and run off pass through the sides and the middle of the road, sometimes creating patches of holes with stale water.
New Ayahag has a red mark in terms of recovery from the death of relatives. It is possible that most of the attention in terms of psychosocial services was given to Bgy. Guinsaugon, with less given to the other communities that were not buried by the landslide but where residents may have had relatives who died in the tragedy. As can be seen later in the cases on livelihoods, the people have not recovered from losses since they were displaced from their farms.

While the environment is considered by many to be better, the community is situated on rolling terrain with two creeks at the entrance and a creek that cuts through the community. The people say that these are dead creeks. Some portions of the creeks have paved embankments to prevent erosion. However, some portions have natural embankments, leaving some housing units facing the threat of hillside erosion.
New Sug-angon

This community is also in the same barangay as New Guinsaugon and New Ayahag. It is located at the inner portion of the barangay. It is not adjacent to the highway but is accessible via a road and several pathways. Among the three resettlement areas in this cluster, New Sug-angon has the greatest number of components that have been built back better, namely its water supply, electricity, recreational facilities and community governance.

Among the challenges mentioned by the community leaders are sources of livelihood, the rough road, already filled septic tanks and low enrollment in elementary school. There are not enough children in the community to warrant additional classes and teachers.

New Nueva Esperanza

This resettlement village is located at the western side of New Guinsaugon, with which it shares an entrance and access road. Most of the shelter units are found at a higher elevation, by following a road that runs along the slope of the hill.

Of the three communities in this cluster, Nueva Esperanza reported the highest number of elements in which recovery has not been achieved. These include non-recovery from illnesses, trauma and emotional disturbance, and of household assets, sources of livelihood, income and water supply. The higher elevation of the community means that the water supply is very scarce in the daytime. Sharing water sources with New Guinsaugon, Ayahag and Sug-angon, which are all located at a lower elevation, the people of Nueva Esperanza have a stable water supply only in the evening. They have to sleep late and even early morning to enable them to collect enough water to use during the day. The residents say
that this situation causes them to continue feeling the trauma of being displaced from their former community. This explains the red marks in their recovery status. There is not a single element considered to be “built back better” and only the roads and the community governance were considered to be fully recovered.

Figure 3.22 A road along the slope towards the village

Figure 3.23 Hillside going up the road

The Barangay Development Agenda of New Nueva Esperanza acknowledges that 50% of the residents of the barangay live in the resettlement and 50% live in the former community that was declared to be a danger zone. This was confirmed by the observations of researchers, who found a number of houses inhabited by families. In both the former community and the resettlement area, the people reported that the people living in the former community are doing so because their farms and sources of livelihood are there and because of the inadequate water supply in the resettlement area. However, they said that they are aware of the danger and that they will stay in the resettlement area during the rainy season.

Being situated in an elevated area is a challenge because there are manifestations of soil movement. There are cracks along the side of the Barangay hall which is located near the slope. The side of the hill near the road needs rip rapping to prevent erosion, particularly on rainy days.

Figure 3.24 The village hall

Figure 3.25 A crack at the side of the village hall
Table 3.9 Recovery Status in the Resettlement Areas

<table>
<thead>
<tr>
<th>Recovery Elements</th>
<th>Ayahag</th>
<th>Sug-angon</th>
<th>Nueva Esperanza</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Physical and Mental Health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. From death of relatives</td>
<td>1.50</td>
<td>1.40</td>
<td>NA</td>
</tr>
<tr>
<td>2. Sickness</td>
<td>2.00</td>
<td>1.93</td>
<td>1.50</td>
</tr>
<tr>
<td>3. Physical injuries such as losses of legs, sight, etc.</td>
<td>NA</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td>4. Emotional trauma</td>
<td>2.63</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>B. Family Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Loss of a house</td>
<td>3.0</td>
<td>2.26</td>
<td>2.45</td>
</tr>
<tr>
<td>6. Loss of household assets</td>
<td>2.00</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>7. Loss of assets for livelihood</td>
<td>NA</td>
<td>2.76</td>
<td>1.38</td>
</tr>
<tr>
<td>8. Loss of livelihood and income</td>
<td>1.85</td>
<td>1.65</td>
<td>1.50</td>
</tr>
<tr>
<td><strong>C. Community Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Education of children</td>
<td>3.35</td>
<td>1.93</td>
<td>2.22</td>
</tr>
<tr>
<td>10. Location and distance of the resettlement</td>
<td>2.88</td>
<td>2.34</td>
<td>2.48</td>
</tr>
<tr>
<td>11. Roads, pathways, bridges</td>
<td>2.20</td>
<td>2.55</td>
<td>2.52</td>
</tr>
<tr>
<td>12. Water supply</td>
<td>3.41</td>
<td>3.80</td>
<td>1.38</td>
</tr>
<tr>
<td>13. Electricity</td>
<td>3.39</td>
<td>3.77</td>
<td>2.07</td>
</tr>
<tr>
<td>14. Recreational facilities</td>
<td>2.03</td>
<td>3.60</td>
<td>1.69</td>
</tr>
<tr>
<td>15. Church facilities</td>
<td>2.16</td>
<td>1.73</td>
<td>1.54</td>
</tr>
<tr>
<td>16. Environment</td>
<td>3.71</td>
<td>2.13</td>
<td>1.92</td>
</tr>
<tr>
<td>17. Farm lands</td>
<td>2.13</td>
<td>3.11</td>
<td>1.81</td>
</tr>
<tr>
<td><strong>D. Relationships and Governance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Relationship with neighbors</td>
<td>3.89</td>
<td>2.67</td>
<td>2.36</td>
</tr>
<tr>
<td>19. Community governance</td>
<td>3.47</td>
<td>3.57</td>
<td>2.61</td>
</tr>
</tbody>
</table>

Table 3.10 Monthly Family Income in the Three Resettlement Villages

<table>
<thead>
<tr>
<th>Monthly Income in Thousands</th>
<th>Nueva Esperanza</th>
<th>Ayahag</th>
<th>Sug-angon</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>P 2,000 and less</td>
<td>15</td>
<td>16</td>
<td>5</td>
<td>36</td>
<td>27.48</td>
</tr>
<tr>
<td>P 2,001-P 4,000</td>
<td>6</td>
<td>26</td>
<td>9</td>
<td>41</td>
<td>31.30</td>
</tr>
<tr>
<td>P 4,001-P 6,000</td>
<td>4</td>
<td>14</td>
<td>9</td>
<td>27</td>
<td>20.61</td>
</tr>
<tr>
<td>P 6,001-P 8,000</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>7</td>
<td>5.34</td>
</tr>
<tr>
<td>P 8,000-P 10,000</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>4.58</td>
</tr>
<tr>
<td>Above P 10,000</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>14</td>
<td>10.69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31</td>
<td>70</td>
<td>30</td>
<td>131</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3.11 Occupations of Family Respondents and Spouses in Nueva Esperanza

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Ayahag</th>
<th>Sug-angon</th>
<th>Nueva Esperanza</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>S</td>
<td>R</td>
<td>S</td>
<td>R+S</td>
</tr>
<tr>
<td>1. Farmer</td>
<td>11</td>
<td>18</td>
<td>6</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>2. Fishing</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>3. Overseas worker</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Driver, pedicab, padyak</td>
<td>-</td>
<td>11</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
Case 3.1.3. Mahika: Three Communities in One

Three upland communities that were resettled were Bgy. Hinabian, Kauswagan and Magatias. The relocation area is located midway between Bgy. Canton and Bgy. Lower Bantawon. The three communities were relocated to one area, hence they just called the place Mahika, a title created by combining the first two letters of the names of their barangays. It is also known as the Red Cross Village, since it was the PRC which constructed and implemented the resettlement. It has a land area of 4.5 hectares and is 9.977 kilometers from the town proper (Barangay Development Agenda of Magatias, 2008). The resettlement area has not been turned over by the PRC to the barangay (Barangay Development Agenda of Hinabian, 2008).

The survey indicates that two-thirds of the families in Mahika depend on farming for a living. There are 14% who work in personal services, with such jobs as domestic helpers and laundry women. Twenty-eight percent have no job (Table 3.12). The families have a very low monthly income. One-third earn 2,000 pesos, or about US $45, or less per month.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Ayahag</th>
<th>Sug-angon</th>
<th>Nueva Esperanza</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Storeowner, vendor</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>6. Employee</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>7. Domestic helper, laundry women</td>
<td>12</td>
<td>-</td>
<td>8</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>8. Midwife, nurse, health worker</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9. Self-employed, mason, carpentry</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>10. None</td>
<td>34</td>
<td>16</td>
<td>6</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>68</td>
<td>29</td>
<td>29</td>
<td>26</td>
</tr>
</tbody>
</table>
As a whole, the respondents of Mahika reported little recovery on most of the elements of recovery. They have recovered fully in terms of shelter, the provision of electricity, and their neighborhood. The provision of electricity was even rated to be better than before in Bgy. Hinabian. Unfortunately, in the same barangay, the areas considered to reflect no recovery are livelihood and income, roads and pathways, water supply and church facilities (Table 3.14).

Table 3.14 Comparative Recovery Status in the Resettlement Areas

<table>
<thead>
<tr>
<th>Recovery Elements</th>
<th>Hinabian</th>
<th>Magatas</th>
<th>Kauswagan</th>
<th>Mahika</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Physical and Mental Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. From death of relatives</td>
<td>2.42</td>
<td>2.29</td>
<td>2.00</td>
<td>2.23</td>
</tr>
<tr>
<td>2. Sickness</td>
<td>NA</td>
<td>1.91</td>
<td>2.00</td>
<td>1.95</td>
</tr>
<tr>
<td>3. Physical injuries such as losses of legs, sight, etc.</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>4. Emotional trauma</td>
<td>2.07</td>
<td>2.00</td>
<td>2.50</td>
<td>2.19</td>
</tr>
<tr>
<td>B. Family Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Loss of the house</td>
<td>3.42</td>
<td>2.31</td>
<td>2.38</td>
<td>2.70</td>
</tr>
<tr>
<td>6. Loss of household assets</td>
<td>2.00</td>
<td>NA</td>
<td>3.00</td>
<td>1.76</td>
</tr>
<tr>
<td>7. Loss of assets for livelihood</td>
<td>2.00</td>
<td>3.0</td>
<td>2.00</td>
<td>2.33</td>
</tr>
<tr>
<td>8. Loss of livelihood and income</td>
<td>1.25</td>
<td>1.89</td>
<td>1.88</td>
<td>1.67</td>
</tr>
<tr>
<td>C. Community Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Education of children</td>
<td>2.87</td>
<td>2.39</td>
<td>2.07</td>
<td>2.44</td>
</tr>
</tbody>
</table>

Table 3.13 Monthly Family Income in Mahika

<table>
<thead>
<tr>
<th>Monthly Income in Thousand</th>
<th>Hinabian</th>
<th>Magatas</th>
<th>Kauswagan</th>
<th>Mahika</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>P 2,000 and less</td>
<td>12</td>
<td>9</td>
<td>11</td>
<td>32</td>
<td>103</td>
<td>34.22</td>
</tr>
<tr>
<td>P 2,001-P 4,000</td>
<td>7</td>
<td>10</td>
<td>5</td>
<td>22</td>
<td>89</td>
<td>29.57</td>
</tr>
<tr>
<td>P 4,001-P 6,000</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>9</td>
<td>54</td>
<td>17.94</td>
</tr>
<tr>
<td>P 6,001-P 8,000</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>15</td>
<td>4.98</td>
</tr>
<tr>
<td>P 8,000-P 10,000</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>11</td>
<td>3.65</td>
</tr>
<tr>
<td>More than P 10,000</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>5</td>
<td>29</td>
<td>9.63</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>26</td>
<td>18</td>
<td>75</td>
<td>301</td>
<td>99.99</td>
</tr>
</tbody>
</table>
### 3.2 Livelihood

Before the landslide, Guinsaugon was one of the more densely populated communities in the municipality of St. Bernard. It was the fourth-highest earning village in the municipality, with its income derived mainly from the production of coconut, abaca and rice (official website of St. Bernard, 2010: www.saintbernard.gov.ph). After the tragedy, the estimated damage was mainly to agriculture amounting to PHP 22.6 million (US $436,000) (Municipal Agricultural Office, St. Bernard).

Various livelihood activities were implemented by the government through the Municipal Social Welfare and Development Office (MSWDO) to help the people of Guinsaugon.

**Self-Employment Assistance Kaunlaran Project (SEA K)**

This project is a community-based credit assistance program that offers loans with no interest and no collateral. The credit is payable in two years and with savings features. Savings is ensured so that the beneficiaries can expand their operations and will not have to borrow funds from other sources.

The Department of Social Welfare and Development (DSWD) Regional Office provided the funds for the project. The credit program includes social preparation where the people are encouraged to be involved in community activities. They are organized into Self-Employment Assistance Kaunlaran Associations (SKA) to establish ownership of the project and to be further united in implementing activities. Trainings and seminars for values formation are also conducted for the community members to motivate them and to sustain their self-employment efforts.

Capacity building training on day-to-day small business operations and management are also given to the beneficiaries to help them efficiently run their businesses. Technical assistance with business management and productivity are also provided to ensure that the businesses yield good results. Other supports include capital assistance, savings mobilization and access to other social services.

**Community Stores (Tindahan Natin)**

This project started in 2000 and was implemented in the entire province of Southern Leyte after a survey showed that the people claimed to be "hungry" and had no access to low-priced, quality rice. Stores were established where the price of the rice was regulated and rice from government agencies was made available to the people at a lower price. The source of capital for these stores can be loans and those who have the means can start one on their own. The loan for the outlets was worth PHP 20,000, payable in one year without interest. In 2004, the project was already able to extend assistance to six groups. To date, the municipality of St. Bernard has the highest percentage of payment in the region.

Two stores were constructed in the municipality of St. Bernard, one in Guinsaugon and one in the Public Market. It has given people access to low-priced goods, especially rice. Its close proximity to the supply source has contributed to easier maintenance and operation of the business.
As of 2009, the LGU, through the office of Municipal Agriculture Office (MAO), was able to provide the following assistance to the farmers of St. Bernard. Through the rice program, hybrid and inbred varieties of rice were distributed throughout the affected barangays in the municipality, helping 303 farmers (covering 167 hectares land) and 500 farmers (covering 352 hectares), respectively.

Vegetable and fruit production was also promoted by the MAO in order to introduce alternative livelihood options to survivors. Vegetable seeds for backyard gardening were distributed to 1,148 farmers with 10 hectares of land. The 19 members of the Vegetable Growers Association were also given commercial seeds to be planted on 5.5 hectares. Fruit seedlings were also given to 20 farmers, and 377 farmers across the municipality were awarded 20 kilos of rodenticides.

NGOs also extended livelihood assistance to the people of Guinsaugon who were relocated in the village of Magbagakay.

Most of the livelihood activities introduced in the community were unsuccessful. There were organizations that extended assistance but did not consult the people about their needs. They introduced livelihood practices without considering the people’s stake. Also, most of the livelihood programs did not complement the people’s technical know-how. For example, the people of Guinsaugon are farmers, so introducing mariculture as an alternative livelihood does not match their capacity.

**Table 3.15 Livelihood Activities by Development Organizations**

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>LIVELIHOOD ACTIVITIES</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippine Business for Social Progress (PBSP)</td>
<td>Southern Leyte Rehabilitation Program (SLRP)</td>
<td>*13,000 fingerlings and 1 fish cage</td>
</tr>
<tr>
<td></td>
<td>Mariculture</td>
<td>22 fish cages were distributed containing 4,200 fingerlings</td>
</tr>
<tr>
<td></td>
<td>Virgin coconut oil (VCO) production</td>
<td>154 household beneficiaries</td>
</tr>
<tr>
<td></td>
<td>Carpentry and masonry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hollow-block making</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Furniture-making</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vermiculture and organic HVC production</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 beneficiaries</td>
</tr>
<tr>
<td>The Daughters of Charity (DC) of St. Vincent de Paul</td>
<td>Loaning, provision of pedicabs, multicabs, fishing boats, loaning capital for bigasan (rice business), buy and sell fish, meat shop, fish vending, copra and abaca buyer, furniture shop, buying abaca fiber, dried fish and vegetables, sediwee and pamo, goat dispersal, farming and hog raising</td>
<td></td>
</tr>
<tr>
<td>Parish Social Action Center (PSAC) of St. Isidore Parish</td>
<td>Goat-raising (allocation was worth PHP 35,000)</td>
<td></td>
</tr>
<tr>
<td>Association of the Major Religious Superiors in the Philippines (AMRSP)</td>
<td>Abante Guinsaugon, Abante Pal (AGAP) Livelihood Project</td>
<td>Members of the AGAP Project:</td>
</tr>
<tr>
<td></td>
<td>Capital for putting up shops such as welding, vandalizing, dress, tailoring and barber; Small-scale business such as Sari-sari stores (mini-convenience store), food stalls like barbeque, meat shop; Farming, duck raising and fish vending</td>
<td>Male-19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Widow/wer-10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Couple-19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single-2</td>
</tr>
<tr>
<td>Gawad Kalinga</td>
<td>Sari-sari store</td>
<td></td>
</tr>
</tbody>
</table>


**Case 3.2.1. Reviving Agriculture in the Old Guinsaugon as a Mechanism for Recovery**

Due to inadequate sources of livelihood and income, 90% of the residents have come back to the Guinsaugon area to revive agricultural production there, while still living in the resettlement area. As
one of the farmers claimed, "it is easier to engage oneself in agriculture, for we are already familiar with the practices necessary to sustain rice farming."

**Back in the Old Guinsaugon Community**

"After the landslide, seeking livelihood opportunities was never easy in the relocation area. There was no place for us to plant, so we had no source of daily subsistence. We had to buy and pay for everything. Unlike in the former community, we can plant and gather fruits and vegetables to eat." (A farmer from New Guinsaugon)

The breakdown of expenses is as follows:

1. Fertilizer (P 1,000.00/sack) - A total of four (4) sacks per season is needed for a hectare of land
2. Tractor (P 150.00/hr) - Tractor is used at least six (6) hours for the preparation of the land, or more, depending on the nature of the soil
3. Carabao (P250.00/day) - However, if the owner needs an additional laborer who will guide the carabao in the plowing of the farm, he has to pay an additional P250.00.
4. Seeds (P600.00/sack) - One (1) sack is utilized
5. Pesticides (P90.00/bottle) - It is the cheapest to date. Pesticide use is highly important, especially during the month of October since it is during this season when pests are most abundant
6. Manpower - Farm Laborers (P200.00/day) - Twenty people are hired every farm season
7. Transportation (P40.00/day) - Farmers have to travel via jeepney since the relocation site is 30 minutes away from the old Guinsaugon.
8. Irrigation system (one sack of the harvested rice) - Contributed to the Integrated Association (an organization established by farmers in the Municipality of St. Bernard to foresee the maintenance of the Irrigation System that was constructed through the assistance of the National Irrigation Agency (NIA).
9. Farm Land rental - (1/4 of the total harvested sacks of rice)

In order to sustain the needs of production, Mang Romel borrows funds from his regular patrons and from other local businessmen. The payment scheme is as follows. For every P300 he borrows, he has to pay a sack of rice, while for every P1,000 he borrows, he has to pay three (3) sacks of rice. He usually sells a sack of rice for P600 per sack.

The earning is relative to the season of harvest. During the second season, in the month of April, the harvest is abundant as compared to the first season, in October, due to weather conditions and pest infestation. A total of 100 rice sacks are usually harvested if the production is good.

The agricultural production cost will be deducted from the produce:

<table>
<thead>
<tr>
<th>100 sacks will be apportioned to the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 sack: as a contribution to irrigation</td>
</tr>
<tr>
<td>20 sacks: will be given to farm laborers (1 sack/laborer)</td>
</tr>
<tr>
<td>2 sacks: as payment for fertilizer</td>
</tr>
</tbody>
</table>

The remaining 77 will be divided into quarters:

| ⅓ or 20 sacks will go to the land owner |
| ⅔ or 57 sacks will go to the farmer   |

If the demand for rice is high, the farmer can earn up to P30,000 by selling the remaining 57 sacks. The retail price also influences the income of the farmer, with a kilo of rice selling for P15 up to P17. The production costs of P17,000 will be subtracted from the estimated value of the earnings, yielding a total income of P13,000.

This situation is common to the farmers returning to the old Guinsaugon community. The larger the piece of land utilized for agriculture, the higher are the agricultural production costs. Some areas also lack access to irrigation, causing farmers to have to exert more effort to get water from the river. They also have to hire more people for manpower.
Working as a farm laborer

Those who cannot afford the agricultural production costs engage in work as a "pasahol," or farm laborer. They usually earn P150-200 a day, working from 6:00 am to 5:00 pm.

"Life was better before since we had our own land to develop as a rice plantation, unlike now, when we have to work as laborers," claimed one of the farmers working as a pasahol.

What they earn is not enough to support the needs of their family. They have to spend P40.00 daily for the cost of transportation from the relocation area to the old Guinsaugon site. This is a very unstable source of living for hired workers, who have to wait for an opportunity to be hired. The labor demand is high only during the planting and harvest seasons and the farmers have to compete with others for labor.

Reflections on the Tragedy

"It is really important to manage the environment properly and responsibly since its condition has a great impact on our daily lives. It is where we obtain our everyday subsistence, thus it is equated to life," says a farmer from Guinsaugon.

The tragedy served as an eye opener to the people of Guinsaugon, making them aware of the relationship between people and their environment. The municipal mayor shared that the people are more active in manifold community activities such as the clean and green program. The people have become more conscious of their actions towards good environmental management by maintaining the cleanliness of their surroundings and practicing backyard gardening to help augment their food source.

"In this life, you have no one to rely on but yourself. You should not always depend on other people’s assistance," shares a farm laborer. People have therefore become more self-reliant and independent. This is an indication that people are aware of their own capacity to survive and are fully conscious of their mechanisms to cope with their situation. It also suggests that a culture of dependency has never been an issue in the community. They are capable of dealing with the situation despite the hardships they have had to endure.

Looking Forward to a Better Life

"I believe that if farmers are given some money to be utilized for agricultural costs, it will be easier for us to meet our daily needs. We would not have to borrow money and this would mean that we could earn more because we would not have to deal with paying interest. Additional livelihood options would also help, such as the donation of funds to be used for purchasing modes of transportation, such as pedicabs, as these would keep us from having to pay the daily fare to old Guinsaugon and enable us to earn extra income by serving as a driver," says one of the farmers.

The local government of St. Bernard currently helps the farmers through the Office of the Municipal Agriculture by:

- Providing vegetable seedlings for backyard gardening, including eggplant and okra among many others and hybrid rice seedlings (also locally known as "bigante") in order to produce good and high yielding crops
- Conducting technical demonstrations, where new varieties of rice crops adaptive to the soil of old Guinsaugon are introduced to farmers
- Distributing fertilizers (i.e., urea) to increase rice production and enable farmers to produce more crops. St. Bernard was recognized in the region for its good production of hybrid rice.

As of 2009, 28.75% of the old site of Guinsaugon consisted of irrigated agricultural land area being managed by 33 rice farmers. The people are also active in animal husbandry, raising 13 carabaos, 4 goats, 1 horse, 3 sows, 2 boars, 14 piglets and 29 fattening hogs. The people of Guinsaugon have been
able to live with their circumstances and withstand the challenges brought by the tragedy of the 2006 landslide (Municipal Agriculture Office 2010).

**Case 3.2.2. Reviving Community Livelihood through Organizing Work: The Formation of the Cut Flower Association in Bgy. Hinabian**

"The cut flower business allowed me to support the education of my children. Before, I only take care of them and focus on housework, but now I’m able to provide financial support to meet the other basic needs of my family." – A member of the Cut Flower Association

**How did it get started?**

The economic activities of the people were severely affected by the February 2006 landslide. Although it was the village of Guinsaugon that suffered most from the disaster, other communities were also affected. Hinabian was one of the seven communities where the residents were forced to leave and start a new life together with the inhabitants of Magatas and Kauswagan in 2008.

Because of this relocation, the residents had to deal with a different environment. The children had to adjust to a new school while the adults had to face livelihood issues. The change of residence required the adults to look for economic opportunities. Some of them continued to farm, while others pursued a cut flower venture or turned to hog raising, and a few invested in a sari-sari store enterprise. It was a challenge for the people since it seemed like they had to start from scratch.

As part of the mechanisms to further respond to their economic needs, the people decided to organize an association of those engaged in cut flower production. Such an undertaking would help establish a system that will encourage them to work together and make the business more sustainable. Although several women residents were engaged in a cut flower enterprise prior to the disaster through the initiative of a former mayor in 2000, they had not yet organized themselves into a group. It was the tragedy that prompted the organization of the Cut Flower Association. The organization was officially formed in 2006 and was comprised primarily of women.

The organizing work led to the recruitment of other women villagers to take on the cut flower business. The planting initiative in the resettlement area was pioneered by Sister Alice of the Daughters of Charity, a Society of Apostolic Life for women within the Catholic Church. She provided seedlings to the women residents of Hinabian. Additional seedlings were donated by Brother Hansel who is also a partner of the Daughters of Charity.

During the organizing work, there were no strict membership qualifications for interested community residents. All the women who expressed willingness to join at the time of the recruitment were accepted. The age of the group members ranges from 30 to 60 years old. Originally, the organization had 20 members, but at present, there are only 10, as some became preoccupied with their responsibilities at home. In addition to housework, they are also busy with their children. They have to take care of them, especially the toddlers, and help them prepare for school.

**How the Organization Works**

Prior to the organizing initiative, some of the women had already received one-day training on cut flower production in 2000 given by the Visayas State College of Agriculture (VISCA). Apart from the training, the former mayor also gave the organization capital of PHP 20,000. Some of those who underwent the training shared what they learned with other members of the group.

In order to run the organization systematically, a regular meeting is held on the first Sunday of every month. This gathering allows the members to discuss important concerns and issues related to the management of their group. A member of the organization willingly offers her house to serve as the venue for the meeting. Each member is strongly encouraged to attend. Those who fail to attend the meeting are required to pay a fine amounting to PHP 25.00. This mechanism serves as a resource...
mobilization strategy since the accumulated dues are utilized to successfully carry out the organization’s activities.

Furthermore, the members also created a structure that would lead and guide the organization. An election of officers was held to select deserving individuals who possess noteworthy leadership and management skills. The presence of officers helped in ensuring the smooth operation of the organization since close monitoring is guaranteed. When there are pertinent concerns that need attention, the officers take a leading role in achieving a resolution.

Each member has an area in her respective backyard for the cut flower venture. The women also go to Barrio Daan, a site located a few kilometers away from their village that offers a bigger space for plantation. In this location, every woman has a plot to cultivate and grow various flowers. They plant different species such Baby’s Breath, Gladiola, Azucena, African Daisy, Chrysanthemum, Ginger Torch, and Anthurium.

They also use fertilizer (i.e., urea) and pesticides. The women also produce their own seedlings to achieve greater production. Usually, the women can harvest the flowers three months after the planting period. Members earn an average of PHP 500 to 1,000 weekly.

If any member does not want to sell the yield of their plot, others can sell it on their behalf, but the income will be divided between them. Their harvest is sold every Friday, the market day of the municipality. But on Thursday afternoons, some of the women already have their products set up in the covered court of the market. The breakdown of expenses that each member incurs for selling flowers in the market is shown in the table below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount (PHP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation (back and forth)</td>
<td>60</td>
</tr>
<tr>
<td>Food</td>
<td>50</td>
</tr>
<tr>
<td>Gasoline</td>
<td>54</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>PHP 164</strong></td>
</tr>
</tbody>
</table>

During the peak season for festival celebrations and weddings, a member can earn as much as PHP 2,000. They consider the months of November to January to be the most difficult period since they only earn a meager income. Although cut flower production demands significant time and effort from the women, their families remain supportive of what they do. It has enabled them to have additional income for their basic needs. The revenue from selling flowers is also utilized to meet their children’s educational needs.
Some women are worried about the sustainability of the endeavor. One of their concerns is that the condition of the soil is not as good as it once was. They have thought of possible interventions that might help their organization sustain what they have started. Additional funding for their cut flower business is deemed necessary to augment their production and acquire a better income. They need capacity building activities to improve their knowledge and skills in cut flower production. They are also keen on exploring better species of flowers which can be found in other places.

**Reflections**

One of the members said that she was happy to become part of this organization. Working in the cut flower business gives her a wonderful feeling especially when she sees the colorful flowers in bloom. It is a pleasant sight for her to have a glimpse on the fruits of her labor. She said that the other members also feel the same.

The involvement of women in such an enterprise makes them feel empowered, considering that they also contribute income to support the needs of their families. They deem this to be very significant to their recovery, taking into account the economic disruption caused by the landslide. This opportunity proved that they are also capable of producing economically, debunking the notion that women are just inclined toward traditional household chores.

The formation of the organization also enhanced the relationships among women in the village, nurturing social relationships. Although they have not received training, their membership and experiences in the organization have enabled them to acquire new knowledge and skills in planting.

**Case 3.2.3. Strengthening the Livelihood Options of the People of St. Bernard through a Dialogue among Stakeholders: The Livelihood Systems Analysis Workshop for the Local Government Unit (LGU) and Non-Government Organization (NGO) Workers (MPDO, 2008)**

Livelihood programs require support in terms funding, technical assistance, marketing and monitoring. With several livelihood projects being implemented in St. Bernard as part of the recovery process, the need for capacity building and assessment of the initiatives was deemed significant in drawing out lessons for livelihood development.

A two-day workshop on livelihood systems analysis was held in October 2007 in the Municipality of St. Bernard to assess the impacts of the various livelihood interventions that were carried out by manifold organizations after the 2006 landslide. It aimed to identify the strengths of the programs that benefited the affected populace, the weaknesses that need to be addressed as well as the projects that may be implemented in the future to continuously uplift economic conditions towards recovery. This activity was also conducted in response to an issue raised by the Livelihood Committee of the municipality to the mayor that many of the recovery projects failed and were not sustained. Given this situation, the LGU saw the necessity of having an avenue for discussing how they can help and what possible strategies they might be able to pursue in response. The workshop was also timely since the LGU was in the process of finalizing its Municipal Development Plan. The undertaking endeavored to establish a systematic approach to maximize the impact of efforts and ensure coordination not only between the LGU and communities, but also among NGOs, civic organizations and other agencies (Municipal Planning and Development Office, 2007).

From the inventory of livelihood projects, it was evident that agriculture became the focus of the donors. The LGU emphasized in their Executive-Legislative Agenda that agriculture remains a top priority.

There were 37 participants from the Local Government Unit of St. Bernard, NGOs, regional government agencies, academia, Barangay councils and civic organizations. The workshop highlighted the various livelihood programs implemented by governmental and non-governmental organizations in response to the economic disruption caused by the landslide.
One of the presenters was the Parish Social Action Center (PSAC)-Isidore. Their report indicated that almost half of the land (1.5 hectares) given by the diocese was allocated for the resettlement of the displaced families of Nueva Esperanza. The remaining portion of the land (1.6 hectares) was divided among four barangays (Guinsaugon, Ayahag, Sug-angon and Nueva Esperanza) to support their farming activities. It also provided capital to carry out other livelihood projects such as the cooking of Filipino delicacies, goat rising and trisikad (pedicab) operation for the affected families.

Although a big portion was allotted for planting, only a minimal portion was utilized for farming, cultivated mainly for growing sweet potatoes. The main reason for this was that most of the residents were busy at home.

The attitude of the beneficiaries was identified to be a factor that adversely affected the implementation of livelihood projects. One project was short-lived because the funding was used by the beneficiaries to pay for the immediate needs of their families like food. The recipients of the land for cultivation also lacked commitment in making the lands productive.

**Issues and Concerns**

From the two-day workshop, the participants were able to pinpoint significant issues that need attention in implementing livelihood projects. These included the following:

- Appropriate timing for NGO implementers to phase out and leave the community
- Assessment of roles of project implementers
- Effectiveness of project operations
- Unified system of project implementation
- Conflicts among implementers
- Responses to those who joined more than one livelihood project
- Transparency of financial operations
- The project is not the primary income source but its purpose is to provide additional income
- The need for a return of capital/investment

They also identified additional concerns that should be carefully addressed (Table 3.17). They prioritized strategies for achieving the goal of improving the economic conditions of their municipality. There was clear tasking, identification of needed resources and planning for the analysis of other livelihood projects. A technical panel was created for each livelihood project such as food, transportation, fisheries, livestock raising, the environment and others. They planned to conduct a training of facilitators on Livelihood and Enterprise Development Planning.

<table>
<thead>
<tr>
<th>Sustainability</th>
<th>Community Organizing</th>
<th>Selection of Beneficiaries</th>
<th>Knowledge, Skills and Attitude (KSA) of Beneficiaries</th>
<th>LGU’s Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reasons why some projects are not supported by community</td>
<td>• Should we work with individuals or with groups?</td>
<td>• &quot;Self-selection&quot; of project beneficiaries</td>
<td>• Values of beneficiaries (e.g. sense of accountability)</td>
<td>• Involvement of LGU for project sustainability</td>
</tr>
<tr>
<td></td>
<td>• Is there a need to organize project beneficiaries?</td>
<td>• Some beneficiaries have more than one project, others have none</td>
<td>• Management skills of beneficiaries</td>
<td>• What can LGUs do to facilitate the development of livelihood?</td>
</tr>
</tbody>
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<td>• Management skills of beneficiaries</td>
<td>• What can LGUs do to facilitate the development of livelihood?</td>
</tr>
</tbody>
</table>
3.3 Education

The landslide tragedy left 103 children orphaned (CDRC and LCDE, 2006). At the time of the tragedy, most of the children who survived were studying in the school outside Guinsaugon, while their parents remained in the community, their mother engaging in household work and taking care of their siblings and their father cultivating the farm.

The children were greatly impacted by the tragedy given the loss of their parents and siblings. Without a house or home, they were enveloped with fear and anxiety, feeling they had nowhere to turn.

Case 3.3.1. Ensuring a Brighter Future for the Children: The Construction of the New Guinsaugon Elementary School

The new elementary school in my community is not only a haven for learning but it also serves as our second home." - Grade 5 Pupil of New Guinsaugon Elementary School

The Disaster that Buried the Lives and Dreams of Children

The Guinsaugon Elementary School, situated at the foot of Mt. Canabag, was among the first structures to be buried as boulders and land tumbled down the mountain. Given its location, the structure was obviously constructed in a high-risk area. The landslide buried 248 children alive along with their teachers, school building and other facilities.

The loss of the school structure disrupted the education of the children, especially those in elementary school. Only 6 pupils (1 girl and 5 boys) survived because they did not come to class on that day. From 2006 to 2007, these children had to join other classes in Ayahag Elementary School to continue their schooling. The displacement of these children required them to adjust to a new environment and deal with new people. Since they had to cope up with physical, material and emotional burdens, things were difficult for them. It was a struggle for these individuals to adapt and regain a sense of normalcy considering that they were faced with complex concerns and issues. Based on the faculty’s observations, these children took some time to go on with normal life. This was manifested in frequent absences from their classes particularly during the first two years after the disaster. This affected their schooling and inhibited effective learning.

The Structure That Gave Hope to Children

The new elementary school was built from 2007 to 2008. Funding for the construction came from various donors. The LGU of St. Bernard coordinated with these institutions to get the necessary financial support for the construction of the school building.

The New Guinsaugon Elementary School envisions itself as a center of academic excellence and character building. Guided by this vision, it aims to produce globally competitive elementary graduates through accessible quality basic education and alternative learning systems, adequate and relevant education services through the collaborative efforts of proactive school managers, competent teachers and highly supportive stakeholders.

There were very few students during its first year of operation. As the years passed, the school population increased. Many of the pupils who enrolled in the newly constructed elementary came from neighboring villages.

The teacher of the new elementary school utilizes a grade combination system to accommodate all of the pupils. The groupings are as follows: 1st and 2nd grade together; 3rd and 4th grade together, and;
5th and 6th grade together. Only one teacher handles every group. In order for each grade level to have individual teachers, they would have to meet the minimum number of pupils per class required by the Department of Education (DepEd), which is 40. The school faculty utilizes the Revised Basic Education Curriculum (RBEC) in teaching. The curriculum is comprised of seven subjects, namely English, Math, Filipino, Science, Social Studies, Home Economics, Music, Arts and Physical Education. The pupils are expected to come to their class at 7:50 in the morning and leave at 5:00 in the afternoon.

The school faculty is comprised of three teachers, one volunteer teacher and a principal. A nurse also visits the pupils on a monthly basis to monitor their health.

To ensure that the progress of the pupils is closely monitored, the teachers set up a monitoring board to see their reading ability and performance in various academic subjects.

*The School’s Engagement in Disaster Risk Reduction*

Although the teachers of the New Guinsaugon Elementary School have not received any training on disaster risk reduction (DRR), they try to integrate DRR into their programs. The lessons from the tragic landslide encouraged them to engage in actions that would prepare them for any threats and ensure their safety. The school has a principal who participated in the DRR training facilitated by ACCORD. She became instrumental in instilling a culture of preparedness among the teachers. She plans to apply what she has learned from the training by playing a leading role in the preparation of a contingency and disaster preparedness plan.

The teachers incorporate DRR components in subjects like Science. In particular, the subjects tackle earthquake, fire and landslide preparedness. The young individuals are provided with a new awareness of what to do in case these events occur. However, the faculty has limited access to information dissemination channels. Although there are some audio visual materials on DRR, they cannot show them to the children since they do not have televisions.

In adherence to the DepEd Executive Order, the New Guinsaugon Elementary School conducts an earthquake drill twice a year particularly in the months of July and February. This provides an opportunity for the school children to learn and practice what to do before, during and after an earthquake. After the drill, the children are also given the chance to raise questions and clarify concerns. The school also embarks on other DRR activities like tree planting. This project is a requirement of the DepEd for all public elementary schools in the country.

The Department of Natural and Environmental Resources (DENR) also implemented a project focusing on fruit and vegetable gardens. It provided seedlings of fruit trees. A teacher was also trained by the DENR on the proper management and care of fruit trees and vegetables. The trained teacher then shared what he learned from the training with others to ensure the success and sustainability of the project.

The school also practices solid waste management to maintain the cleanliness and orderliness of its surroundings. The teachers strongly encourage the pupils to segregate waste materials according to the following classifications: biodegradable, non-biodegradable and recyclables. In February 2010, the LGU of St. Bernard started a program related to waste management. It carried out an initiative to collect recyclables (e.g., juice packs, plastics and straws) from schools in the whole municipality. They conduct surprise visits to gather the recyclables from the teachers and pupils. In exchange for the collected recyclables, the pupils receive school supplies. This project provided a good mechanism for motivating young students to have discipline in managing their garbage, and thus contributing to a healthy and habitable environment. In addition to these activities related to cleanliness, the Pupil Government Office (PGO), an organization of elected elementary pupils from different grade levels, also embarked on providing waste bins this year to enable the school community to put their garbage in its proper place. The teachers also remain committed to encouraging the pupils to clean up their surroundings during their free time.
Challenges and Lessons

The provision of a school building was not enough for the young people of New Guinsaugon to achieve a quality education. The faculty and the pupils are faced with a number of concerns that affect teaching and learning.

The school lacks audio-visual equipment like computers and televisions that would help ensure interactive and effective learning. As much as the teachers would like to introduce innovative techniques in teaching, they cannot push for these things given the meager resources available. Besides the equipment mentioned, the availability of lesson guides is also a problem that teachers have to deal with. The lack enough books, making it difficult for the children to study and do their homework. Students have to share their book with others. One book is used by three pupils.

Poverty is also a significant issue that affects the schooling of children. Most of the pupils’ parents work as daily wage earners (e.g., pedicab driver, farm laborer, carpenter, vendor and sari-sari store owner). Engaging in these livelihood activities only provides them with enough money for the subsistence of their family. Since the parents do not have extra money for educational expenses, the children opt to stay at home or help their parents in different income generating activities. They lack money to buy snacks and other school needs. Considering this concern, the principal coordinated with an NGO named ACCORD to include the New Guinsaugon Elementary School as one of the beneficiaries of a feeding program.

The tragedy taught them valuable lessons that will forever be remembered. One of these realizations is the need for disaster preparedness at all times, not only in school but most especially in the larger community.

Case 3.3.2. Making Education More Accessible to the Young People of New Guinsaugon: The Construction of the New Guinsaugon High School

"It is a humbling experience to be part of the faculty who became instrumental in providing valuable learning and experience to the pioneer students of this secondary school. I know that the well of knowledge and skills that this institution has built will arm them as they face the challenges in the future." – A teacher of the New Guinsaugon HS

New School, New Hope: The Construction of the New Guinsaugon High School

The adverse effects of the terrible February 2006 landslide became notable in the education of the young people of Guinsaugon. Many of the students were distressed because of what they had experienced and witnessed. Some of them lost parents, siblings and other family members. Others were orphaned and forced to live with relatives. They had to adjust and cope with their new environment
which affected their schooling. Some of them had to stop attending school and work, while others had to move to a different school. Some lost their drive for learning because of the tragedy. This being the case, the establishment of a secondary school within the community was deemed fundamental to help the students regain their sense of normalcy in learning.

The Philippine Business for Social Progress (PBSP) and United Way International played a fundamental role in the construction of a building to help address the need for secondary education for students in the New Guinsaugon community and other neighboring villages. Through their efforts, funds were mobilized from the Citi Foundation under Project B.L.U.E. (Building for Literacy, Understanding and Education). The initiative was also realized through the collective partnership of San Isidro Multi-purpose Cooperative, the Municipal Government of St. Bernard, the Provincial Government of Southern Leyte, and the Department of Education (DepEd). Furthermore, the evident support and strong leadership of the Parents and Teachers Association (PTA) President was instrumental in the construction of the New Guinsaugon High School.

It was in the year 2009 that the authorities granted the aforementioned secondary school an official permit to operate. Individuals and groups inside and outside the municipality also provided material donations to make learning effective for students. A Buddhist organization provided chairs that helped students feel comfortable in their classes. Local teachers kindly donated tables to go with the chairs and helped with efforts to beautify the classrooms.

The high school has seven faculty members. A nurse also visits the school to monitor the health of the students. The scheduling of her visits varies depending on the needs of the school populace. During the school opening, the nurse patiently measured the height and weight of each enrollee to know who are physically fit as well as those who are not. This information is deemed necessary to help identify students who are undernourished and need proper health care. Considering that the location of the school is near the Barangay Health Center, both the students and teachers can easily access medical assistance in case of emergency.

Records from 2010 show that 208 students were enrolled in the New Guinsaugon High School. The school accommodates students from 1st to 3rd year levels. The students who come to study at the high school are not only from the village of New Guinsaugon but also from other municipalities like San Juan. In fact, only 10% of the student population comes from the Old Guinsaugon.

The figure below shows the number of male and female enrollees per year level (School Year 2010-2011).
Responding to the Challenges

In response to the destitute condition of the students, the PBSP also provided scholarship grants to deserving students. Besides PBSP, the DepEd has also given scholarship grants to selected high school students who belong to impoverished families. A cooperative in St. Bernard also extended educational assistance to deserving students. Moreover, the principal of the New Guinsaugon High School assisted some students with their educational needs.

Making Disaster Preparedness a Part of Students’ Lives

The dreadful landslide that happened in 2006 prompted residents to become proactive in dealing with disasters. They have become vigilant in responding to hazards and risks in school and in the community. Disaster risk reduction themes have already been integrated in the curriculum that the school utilizes in teaching. The students are taught about landslide, earthquake and flood preparedness in subjects like Science, Values Education and Araling Panlipunan (Social Studies).

The school also holds an annual earthquake drill. This activity equips the students with appropriate and feasible actions to take before, during and after an earthquake. In particular, they are taught to do the "duck, cover and hold." After the drill, the teachers and students engage in a discussion to talk about what went well during the event and what areas need improvement.

Another proactive measure that the teachers have adopted is the placement of first aid kits inside the classroom. Such kits are deemed useful especially in times of emergency (e.g., when students are injured during physical activities). It also contains medicines that students can take for relief in case they are suffering a headache or stomachache.

Apart from the abovementioned, the students from all year levels are also keenly involved in a tree planting initiative that started in 2009. Through the issuance of a DepEd memorandum, they have been involved in planting malunggay and fruit-bearing trees.

To maintain a hygienic learning environment, students regularly engage in activities to clean their classrooms and the school surroundings. In support of the initiative described above, the Student Supreme Government (SSG) started implementing a similar activity as one of their projects in 2009.

Although the teachers have not yet received any training on disaster preparedness, they have expressed an eagerness to participate in such an endeavor if given the opportunity. They see it as a fundamental mechanism to further their knowledge and skills in dealing with risks and other life threatening events. They believe that the lessons they would gain from the training would allow them to craft disaster preparedness plans that are effective and responsive to the needs of the school populace.
Challenges Confronting High School Students

The high school students are confronted with a number of concerns that affect their studies. One relates to their guardians and family. Those who lost their parents in the tragedy were left in the care of relatives like grandparents, uncles and aunts. These children have become involved in delinquent behavior because they were not carefully looked after by their guardians. Taking into account that their guardians were also preoccupied with other responsibilities at home and at work, they could not devote enough time and attention to the children. In addition, teenage pregnancy is another concern that has surfaced. In fact, one student became a victim of early pregnancy, which inhibited her from attending classes and graduating on time.

There are two students who survived the landslide and who are enrolled in the school. The impact of the disaster on these children was apparent in their school attendance. The teachers noted that these students do not regularly attend their classes. As a result, they are not able to finish their schooling on time. Apart from the behavioral effects of the landslide, another factor that has hampered their schooling is their poor economic status, which was aggravated by the landslide and its effects on livelihoods, specifically agriculture. Their poverty-stricken state requires them to work and help their parents earn a living. This dilemma is the same reason why the population of the school is comprised mainly of boys since most of the young females in the community have opted to give up their education to support their families. In most cases, they are hired as house helpers and salesladies in Metro Manila and in other neighboring cities and provinces.

Besides the aforementioned difficulties, the school has also had a share of the problems that prevent students from acquiring quality education. The institution lacks facilities such as computers and textbooks which will aid students in gaining access to information. The current ratio of book to students is 1:2. Given this, the students cannot study well and do their homework with ease since they are not allowed to bring their books home. Despite this concern, the teachers found a way for students to have access to books. They made an effort to borrow books from neighboring schools. They also prepared resolutions to seek assistance and mobilize funding to purchase additional books. Donations are also accepted by the school. Just recently, some students from the University of the Philippines visited and gave out some reading materials.

Lessons Learned from the Tragedy

The tragedy taught residents significant lessons that continuously guide them in their everyday lives. Their experience made them realize they have to be conscious in taking care of the environment. Although the adverse impacts of abusive human activities are not immediately felt, when nature takes its toll, the worst case scenarios are not far from happening. Cruel acts would lead to threatening conditions that are far from what human beings would ever imagine. Concrete manifestations of this reality are the mega disasters that have been affecting not only the Philippines but also other countries around the globe. We suggest that within their geography lessons (not just science) teachers should address DRR as an environmental issue, focusing on the environmental degradation that caused the disaster, such as mismanagement of the hillsides and deforestation. The people deforested the land, but upon realizing the risks, they then replanted with trees. However, they replanted with shallow-rooted trees instead of the indigenous deeper-rooted varieties.

Self-assessment of disaster risks by the community should also be encouraged through the schools.

Another realization that emerged as a result of the disaster was the need for careful coordination especially in times of emergency. The existence of systems is important to ensure that rightful beneficiaries are selected among the affected residents. Consultation at different levels particularly in the community would help prevent any misunderstandings in terms of providing the needed assistance. It would also avoid duplication and monopoly of the same people receiving support from donors.
adhering to a participatory framework of emergency response, transparency and accountability can also achieved.

To assist in future landslides, where complete communities may be engulfed, technology should be installed for locating critical infrastructure buildings (e.g., schools and hospitals). The use of beacons, GPS coordinates, and other tools should be encouraged by the DepEd and local government. This would ensure more effective search and rescue efforts.

**Case 3.3.3. Education: The Three Became One... Mahika Elementary School**

Mahika elementary school sits on a slope, near the road, with a wide space of ground in front of the building that provides just enough room for the children to play during their recess. Mahika is a word coined from the three barangays relocated as a result of the landslide. The MA stands for Magatas, the HI for Hinabian, and the KA for Kauswagan.

**How Did It All Start?**

Prior to the relocation, each barangay except for Kauswagan had its own school. Magatas had a primary school for grades 1-4 as did Hinabian. Children in Kauswagan had to go to a nearby barangay, Bgy. Catmon, for their schooling.

After the landslide, from 2006-2008, a makeshift elementary school was built in Bgy. Catmon to accommodate the children of these three barangays and this was where the integrated elementary school started. On Feb. 8, 2008, the residents of the three barangays transferred to a resettlement site referred to as "Mahika." The school was built by the Japanese Red Cross and Philippine Red Cross. There are only about five rooms in the school, enough for the existing grade levels, four classrooms, and one office.

During that time, while classes were in session, an assembly was held for the purpose of drafting a resolution to name the school "Mahika." Before the assembly however, there was a council meeting of the three barangay councils to discuss what the assembly would be about, and during that council meeting, the leaders of the three barangays discussed the integration of the two schools (Magatas and Hinabian) with Kauswagan.

At the assembly, a resolution was made to rename the school Mahika Elementary School. The resolution then was submitted to the provincial board of the Department of Education. At the provincial level, it took a year for the resolution to be processed, and with the intervention and endorsement of Mayor Rico Rentuza of St. Bernard, the papers were then submitted to the National Department of Education office. It was approved at the national level, passed on to the region, and then to the LGU and with that was born the new Mahika Elementary School.
Current Status of Mahika Elementary School

Except for those in kindergarten, the children stay in school the whole day from 7:30 to 11:30 a.m. and 1:00 to 5:00 p.m. Some children go home for lunch, while others bring their lunch to school. Still others stay at school without lunch, as they live on their own in their homes. Some of the parents of the children who live on their own go to their former home either in Magatas, Hinabian or Kauswagan to plant and take care of their land, leaving their children on their own for a couple of days. Often times, these parents bring their children with them to their former homes, thus causing them to be absent from school.

Each of the classes has an assigned teacher, with one class having one teacher. The grade 2 and 3 classes have been integrated since they had only a few students, so the teacher of that class alternately teaches one grade level, one at a time within the school period. There are seven teachers in the school.

The curriculum that the school uses is the Revised Basic Elementary Curriculum (RBEC). Despite the limitations of its human and material resources, Mahika has opened its doors to minorities called the Manunua. The school has accommodated them in the grade levels appropriate to their capabilities. Most of them are much older than their classmates.

Challenges

Student performance, competency levels

Efforts to monitor the children’s performance in oral reading in English and Filipino show that their standardized pre-test scores are very low. Students are given a pre-test to determine their level of competency. The pre-test for the English and Filipino competency is administered every July and the post-test is in February.

Why are their scores low? The teachers gave the following reasons:

- There is no structured follow up at home so students acquire faulty study habits.
- The standardized passing score is high.
- The need for faculty/teachers’ development to equip them and enable them to come up with methodologies that could appropriately motivate the students.
When asked what mechanisms they are using to improve the scores of the students, this is what they say: After the pre-test, they assess and check those who do not fall into the competency score of that grade level. These students are given remedial classes, every day from 11:00 to 11:30 a.m. and 4:00 to 4:30 p.m., as much as possible.

"Kung hindi makuha ng mabuti, I re teach ng 1 day, na remedial o re teach" ulit. (If the students still don’t get it, then this is retaught as a lesson in one more day and if it still does not work, this is discussed in the remedial classes).

Lack of supervision for some children

Parents leave their children alone at home while they work in the fields, leaving the children to fend for themselves for nearly a week. This results in very little food supply for the children, a lack of supervision over their school work and a lack of parental guidance. Sometimes the teachers, realizing that these children are left alone without any food, will help out and give food to their students, mostly from their own meager supplies.

The lack of school rooms in the future

In the future, the elementary school will be lacking classrooms, as the classes will move up one level higher. The kindergarten class will all be grade 1 next year and that means that those 54 children will be needing a classroom, and so on as the grades move up. Another building is needed. One teacher mentioned something about the need for a science building with some science equipment. How can they teach basic science concepts when all the students see are pictures, they ask.

Lessons

Despite the challenges looming ahead, the teachers see lessons from their experience. They say that the experience taught them to be resourceful, to find means and ways to improve things that need to be improved. It also has taught them to be patient and persevering in teaching the school children, despite their varied and diverse backgrounds and characteristics.

Most of all, they saw that in the midst of all the tragedy, there is still something good that has come out of it. Before when they were divided, the communities on their own initiated the move to join together to give their children an education. This is one lesson that they have learned in the school of life.

All in all the teachers have this to say: "Masaya sa pagtuturo (we are happy teaching), God put us in this profession."

Case 3.3.4. Living the Dream of Tomorrow’s Children: Scholarship Assistance for the Survivors of Guinsaugon Landslide

"Both my parents died during the 2006 landslide. But despite what happened, I carry on looking at life with a good perspective since I still have my elder sister and brother. Thus, the scholarship given by the Archdiocese of Maasin enabled me to continue chasing after my dreams to become a Chemical Engineer" (an orphaned student, aged 21).

The Guinsaugon Orphan Scholarship Coordinating Committee

To coordinate and supervise the implementation of all educational assistance for the orphans and affected children, the Guinsaugon Orphan Scholarship Coordinating Committee (GOSCC) was established in 2007. This committee was mandated to ensure transparency and accountability for both the sponsors and beneficiaries through its formulation of the implementing rules and guidelines supportive to the nature of the assistance provided, the selection of grantees and the handling of funds. It also ensures proper guidance for the orphaned students by assessing the academic potential of the grantees to determine and recommend the degree or curricular program appropriate to the students.
The GOSCC monitors and conducts regular assessments of the academic performance and well-being of the grantees, thus providing a periodic academic and personal evaluation report of the grantees. The sustainability of the assistance is also governed by the committee which is responsible in doing the follow up of the pledges and commitment of support, and in making solicitations for educational funds and sponsors.

The GOSCC is headed by the municipal councilor who heads the Committee on Education in the legislative council. The members include the school heads of the national high schools in the municipality and its neighbor municipalities and some of the sponsors. The municipal mayor and the Department of Education (DepEd) representatives serve as advisors.

**Criteria for the Selection of Grantees**

First priority

The children of Guinsaugon and those children from the immediate neighboring villages whose parents (either both or one) were killed or incapacitated (physically or mentally) by the tragedy; whose parents may have survived the tragedy but whose means and capacity to earn a living have been adversely affected; and whose parents died in Guinsaugon in the performance of their official duties.

Next priority

Other poor and deserving children from neighboring communities of Guinsaugon may be included by virtue of the guidelines set by the sponsor of the scholarship.

**Selection and Renewal**

a. The committee selects and recommends/refers deserving grantees to the sponsors.

b. The committee, in consultation with the sponsors and the grantees, determines and approves the course/curricular program to be pursued as well as the school where the grantee is to enroll.

c. The grantee must continue pursuing his/her approved course or curricular program. Any changes in the program and the school must be approved by the committee.

d. The grantee shall enroll for the normal semester or yearly academic load prescribed by his/her approved course or curricular program.

e. The grantee should not have failing grades in more than 25% of the subjects or units enrolled except when the cause(s) is justifiable.

f. The grantee is required to submit to the Committee his/her grades of the immediate past semester and/or school year, which is duly certified either by the registrar, principal, advisor or teacher-in-charge.

g. The grantee must not have committed a crime or been subject to strong disciplinary action by the school or other authorities.

h. The grantee must refrain from smoking and drinking alcoholic beverages.

i. A grantee shall be entitled to only one (1) grant-in-aid scholarship with complete benefits, such as monthly stipend and book and uniform allowances in addition to tuition and school fees.

**Current Situation**

Most international and local NGOs support students who are under the age of 18. Thus, most of the children who are entering college do not have financial assistance. The GOSCC is currently scouting for agencies that can help the students continue their studies. The LGU of St. Bernard has utilized the calamity fund (5% of the annual budget) to assist the orphaned students. There are still 24 identified orphaned students (15 second-year college students and 9 high school students) in the community of Guinsaugon who are in need of assistance, currently supported by the LGU. Nine (9) of the 15 second-year college students are being recommended to the Tan Yan Kee Foundation so they will be able to continue their studies. The Regional Office of the DSWD in partnership with the LGU of St. Bernard thr
its Committee on Education continue to help 22 orphaned third-year college students by providing financial support for their tuition fees, a monthly stipend, transportation allowance, books, uniforms and other individual needs. A total of PHP 2,080,000 is allocated to support the said students.

Success Stories

There have been 25 students who have finished high school since 2006 through the grant provided by the Children’s Hour (CH) in partnership with PBSP (Children’s Hour website, 2010). To date, there are still 31 students left who continue to receive assistance.

With the assistance extended by the Diocese of Maasin, one of the orphaned children is now serving as a policeman after finishing studies in criminology.

Through the support provided by the Dharma Drum Mountain Social Welfare and Charity Foundation, four out of the 31 scholars were able to earn a Bachelor of Science degree in Nursing from the University of the Visayas.

Some of the orphaned children completed an Auto Mechanic Training program with assistance from the Technical Education and Skills Development Authority (TESDA), in collaboration with Plan International-Philippines and Isuzu Motors Limited. The training was conducted at the Auto Mechanic Training Center for six months.

3.4 Health and Nutrition

Like most barangays nationwide, Bgy. Guinsaugon has an existing health program with an established barangay health center, supervised by a midwife and managed by barangay health workers (BHW). Barangay health workers are local residents of a barangay who are organized and trained in the basics of how to implement health programs in the community.

This barangay health center is under the direct supervision of the Municipal Health Office of the LGU. The Women’s Health and Safety Motherhood Project was one of the active health programs being implemented by the Barangay Guinsaugon Health Center.

With the whole barangay buried in the landslide, most of the infrastructure was lost, including the newly built barangay health center. After the landslide, people were evacuated to nearby sites. A surveillance team organized by the Municipal Health Office was immediately assigned to survey the health situation at the evacuation sites focusing on two of the more vulnerable age groups: children and the elderly.

The survey revealed the prevalence of upper respiratory tract infections (colds and cough) especially among the children as a result of the overcrowded conditions, and gastrointestinal diseases as a result of inadequate sanitary facilities and water. The health status of the elderly was constantly monitored as most of their physiological condition was unstable.

During the time that the residents were at the evacuation sites, the Municipal Health Office focused on the provision of emergency aid and the prevention of a possible epidemic. Children were immunized to ensure that diseases would be controlled and to prevent the outbreak of disease.

The health services organized during this time were mainly palliative, as efforts were focused on giving immediate care and treatment to those afflicted with these illnesses. Health care programs that will
facilitate the long-term delivery of health services were not established as these will require some permanent structure.

**Case 3.4.1. Rebuilding the Philippine Health Care Delivery System in the Resettled Communities**

**Institutional Framework**

The revival of the delivery of health care services in the resettled communities is achieved through the utilization of the processes and framework of the Philippine Health Care Delivery System (PHCDS). The PHCDS is characterized by multilevel structures, with a referral system as the inherent means of the delivery of health services. This structure came about as a result of the devolution of the local government where the local government was given more responsibility in its governance. In the case of health, the barangay, which is directly under the municipal local government unit (LGU), becomes responsible for local health services (Reyala, Nizce, Martinez, Hizon and Ruzol, 2000).

In the PHCDS, there are three levels of health care services categorized according to the service capabilities they offer. The primary level is comprised of the barangay and municipal health care institutions which have facilities and capabilities for first contact emergency care, such as the barangay health stations (BHS) and rural health stations (RHS). The secondary level consists of district health stations with capabilities and facilities for medical care cases requiring hospitalization, for example, municipal hospitals with a 50-100 bed capacity. The tertiary level consists of specialized centers, regional health care institutions and provincial institutions. They are able to provide medical care in cases requiring sophisticated diagnostic and therapeutic equipment and expertise of trained specialists. These include regional health centers with complete facilities and a 100+ bed capacity (Aracainna 1991:11-13).

There are two major components of the health care delivery system: the private sector and the public sector. The public sector consists of the national and local government system. The national level is managed by the Department of Health, which manages all the specialty hospitals and government hospitals, while local health services are managed by local government hospitals. The provincial and district hospitals are now under the LGU, while the municipal government manages the health centers/rural health units (RHUs) and the barangay health stations (Cuevas, 2007).

The primary health care is the approach utilized by the PHCDS. This is characterized by a referral system for the delivery of services that moves along the levels of the PCHDS structure. The referral system is the mechanism used in providing health services to people with the goal of providing the most appropriate treatment and delivery of services that is accessible and affordable. Following the structure and levels of the health care system, if the client’s condition upon assessment at the primary level requires specialized care, the barangay health station (BHS) will refer that client to the next level. If at the secondary level, the client is deemed to require specialized surgery or treatment, the client is referred to the tertiary level (Arcainna, 1991:13). In certain cases where a patient is deemed to need immediate and urgent treatment, that patient will go straight from the primary to the tertiary level.

The basic philosophy of the health care system hinges on empowering the people and thus allowing for community-based health services that are accessible, affordable and sustainable (Cuevas, 2007:19-30; Maglaya, 2004). The components of Primary Health Care found in every barangay are:

- Environmental sanitation
- Control of communicable diseases
- Immunization
- Health education
- Maternal and child health and family planning
- Adequate food and proper nutrition
- Provision of medical care and emergency treatment
- Treatment of locally endemic diseases
• Provision of essential drugs.

**Operationalization in the Communities**

At the outset, the Philippine National Red Cross (PNRC) was actively involved in the rehabilitation of the barangays that were relocated after the landslide. The PNRC came up with an infrastructure package consisting of a barangay hall, barangay health center, multipurpose court (serving as a basketball court) and a day care center.

With the new barangay health center established by the PNRC, the municipal government proceeded to introduce the programs based on the PHCDS with its components derived from the Primary Health Care program. Part of its rehabilitation program is the training of barangay health workers (BHW) in disaster preparedness.

In Bgy. Ayahag, one of the relocated barangays, a midwife is assigned to the organization and management of the barangay health station (BHS) and the training of barangay health workers. The midwife comes to Barangay Ayahag, every Monday and Thursday. The rest of the week, the barangay health workers manage the barangay health center.

Immunization programs (child health components), prenatal checkups (maternal child health) and efforts to monitor the nutritional status of children are the core programs currently operational in the Bgy. Ayahag Health Center. Fely (not her real name), a health worker, takes charge of the child health program monitoring, while some of the other BHWs take turns managing the center and assisting with the delivery of babies at the center. Fely is also responsible for conducting training among the residents in sanitation and nutrition.
The Municipal Health Office monitors the health programs at the health centers through quarterly reports submitted by the midwife assigned to the relocated barangays. The quarterly monitoring reports address the following:

- Maternal Care: Number of pregnant women given treatment and prenatal care
- Family Planning: Number of clients being given contraceptives
- Child Care: Number of children being given immunization at prescribed months and stages, the number of total live births, number of infants breastfed and referred for newborn screening, number of children born with low birth weight and anemia, number of children with diarrhea and other gastrointestinal diseases
- Dental Care: Number of children, youth and adolescent and pregnant women using prophylaxis.
- Disease Control: Foremost in the report are reports on the status of clients with pulmonary tuberculosis, ascertained through smear and sputum tests, leprosy (if any), malaria, schistosomiasis and filariasis.
- Epidemiological reports: Focused on live births and deliveries

Figure 3.47 Sample of records kept in Bgy. Ayahag Health Center as a primary level center

The primary health care program through the PHCDS facilitates the immediate delivery of vital health services particularly in the area of maternal child health care. The barangay health center, having been equipped with the basic facilities for the delivery of babies, is equipped to deliver such services.

**Challenges, Lessons and Recommendations:**

Health programs are developed to maintain the health of the community and the people. This built-in program of the Department of Health is an advantage because it serves as a mechanism for the development of the health of the people affected by the landslide. The delivery of health services to the families affected by the landslide has been restored by adopting this health delivery system. The challenge, however, is in procuring the funds to sustain these programs.

The malnutrition problem in Bgy. Ayahag is an example of this situation. According to Fely, there were measures taken to reduce the incidence of malnutrition among children through a feeding program and a program to train families in the preparation of meals that are accessible and affordable. However, despite these strategies, the incidence of malnutrition (third degree malnutrition) among the children increased from 12 to 40 children in a period of eight months. The funds for the feeding program have been depleted and the barangay is waiting for more.

Health is a holistic state of being, a result of the interweaving of contributory external, environmental and socioeconomic factors. For instance, nutrition and feeding is dependent on food security; food security is dependent on existing sources of food. In the case of the malnourished children of Bgy. Ayahag, malnutrition is perhaps directly related to the inability of their families to give them the most appropriate foods.
"lahat dito binibili, samantalang doon sa dating lugar namin, may mga tanim kami" (everything here in this place is bought while in the place where we used to be, we can harvest food from where we are).

Most of the people do not have steady jobs or a source of income. Without jobs they cannot buy food to feed their families.

However, despite the problems looming ahead, structurally, the PHCDS through the barangay health center, is the best venue to address the problems in health as its mechanisms are inherent and transferable to every barangay. Thus, it is easy to facilitate the planning, implementation, monitoring and evaluation of these programs. It has also become a venue for unity among the community volunteers and barangay health workers as they have expressed their collective efforts to work towards the improvement of the health of their community. Funds or no funds, they have been relentless in their efforts to move towards recovery. They have expressed hope despite the odds and uncertainties.

If anything this is the first step towards recovery: the silver lining behind the cloud.

Case 3.4.2. Barangay Health Workers: The Indigenous Health Workers in the Community

The barangay health station (BHS) is the first line of service in the community. Its service is basically primary health care, where the focus is on prevention and health promotion. Individuals and families can go to the BHS to have their primary health needs addressed. When this station cannot respond to the needs of the individual or the family, they are referred to the next level of service, which is the Rural Health Unit (RHU), the secondary level, situated in the municipality, where diagnosis and disease intervention takes place.

The barangay health center is supervised by a midwife, assigned by the Municipal Health Office. To enable the provision of continuous service to the Barangay, the midwife organizes a group of volunteers from within the barangay itself. To enable them to be effective in their work and to ensure that they understand what it takes to be a barangay health worker, these volunteers, now the Barangay Health Workers (BHW) undergo training. Part of the structure of the Philippine Health Care Delivery System (PHCDS) is a mechanism for training and equipping the volunteers of the barangay health center. The Rural Health Unit is responsible for providing training to these volunteer health workers.

Barangay Guinsaugon Health Center and Its Volunteer Health Workers

The barangay health center was built in 2006 and was turned over to Bgy. New Guinsaugon in early 2007. A midwife was assigned in April 2007. At that time there were only three volunteers coming from Bgy. New Guinsaugon who worked in the barangay health center. One of the three first BHWs was a landslide survivor. The landslide survivor decided to volunteer as her way of serving and showing her gratitude for coming out of the landslide alive.

In May 2007, the Bgy. New Guinsaugon Health Center sent six BHWs to the RHU for training. Together with the midwife assigned to the BHS, the six BHWs completed the training program. The training program consisted of equipping the BHWs with skills in patient assessment, record keeping, basic health intervention strategies, including alternative treatment modalities such as herbal training; first aid and environmental sanitation. The training was conducted and organized by the Municipal Health Office.

The training lasted for five days and was comprised of both didactic and hands on training through skills practice. The trainers were personnel from the RHU, midwives, a nurse and the municipal health officer.
The training leaned more towards learning basic skills related to patient assessment, called "training in taking vital signs."

Taking vital signs is a health assessment skill, and the BHWs were taught how to take a person's temperature, blood pressure and respiratory rate. They were shown step-by-step how to perform the skill and then were given the chance to practice doing it. Next they underwent what is referred to as a skills assessment. The midwife in the interview said that these BHWs did not have difficulty performing these skills as she had already taught them these skills prior to the formal training ("Bago pa sila ma train, tinuruan ko na sila").

On subsequent days, other topics were discussed and the BHWs were trained to do first aid, administer herbal medicine, perform environmental sanitation and perform the other duties, responsibilities and functions of being a BHW.

The functions of the barangay health center, in its role as a primary health care center geared towards health promotion and health prevention, are performed by the BHWs through a three-pronged approach. The BHWs act as community organizers who organize the community toward health development. They are expected to work closely with the members of the barangay, through the development of an action plan for the health center. The action plan is focused on the following the programs:

- Child care
- Safe motherhood
- Family planning
- Prevention of infectious disease
- Promotion of healthy lifestyles

Following the "formulaic programs of the Department of Health," each of the programs consists of the following specific health projects and services.

**Child Care:**

- Expanded immunization programs
- Monthly weigh-ins
- Supplemental feeding
- Breast feeding
- Newborn screening

**Safe Motherhood:**

- Prenatal care
- Labor and delivery
- Family planning

**Prevention of Infectious Diseases**

- TB-DOTS (Tuberculosis)
- Giving of free medicines like Isoniazid
- Compliance issues
- Case finding

As health educators, the BHWs are expected to provide "health lessons" or to advise others on basic issues in health care, like the importance of newborn screening and immunization. They advise mothers to let their babies undergo these "procedures." They also encourage mothers to breastfeed their newborn babies.
As health providers, the BHWs assess patients coming into the health center and take down their physical complaints. When there is no doctor or midwife on hand, and they are limited in their ability to give medical intervention, they refer the patient to the rural health unit (RHU). The BHWs fill out a referral slip and give it to the patient, who shows it to the health personnel at the RHU.

In times when there is an impending birth, they assess the mother, prepare the delivery room and assist the midwife in delivering the baby. They provide first aid and assist the midwife in immunizing babies. The BHWs are on duty once a week, for an eight-hour shift, and thus take turns manning the health center. The midwife prepares the schedule and rotation of the BHWs.

**Figure 3.48 A day in the life of a barangay health worker (left) and Visitor Log Book**

**Reflection**

The involvement of the BHWs in the health delivery system is an effective mechanism that is participatory, gender sensitive and empowering. In the case of the disaster survivor, this volunteer work has also served as a means of healing and expressing gratitude.

The BHWs had to start from scratch, from fixing the barangay health center to organizing the volunteers. They needed to do this on their own realizing that this after all is for the people living in the new community. When asked if they ever received any training in disaster management, they said they were not included in the training. A training drill was conducted in Bgy. New Guinsaugon but they were not included in it. “Hindi naman kami kasali dun, at wala rin kaming mga gamit tungkol dun.”

There still is a need to provide for more items in the barangay health center. It is newly built, but lacks equipment "maraming kulang" (we still lack many items in the center). Among them, blood pressure (BP) apparatus is needed (there is only BP apparatus being used). The BP apparatus is used to monitor blood pressure. Considering that the center has an area for labor and the delivery of babies, the following equipment is needed: IV stand, wheelchair, stretcher, emergency lighting and most important, a sterilizer to keep the instruments sterile.

**3.5 Gender**

The death toll from the Guinsaugon landslide included 80 women who were celebrating the anniversary of the Women’s Health Association, 256 children and 7 teachers. Assistance was provided by several humanitarian agencies, non-government organizations, religious organizations and government agencies, both from the local, national and international levels. Assistance was also extended to the residents of neighboring villages who were forced to evacuate: Ayahag, Sug-angon, Kauswagan, Magatas, Hinabian and Nueva Esperanza.
Livelihood organizations were mobilized to promote women’s involvement in recovery through their leadership in promoting women’s rights and women’s participation in leading civic organizations. The St. Bernard Women’s Livelihood Federation is one of the women’s organizations that is continually highlighting the significance of women’s participation through livelihood activities.

**Case 3.5.1. Women’s Involvement in Recovery: A Case Study on Livelihood Interventions of the Women of St. Bernard, Southern Leyte**

**St. Bernard Women’s Livelihood Federation**

The livelihood organization for women was organized in 2005 through the efforts of the Municipal Social Welfare and Development Office (MSWDO). Through the Gender and Development (GAD) Program, 5% of the total budget was apportioned for the implementation of livelihood projects devoted to women. The women of the villages of Catmon and Maria Asuncion were the first groups to be mobilized.

In 2007, a year after the landslide, the program was mainstreamed to 20 other villages through funds given by the European Union. These funds were utilized for capacity building activities on alternative livelihood options for the women from the relocated villages. With 22 active women’s organizations in the municipality, a federation was established. In 2010, there are 679 active members affiliated with the federation (Table 3.18).

<table>
<thead>
<tr>
<th>VILLAGE CHAPTER</th>
<th>MEMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Atuyan</td>
<td>36</td>
</tr>
<tr>
<td>2. Ahayag</td>
<td>44</td>
</tr>
<tr>
<td>3. Bantawon</td>
<td>12</td>
</tr>
<tr>
<td>4. Bolod-Bolod</td>
<td>26</td>
</tr>
<tr>
<td>5. Catmon</td>
<td>6</td>
</tr>
<tr>
<td>6. Guinsaugon</td>
<td>18</td>
</tr>
<tr>
<td>7. Himatagon</td>
<td>36</td>
</tr>
<tr>
<td>8. Himbangan</td>
<td>50</td>
</tr>
<tr>
<td>9. Himos-onan</td>
<td>30</td>
</tr>
<tr>
<td>10. Hindag-an</td>
<td>85</td>
</tr>
<tr>
<td>11. Hinabian</td>
<td>28</td>
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<tr>
<td>12. Libas</td>
<td>25</td>
</tr>
<tr>
<td>13. Lipanto</td>
<td>52</td>
</tr>
<tr>
<td>14. Ma. Asuncion</td>
<td>26</td>
</tr>
<tr>
<td>15. Magatas</td>
<td>17</td>
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<tr>
<td>16. Magbagakay</td>
<td>26</td>
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<tr>
<td>17. Mahayag</td>
<td>43</td>
</tr>
<tr>
<td>18. Malinao</td>
<td>26</td>
</tr>
<tr>
<td>19. Nueva Esperanza</td>
<td>8</td>
</tr>
<tr>
<td>20. Paniaan</td>
<td>29</td>
</tr>
<tr>
<td>21. San Isidro</td>
<td>24</td>
</tr>
<tr>
<td>22. Sug-angon</td>
<td>32</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>679</strong></td>
</tr>
</tbody>
</table>


**Becoming a Member**

The organization is open to all women of the municipality, aged 18 and older, regardless of marital status or occupation. In order to be a member, the applicant must complete the registration form and pay the membership fee. An annual contribution to the organizational fund must be fulfilled once the applicant becomes a member in order to sustain the organization's operations. The amount of the membership fee and annual contribution varies from one village chapter to another, depending on the agreement of the members. Most importantly, adherence to the rules and regulations developed by every village chapter must be practiced by each member.
Current Livelihood Activities

In June 2009, the members started a venture in the promotion of proper solid waste management. Solid waste materials such as old glossy calendars, magazines, newspapers and food paper packs were used as raw materials for making accessories such as earrings, necklaces and bracelets. They also make bags, containers and household ornaments.

Table 3.19 Village chapters and its livelihood activity

<table>
<thead>
<tr>
<th>Village Chapter</th>
<th>Livelihood Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bolod-Bolod</td>
<td>Planting of turmeric</td>
</tr>
<tr>
<td>2. Carnaga</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>3. Catmon</td>
<td>Abaca planting, Paper recycling</td>
</tr>
<tr>
<td>4. Himatagon</td>
<td>Cooking of Insumix</td>
</tr>
<tr>
<td>5. Himbangan</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>6. Himos-onan</td>
<td>Paper recycling</td>
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<tr>
<td>7. Hindag-an</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>8. Libas</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>9. Magbagakay</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>10. Malibago</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>11. New Guinsaugon</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>12. Panian</td>
<td>Paper recycling</td>
</tr>
<tr>
<td>13. San Isidro</td>
<td>Paper recycling</td>
</tr>
</tbody>
</table>

Ayahag Village Chapter

One of the most active village chapters of the federation is Ayahag. A lot of women are drawn into the organization, as one of the members shared, "through my involvement in this organization, I became more aware of our (women’s) issues and realize that I am not alone..."

They were organized in 2006 during their stay at the evacuation center at St. Bernard Central Elementary School. Women were mobilized through the initiative of the SWDO and assistance extended

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9 One of the nutritional recipes developed by Department of Health (DOH): Insumix (short for indigenous supplementary mixture), is a food supplement made from rice, green beans (mongo) and sesame seeds, and comes in powdered form. It is mixed with water to become a thick sauce ready for consumption.
by Oxfam Great Britain channeled through the Leyte Centre for Development (LCDE). The LCDE granted the federation seed capital in the amount of PHP 15,000. The members used the grant to purchase materials to start a catering service.

Like most of the village chapters, Ayahag formulated its rules and regulation to sustain the efforts of the organization. To become a member, one has to pay the registration fee of PHP 20.00 and complete the registration form. Upon membership, the member has to contribute to the health savings of the organization. Each member has to attend the regular meeting of the organization which is scheduled for the first Wednesday of every month. If the member fails to attend without providing a letter of excuse, she will be compelled to pay a penalty of PHP 50.00. However, emergency situations are recognized as valid reasons for absence, e.g., community duties and family needs and problems. Non-attendance at three consecutive meetings without the submission of an excuse letter will result in the termination of membership. If the member decides to leave the organization, she will not receive a refund of the registration fee or the funds accumulated over the duration of her membership. On the other hand, membership can be reactivated through the payment of the membership fee and the provision of a contribution to the health savings.

Health Savings

Annually, the Ayahag village chapter collects PHP 100 from members to serve as a standing fund for the health needs of its members. A member can contribute more than what is required and this will increase her credit power. The members can file a loan in case of emergency family situations. The first three (3) months are free of interest, after which 2% interest will be charged.

Issues of Sustainability

Currently, the Ayahag chapter is having a hard time in recruiting more members since the women are afraid of the landslide in Guinsaugon. Many women victims were members of a people’s organization led by women—the Women’s Health Association. Some members cannot pay their dues and end up becoming inactive, resulting in the decline of the organizational fund.

Lessons Learned

Other than the meager amount that the women get whenever they sell their goods, they also get non-material benefits. One of them said that, "by engaging myself in this activity, I am able use my time productively and gain more friends at the same time." Another woman adds, "being a member of the federation helps me further realize my creativity since you have to think of new designs in order to make your product more marketable." Involvement in the organization has provided the women a venue to further realize their agency, develop their social skills and enhance their potential as individuals.

3.6 Psychosocial Recovery

When a portion of the mountain literally fell on Bgy. Guinsaugon, lives were lost. Hundreds were buried alive, women, children, young and old, resulting in disjointed and separated families, leaving widows, widowers, and orphans as survivors, or in the worst scenario, wiping out entire families.

Those left behind presumably suffered some form of post-traumatic stress disorder (PTSD). PTSD "can develop after exposure to a clearly identifiable traumatic event such as community disaster or a tragedy from natural disasters, calamities that threaten the self, which could result in people experiencing acute stress with accompanying feelings of fear, concern, uncertainty, anger, grief and horror" (Keltner 2007:423-425).
The realization that their loved ones disappeared and were buried beneath a great mass of earth resulted in feelings of "shock" which they described as "nakatulala" (staring into space, immobile and withdrawn). Grief was evident when they cried endlessly as they remembered their loved ones. The feelings of hopelessness and helplessness pervaded over the next few days as people tried to cope with the everyday routine at the evacuation centers.

The loss of lives and families range from a husband who lost his wife and all their children, to a couple who lost their parents and two children. Beyond even this, nine families were buried without any survivors. A more devastating result of this tragedy are the children who lost both parents.

After the landslide, the survivors were housed at evacuation sites where they underwent counseling sessions. They were gathered in groups and sessions were facilitated by different persons coming from different NGOs. One survivor even noted that the person leading the counseling session in their group was a foreigner. Other counselors were from the religious sector while still others were psychologists.

Given all the experiences that the people went through, there was a need for counseling sessions and debriefing. However, the community found a way to cope with their feelings and their sense of loss. This was done through "memorializing" or community rituals.

**Case 3.6.1. Community Rituals: Spirituality as a Means Towards Recovery**

Faith and religion play a big part in every Filipino's way of life. For every season in their lives, faith and religion are used as reasons for occasions and activities. Fiestas for which Filipinos are known to celebrate lavishly are held in honor of the patron saint of any town or barangay. When children are baptized, it is an occasion to hold a party almost of the same grandeur as a child's birthday party. A mass of thanksgiving is offered to a person who passes licensure exams and then a party is held afterwards. The simbang umaga (midnight mass) before Christmas is much anticipated because of the festive air it brings with it.

But religion and faith do not only come into a person’s life when there is a cause for celebration; they also play a role during times of distress and trials. Mass is held when a person is very sick. During a wake, a Novena or mass is held every night. Mass is also heard when a person is in a dire situation, and the mass is offered on behalf of that person.

Faith and religion in this case also played a significant role in the lives of the survivors in Barangay Guinsaugon because it symbolized their need to express their grief and mourning and in the process, to remember their loved ones who had died.

The normal process of mourning is often expressed in the use of rituals, such as memorials, holding masses, marking key times and events. It is important that the community is involved as this provides a network of social support and thus paves the way to help people "let go" of their grief (Veneema, 2007).

This phenomenon holds true to the people of Bgy. Guinsaugon. The effect of the disaster triggered responses not only on an individual level but in the community as well (family, neighborhood, local government). The community members of Bgy. Guinsaugon had something in common. They went through the experience of grieving and mourning. Their shared experience evolved into a need to "memorialize" the event as a manner of expressing their loss.

One ritual that they embraced has been the holding of a masses to remember the tragic event that took away their loved ones. This mass is held on the 17th of every month and is attended by 30 or more people to commemorate the event and remember their departed loved ones. The survivors of the Bgy. Guinsaugon landslide gather monthly to hold prayer meetings at the site. The service is solemn, consisting of prayer and candle lighting and is facilitated by the priest.

Once a year, a more elaborate religious celebration takes place with invited community residents and officers of the LGU participating. A mass is held, followed by a program where testimonials are heard.
from selected survivors, after which some words of affirmation are given and speeches are made by the guests.

After the program and the mass, food is served and a feast is shared. This sense of community and sharing has become a means of healing as the community altogether share in commemorating the event. There must be mixed emotions as this event is held, with sadness and joy mingling with tears of relief and loneliness.

**How Did it Come About?**

Bgy. Guinsaugon made a resolution regarding the holding of masses to commemorate the event, including a yearly anniversary and mass. This resolution was supported by the mayor of the LGU such that they were allowed to use the LGU's bus for free every 17th day of the month to bring people to Old Guinsaugon and hold the mass.

The mass takes an hour and is led by a priest from Bgy. Catmon. If the 17th falls on a Sunday and the priest is not available, a lay minister of the community takes over and administers the ceremony assisted by members of the Basic Ecclesiastical Community (BEC). The BEC was organized and started by Sr. Alice of the Daughters of Charity. In place of the mass said by the priest, the lay ministers use a guide of ceremonies which was developed by Sr. Alice. In that guide, the lectors, readers and collectors, who are all part of the lay ministry, have a part in the ceremonies.

The BEC was organized in 2007, led by Sr. Alice of the daughters of Charity. The BEC is an organization of the Catholic Religion and is part of the parish community. The initial organization was established with just one cluster, mostly volunteers. There are eight leaders distributed within the clusters, and they were given a seminar for one month to serve as lay ministers. This cluster started engaging other community members to be part of the clusters. The basis of membership for a cluster is that they should be Catholics and should have a devotion to the "Birhen ng Mulayanan" (Virgin of Mulayanan). The members can come anywhere from the new Bgy. Guinsaugon, their clusters coming from the cluster of houses they are in, whether they belong to the JICA, PNRC or GK group.

The clusters have grown; there are now five and these have been organized into a federation. The federation organizes the activities of the monthly anniversary commemorating the Guinsaugon landslide. But each of the clusters has separate activities apart from the federation activities.

Such typical activities of the cluster could be taking care of the image of the Virgin Mary such as hosting the image of the Virgin Mary at the home of a member of the cluster; having a novena and daily rosary; and moving the Virgin Mary to the house of another member of the cluster. There are also Bible
readings and reflections. They share a word from the reading of the Bible that is applicable to any event in their life during a given week or day.

When the priest is not available, the lay ministers who are the officers of the federation take over the commemoration activities for the monthly anniversary. After the religious activity, they share a meal, mostly just simple snacks of native delicacies prepared by the attendees.

**Impact of Activities**

When asked what the impact this activity has on them, they said it was "Masaya, na nagkakashare" (It is a good feeling and we feel happy that there is sharing among us). They said that they feel good because "binibigyan sila ng ceremones ng matulungan sila kung saan man sila dinala, dahil nga hindi maganda ang pagkamatay nila" (The dead are given a ceremony so that they can be assisted to the place wherever they should be, after all they died tragically).

When asked how these activities helped them, one informant answered "tuwing panahon na nagshashare kami, naibabahagi din namin ang mga problema namin. Ito ay nakakapagsaya sa amin" (When we share with each other, when we share also our problems to each other, and this makes us happy)

**A Cell Group That Grows... Leadership Development**

Sustaining the basic ecclesiastical community is the challenge being faced now. While at this time, the level of enthusiasm and motivation is high, the clusters and the federation could grow in numbers. But it is observed that mechanisms for developing new leaders who can take over have not been considered. While the original leaders have been trained by the religious order, there is still a need to train more leaders. At the same time that there are new leaders being trained, there is a need to upgrade and equip the current leaders, and perhaps train them to develop ceremonial guides as well, if this is allowed.

The strength of this practice is that religiosity and spiritual rites are inherent within the Filipino individual as well as inherent in the community. This is evident with the presence of a chapel built in New Bgy. Guinsaugon. The residents helped build and complete it, "bayanihan" style. The new structure can help sustain the religious activities within the community and connect it with the Diocese of the area, and locally with the parish community.

![Community rituals at the site of the landslide.](source_of_pictures: Barangay Hall, Bgy. New Guinsaugon)

This way of memorializing is explained as part of the phases of mourning that people who have suffered losses and death go through. The initial phases are processes addressing the person’s need to accept the reality of the loss and having to face the pain of the loss. After this, there is a need to move towards
adjusting to an environment. One of the adjustments cited is the spiritual adjustment, where the belief system is used as a mechanism to face the reality of the loss. This belief system is usually influenced by the social network, in this case, the community, family and peers. Then comes an action of "memorializing" as a way to "relocate" the deceased to allow the bereaved to move on with life. The "memorializing" is a way of relocating the deceased (in this case through the rituals and anniversaries) to allow and enable the survivors and the bereaved to move on. It is important that the memorializing is a way of not giving up on the relationship with the deceased but more of just "relocating" this as part of the memory, to enable the moving on process (Warden, 2002).

**Challenges**

Psychosocial recovery from a traumatic event especially of this magnitude is a long process. While provisions for immediate relief and emergency measures have been made and have been given to the survivors, the process of "moving on" varies from one individual to another and from one community to another. One case is different from the other, reactions and responses are varied as a result of the varied confluence of mourning mediators (Warden, 2002).

The challenge for the recovery process is the capacity for an agency to provide programs that will facilitate a sense of community recovery and a united effort towards rebuilding. One of the factors that can assist in the recovery process of individuals and families as well as the community is having a catalyst that will give people some sense of purpose in their existence, after the loss.

Livelihood projects that will increase their self-esteem and give them a sense of achievement and a sense of self-empowerment are good for the development of personal growth. Projects for women that will keep them busy while at the same time increasing their self-worth will facilitate the replacement of their loss to something that will have meaning in their lives. These might be community projects, appropriate to their context and expertise (most of the women are used to farming and planting, but in the relocated areas there have been little opportunities for them to pursue these activities).

These projects serve several purposes, one of which is to provide an avenue for responding to the basic need of survival. The need to be given a sense of security in terms of responding to the basic physiologic needs shall help in their process of healing. Knowing where to get food is very important to them. These projects could become a way to provide them with a sense of achievement and sense of a meaning in life. Having something to do and something to keep them busy will be both therapeutic for them and conducive to the community's recovery.

An interdisciplinary approach to assisting the community in its recovery could mean providing livelihood development programs that are appropriate to local characteristics and competencies. Efforts must be made to meet psychosocial needs such as counseling sessions and activities that will allow for catharsis and expressions of mourning.

Taking advantage of the sense of community and shared experience by coming up with "a community project" can help the community in the same way that the community mass and rituals can facilitate the process of recovery for the individuals and families that suffered losses. Then faith and religion can still be emphasized and continued as the community comes up with symbols memorializing the event. Perhaps a chapel can be built in the area of Guinsaugon as a means to symbolize the strong faith and the acceptance that there is a Supreme Being who will take care of them and help them.

As one of the survivors says "Salamat sa Diyos, kung wala talaga ang Panginoon hindi ko na alam ang gagawin ko" (Thank God, if it hadn’t been for God I wouldn’t know what will happen to me)

**Case 3.6.2. Bringing Smiles and Hopes to Children Through Theater Work**

"My involvement in theater helped me to recover from the loss and painful memories that the tragedy had caused. Meeting children who were also affected by the disaster gave me a feeling
of comfort since I have realized that I’m not alone. The friendship I built with my fellow children created an opportunity for us to share our feelings and emotions which allowed us to move on. We were also equipped with new knowledge and skills in disaster preparedness which would help in making our communities safe from disasters.”—Teatro Bidlisiw Member

Guinsaugon Landslide and its Impacts on Children

The tragic landslide that struck the village of Guinsaugon situated at the foot of Mt. Canabag in February 2006 was a major trauma for local residents. Witnessing gigantic boulders and mud descend down the mountain, burying houses, livelihoods and lives left people with painful memories. These events caused suffering for many, particularly for the children and youth, who are considered to be one of the most vulnerable groups in times of disaster. The devastation that the disaster brought adversely affected their day-to-day activities and disrupted their normal way of life. For adults, their livelihoods suffered the brunt of the disaster, thus challenging their role as providers of the family. On the other hand, the schooling of children was also hampered since their classrooms were either buried or used as evacuation centers. School materials and facilities were also destroyed and/or lost which prevented children from engaging in their regular learning activities. Play activities of children were also suspended which inhibited them from interacting and socializing with others. Apart from education and socialization, it was also a traumatic experience for them to lose their loved ones especially their parents and siblings in this catastrophic event.

The landslide caused distress to the general populace, especially children. Given this, the children and community were in need of channels for gaining some relief from the emotional burdens of their bitter experiences. One the avenues for the children’s psychosocial support was theater. Their engagement in theater became a stress relieving activity which helped them overcome their feelings of desolation caused by the losses they sustained as a result of the disaster. Apart from the individual benefits, theatrical performances also were used to conduct an effective public awareness campaign and to advance disaster risk reduction awareness for different stakeholders at the local level and beyond.

Where Did it All Begin? Revisiting the Formation of Teatro Bidlisiw

After the 2006 landslide, Handicap International, one of the many humanitarian organizations that served the survivors of the tragedy, started the concept of theater work for children especially those who were living in the evacuation centers. Young individuals from the villages of Ayahag, Guinsaugon, Nueva Esperanza and Sug-angon were encouraged to participate. This initiative was deemed to be a good avenue for their psychosocial recovery considering the stress and tension that they had experienced in the disaster.

To prepare the children to be effective actors and actresses, Handicap International held a workshop on JFAS (Joy, Fear, Angry, and Sad) led by a foreign trainer. For a child to become a member of the theater group, he or she was required to pass the JFAS workshop. This activity provided an opportunity for child survivors to enhance their knowledge and skills in formal acting. About 40 to 50 children participated.

A year after their effort to organize the children for this activity, Plan International, another developmental organization that focuses on interventions promoting children’s rights, continued what Handicap started. It facilitated a series of workshops led by facilitators from Manila to further enhance the capacities of children and youth (aged 15-28 years) in theater. It encouraged young individuals from other municipalities to engage in children’s theater.

The landslide that hit the community caught the people by surprise. Seeing its devastating effects pushed them to take preventive and preparedness measures. With the massive destruction and high number of casualties, children were easily enticed to get involved. The children’s theater group was called Teatro Bidlisiw.
To sustain their advocacy in disaster risk reduction and environmental protection, a second batch of members are now being recruited, since most of the first batch members are now in their tertiary education and no longer stay in the village that often.

**Figure 3.53 The first batch of Teatro Bidlisiw members in one of their performances at Kissbone Hotel**

### Glimpse of Teatro Bidlisiw

To explore the children’s potential, different capacity building activities were organized. They had workshops on acting, singing, dancing and script writing. They came up with their own scripts to convey pertinent messages on disaster risk reduction and community safety. The prominent themes of their performances included landslides (causes, impact and recovery) children's rights, child trafficking, ecology, family relationships, adolescent health, HIV, substance abuse and birth registration. The young individuals also demonstrated their dreams and aspirations for their community, which evolve around their safety, fostering people’s involvement and recognizing the role of children in disaster preparedness.

Youth leaders are also part of the group, acting as facilitators, directors and choreographers. Performances usually last for 45 minutes.

To keep a system within the organization, Teatro Bidlisiw also holds a monthly meeting to discuss relevant concerns and resolve issues. They also elected officers to ensure that there would be individuals responsible for overseeing the operations of the group.

Plan International-Philippines provided the first set of costumes and props for the theater group. The owner of the Kissbone Hotel, being the coordinator and manager of the Teatro Bidlisiw, generously provided the materials needed for the second batch of child-actors to continue their advocacy work. The group also stores their props and costumes in that hotel. Even without pay, the owner indicated a commitment to supporting the children’s endeavors. It was also timely that she was elected Vice Mayor of the town during the 2010 elections. This allowed her to sustain the good deeds she had started not only for the group but for the whole municipality.

To realize their role in disseminating valuable information related to disaster risk reduction, the children go "community hopping," visiting one village after another. In other cases, the theater group is invited to perform when local and international guests visit a municipality. Through these performances, they
are given an opportunity to mobilize resources that would help sustain their activities or help other children in need since donations are accepted using a "pass the hat" system. Besides financial assistance, the spectators also endow them with moral support and encourage their friends to also watch the group’s performance.

The money that they earn from their performances is equally divided among them and in buying the needs of the group such as snacks during rehearsals. Some of them use their earnings to purchase school uniforms and other schooling supplies.

The assistance of external organizations is needed to help the community build back better and recover. With the help of Plan International-Philippines, some of the children had the chance to perform in Japan for the International World Landslide Forum in 2007. Different ambassadors and ministers from around the globe attended that event.

The group also enjoyed international exposure when the BBC featured their story in 2008. The children interacted with some of the BBC crew and told the story of how they got started and how the group has developed over time.

The theater group was also invited to have their show in Intramuros, Manila through WOW Philippines, a national program of the Philippine government’s Department of Tourism.

In addition to their theatrical production, the members are also involved in other community activities. In 2008, they cleaned the St. Bernard Elementary School which served as an evacuation center. They participated in the coastal clean-up during the 2009 celebration of Earth Day. They also help in cleaning the church and planting trees every summer. Some members participated in a workshop on landslide preparedness facilitated by CARE-ACCORD in 2008.

**Sowing the Seeds of Hope: Benefits of the Children’s Theater Work**

The members of the theater group demonstrate commitment and hard work in their theater work. Driven by the urge to not let another disaster happen again, the children have willingly devoted their time and effort to the endeavor. Since no one was exempted from the fury of the landslide, they have been guided as well by the thought of making disaster preparedness everybody's responsibility. This has debunked the common notion that children are just the beneficiaries of assistance and gave them a chance to take on an empowering role. They became instrumental in increasing people's awareness and motivating them to take proactive measures to deal with disasters.

Together with the adults, the children took on an active role in promoting disaster preparedness and safety. Awareness raising is a mechanism that allowed them to become change agents in their communities. The theater group has utilized a community-based approach to fulfill its role in information dissemination. This has proven more effective in their case than other forms of media (e.g., the Internet and newspaper) in terms of the accessibility of the performances to people in various locations. Seeing actual performances allows the audience to grasp the importance of a culture of safety. Having face-to-face encounters with people enables the children to articulate their feelings and
emotions in a creative and realistic manner. The tangible conditions being portrayed by the children have become an avenue for gaining sympathy and encouraging others to actively take steps to prevent disasters.

The series of performances served as a training ground for children to enhance their knowledge, skills and attitude. The involvement of young individuals allowed them to explore their potential in singing, dancing and acting. Their membership in the theater group also enabled them to boost their self-confidence. Some of the children who were not that close to their relatives prior to the 2006 landslide have developed closer relationships with them. They have increased self-esteem, improved social relations and have learned to recognize their abilities.

The former president of the group also shared that his exposure in theater served as a training ground for him to do public service and to be of help to his community. He is now the Chairperson of the Sangguniang Kabataan (Youth Council) of Barangay Ayahag.

Besides enhancing children’s capacities and heightening people’s awareness of disaster risk reduction, this theater group has also enabled young individuals to share their stories and experiences with others. Having people around them who are willing listen helped the children in dealing with their own traumatic experiences. This process has been therapeutic, helping them let go their sad emotions and eventually regain a sense of normalcy. Although some of them lost immediate family members and became orphaned, involvement in such an organization gave them a feeling of belonging, like they had found a new family. It made them feel secure knowing that they were not alone and that other children were going the same experiences as them. Friendship, camaraderie and trust have been built and tested as they have continued to work together.

The theater performances are also helpful to the audience members who were affected by the landslide. It became an avenue for stress relief, some of them even crying as the theater group portrayed the scenario during the landslide event. A discussion is facilitated after the performance in which viewers are asked how the performance made them feel. It is also through this activity that they are given an opportunity to provide suggestions to the children for ways to improve their performance.

**Reflections: Lessons from the Children’s Theater Work**

The theater endeavor became instrumental in making the children realize their basic rights, which should be promoted by any development initiative. The formation of an organization allowed the children to exercise their rights to participation and development. Their membership in the theater group gave them a chance to become involved and let their voices be heard. It also allowed them to explore their potential for personal growth. Skills were developed, values were enhanced and ethics were instilled in these children, who will soon face the realities of life. The theater also became a way to keep them away from engaging in vices or succumbing to the influences of bad peer groups.

The children learned the importance of perseverance in order to achieve their dreams. Children are constantly taught the principle that nothing is impossible as long as there is hope and a willingness to exert effort and take action to achieve what they want. They were taught to take advantage of as many opportunities as possible not only for their individual welfare but for the development of the greater populace.

It also provided an avenue for children to challenge their traditional role of being passive recipients of any assistance because of the notion that they are "helpless." Although the disaster triggered devastation, it also created opportunities for children to take an active role in community development work. The formation of the theater group encouraged children to come out of their shell and contribute something to the protection not only of their personal well-being but also that of the general populace as well. Like adults, the children became effective actors in a public awareness initiative through theater. The children were recognized as being helpful in conveying messages relating to the importance of disaster preparedness and safety. The portrayal of scenarios from the tragic landslide and the young
individuals’ aspirations for their community served as an eye opener to audiences and enticed people to take action.

Ensuring multi-stakeholders’ participation is essential for any development work to succeed since needs exist in every sector. Holistic and sustainable development is possible only when the concerns of various stakeholders are recognized. Although children have been identified as one the most vulnerable group of stakeholders, they possess capacities that can help the community in achieving the kind of development to which it aspires.

Ways Ahead

To sustain what has been started, organizing interactive workshops especially for the new members of the group is deemed fundamental. The necessity of introducing relevant concepts and mechanisms of theater by experts is strongly recommended by the original members to further improve the capacities of the children and make them more effective actors and actresses.

Case 3.6.3. Rebuilding Families, New Community, New Home, New Family: Composite Cases of Remarriage and Blended Families

"Malungkot pag walang kasama
Makakatulong pag may kasama,
May kausap ka, kahit laging maalala ang nangyari
Pag walang kasama... ewan ko lang"

It is difficult when you don’t have someone
It helps when you are with someone
Because you have someone to talk to
And even if you remember what has happened
It helps when you have someone
If you don’t have someone, I don’t know what else will happen

The tragedy in Bgy. Guinsaugon resulted in disjointed, separated families and "broken families" literally, leaving widows, widowers, childless couples and childless widows and widowers, causing skipped generations (no grandsons or granddaughters) and taking nephews, nieces, cousins, aunts and uncles, siblings, in-laws. Gaps in families were large and visible.

This caused an extreme sense of emptiness, shock, pain, loneliness and depression. Those left behind presumably suffered post-traumatic stress disorder (PTSD). PTSD "can develop after exposure to a clearly identifiable traumatic event such as community disaster or a tragedy from natural disasters, calamities that threaten the self, which could result in people experiencing acute stress with accompanying feelings of fear, concern, uncertainty, anger, grief and horror" (Keltner 2007:423-425).

The statement in the title explains it all. There is sense of loss, deep loneliness and the need for someone to assuage the pain.

Carrying with them the shock, pain and pervading sense of loss, each of those left behind have stories to tell of how they have coped with the tragedy, with coping mechanisms ranging from depression to escapism.
The initial reaction is more one of shock, commonly lasting several months. Slowly and painfully as the shock wore off, perhaps the realization of loneliness and the sense of loss has led most survivors to seek comfort and solace from someone. Thus living in close proximity with each other, kindred feelings develop, the widows and widowers remarry and blended families (if there are children survivors) are created. Families are rebuilt.

Barangay New Guinsaugon is a community of rebuilt families, unique in their membership as most of those who live are intermarriages. Of the 56 couples, 40 couples have remarried among themselves (widows and widowers), while 16 couples are comprised of one Guinsaugon widow/widower and an outsider. The others are either relatives of those who died and were granted the home as a result of the death of their kin. Some of these relatives have come from elsewhere and settled in New Guinsaugon, marrying either a local resident or bringing their family with them and settling in new Guinsaugon. The common denominator of most of these families is this: their relatives (whether parents, siblings, grandfathers) died in the Guinsaugon landslide.

These are their stories...

*Time to Move on....." From Libingan, ngayon libangan sa videoke”*

His wife was not part of the barangay, but attended the program on that fateful day. The husband on that day looked for her but in vain. Realizing that he is now a widower, he waited a year as this is the Catholic practice. After a year, he deliberately started looking for a partner, had girlfriends, preoccupied himself with singing, going to the videoke and even organizing a music band that plays in programs. Until he had a text mate 20 years younger, a student in her second year of nursing. Soon he married the girl and had a child. His wife stopped going to school for awhile, but later continued her education and finished a program in nursing. Now the widower has a young wife and a young child in St. Bernard, Southern Leyte.

Now he says that he is happy, even if there are adjustments in their new family. He saw the need to be strong and resolve to move on after the death of his wife as he says "Paano kayo makakatulong kung sa sarili mo di mo matulungan. salamat sa Diyos, Masaya ako, walang problema sa akin.” (How can one be able to help and serve if one cannot even help oneself, thank God, now I am happy, I have no problem as of the moment.)

*Living Together... That’s the Arrangement..*

The widow, 36 years old when the landslide happened, had a husband who was buried in the landslide, but she had her children with her the whole time they were in the evacuation site. She met her partner-to-be in February 2006. She was still in shock, but when she was asked by the male partner to marry, she was hesitant: "mag aasawa ba ako? Blanko pa ang isip namin” (Will I get married? My mind is still in blank.)

"Nag asawa na lang ako, para hindi ako nag iiisip tungkol sa nangyari, kesa naman sa nakatulala ako. ” (I decided to live with him, so I don’t have to be thinking of things, instead of just staring blankly in space)

They are not married yet, as her children will not allow her to marry because the surname of her former husband will be "erased from her." She is living with her partner. When asked how she feels she says: "Masaya, kahit may konting kahirapan, pero mahirap di pag walang trabaho, wlang pera...." (I am happy, even if life is difficult and difficult to get some money. If there is no work there is no money....)

When asked what lessons she has learned, she says she has learned one thing... Fear of the effects of the rain, "Ngayon, pag umuulan, nakakatakot...” (Now when it rains, I am afraid.)
Reunited: Together Again

Prior to the landslide, the man had an affair with another woman. During the landslide, the man’s wife and their daughter and their 12-year-old grandson were part of the women’s association. So they did not survive. Four children were saved, two were in Liloan with him and two were in the mountains. The man has adult children and has 10 children, all of whom survived because they were not around and were not staying in Guinsaugon.

The man was relocated to the evacuation site in Cristo Rey. Five months after the landslide he and his mistress transferred to Barangay Guinsaugon. Prior to the landslide, the woman had been working in Manila as a helper. When the landslide happened, the woman left for Guinsaugon. At the time of the interview, the woman was 52 and the man, 73.

After the landslide they had difficulties. Before the man had a whole expanse of land to till, had carabaos and was fairly well off. But when the landslide occurred, things changed. With no means of income and poor health, the new family had difficulty meeting their basic needs. The man is old, with failing health, has diabetes and high blood pressure. The "young mother had to make ends meet by selling food."

"Mas okey pa nuon kesa ngayon
Reaksyon sa buhay ngayon...ok naman kaya lang walang hanapbuhay
Ok naman ang reaksyon ng mga kapamilya, natanggap na nila ako siguro,
Dahil ako nga ang nag aalaga ng kanilang ama
Hindi na siya binibisita, mga anak niya nasa ibang lugar
Maligaya pa rin na magkasama, kaya lang hindi naman maiwasan na may problema, basta hindi makakalimutan ang Lord"

" We were much better off before the landslide...
as to life now, we are ok except that we don’t have jobs.
It seems that the family does not have a negative reaction to me,
maybe because I am the one taking care of their father.
They don’t visit him anymore, his other children lives in a different place
We are happy, as we are together, problems are just part of life,
as long as we don’t forget the Lord."

Inherited the Place....

This case is different because he did not come from Guinsaugon and has never lived in Leyte, but he opted to stay in the barangay and resettle there with his family. He now finds the place peaceful, feels that he is a part of the place and identifies with those who suffered.

It was his mother who died in the landslide, with nephews and nieces, cousins and siblings. But two children survived. When the landslide happened, he went back from Manila and looked for his mother but to no avail.

The shelter was awarded to him since he was an immediate relative of the victim. In a year’s time, through "bayanihan" he was able to build and refurbish the house. With money that he got from his resignation as a security guard in Manila, he established a small convenience store and bought a motorbike for a pedicab.
"Masakit pa rin. (It is still painful.) Dinadaan na lang sa dasal. Manalig talaga sa Diyos. Ang Misa pang aliw, tulong sa dinadaanang hirap at problema." (We just pray and have faith in God. The Holy Mass helps us when we feel the difficulties and the problems.)

"Malungkot pag walang kasama
Makakatulong pag may kasama
May kausap ka, kahit laging maalala ang nangyari
Pag walang kasama... ewan ko lang"

"It is difficult when you don’t have someone,
It helps when you are with someone,
Because you have someone to talk to
And even if you remember what has happened
It helps when you have someone.
If you don’t have someone
I don’t know what else will happen"

There are more cases similar to these, but what has helped them cope with the pain is finding a partner and a companion who will be with them. No matter how much pain and suffering they feel, there is always a tinge of hope in their voice when they talk and tell their stories.

The Filipino resiliency works at its best in these cases. The harder life is, the stronger they become. Now if only they would be given some means of earning a living so that the feelings of pain and loss would diminish and they could regain their sense of purpose and permanence.

### 3.7 Environment in the Landslide Area

Barangay Guinsaugon and the six neighboring communities have been declared danger zones. While the communities have been relocated to new sites, the people still come back to their farms. Most of them are farmers who continue to grow rice, corn, vegetables, banana and coconut. Maintaining the farmland provides income for the farmers and at the same time helps maintain the ecological balance in the area. With the effects of climate change already becoming concrete, maintaining vegetation is an effective strategy for climate change mitigation and for the farmers to adapt to the emerging situation.

Figure 3.55 The landslide area taken in May 2010. Vegetation has grown in at the lower portion
3.8 Other Infrastructure Programs Outside of the Resettlement Areas

Case 3.8.1. A Package of Community Facilities in the Resettlement

Most of the infrastructure programs have been implemented in the resettlement areas. These include improvements to roads, the water supply system, electrical and drainage services, and the creation of infrastructure by the Japanese Red Cross, which built four key facilities in each area (a barangay hall, health center, elementary school and recreational facility). The package comprised of the four infrastructure projects has significantly helped in promoting a faster recovery in the resettled communities. Services related to community governance, health services, basic education and recreation have been provided with the help of these facilities.

Figure 3.56 The building that houses the health center on the ground floor and the barangay hall on the second floor

Figure 3.57 A health center, better than before

Figure 3.58 The recreational facility serves also as a drying area for rice. The school is in the background

Figure 3.59 A multi-purpose covered hall in Mahika Resettlement

Case 3.8.2. Hanging Bridge: Creating Access, Erasing Risks

Infrastructure projects were also implement outside of the resettlement areas. The first was the hanging bridge over the river connecting the old Guinsaugon community with the adjacent barangay. The old Guinsaugon is separated by a river that often overflows during the rainy season. It should be noted that there are farmlands in Guinsaugon that are beyond the deposition area of the landslide debris. The farmers continue to make these farms productive. However, getting to those areas was very difficult
and risky because the people had to cross the river, which was a half-foot deep during the dry season but up to six feet deep on rainy days.

Similarly, access to the landslide area for rituals and ceremonies, and for visits and tourism purposes was difficult because of the river.

In response to this situation, the provincial government constructed a hanging bridge. The project is considered by the farmers to be very useful and they are happy to have better and safer access to their farms.

Figure 3.60 A hanging bridge was constructed by the provincial government to enable the farmers to cross the river

Case 3.8.3. Rehabilitation of Schools Used as Temporary Shelter

For as long as two years, the central school in the poblacion was used as a temporary relocation area for the affected communities. Not surprisingly, this had an effect on the school facilities and grounds. In coordination with the LGU, the GTZ implemented a program that aims to rehabilitate the schools that were used as temporary relocation areas. The school facilities and premises are in much better condition now as compared to their condition before the landslide.

Figure 3.61 The school grounds

Figure 3.62 The entrance
3.9 Governance

Case 3.9.1. Institutionalizing DRR in the LGU: Based on the Report by Mayor Rico C. Rentuza (2010)

In 2006, the disaster management system was anchored on a disaster preparedness paradigm where the local government units (LGU) such as municipalities and barangays were mandated to prepare and respond to disaster events. There was a local disaster coordinating council in each LGU. When the landslide happened, Barangay Guinsaugon and the Municipality of St. Bernard became the focus of attention and resource provision. Since then, the municipality has undergone institutional reforms aimed at disaster risk reduction. When the current mayor took office in 2007, he was faced with the challenge of dealing with the impact of the landslide. He said that there were three choices for dealing with the disaster in the municipality. The first choice was avoidance, or leaving the area and going to a safer place. The second was to wait for another disaster to happen and respond accordingly, as happened in 2006. With those two choices deemed to be impossible, the municipality had no choice but to embrace the third choice, which was to be pro-active in making preparations now, before another disaster occurs.

He began by making himself available for opportunities that would enhance his capacities in disaster risk reduction. He attended seminars, conferences, workshops and field exposures locally and internationally to equip him in the tasks of DRR. He established linkages with NGOs, academia, private groups and other government organizations which can help facilitate the recovery of communities affected by the landslide and in mainstreaming disaster risk reduction in development planning.

The municipality adopted a proactive disaster risk management approach anchored on the principle: the right choice for effective local governance is doing what is rightfully due to the people.

The 2007-2010 vision and mission of the municipality was revised to incorporate "resilient communities." As part of its mission, the municipality shall "integrate disaster risk reduction measure in all projects and programs." Similarly, a 12-point agenda was formulated with the rehabilitation of the Guinsaugon landslide-affected families topping the list. The vision, mission and the 12-point agenda are all displayed in the municipal hall for the public to see.
The Municipal Disaster Coordinating Council (MDCC) was strengthened and made more functional, meeting once a month. Although it was not mandatory for the LGU to have a Disaster Management Office, St. Bernard established the Municipal Disaster Management Office responsible for the day-to-day operations for disaster risk reduction such as hazards assessment and monitoring, contingency planning, warning, disaster awareness and capacity building and assisting communities in disaster risk reduction, response and recovery.

The LGU’s capacities in disaster risk reduction (DRR) were strengthened by incorporating DRR in development processes, particularly in the formulation and implementation of the Comprehensive Land Use Plan, the Comprehensive Development Plan, the Executive and Legislative Agenda and the Annual Investment Plan. These are standard planning tools adopted by all LGUs in the country. What St. Bernard did was to mainstream DRR in all these planning processes and tools.
The LGU developed standards, guidelines and protocols for emergency response and mechanisms for community participation in DRR. They developed a Contingency Plan for high-risk barangays where the residents were involved in workshops and drills. The community’s contingency plans such as the warning system and the evacuation plans were linked to the municipality’s contingency plan.

The Annual Investment Plan specifies the programs and projects that will be carried out by the LGU during the year. It incorporated a budget for DRR related activities such as the dredging of the Lawigan River, which had risen over the years. It adopted a proactive stance in using the calamity fund for emergency response to disaster preparedness and mitigation.

The Executive and Legislative Agenda is a three-year plan that coincides with the term of the LGU officials. The political and economic platform of the local executive is translated into priority programs and projects within his term and with the approval of the legislative body. The agenda aims for disaster-proofing the development priorities. The programs include the re-channeling of the Lawigan river, agricultural development and better delivery of social services.

The Comprehensive Development Plan for 2010-2016 envisions the municipality to be "...a model for disaster risk reduction and climate change adaptation and a center of eco-tourism in Eastern Visayas..." Similarly, the 10-year Comprehensive Land Use Plan is being updated using the risk factors identified by the multi-hazards mapping, changes in land use as a result of the Guinsaugon landslide, and the capacities and vulnerabilities of the barangays and the municipality.

The LGU laid down the key requirements for governance:

- Multi-sectoral participation
- Voice of the most vulnerable
- Accountability and transparency to whom we serve
- Mainstreaming DRRM in development processes
- Sharing of knowledge with other LGUs: Brother’s Keeper
- Political will

In recognition of the municipality’s efforts in enhancing DRR, the Municipality of St. Bernard won a national award in 2008 for being the best Municipal Disaster Coordinating Council for a 4th-6th Class Municipality.
Lessons

Leadership initiatives and political will of the government executive is a significant factor in fostering a proactive stance toward mainstreaming DRR in the municipality. Challenged by the unfavorable conditions of the municipality, such as its being prone to hazards, the high vulnerability of its communities, the poverty level of the people, low government income and the adverse impact of the 2006 landslide, the LGU pushed for a commitment to strengthen governance by mainstreaming DRR in development planning processes, budgeting, land use planning and in the provision of social services. Making these initiatives known to the public is a demonstration of government transparency and is a mechanism for inculcating positive values and a commitment to these same goals among the constituencies.

The inadequacies in internal resources and financing were addressed by having strong linkages with NGOs and prioritizing funds for disaster risk reduction measures. A participatory approach was adopted to ensure community involvement and as a means for developing the people’s awareness and capacity for DRR.

Case 3.9.2. NGO-Communities-LGU Collaboration for DRR Based on a Report by Marieta Lupig Alcid, ACCORD (2010)

Many NGOs and humanitarian organizations went to St. Bernard to provide relief and recovery assistance after the landslide. The assistance came in many forms: food, clothing, medical care, health and sanitation services, psychosocial interventions, and other relief services, livelihood programs, temporary and permanent shelter, capacity building and technical assistance. After four years, the number of external assistance programs has dwindled. One of the few NGOs that remained in area and continued to be a partner of the LGU and the communities was ACCORD, which stands for "Strengthening Assets and Capacities of Communities and Local Government for Resilience to Disasters." ACCORD was a partnership program among CARE Nederland, CARE Philippines, the Corporate Network for Disaster Response, the LGUs and public schools. It was funded by the European Commission’s Fifth DIPHECO Action Plan for Southeast Asia. The program started in January 2007 and was implemented until 2010.

Accord is CARE’s new disaster risk management project that applies both community-based (CBDRM) and rights-based approaches (RBA) in a complementary manner. It carries out disaster risk management tasks from human rights perspective, wherein disaster risk reduction capacities of communities are developed as a matter of people’s rights, and local government are...
supported in order to be in a better position to perform their obligations of building safe communities. (Dizon, Benjamin and Herrera, 2007:iv)

In 2010, ACCORD was transformed from being an NGO program to an NGO itself, implementing a new program called "Advancing Safer Communities and Environments Against Disasters" (ASCEND) from June 2010 to September 2011. ACCORD was involved in strengthening the LGU capacities for disaster risk reduction. Its activities included:

- Developing standards, guidelines and protocols on emergency response and mechanisms for community participation in DRR
  - Developing community facilitators
  - Training non-leaders coming from the poorest households
  - Developing emergency response systems at the barangay, municipal and provincial levels
- Incorporating disaster risk reduction in development planning processes, particularly in the development and implementation of the Municipal Comprehensive Development Plan, Executive and Legislative Agenda and the Annual Investment Plan
- Utilizing the rationalized planning system as a tool in mainstreaming DRR
- Updating the rationalized land use plan in partnership with the GTZ, using the identified risk factors as a result of the multi-hazards mapping and the capacities and vulnerabilities assessment of the barangays and municipalities.

Figure 3.70 Participatory community risk assessment facilitated by ACCORD
Figure 3.71 Training of the community for disaster preparedness and contingency planning

Figure 3.72 Capacity building activities for the community, schools and the municipality
An innovative strategy of ACCORD is linking DRR with sustainable livelihood and taking food facility as a vulnerable reduction strategy. They do this through livelihood activities such as providing fishing implements and fish sanctuary, home-based production activities in the resettlement sites, animal dispersal, municipal wide vegetable production, post harvest facilities like cold storage and trading posts, facilitation of market links, food banks, organization of production clusters and enabling local legislations to support these services.

To ensure coordination and minimize overlapping of functions and services by the NGOs assisting St. Bernard such as ACCORD, GTZ, Philippine Business for Social Progress, Philippine Red Cross and Plan, the group came out with an informal mechanisms where they meet regularly to share and update each other on each programs and services for DRR in St. Bernard. The meeting is attended too by the LGU officials, thus facilitating intersectoral coordination and collaboration.

**Lessons**

The experience of ACCORD affirms the imperatives of community participation in various aspects of disaster risk reduction from risk assessment to response and recovery. It shows that the people have potential and that all they need are opportunities for capacity building and space for engagements.

There was an influx of NGOs right after the landslide. Their exodus was just as swift, as most of them were engaged only in the provision of emergency and relief services. The LGU and the communities noticed the sudden decline in services even though recovery was not yet in place. This brings us to the need to ensure the continuity of services for the full recovery of affected communities. External support mechanism must go beyond emergency response and ensure that there are entities providing recovery services. There has to be some shift in the direction and programming of some NGOs from emergency response to recovery. Alternatively, development NGOs could prioritize communities affected by disasters in their programs.

The informal network of NGOs assisting the municipality of St. Bernard provides an effective model for sustaining collaboration and coordination. They share information about their programs, their target areas, beneficiaries, strategies and challenges, and identify ways to move forward Both individually and collectively.
CHAPTER 4: ISSUES, LESSONS, AND MOVING FORWARD

4.1 Issues and Challenges

The assessment of the various aspects of recovery in the communities affected by the 2006 Guinsaugon landslide points to several concerns, issues and challenges that have to be addressed, specifically in terms of the development of disaster recovery policies for the local communities. The assessments given by residents at the local level, regarding how they have or have not recovered from the landslide provide a good starting point.

*Recovery Elements "Built Back Better"

There are five resettlement areas and 19 elements reviewed in each area, for a total of 95 area-specific elements (5x19). Of those 95, only six or 6.3% got a rating of 3.5 or higher, indicating that they are considered to have been "built back better" than before the disaster. These are community relationships and the environment in Ayahag, and the water supply, electricity, recreational facilities and community governance in Sug-angon. There are five other area-specific elements that were rated higher than 3.25, most of which are in Ayahag. Only the church facilities in Guinsaugon made it on the list.

The point is that there are very few elements of recovery in the resettlement that have been assessed by the residents as having been "built back better."

Table 4.1 Recovery Elements That Have Been Built Back Better

<table>
<thead>
<tr>
<th>Recovery Elements</th>
<th>Recovery Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships with neighbors in Ayahag</td>
<td>3.89</td>
</tr>
<tr>
<td>Water supply in Sug-angon</td>
<td>3.80</td>
</tr>
<tr>
<td>Electricity in Sug-angon</td>
<td>3.77</td>
</tr>
<tr>
<td>Recreational facilities in Sug-angon</td>
<td>3.77</td>
</tr>
<tr>
<td>Environment in Ayahag</td>
<td>3.71</td>
</tr>
<tr>
<td>Community governance in Sug-angon</td>
<td>3.57</td>
</tr>
<tr>
<td>Community governance in Ayahag</td>
<td>3.47</td>
</tr>
<tr>
<td>Water supply in Ayahag</td>
<td>3.41</td>
</tr>
<tr>
<td>Electricity in Ayahag</td>
<td>3.39</td>
</tr>
<tr>
<td>Church facilities in Guinsaugon</td>
<td>3.39</td>
</tr>
<tr>
<td><strong>Education in Ayahag</strong></td>
<td><strong>3.35</strong></td>
</tr>
</tbody>
</table>

As shown in the case studies, the educational services in New Guinsaugon are very good and were rated "built back better" by those staying in the PNRC units. On average, the community is considered to have achieved full recovery. Most of the residents said that they have fully recovered from the losses in community services such as water supply, electricity, roads, recreational facilities, neighborhoods and governance in New Guinsaugon.

The more important concerns are the elements which received the lowest ratings in the recovery status study, that is, those that were rated at 1.5 or lower, as shown in Table 4.2.

*Status: No Recovery*

Most of the elements of recovery considered by respondents to require greater attention were found in the Nueva Esperanza resettlement. These are elements that had the lowest recovery status ratings. These include trauma and emotional disturbance, loss of household assets, poor water supply, and loss of assets for livelihood and income sources. The respondents from Bgy. Sug-angon and Bgy. Ayahag
mentioned the death of relatives as an area in which they have not recovered. It should be noted that it was Bgy. Guinsaugon that was buried by the landslide. However, the residents of the surrounding barangays were also affected by the deaths of relatives from Guinsaugon. Those from Guinsaugon had more deaths, but their recovery from psychosocial and emotional disturbance was 2.22 compared to Sug-anon, 1.4 and Ayahag, 1.5. It is possible that the psychosocial interventions were focused on Guinsaugon, the area hit hardest, with little attention focused on the other barangays which, though not buried in mud, were similarly grieving the loss of loved ones living in Guinsaugon.

The status of the water supply in New Nueva Esperanza is very alarming. Nueva Esperanza, being located on a hill, is not adequately supplied with water, as its water supply comes from Old Ayahag and is conveyed to the resettlement areas in New Ayahag, New Sug-anong, and New Guinsaugon. As they testified, they sleep very late because they have to collect water in the evening until early morning. The lack of sleep and the fact that there is no adequate supply of water can make people sick and demoralized. This may be why the residents of Nueva Esperanza still feel that they have not recovered from trauma and sickness. This could also explain why Nueva Esperanza has the greatest number of elements on the list of elements with the lowest recovery rankings (Table 4.2).

The water problem in Mahika is also validated by the survey results. The residents claim that they cannot drink the water that comes out from the water reservoir because of the taste and smell. They use the water there only for washing and cleaning, but not for drinking or cooking. They end up buying drinking water from those who deliver water to the resettlement.

<table>
<thead>
<tr>
<th>Elements of Recovery in Resettlement Areas</th>
<th>Recovery Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma and emotional disturbance in N. Esperanza</td>
<td>1.00</td>
</tr>
<tr>
<td>Loss of household assets in N. Esperanza</td>
<td>1.00</td>
</tr>
<tr>
<td>Water supply in N. Esperanza</td>
<td>1.38</td>
</tr>
<tr>
<td>Loss of assets for livelihood in N. Esperanza</td>
<td>1.38</td>
</tr>
<tr>
<td>Death of relatives in Sug-anong</td>
<td>1.40</td>
</tr>
<tr>
<td>Death of relatives in Ayahag</td>
<td>1.50</td>
</tr>
<tr>
<td>Sickness in Nueva Esperanza</td>
<td>1.50</td>
</tr>
<tr>
<td>Loss of livelihood and income in N. Esperanza</td>
<td>1.50</td>
</tr>
<tr>
<td>Water supply in Mahika</td>
<td>1.63</td>
</tr>
<tr>
<td>Loss of livelihood and income in Sug-anong</td>
<td>1.65</td>
</tr>
<tr>
<td>Loss of livelihood and income in Mahika</td>
<td>1.67</td>
</tr>
<tr>
<td>Recreational facilities in N. Esperanza</td>
<td>1.69</td>
</tr>
<tr>
<td>Farm lands in Guinsaugon</td>
<td>1.71</td>
</tr>
<tr>
<td>Roads, pathways in Mahika</td>
<td>1.73</td>
</tr>
</tbody>
</table>

While the infrastructure and the roads are well appreciated by most of the residents of the resettlement villages, the road poses a problem for those living in Mahika. The roads within the resettlement are paved and are in good condition. However, the access road from the resettlement to the central poblacion of the municipality is rough and dangerous. In fact, on the way to Mahika, the researchers for this study had an accident when the motorcycle they were riding fell on its side as it went uphill, hitting the researchers’ legs. Apparently, the arrangement was that the PNRC was responsible for the infrastructure inside the resettlement and the provincial government for the access road outside of the resettlement.

New Hazards and Vulnerabilities in the New Communities

Bgy. Guinsaugon and the six other communities were resettled because the contiguous area was declared a danger zone. The resettlements are far from the mountains that might cause landslides. However, there are new hazards in the resettlement areas brought by inadequate services such as the inadequate water supply and poor road conditions discussed above. These can trigger illnesses and other social disasters.
The environment in Ayahag, though considered to have been "built back better" by residents, is questionable if one is to look objectively at the conditions there. The two creeks at the entrance could be a potential pathway for runoff. There is a creek traversing through the community, posing a danger to some units whose lots are near the erosion area. These are environmental hazards. If one is to look at the overall location of the community, it is situated in a watershed and many housing units are located therein. It is of course understandable that the people there rated the environment in the resettlement area to be high in terms of recovery status, considering that their original community was declared a danger zone. Nevertheless, these environmental elements in New Ayahag require attention.

Low Income, Limited Livelihood Options

The resettlement areas were established with livelihood provisions for the affected families in mind. Both the LGU, NGOs, and the private sector came out with several income generating and livelihood activities. However, many of these economic projects failed or did not become sustainable as shown in the case studies. Some of the projects were not economically feasible, such as fishing projects for beneficiaries who are essentially farmers, handicraft projects without sustained markets, or home gardening projects for people without much land available for planting in the resettlement area.

The current income of the families is very low and falls below the country's poverty threshold level of PHP 5,000 per month in the Visayas and Mindanao area. The poor condition of the affected families can be attributed to factors related to the landslide.

- Production assets such as land and equipment were buried by the landslide
- Gainfully productive members of the family died, leaving orphans and widows
- Living in the resettlement displaced them from possible sources of food in the agricultural area where vegetables, root crops and fruits abound
- The row-house design of the resettlement hinders families from having farm animals which can be sources of food and income
- The farmers have to spend money on transportation to and from their farm land
- It is more difficult to raise farm animals in the former barangay because the families live in the resettlement area, leaving no one on site to take care of the animals and protect them from burglars

The Municipality of St. Bernard is a fifth-class municipality, meaning that it has a low income and less economic opportunities. Beyond the need to respond to the income challenges of the families is the challenge of stimulating economic growth at the macro or meso-level through investments in agribusiness and services. This would have ramifications for the local economy and would help generate employment opportunities.

Appropriate resettlement design

There are many factors affecting the design of the resettlement areas, particularly the shelters: the users’ characteristics, location, technology and resources available. When the number of target users is large and the resources available are limited, the tendency is to maximize the resources so that more people will be able to benefit. This puts stresses on the technology and design to be used, usually resulting in the use of low-cost technologies, design-minimal indoor spaces and low quality materials. This is aggravated by the pressure to complete the shelter as fast as possible because of the need to house the affected families.

The cases of the communities resettled because of the landslide show that Bgy. Guinsaugon was able to move to the resettlement area eight months after the tragedy. Other resettlements were occupied by the families after two years, the latest being September 2008 in Ayahag. This means that they had to stay in a temporary shelter and make do with the facilities therein, while pressure to move to permanent housing was high. The inadequate facilities at the evacuation areas, particularly water and
sanitation facilities, were sources of sarcastic jokes among the residents as they narrated how they waited in long queues to be able to take a bath or use the toilet.

Once in the resettlement areas, they expected that they would no longer be facing such problems. The results of the recovery status survey indicate that the families have recovered from their loss of shelter. Those coming from barangays other than Guinsaugon even said that they received new shelters since their houses were not buried. They just had to adjust to the smaller space, the row design, and not having enough land for their backyard and "dirty kitchen." There were few complaints heard about the design and the space available since they recognized the limitations of the resources and they were not required to pay for their shelter. However, they deplore the design of the drainage, and the septic tanks used were plastic drums that were quickly filled. This has become a health hazard.

**Documentation of Emergency and Recovery Undertakings**

The landslide tragedy brought together in St. Bernard countless organizations, agencies and individuals who collaborated to help. Many projects were co-sponsored by two or more agencies. However, considering the magnitude of project reports and documentation by the various organizations and agencies, the LGU had very little materials on the landslide emergency response and recovery, as compared to the volume of programs and services implemented in the communities. This may indicate that the LGU was not given the reports and documentation, or that the materials were lost or are not systematically tracked and maintained.

### 4.2 Lessons

**Shelter**

- Providing shelter to the affected communities was facilitated by the collaborative efforts and sharing of resources among the various stakeholders. Tasks and responsibilities were divided, with the LGUs providing the land, international agencies providing funds for shelters, local NGOs managing shelter construction, government agencies providing services such as food-for-work and the affected families contributing labor.

- The relocation of each barangay into one resettlement area maintained the identity of the barangay and lessened the impact of social displacement since the neighborhoods were kept intact even in the new setting.

- Each agency managing a shelter program had its own shelter design, resulting in distinct physical differences among the housing units. The provision of a space for a "dirty kitchen" is necessary in the Philippine context.

- The use of black plastic drums as septic tanks is not appropriate and should never again be used in any permanent resettlement community at any time, or in any location.

**Infrastructure**

- The development of infrastructure in the resettlement areas was done through the collaborative efforts of governmental and non-governmental organizations to facilitate the sharing of resources, and thus facilitate the recovery of infrastructural elements that are highly capital intensive. The LGU took care of the roads, NGOs of the water supply and existing electric cooperatives provided the electricity.

- An integrated infrastructure package for each resettlement, which was comprised of a barangay hall, health center, an elementary school and a recreational facility such as an open court, ensured the faster recovery of social services and establishment of barangay governance in the new location.
Facilities not affected by the landslide but used by the people affected by the disaster need rehabilitation as well. The program to rehabilitate the schools that were used as temporary shelter resulted in schools with better campuses and facilities.

There were unexpected technical difficulties in the implementation of the community infrastructure that has resulted in new hazards, such as an inadequate water supply (due to the elevation of the community) and erosion that threatens housing units and a barangay hall.

Environment

The landslide that affected one barangay led to the geologic assessment of the surrounding communities. This led to the declaration of the whole area as a danger zone and the mandatory relocation of all residents. This decision was difficult to enforce, but the reality of potential landslides is high. The resettlement of the six barangays was facilitated by the fear of the people to return to their communities, lest the tragedy in Guinsaugon happen to them.

Rural people are used to gardening as part of their lifestyle, as a recreation and as a way of producing food. However, the design of the resettlement area is very urban-biased, that is with houses that are too close together and with no available space for home gardening. This has an adverse impact on people’s lifestyles, making it difficult for them to secure food from their own produce.

It is imperative to identify the potential hazards in the resettlement areas posed by environmental conditions such as the presence of a river system and the land elevation.

Livelihood

Livelihood is an integrated component in resettlement and there were a number of initiatives promoted by both governmental and non-governmental agencies. However, many projects failed and were not sustainable.

Livelihood projects that continue to exist are those that were in place even before the landslide, such as paper crafts among women, cut flower production and farming.

The communities declared to be danger zones are the production areas of the affected families, producing crops such as rice, coconut, fruits and vegetables. People come back to these communities to continue farming, but with a very high awareness of the hazards and risks involved. Thus, the people go to the community to farm during the dry season but refrain from entering the area during or right after rainfall.

Support services for farming such as transportation, storage facilities, seedling production and storage, collective purchasing of farm inputs and marketing are inadequate. These are projects and services that could directly help people in their livelihood.

Health

The recovery of health services in the resettlements was made possible by the adoption of the existing health delivery system in the country. This was made possible because the identities of the barangays were retained.

Each barangay was provided with a health center that is equipped with the basic equipment for community services. The presence of volunteer community healthy workers helps in sustaining the provision of health services.

The mobilization of volunteers such as the Barangay Health Workers is an effective, participatory, gender sensitive and empowering strategy for the recovery of the health delivery system in the community.
Psychosocial

- The impact of the landslide tragedy is complex as it affects the whole being of the person, the family, the community, the LGU and the larger society. Losing a member or all the members of the family and the whole community is a traumatic experience that requires a holistic and comprehensive program for psychosocial intervention. Until now, the psychosocial element has been the area where people have been feeling the least recovery.
- Psychosocial conditions are aggravated by other factors such as economic conditions, inadequate social services and the way service providers relate to people. As they say, they already lost their loved ones, but their condition is worsened by their lack of income and inadequate social services.
- Externally-based psychosocial interventions are difficult to sustain. They were available at the early stages of the emergency but psychosocial workers eventually left. The ones initiated by the people themselves and those from within the community are the ones that are sustained, and most of those are spiritually-based.
- The death of a person has a spiritual component in the Philippine context. Thus, the strategies adopted make use of religious activities to help heal people's pain and trauma. The problem is that the presence of different faith groups in the community means that some people are excluded from the religious activities of the dominant faith group.
- Psychosocial intervention seems to have been neglected in the communities which were not buried by the landslide, even though their residents had relatives who died in the landslide.
- Play, drama, songs and music are effective psychosocial tools for both the participating children and the audience, both children and adults. Such activities are cathartic and facilitate the release of inner emotions such as pain, hurt, guilt and other sources of distress.
- Inter-marriages among the widows and widowers increased among those affected by the landslide. The need for a companion became very pressing and the resulting marriages help relieve some of the victims' pain.

Education

- The provision of educational services is the one considered by the residents in the resettlement as one with high recovery status, in some cases even better than before the landslide tragedy.
- One concern in the schools is having so few students in class. This has a bearing on the sustainability of classes and support by the local education agency. In Guinsaugon, none of the school children except the few who were not in school because they were out of the village, survived the landslide. Since as school was built in each of the resettlement areas, the school children were scattered across several schools. Four resettlement areas are near each other and each has its own school, in addition to the school in the host community.
- The provision of college scholarships to the orphans is a very good strategy. It is an investment in itself and serves too as a psychosocial intervention. Many youth who were not studying prior to the landslide went back to school because of the availability of a scholarship.

Gender

- The women’s group was one of the groups that suffered because the landslide happened when the group was celebrating its anniversary. The death of its municipal level leaders and members might have caused the organization to cease to exist due to a leadership vacuum, blame from the relatives of women who died in the tragedy, gross demoralization and trauma. However, the women persisted and continued to do the organizing work among women. The group remains vibrant up to this day.
- The federation of women’s organizations at the municipal level provides a support system for the community chapters.
• Women are productive members of the community and their contributions in earning additional income for their families are recognized by their family members. This helps establish their visibility, significance and gender equality.

**Governance**

• The relocation of the barangay as a whole community, complete with such facilities as a barangay hall, health center, elementary school and recreational facility, sustained the operation of the barangay as a local government unit. They are geographically situated in a different location but they operate as a regular LGU with two areas: the former site of the barangay where they have agricultural lands and the resettlement area where they live.
• The tragedy led to the institutionalization of disaster risk reduction in the municipality. Even prior to the enactment of the 2010 law on DRRM that requires the LGU to establish local Disaster Risk and Management Offices, the Municipality of St. Bernard established its own in 2007.
• Leadership initiatives and political will of the government executive is a significant factor in fostering a proactive stance toward mainstreaming DRR in the municipality. Making these initiatives known to the public is a demonstration of government transparency and a mechanism for inculcating positive values and a commitment to their constituents.
• The adoption of a participatory approach ensures community involvement in the assessment, planning and implementation of disaster risk reduction measures and serves as a means for developing the people’s awareness and capacity for DRR.
• Collaboration between NGOs and the LGU has facilitated the coordination and implementation of recovery programs, minimizing the overlapping of functions and services among the NGOs, complementing the services of the LGU and rationalizing resource mobilization.

### 4.3 Moving Forward

The study comes out with two sets of measures for moving forward. The first set pertains to the immediate actions needed to respond to specific concerns in the community. The second set of measures pertains to the development of programs and policies by the LGU or other support institutions such as NGOs that will help improve the lives of the people in the resettlement areas.

#### 4.3.1. Need to respond to the immediate concerns in the community

The quality of life of the people in the resettlement areas is a primary consideration. There are environmental, physical, and socioeconomic needs that have to be addressed in each of the resettlement areas.

**Environment and Infrastructure**

• Water supply in New Nueva Esperanza
• Water supply in Mahika
• Erosion in the creek affecting some housing units in New Ayahag
• Rip rapping of the slope along the road in New Nueva Esperanza
• Assessment of the soil movement in New Nueva Esperanza since there are cracks at the side of the barangay hall building
• Road improvements in New Guinsagon, New Ayahag, New Sug-angon
• Road improvement of the access road to Mahika
• Drainage improvements in all the resettlements, particularly with regard to the septic tank situation
• DRR and climate change adaptation training for all areas
Livelihood Development

- Agri-based enterprise development such as seedling production
- Technical and marketing support for cut flower production
- Technical and marketing support for the production of handicrafts and ornamental items by women
- Computer training and information technology enterprises
- Transportation system from the resettlement to farm lands in the old communities
- Organization of farmers to determine farming interventions

Social Services

- Sustenance of the scholarships to children
- Identification, assessment and assistance to those in need of psychosocial support in New Ayahag, Sug-angon and Nueva Esperanza
- Sports development among the youth

4.3.2. Governance and policy development

- Formalization of the status of the resettled barangays as being comprised of the original barangay with its own identity, people, resources and governance, but physically located in another barangay, the host community of the resettlements.
- Related to the first, the allocation of Internal Revenue Allotment (IRA) to the resettled barangays, with due consideration to the land area of the former barangay and the population in the resettlement (the land area and population are the primary factors in determining the IRA)
- Distribution of certificates of occupancy of shelter units to resettled families by 2011
- Turnover of Mahika by the PRC to the LGU
- MGB guide in response to the practice of residents who are farming lands in the old communities declared to be danger zones
- Establishment of an archive regarding the 2006 landslide and recovery, not in the danger zones but in a safe location to protect the materials
- Policy requiring stakeholders to provide copies of reports, documentation and audio-visual presentations regarding the disaster to the LGU concerned
- Strengthening of the Municipal Disaster Risk Management Office
- Review of standards for shelters in the resettlement areas, particularly the use of plastic drums as septic tanks
CHAPTER 5: CONCLUSION

The 2006 landslide tragedy was the first of its kind in the Philippines, where an entire community, including its people, its productive assets, and its socio-cultural resources, was totally buried. Descriptions at the time indicated that the community had been erased from the map.

In understanding the recovery of the people affected by the landslide, it is imperative to have a grasp of how the people look at well-being, and the components that make up the Filipino as an individual, as a family and as a community. Based on previous studies on what Filipinos consider to be important in terms of their well-being, their faith in God and their love of family are the top most elements (Sycip, de Asas, Luna, 1998). This can help explain the way the affected families and their communities responded to the disaster, that is, their grieving for their lost family members, the adoption of spirituality as a means to recover from the trauma and their need to create new families through remarriage.

Various levels of recovery have been achieved on various elements of recovery affecting the families and resettled communities. The elements with the highest recovery status rankings are those that pertain to the provision of community services and facilities such as health, education, recreation and infrastructure. The elements with the lowest recovery status rankings are livelihood opportunities and psychosocial services. There are some variations across the resettlement areas. While some communities consider their water supply services to have been completely recovered, others report that their water supply is among the least recovered elements.

The principle of "build back better" is definitely a universal call and has to be pursued in all recovery endeavors. However, there are conditions in which this principle would be difficult to realistically achieve. In cases where all the members of the family died in the disaster except for a lone survivor, it would be impossible and insensible to say that the survivor will be able to have a better family than before. In cases where all of the assets of a family, such as their agricultural fields and a huge house, have been buried and their community is declared to be a danger zone such that they cannot recover what they had before, the principle of "build back better" would be difficult to achieve. This suggests that some further reflection is needed to either identify the limitations of the principle, or to identify those areas of concern in which "build back better" can best be applied.

This tragedy highlights some good practices in disaster response and recovery, showcasing the bayanihan (volunteerism and collective work) and resilience of the Filipinos, and the collaborative efforts of the various stakeholders during this emergency situation. There was an outpouring of resources and people who were willing to work as volunteers from the local communities, the national and international community, government agencies, NGOs, private corporations, civic organizations and the general public. Support came from humanitarian groups and other sectoral service providers. However, the number of service providers dwindled as time went by, with few left behind that were committed to the ongoing work of recovery.

There are areas of concern in the resettlement areas that need immediate attention. These are hazardous situations that could lead to disaster if not addressed. This study affirms that disaster recovery has to be advocated for and mainstreamed in national and local development planning, education, and mass media programs so that the principle of "build back better" can be achieved. Recovery strategies have to be proactive in projecting possible disaster scenarios and their corresponding responses, such as the organization of recovery mechanisms, allocation of resources for recovery, identification of possible relocation sites and creation of a system for facilitating coordination and collaboration among stakeholders. Early warning systems for landslide hazards are available and should become a part of the preparedness and recovery efforts in this region and others exposed to landslide risks.
The efforts of the international community to focus on disaster recovery is a strategy itself in disaster risk reduction. That community is uniquely positioned to influence governments and humanitarian aid organizations to institutionalize disaster recovery strategies.
References


Assistant Municipal Planning and Development Coordinator-Designate 2008.


Barangay Development Agenda of New Guinsaugon,2008


Barangay Development Agenda of New Magatas, 2008.

Barangay Development Agenda of New Nueva Esperanza, 2008


Citizen Disaster Response Center (CDRC) and Leyte Center for Development (LCDE) 2006. "A Preliminary Report on the Landslide in St. Bernard, Southern Leyte".


Dizon, Antonieta; Benjamin, Michael; Herrera,Odyssey.2007. A Research on Natural Resource Management as an Approach to Disaster Mitigation. ACCORD.


http://en.wikipedia.org/wiki/St._Bernard,_Southern_Leyte

http://www.defense.gov

http://www.jschina.com.cn

http://www.uwec.edu/iolhm

http://wwwen.wikipedia.org/wiki/Southern_Leyte

Information and Communication on Guinsaugon Landslide Tragedy, Southern Leyte, Philippines, UNDAC, 2006


Murallos. "End of Course Project."


Reyala, Jean; Nizce, Zenaida; Martinez, Florida; Hizon, Nelia; Ruzol, Carolina. 2000. Community Health Nursing Services in the Department of Health, Philippines. Published by the National League of Phil Government Nurses, Inc. Manila, Philippines.


Telecoms Sans Frontieres (TSF) with United Nations Disaster Assessment and Coordination (UNDAC) 2006.


