

## **RAPID ASSESSMENT REPORT ON TYPHOON REMING DISASTER**

**4-6 December 2006**

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### **Background information**

The assessment team focused its visit to the municipalities affected by mudflows in Albay, namely Legazpi City, Daraga, Camalig, Guinobatan and Sto. Domingo. A member of the team, however, also went to Pili, Camarines Sur to get data from the provincial government.

### **Characteristics of the crisis and baseline data:**

- After Typhoon Milenyo (international code: Xangsane) battered Southern Luzon on September 25, 2006 another yet more powerful typhoon, Reming (Durian), lashed out at the same general area on November 28, 2006. Milenyo's 160 kph strength and Reming's 195 kph were like a one-two punch that knocked out most of the provinces in the Bicol and Southern Tagalog regions.
- What made Reming even more devastating was it packed an extraordinary volume of rainfall recorded at 466 mm, considered the highest in the area since 1967. This was even higher than the 370 mm stirred by four weather disturbance in 2004 that triggered massive flooding and landslides in Quezon and Aurora province.
- In Albay alone, 600,000 persons or 50% of the 1.2 million populations is estimated to have been affected. This is roughly 100,000 households. An estimated 40% of these are children. Albay has 15 municipalities & 3 cities with 719 barangays
- Although evacuation order was given in the afternoon before the typhoon hit, it is the impression that this was not heeded to. As people just went through Mayon and Milenyo and survived them, they thought they could ride this one out, too.
- The combination of the heaviest rain in memory, type 4 winds, recent typhoons and a typhoon which veered off course to the south brought another element of surprise that led to the disaster.
- Majority of the people are not in the evacuation centers, but are in or around their destroyed houses to salvage goods and start rebuilding efforts. As of Dec 5, there are 50 evacuation centers in Albay with 15,482 families and 76,892 individuals.
- Most affected are Guinobatan, (with more than 300 casualties, concentrated in Barangay Maipon, missing as of the municipality's last count), Daraga, Legazpi and Sto. Domingo. Areas even beyond the 8 km danger zone of Mayon were also severely affected by Reming.
- Most recovered bodies were decomposing, and difficult to identify. These bodies were buried in shallow, individual, tagged graves.
- The Provincial Government sees the need for food support of the affected population for two weeks as crops and other means of livelihood were damaged. On the third

week, transition sets in where the focus will be on shelter (targeting 100,000 houses). Relocation to safer sites is also being planned now.

- There is still general power outage in the Bicol region. Government offices rendering emergency services rely on generators to sustain operations. The Provincial Government and the Transmission Company (TRANSCO) foresees that power will be restored in the City on Dec 16, 2006 while major roads are expected to be cleared by Dec 8, 2006. Power restoration and road clearings outside of Legazpi might take months though. In other areas, it will depend on how fast electric posts and lines can be restored by the electric companies.
- Since Mayon's ash fall this year and the aftermath of Milenyo, more than PhP 20 M from the calamity fund was spent by the local government of Albay leaving the Province with barely PhP 5 M in calamity funds to cope with the effects of Reming.

### Number and Status of Affected People

DSWD and OCD R5 declared the number of affected barangays, families and persons in the Bicol region as of 5 Dec. 06 as follows:

Affected Province	Affected Barangays	Affected Families	Affected Persons	Evacuation Centers	Remarks
Albay	190	64,946	343,508 *	50	15,482 families and 76,892 individuals
Camarines Norte	79	15,069	79,311	81	All affected families and individuals served (2,896 and 14,545 respectively) were those in the evacuation centers
Camarines Sur	472	129,895	602,916	159	10,130 families and 58,918 individuals, both inside and outside the evacuation centers
Catanduanes	82	12,023	62,087	3	All affected families and individuals served (109 and 515 respectively) were those in the evacuation centers
Masbate	44	5,451	28,433	0	0
Sorsogon	6 (all in Municipality of Gubat)	3,143	15,871	6	All affected families and individuals served (171 and 1026 respectively),

					concentrated in Gubat and Sorsogon City, were those in the evacuation centers
<b>Total</b>	873	230,527	1,132,126	299	

\*Albay's projection is 50% of the 1.2 million population are affected but some barangays have not yet submitted their reports due to the severity of the damage on communication and infrastructure.

### **Displacement**

- With 471 casualties, 657 missing persons and at least eight barangays buried in Albay, there is a great probability that a number of children were left orphaned partially or totally.
- 70,000 to 100,000 houses were totally damaged with the survivors moving in with relatives or to evacuation centers. While the PSWDO was advised to come up with a master list of orphaned and displaced children, the MSWDO and barangay captains claim that as a standard operating procedure, they bring orphaned children to the nearest of kin.

### **Health & Nutrition**

- The Province is receiving quite some assistance at this moment already. Army medical team, other medical teams from different provinces are setting up field hospitals.
- The Provincial Health Officer is able to dispatch four medical teams on Tuesday, 5<sup>th</sup> Dec, for local assessments on food, medical supplies, water and sanitation situation and medical infrastructure.
- It is suspected that many health facilities, including barangay health stations are not functioning anymore, but that staff is still providing services. Around 1,000 injured individuals have been counted, many with lacerations, cuts and abrasions. This indicates chances for severe infections within the next few days. Malaria is not a public health problem.
- Food security for a large size (50%) of the population is in danger in the short term, and probably for a significant proportion of the province in the medium term.
- Capacity for other services to be assessed on the 5<sup>th</sup> Dec: Vaccinations, staff, facilities, WASH and shelter
- Increased disease surveillance is also being done.
- In Guinobatan, 77,000 people were affected; almost 100% of houses were damaged or destroyed.
- All clinics were closed in Guinobatan. Open air clinics were opened as the only functioning unit in the areas. All available drugs were taken and being dispensed.
- There were long double lines of patients in Guinobatan, no one in critical condition, but especially the elderly have psychological/stress affects. There were no cases of

obvious malnutrition and/or serious disease. Most injuries are superficial cuts, lacerations and abrasions, well bandaged and managed.

- Medium term expectations: cases of ARI and GI to increase, drugs running out, WASH concerns.
- Long term issues: rehabilitation of clinics and schools. WASH, learning.
- Short term: Medium sized Tent(s) for clinic and food kitchen); medicine kits. Additional ORS and basic antibiotics, water tank(s), water treatment tabs.
- Red Cross maintains bandage clinic and center for lost relatives, together with the DSWD.
- In Camalig, 80% of houses were destroyed. Of 31 BHCs, 60% were destroyed. 70% of all people is indigent and or farming and will have major problems as fields are destroyed.
- Vaccines were protected by bringing them to the cold room at the regional level, as typhoon warning was raised the day before. The municipality of Camalig intends to do clinic based vaccinations on 6 December (routine). OIC Plans for health & nutrition education, feeding programmes for 1-5 yrs and income generation projects.
- CHD V has taken decision to start Thursday 7 Dec with vaccinations of children < 15 yrs for measles and polio. Supplies are already available from existing stocks at regional level.
- A mission is to be dispatched to Catanduanes, where 12 deaths have been reported due to the typhoon (no mudslides), with only 1 evacuation centre reportedly with 7 families.
- Emergency functions in hospitals are severely affected by the widespread power disruption. Some hospitals in Albay are lucky to have a working generator while some hospitals, like the 11 devolved in Camarines Sur, could not afford prolonged use of their generators as they conk out after a couple of hours' use.
- In Camarines Sur, even before the typhoon, child malnutrition rate was already high at 56,000 children aged 6 years old and below.
- Still in Camarines Sur, there is no working facility for cold chain storage due to the absence of a continuously functioning generator; vaccines have been shipped to the regional center for storage and safekeeping.
- Eleven hospitals in CamSur need water tanks for daily hospital use as there is no water supply (patients are referred to other hospitals for the simple reason of having no water).

### **Water and Sanitation**

- The piped water systems in some of the municipalities like in Daraga and Guinobatan have been damaged. Many of the families in these communities are relying on dug wells/hand pumps for their water needs.
- Manila Water Company deployed a water filtration machine to Camarines Sur on 6 December. The machine reportedly is capable of purifying 4,000 liters of water per hour. A similar machine stationed at the OCD Region 5 office will be sent to Guinobatan and another was reportedly being sent by another water company in Albay. Another water filtration machine was reportedly pledged by the UN during President Arroyo's visit to the area on 5 December.

- Some fire trucks are also delivering water in evacuation centers although it was not ascertained how regular were the deliveries.
- Water tests were being conducted on 5 December.
- Water tanks and water purification tablets are being requested. Request is for at least 2 water tanks for each municipality. (There are a total of 15 municipalities and 3 cities; 719 barangays in Albay.) Also requested is at least 1 water tank for each barangay. The Provincial Government re-deployed some of the water tanks provided by UNICEF during the Mayon eruption to the affected communities.
- Most households would still have functional indoor toilets. The hygiene situation in evacuation centers, however, remains critical because of lack of adequate sanitary latrines and water facilities. Some of the latrines in the schools being used as evacuation centers are non-functional because they are clogged or the septic tanks are already filled by sludge.
- Mounds of garbage litter the streets of Legazpi City and Daraga. Garbage collection was supposed to start on December 7, according to provincial authorities.

### **Shelter**

- There were several existing evacuation centers but the Province is dissuading donors from putting up additional evacuation centers as they are encouraging donors to assist the people in rebuilding their homes. A donor donated 10 big tents per municipality but they are hardly being used.
- Relocation to safer sites may be necessary for some barangays.
- Request is for 100,000 small tents or tarpaulins for each family.
- Family packs consisting of pots, stoves, plates etc. aside from the individual tarpaulins would help the families start over again.
- Legaspi, Daraga and Sto. Domingo already have relocation sites. Relocation site for Guinobatan is still to be discussed.

### **Education**

- Albay has 25 school districts with 461 public elementary schools and 85 secondary schools. 487 schools or 90% of the total number of schools have 90% damage. Instructional and learning materials in all schools were damaged and classes were suspended. School buildings that remain standing need major repairs.
- An estimated 168,502 students were affected. DepEd still has to determine the status of teachers.
- In Camarines Sur province, 85% of all public elementary and secondary schools incurred major damages disrupting the classes of an estimated 283,000 students.
- Classes have been suspended until beginning January, but exit strategy for evacuees is always problem.

### **Child Protection**

- Neither the DSWD nor the LGUs are keeping tab of children orphaned or separated by the disaster. They have been advised to look for these children as they are the ones most in need of protection.
- The sheer number of casualties and the extent of devastation and displacement are factors for psychological distress. Children and their families in the most affected areas would be the most in need of psychosocial help.
- The National Center for Mental Health (NCMH) was reportedly poised to provide psychosocial assistance. Trauma counseling, however, should not be the point of departure for psychosocial help. Activities that would re-introduce structure and normalcy and empower children and their families in a safe environment would help majority of children over time.

### **Infrastructure and Telecoms**

- Power, telecommunications and water supply facilities have been damaged.
- Landlines have not been fully restored but Globe and Smart phones are generally working in city and municipal centers; signal however is weak in some areas.
- Mounds of sand and other debris are still present along the main highway in some sections of Daraga, Camalig and Guinobatan municipalities; however the road remains passable with some sections rendered as one-lane.
- A substantial number of electric posts have been toppled and some lay by the roadside, hindering traffic flow in main roads as well as secondary roads.
- In Catanduanes, cost of damage to infrastructure and properties total to PhP 365.8 M. FICELCO distribution lines, PASO, IPHO, DPWH and TESDA infrastructure were damaged.
- Single side band radio is the only working communication line between regional offices and the Catanduanes provincial government.

### **Agriculture**

- The agricultural sector of Albay and Camarines Sur provinces incurred huge losses estimated to reach P900M, representing damages to both land farmers and fishing communities. Provincial Planning Officers are considering the option of providing agricultural start-up inputs for both farmers and fishermen in the worst hit areas. This package costing P15, 000 would consist of hybrid seeds and basal fertilizer (first layer) good for one hectare of land per farmer-beneficiary.
- Start-up inputs for fishermen would be fishing nets and non-motorized boats for fishing cooperatives. This would allow severely affected farming families to have something to start with while dealing with their day-to-day needs.
- Damage to other sectors is as follows: fish: PhP 46 M, livestock: PhP 37 M, infrastructure: PhP 50 M.

Damage to agriculture in the region is presented as follows (DAR5):

<b>Province</b>	<b>Rice (PhP M)</b>	<b>Corn (PhP M)</b>	<b>Fruits/ Vegetables (PhP M)</b>
Albay	3.9	11.4	4.2
Camarines Norte	.88	-	36.4
Camarines Sur	79.8	5.2	79
Catanduanes	1.2	-	9.4
Masbate	2	-	.6
Sorsogon	5.7	-	-

### **HIV/AIDS**

- There are no reported cases of sexual abuse and rape. Minimum universal precautions in safe blood supply, sterilization and disposal of sharps and gloves are being practiced.

### **Access, security and threats**

- Access to affected areas does not pose any operational barrier. Government officials from the provincial down to the community levels are very cooperative and extremely helpful.
- Security forces from both the military and police are involved in the emergency relief operations in the area of logistics transport, security of affected areas and evacuation sites, traffic management and manpower augmentation for relief supply distribution.
- No security escorts are required for logistics convoy. There has been no incident of looting or disorderly incidents during relief distributions. There are no restrictions in movement of humanitarian workers in the area.

### **Partners**

- The Albay Public Safety and Emergency Management Office is coordinating the entire relief operations with no less than the Provincial Governor maintaining a post in the office.
- The number of actors involved in the emergency relief has substantially increased – this applies to both local/national NGOs and INGOs (OXFAM-US, OXFAM GB, WORLD VISION, CARE, Mercy Malaysia, TSF, etc)

### **Logistics Management and Operations**

- There is very limited logistics management capacity on the ground in Legaspi City and Pili, and Camarines Sur airports (the same is true in Virac airport, Catanduanes).
- In the event that emergency relief operations goes on full swing with most supplies coming in through C-130 flights, others by trucking and navy ships (for Legaspi and Virac), the local capacity will surely be overwhelmed as there are no dedicated persons/units for this specific task – management and tracking of supplies, temporary warehousing, etc.

- With the absence of temporary warehouses that will receive and track arriving supplies and from which turn-over of goods to PDCCs will be staged, Rub Halls (WFP tent warehouses) in the vicinity of each airport (Legaspi, Pili, Virac) might be useful in this respect.

## RECOMMENDATIONS

<b>Food Supply and Agriculture</b>	
<b>Immediate Action</b>	<b>Short to Medium Term Action</b>
<ul style="list-style-type: none"> <li>▪ <b>Support logistical requirements and provide technical assistance to LGUs for the quick distribution of food aid-</b> Albay province has received tons of emergency food relief and the challenge is to bring these to the neediest populace the quickest possible time.</li> <li>▪ <b>Provide food aid in other affected areas-</b> Other affected areas like Camarines Sur and Catanduanes are not receiving the same kind of assistance and attention as Albay. These areas are also equally in need of immediate relief.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Continue to provide food aid to the most vulnerable sectors-</b> Families of subsistent farmers and small fishermen in the affected areas are the most vulnerable to starvation as they most likely would have no income nor food supply for the next few months. Those who are living in isolated communities far from urban centers should be prioritized.</li> <li>▪ <b>Provide inputs and tools to affected small farmers and fishermen-</b> Seedlings, farm tools, fishing equipment are some assistance these most affected sectors would need to help on the way to recovery.</li> </ul>

<b>Shelter</b>	
<b>Immediate Action</b>	<b>Short to Medium Term Action</b>
<ul style="list-style-type: none"> <li>▪ <b>Provide materials for temporary shelter-</b> Many of the schools that have traditionally been used as evacuation/IDP centers have also been damaged and made uninhabitable. Some communities, particularly those inundated by mudflow, may need family tents but most other communities would prefer indigenous materials to rebuild their houses or makeshift huts.</li> <li>▪ <b>Support immediate repair of damaged schools that can be used as safe temporary shelters/evacuation</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Provide materials for core shelter-</b> Many families in rural communities would just need inexpensive materials like GI sheets, CW nails, nylon cords and indigenous materials like nipa and sawali shingles to rebuild their homes.</li> <li>▪ <b>Support permanent relocation of communities in hazardous zones. Provide technical assistance in sitting new camps-</b> New communities will have to be established in safe areas in lieu of those located in dangerous areas. This would entail support for basic public utilities, i.e. power, water and</li> </ul>



<p><b>centres-</b> More evacuation centers may need to be opened to decongest existing ones and provide shelter to the homeless. Schools that would just need minor repairs to make them safe for refuge can be prioritized.</p> <ul style="list-style-type: none"> <li>▪ <b>Provide family care kits (blankets, sleeping mats, cooking and dining wares, clothes) to families whose houses have been destroyed-</b> Thousands of families have lost their belongings. They would need these basic items to help themselves and take care of their family members.</li> </ul>	<p>infrastructure, i.e. schools, health centers.</p>
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<b>Health and Nutrition</b>	
<b>Immediate Action</b>	<b>Short to Medium Term Action</b>
<ul style="list-style-type: none"> <li>▪ <b>Support the reactivation of regular health care services by</b> <ul style="list-style-type: none"> <li>○ <b>Providing emergency health kits and essential drugs to health facilities to all affected areas</b></li> <li>○ <b>Providing power generators and cold chain equipment and supplies</b></li> </ul> <p>Restoration of electricity in the Bicol region may take weeks even months because of the extensive damage to power lines. Power generators can help revitalize the services in hospitals and RHUs and re-establish cold chain. Health facilities, including hospitals and rural health units have great demand for essential drugs like ORS and antibiotics.</p> </li> <li>▪ <b>Support and coordinate the establishment of disease and nutritional surveillance system in all affected areas-</b> Health facilities must be enabled to monitor communicable diseases particularly diarrhoeal</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Support the reactivation of regular health services by</b> <ul style="list-style-type: none"> <li>○ <b>Providing essential medical supplies, equipment and kits to Barangay Health Stations/Health and Nutrition Posts and midwives/BHWs</b></li> <li>○ <b>Supporting the repair/re-construction of health facilities-</b> Health services must be restored down to the community level. Supplies and equipment that may have been damaged or used up need to be replaced.</li> </ul> </li> <li>▪ <b>Support supplementary and therapeutic feeding centres, if needed-</b> The nutrition survey would determine if feeding centers are needed for undernourished infants, young children and pregnant and lactating mothers. Since the affected areas are among the poorest, undernutrition would likely be prevalent.</li> </ul>

<p>diseases, ARI and measles and cases of undernutrition among infants, young children and pregnant and lactating mothers in the affected populace.</p> <ul style="list-style-type: none"> <li>▪ <b>Encourage and support the conduct of immunization campaigns particularly on measles and tetanus toxoid-</b> Measles vaccination should be done to children from six months to 14 years in the affected areas. This expanded coverage would require additional supplies of measles vaccines, disposable syringes and cold boxes.</li> </ul>	
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<b>Water, Sanitation and Hygiene</b>	
<b>Immediate Action</b>	<b>Short to Medium Term Action</b>
<ul style="list-style-type: none"> <li>▪ <b>Support trucking in of drinking water in affected areas and provide water tanks (with tap)-</b> These water tanks can be placed in strategic and accessible locations as a ready source of safe drinking water. Water purifiers can be provided to ensure that the water is fit for drinking.</li> <li>▪ <b>Provide affected families with family water kits (water containers, water purification tablets and bars of soap)-</b> These would help families have water safe for drinking, cooking and personal hygiene.</li> <li>▪ <b>Support the repair/improvement of existing water systems in evacuation centers-</b> Some evacuation centers have dug wells that would only need minor repair or new handpumps to be operational.</li> <li>▪ <b>Support construction of new latrines and the repair/siphoning of sludge of existing toilets in evacuation centers</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Help restore water sources-</b> Enough resources need to be provided for the restoration of water systems and the development of new ones in the most affected communities</li> <li>▪ <b>Provide families who have lost their houses with family sanitation kits (shovel, pick mattock, squat type pre-fabricated toilet) –</b> These could be a part of the shelter assistance for those whose houses were totally damaged.</li> <li>▪ <b>Support construction of additional latrines and water facilities in schools that are usually used as evacuation centers-</b> The reconstruction of these schools and the provision of these facilities should take into consideration not only the projected student population but the number of families who may seek refuge during times of disaster.</li> </ul>

<p>– Many toilets in evacuation centers are not functional because their septic tanks are filled to capacity.</p>	
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<b>Education</b>	
<b>Immediate Action</b>	<b>Short to Medium Term Action</b>
<ul style="list-style-type: none"> <li>▪ <b>Support the rehabilitation/ reconstruction of schools-</b> Schools are the traditional refuge of communities during disasters. Quick repair to make them safe and habitable can ease the congestion in some evacuation centers. These can also provide much needed income or food (if food for work scheme is adopted) to affected community members who can be tapped for manual labour.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Provide teaching and learning materials-</b> Books, school equipment and educational supplies were destroyed in many schools. These have to be replaced. Students have to be provided with basic school supplies to motivate them to go back to school.</li> <li>▪ <b>Support the rehabilitation/ reconstruction of day care centers-</b> Early childhood care and development should not be overlooked. They should be supported to normalize their services as quickly as possible.</li> </ul>

<b>Protection</b>	
<b>Immediate Action</b>	<b>Short to Medium Term Action</b>
<ul style="list-style-type: none"> <li>▪ <b>Encourage social welfare offices to identify and locate children who have been separated, unaccompanied and who have lost one or both parents or their guardians. Provide immediate support to survivors.-</b> The high number of casualties not only include children but parents as well. Orphaned children have to be identified to ensure that they are safe and taken cared of by responsible adults.</li> <li>▪ <b>Support the establishment of child-friendly spaces-</b> In the meantime that schools and day care centres are not yet operational, a safe place where children can play and participate in recreational activities have to established. These</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Support activities that would enhance resilience and positive coping strategies of communities and families.-</b> This may involve training of service providers and parents and group activities for children and their families.</li> </ul>

<p>can be supervised by DCWs, teachers or NGO volunteers.</p> <ul style="list-style-type: none"> <li>▪ <b>Work with LGUs and camp authorities to ensure effective security for women and children</b> – Disasters increase the vulnerability of girls and women to sexual and gender-based violence because of separation, lack of privacy, etc. Officials should be made conscious of these so preventive measures can be instituted, i.e. separate sleeping quarters in evacuation centers, adequately lit toilets, etc.</li> </ul>	
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<b>Logistics Management and Operations</b>	
<b>Immediate Action</b>	<b>Short to Medium Term Action</b>
<ul style="list-style-type: none"> <li>▪ <b>Provide support for the logistical requirements of delivering aid to the neediest populace-</b> LGUs and other humanitarian organizations may need support to deliver relief goods in remote communities.</li> <li>▪ <b>Provide technical assistance for the coordination of humanitarian assistance-</b> Helping LGUs keeping basic documentation and information sharing on who is providing what, where, when and how would already be a big boost in coordination.</li> <li>▪ <b>Help set up ICT facilities (TSF-type) in some provincial centers-</b> This will provide telephone/ fax/ internet capacity for urgent communication and regular exchange of information.</li> </ul>	

## **Sources of Data**

Governor Fernando Gonzalez, Albay

Cedric Daep, Department Head, Albay Public Safety and Emergency Office

Dr. Luis Mendoza, PHO Albay

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Mr. Epifanio Buela, Albay Division Superintendent

Director Arnel Capili, OCD5

Mayor Herbie Aguas, Sto. Domingo

Ms. Lourdes L. Llana, RSW, MSWDO, Camalig

Mr. Noel Munoz, District Administrator, Camalig

Ms. Merlita Baduria, District Supervisor, Guinobatan

Dr. Badet Carlos, PHO, Camarines Sur

Mr. Bing Tolosa, Provincial Planning Officer, Camarines Sur

Mr. Adam Oliquino, Executive Assistant of Mayor Juan Garcia, Guinobatan

Director Jim Rebutillo, DSWD V Regional Director

Ms. Marlene Homo, Assistant CSWDO, Legazpi City

Evacuees staying in Guinobatan East Elementary School and Ibalong Centrum for Recreation