



Tropical Storm Sendong 2011

ShelterCluster.org

Coordinating Humanitarian Shelter

REACH ASSESSMENT FACT SHEET #2

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REACH



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SUMMARY

To ensure a better response to shelter needs, the Shelter Cluster conducted a technical and socio-economic assessment of housing needs between 22 and 28 January.

Data was collected from 62 barangays across 10 municipalities, covering almost all affected areas. The surveys and focus group discussions considered all of the areas of concern referred to above. Specific needs of female heads of households; pregnant and lactating women; separated, unaccompanied and orphaned children; and those who are unable to rehabilitate or reconstruct their homes independently have also been recorded.

Damage to housing was assessed and classified in accordance with the following categories: i) no damage; ii) flood and mudflow damage; iii) partial, minor damage; iv) partial, major damage; and v) totally destroyed or washed away. Damage to as many as 70% of homes was recorded of which 30% of have been completely destroyed or washed away. Of those with housing damage, 77% are living at or below the poverty line. Many of the partially damaged houses are flood and mud-damaged and require debris removal and cleaning, while the remainder have limited structural damage. Major damage was reported for only 14% of those houses reported as being 'partially damaged'.

The findings of this assessment will enable a better informed inter-cluster strategy to be developed for the rebuilding of homes and livelihoods, while also ensuring basic needs are met.

BACKGROUND

According to the NDRRMC, Tropical Storm Sendong (a.k.a. Topic Storm Washi) entered the Philippine Area of Responsibility as a tropical depression on 15 December 2011 and shortly intensified into a tropical storm. As it crossed the Philippines, the storm affected seven regions: IV-B (MIMAROPA), VII (Central Visayas), IX (Zamboanga Peninsula), X (Northern Mindanao), XI (Davao), XIII (Caraga) and ARMM (Autonomous Region in Muslim Mindanao). Region X includes the most heavily affected areas of Cagayan de Oro City and Iligan City.

As of 24 January 2012, the Department of Social Welfare and Development (DSWD) estimates that the total number of affected persons from Sendong in Region X is 384,857 people or 69,755 households. Specifically, around 284,515 people are displaced – with capacity in the evacuation centers being stretched to 21,862 people or 4,738 families. The remaining displaced persons are in makeshift shelters on their damaged properties, with host families, renting of properties, or without access to any shelters. A total of 39,400 family homes were damaged in Region X, mainly in Cagayan de Oro and Iligan cities (Totally – 11,427 /Partially – 27,973).

METHODOLOGY

The key objective of the assessment is to **contribute towards the effective and equitable provision of emergency shelter assistance to the affected population by ensuring that shelter actors have adequate information for designing and funding programs.**

The shelter assessment includes four components of data collection and analysis. First, there are the secondary data sources of governments and agencies. Second there are the household surveys that serve as the backbone of the assessment. Thirdly, there was focus group discussions in each of the communities visited. And finally, there is the GIS and mapping component of all the aforementioned data collected, collated and analyzed.

All of the research's raw data, including databases, reports, web-maps, static maps, government and other secondary data, questionnaires, fact sheets and more can be accessed through the REACH portal of IMPACT Initiatives: <http://philippines.reach-initiative.org/>

All static maps, reports, fact sheets and other articles can be accessed through the Shelter Cluster at <https://www.sheltercluster.org/Asia/Philippines/TropicalStormSendong2011/Pages/default.aspx>

This assessment focuses on Region X of the Philippines, the area where the majority of the impact of Sendong was experienced.

The process for selecting the communities included reviewing the list of affected municipalities by DSWD in their Disaster Reports (December-January 2012). Throughout this process, two municipalities were completely removed due to existing statistics not reflecting the on-ground reality. Specifically, in Malitbog and El Salvador City municipalities, both administrations noted that there was no shelter damage within their area.

The Macasandig Barangay was excluded from home-based surveys, and only evacuation centres and temporary shelters were included. This was because Catholic Relief Services had undertaken an assessment in Macasandig, and as the only implementing agency there it was not required to be reassessed.

Security and transportation challenges unfortunately rendered some areas inaccessible to the assessment team, particularly in Iligan City. Mainit, Lanipao, Dulag and Kalingangan barangays were simply inaccessible due to roads being washed out, bridges collapsing, fear of kidnapping, and the like.

ASSESSMENT RESULTS

DEMOGRAPHICS AND VULNERABILITIES

A total of 3,945 households were surveyed as part of this assessment, over 10% of families with houses that had been affected. This represents over 19,000 individuals. The age profile of respondents highlights the relative young nature of the Philippines in general, but also the number of children that have directly been affected. This includes 11% being children under the age of five and 3% being infants. Moreover, the vast majority of those affected are working-age people, highlighting the intricate relationship of livelihoods needs as well as shelter needs. **A large number of those affected are considered vulnerable households.**

Moreover, those in temporary shelter arrangement are less likely to have alternative coping mechanisms such as being able to rent, live with relatives, etc.

SOCIO-ECONOMIC PROFILE

The primary livelihoods of those that have been affected and surveyed is agriculture and skilled / unskilled labour. Moreover 13% of all respondents claim to have no income. Of the households surveyed, 77% claim to be living below the poverty threshold, exceeding the 32% poverty rate typical for Region X. **64% of households who reported an income stated that their income had declined by over 50%, while only 11% reported that their income remained unaffected.**

The above information is supported and emphasized by **the significant number of affected households that stated they are not completely able to meet the family's basic needs.** While before Sendong 554 households noted that they could only partially cover basic family needs, this number has almost tripled to 1430 after Sendong, reflected by the fact that incomes have been severely affected.

TECHNICAL ASSESSMENT

It is clear that as of 20th of January there are approximately 4,700 households in evacuation centers or about 12% of those with affected houses.

While reports have indicated that many families have opted to live with family and friends, the findings of this assessment is that **there is a significant portion that are living in temporary shelters or damaged houses on their own property.** This is often due to informal property rights resulting in families unwilling to leave their land for fear of not being able to return, or because they have no alternative coping mechanism.

Sendong created significant floods and mud flows in particularly urban areas of Cagayan de Oro and Iligan, as well as impacting on remote and rural communities – including those in higher altitudes that were more likely to be affected by flash floods or landslides. **The most significant impacts were felt by those that did not have adequate housing, such as wooden shacks (57%) and wooden houses typically with concrete foundations / bottom floors (29%).**

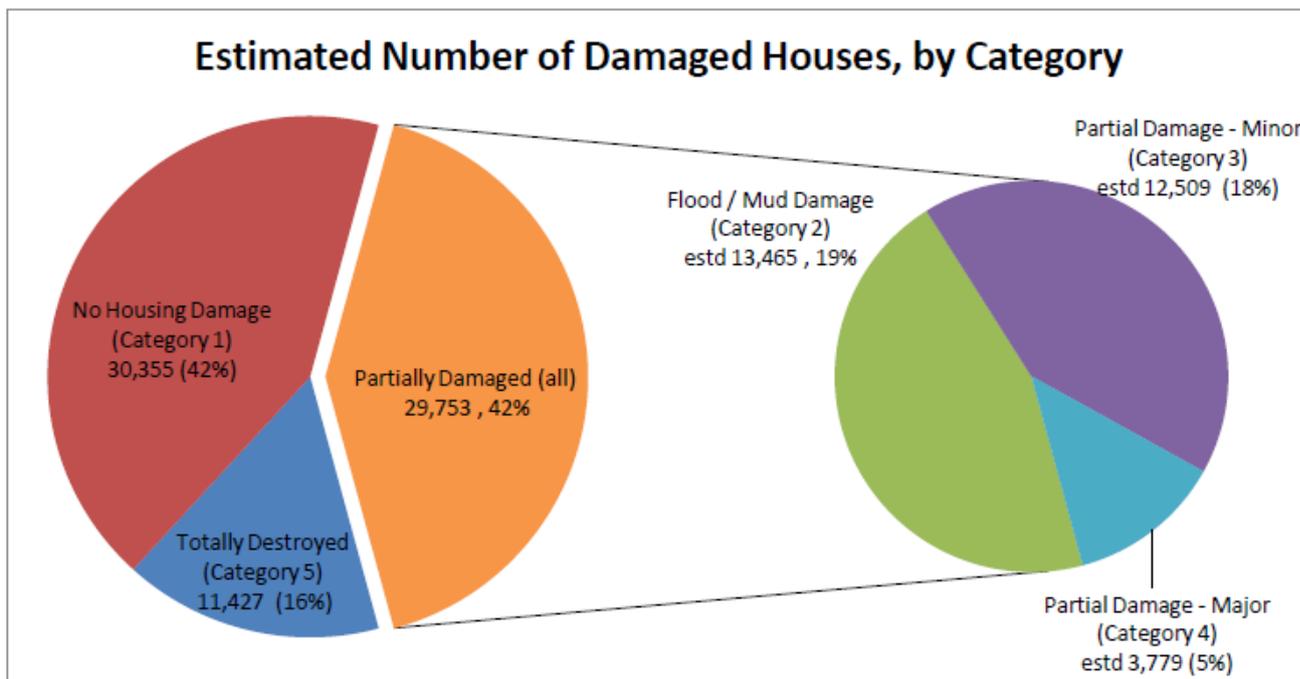
This assessment has identified that most of the partially damaged houses have relatively minor impacts, requiring smaller levels of support. This typically includes cleaning of mud damage, small repairs of flooring and roofing (where the water has been extremely high), and rehabilitation of fixtures such as doors and windows. **Only 13% of partially damaged houses were assessed as requiring major rehabilitation,** such as walls, floors, roofs, and potentially support structures. There is also significant variation of the type of damage based on the type of house.

One of the defining aspects of the Sendong shelter challenge is the Government-declared No Build Zones¹. Government calculations state that there are approximately 2700 households in Cagayan de Oro within the No Build Zones. The assessment asked respondents whether their houses are located in the No Build Zone. Unsurprisingly, a very low number of respondents in Iligan stated that their houses were in No Build Zones as they have not been clearly demarcated nor have households been made aware of their locations².

The **presence and scale of debris** was included in the assessment on the behest of those involved in the cleaning. The main type of debris that is creating a significant challenge for the recovery and relief effort is mud.

Households' Income Sufficient for Covering Basic Family Needs		Before Sendong			
		Completely	Sufficiently	Partially	Total
After Sendong	Completely	112	72	78	262
	Sufficiently	159	328	150	637
	Partially	293	811	326	1430
	Total	564	1211	554	N=2329

Table 2: Capacity for Households to Cover Basic Needs, Before and After Sendong



	Number of Households	Percentage of All Damaged Houses
All Affected Households in Region X	39,400	100%
Partially Damaged Houses (DSWD)	27,973	71%
Category 3 & 4 Households (Assessment)	15,385	39%
Category 3 Households At or Below Poverty Line (Assessment)	10,577	27%
Category 4 Households At or Below Poverty Line (Assessment)	3,274	8%
Category 3 & 4 Households At or Below Poverty Line (Assessment)	13,851	35%
Category 5 Households (DSWD)	11,427	29%
Total Support	25,278	64%

Table 4: Estimated Number of Priority Houses to Rehabilitation and Reconstruction

Finally, over half of those affected currently do not have access to electricity, largely due to damage to household networks but also because of damage to public networks.

SUPPORT NEED AND PROVIDED

The level of support requested was particularly high (over 95%), unsurprising considering the number of households in evacuation centers and the fact that 77% of those surveyed are at or below the poverty line. **The type of support requested by households provides a greater reflection of the immediate needs**, such as food as well as water. In addition, health, sanitation and hygiene kits were also requested and are areas where significant provisions have been provided by the relief efforts. Moreover, livelihood support seems underwhelming relative to the level of requests placed by households.

With regards to shelter needs, the financial requests were considerable as a result of household income having been highly affected (64%). This is coupled however with the need for materials for their houses. Those that noted 'other' support required were typically focused on land for relocation, a significant concern for those in No Build Zones.

Generalizing Results and Statistical Analysis

A non-random sampling method was used to identify households and communities that were included (see above for how communities were selected). This was a strategic decision to better support the Shelter Cluster members that are currently planning or implementing in specific areas.

Therefore, this assessment does not include a statistical analysis. In total, over 10% of affected households were surveyed. This is sufficient for results to be considered indicative and for general issues, challenges and opportunities to be identified.

Agencies are encouraged to verify all information.

CONCLUSIONS AND RECOMMENDATIONS

1. The incidence of poverty not just in the region but in the directly affected areas is considerably high - 77% of those affected. This has been exacerbated by Sendong, with up to 64% of households' income being highly affected.
2. Debris removal and clearing is of utmost importance to ensure access to houses and communities, while also preventing public health issues from worsening. Solid waste management plans are recommended where necessary.
3. A common understanding of the definition of damage to houses, and coordinated approaches to designing rehabilitation and reconstruction packages to ensure equitable distribution of support.
4. Those in temporary shelters and evacuation centers ought to be prioritized for relocation, reconstruction and rehabilitation projects. This is for two reasons. Firstly, they are the more vulnerable and less capable of those affected. And secondly, the sites are typically schools which should return to their normal operations as soon as possible for the sake of the children.
5. The No Build Zones need to be clearly demarcated and communicated to those affected. Moreover, any program that addresses reconstruction and rehabilitation ought to adhere to these boundaries in an effort to improve disaster risk reduction and resilience to future water-related events.
6. Programs ought to prioritize households that are below the poverty line with rehabilitation needs, and all totally destroyed houses.
7. Reconstruction and rehabilitation works should as best as possible incorporate disaster risk reduction components. This may involve 'building back better' and including concrete foundations; supporting early warning mechanisms to reduce the likelihood of significant impact from floods or other disasters in the future..

Agencies and Organizations participating in the Shelter Cluster assessment:

ACTED, CRS, DSWD, ERC, IFRC, Impact Initiatives, IOM, Latter Day Saints (LDS), NCSB, OCHA, UNHABITAT, UNOSAT, Xavier University, Xavier University Engineering Resource Centre