

Multi-Cluster Needs Assessment

(FINAL REPORT)

Philippines
Typhoon Haiyan

This assessment was made possible through
financial contributions from WFP and OCHA



December 2013



Manila, Philippines

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Typhoon Haiyan (Yolanda) track, November 2013



The boundaries and names shown and the designations used in the maps used for this report do not imply official endorsement or acceptance by the United Nations,

Recovery concerns

- ▶ **Housing remains a key priority for the affected population.** One and half month after Typhoon Haiyan made landfall, more than half of the population in the coastal areas of Eastern Visayas (Samar, Eastern Samar and Leyte) remain displaced from their homes.
- ▶ **With many livelihoods destroyed, household incomes remain limited for many months to come.** Household income levels have halved. With large asset losses and destruction, especially in the farming and fishing sector, it will take time to re-establish livelihoods. In urban areas, the proportion of people seeking for work is up by 10 percent. This highlights the importance of providing livelihood support for the most affected populations.
- ▶ **Those who remain in evacuation centres are the most vulnerable.** IDPs who have not been able to return to their homes are disproportionately affected due to high levels of pre-existing vulnerabilities. They will need additional supports in the short, medium and long term to address their basic needs and to provide durable solutions.
- ▶ **Access to basic services is improving but key health-, nutrition-, sanitation-, and education-related services remain lacking.** Garbage collection, waste management, drainage and sewage are among key infrastructure and services that remain non-functional, raising concern for health and nutrition outcomes. Mobile clinics have expanded to fill the gap of health facilities however their ability to respond to health concerns of vulnerable populations such as pregnant women and children is limited. Variations in school attendance, due to non-functional schools and for older children household factors including cost of schooling and need to contribute to family income, raise concerns about deepening disparities, permanent school drop-out and increased protection risks.
- ▶ **The rapid recovery of banking services and ongoing recovery of markets** point to appropriateness of cash-based interventions in certain areas. In an environment of functioning markets and banking services, cash-based interventions can have multiplier effects in improving livelihood, food security, health, nutrition and education outcomes.
- ▶ **Although food consumption has improved since the immediate impact of the Typhoon, food assistance should remain a priority.** Approximately 27 percent of the surveyed population remains food insecure. Food assistance is a major food source for the affected population which has enabled many households to maintain an acceptable food consumption.
- ▶ **Protection issues continue to be of concern.** As populations continue to struggle to rebuild their homes and livelihoods and deal with the stress of the disaster, addressing protection and insecurity concerns must remain a priority, particularly for women and children who are at higher risk of trafficking and sexual abuse.

Key findings

- ▶ **The resilience of the affected population is remarkable.** Despite loss of household members and widespread devastation of livelihoods, housing and assets, the people of the Visayas are working hard to reestablish their lives and livelihoods.
- ▶ **Basic community services are being restored quickly in most areas** although key services such as schools, maternal health clinics, social protective services, garbage collection and waste management, drainage, and sewage continue to be non-functional.
- ▶ **Markets are rapidly recovering across** the affected areas and, in some cases, are fully functional. **However, key bottlenecks in the supply chain continue to influence affordability** with high and volatile prices observed particularly in the Eastern areas.
- ▶ **Livelihoods, especially in farming and fishing, have been severely affected by the typhoon.** Wind damage and powerful storm surges destroyed or damaged key assets and disrupted livelihood activities – this resulted in income losses of up to 70 percent. Most agricultural households report that it will take between 6 and 8 months to fully recover.
- ▶ In the immediate aftermath of the typhoon, households reported significant decreases in food consumption. While, the food security situation has improved considerably with the increase in food assistance, **the most vulnerable populations remain food insecure and highly dependent on food assistance.** As a result, priority should remain on improving food consumption, encouraging breastfeeding practices, and on ensuring dietary diversity in the longer term.
- ▶ **Access to adequate health services remains a key concern for more than a third of the affected population.** Child nutritional status did not appear to be alarming; however it is still of concern considering the identified aggravating conditions. Preventative interventions focusing on infant and young child feeding should therefore be scaled up.
- ▶ **Several serious protection concerns have emerged in the aftermath of the Typhoon.** There remains a relatively high number of households reporting that some **members are still unaccounted for**, especially in Domain 3 and in evacuation centres. In addition, approximately 40 percent of households report **feeling insecure** and concern is high around the **risks of physical and sexual violence.**
- ▶ **Major humanitarian assistance efforts since typhoon Haiyan have included food assistance, provision of shelter material and hygiene kits.** These activities have helped the affected population cope with the disaster impacts more effectively in the immediate aftermath of the disaster. Provision of recovery assistance including cash and agricultural and fishery inputs have been limited up to now.



Housing was severely affected by typhoon Haiyan, and rebuilding homes remain a priority concern in the most affected areas.

Background

The Multi-Cluster Needs Assessment (MIRA II) was conducted between the 3rd and the 10th of December, 2013 to supplement the information obtained in the Multi-Cluster Initial Rapid Assessment (MIRA I) conducted in November, 2013. While the MIRA I aimed to provide information about impacts at the community level, the second assessment aimed to better understand impacts at the household level.

The Philippines is a densely populated country of 97 million people. The category 5 super typhoon Haiyan passed through the Visayas, home to over 11.2 million people, and devastated areas in 41 provinces. It made landfall on Guiuan in Eastern Samar, 600 km southeast of Manila, in the early morning of Friday 8 November, 2013. Rain fell at rates of up to 30 mm per hour, winds reached upwards of 315 km/h, and massive storm surges up to 5-6 metres high hit Leyte and Samar islands.

Typhoon Haiyan (locally known as Yolanda) was one of the most powerful storms to ever make landfall. Official estimates suggest that the typhoon left 14 million people affected and 4.1 million displaced. The confirmed death toll is at least 6,000.

The MIRA I delineated four geographical areas according to the varying impacts of the storm. These were used as the sample universe for this assessment. The phase 2 of the assessment was however limited to areas worst affected by the typhoon: along the coastal areas of Leyte and Samar and in the immediate

vicinity along the typhoon track (Map 1). A fourth domain consisted of all evacuation centers and a separate sample was drawn for this domain. A summary of each domain is provided in Table 1.

In total, 1,167 households from 124 barangays and 32 evacuation centres were assessed. The average household size is five with the most common family composition of two parents and 3 children below the age of 18. Female-headed households accounted for 20 percent of total households assessed.

Details on the survey methodology are provided in Annex I. Profiles are included for (i) community services, (ii) livelihoods, (iii) food security and nutrition, and (iv) protection. Data on key indicators for each profile are disaggregated by geographic domain, gender, main economic activity, urban/rural classification, and wealth. Throughout the report references are made to these profiles where more detailed data can be found than presented in the main body of the report.

The complete data set and additional data sheets are also being made available for additional analysis and insight needed by different response clusters.

Map I. Sampled locations in each domain.

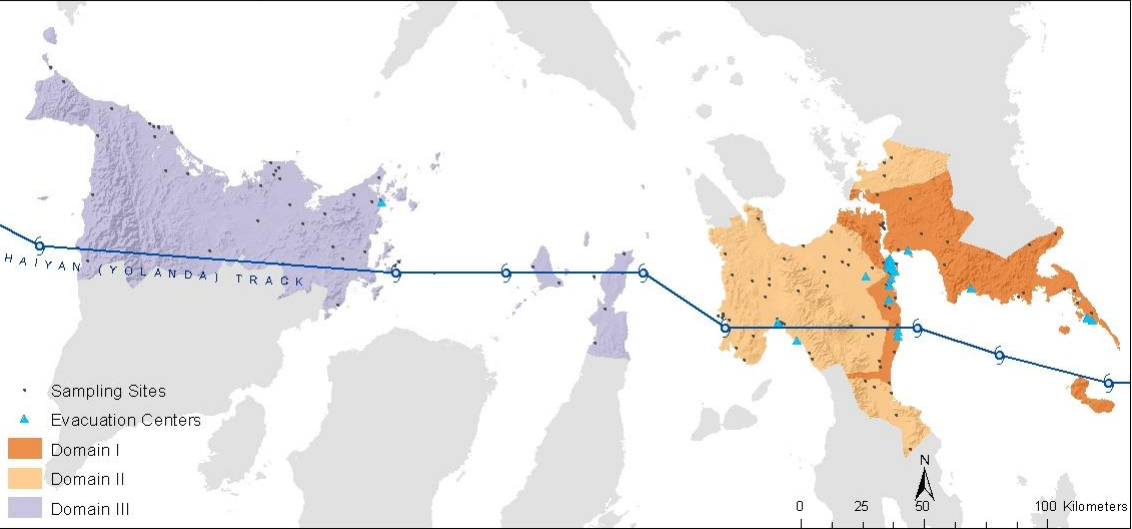
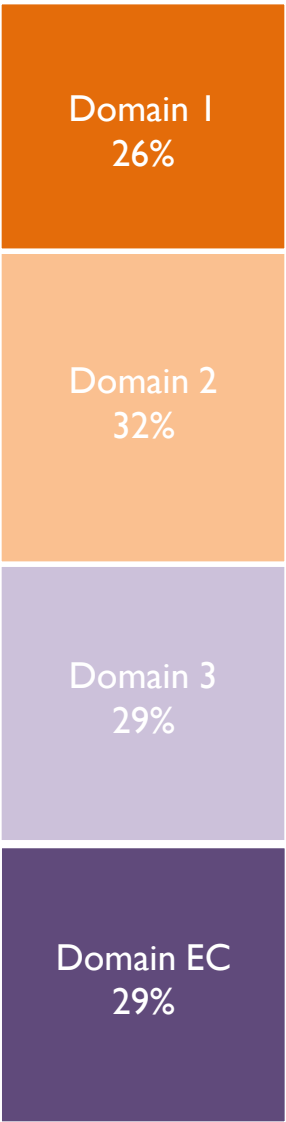


Table I. Summary of profile by domain.

Domain	Disaster Profile
Domain I Areas along the eastern coastline of Leyte and across the southern coastline of Samar.	In the coastal areas of Eastern Visayas (Samar, Eastern Samar, and Leyte), damage to lives, livelihoods, and infrastructure was particularly severe due to powerful storm surges and inundation. In these areas, the impacts of the typhoon are comparable to those of a tsunami with widespread destruction to housing, assets, infrastructure and livelihoods.
Domain 2 'Inland' areas across Leyte/Samar along the storm path to Kanaga and Ormoc.	The western coastline of Samar and Leyte as well as inland areas of Leyte suffered significant damage as a result of strong winds of almost 300 kilometres per hour. There was significant damage to agricultural livelihoods, key infrastructure, and basic services.
Domain 3 Areas along the typhoon path, including Panay Island, northern Cebu, and Coron.	Areas located along the typhoon path in the Central Visayas (northern Cebu and Panay) and Western Visayas (Coron) also experienced damage, although this was less severe than in the Eastern Visayas. Damage in this Domain was largely due to strong winds and some inundation. Coastal livelihoods, some infrastructure, and some services were affected.
Domain EC Evacuation centres	People currently residing in evacuation centres. These are mainly located along the coast of Leyte and Samar and Eastern Samar. One evacuation centre was identified also on Panay Island.

Proportion of interviews per domain.



A profile of the affected population

The resilience of the affected population is remarkable. Despite loss of household members and widespread devastation of livelihoods, housing and assets, the people of the Visayas are working hard to reestablish their lives and livelihoods.

Despite recent progress made in rebuilding the affected areas, housing remains a priority concern. Fifty-five percent of houses were completely destroyed or affected to such extent that they are no longer inhabitable; the respective figure for Domain I is even higher – 71 percent of houses were either completely destroyed or uninhabitable. In addition, a staggering 31 percent of the affected population is currently not living in their own house. This is especially so in Domain I where more than half of the population has been displaced. House destruction also provides an indication to the likely extent of seed and food stocks as they are normally stored in people's houses either in bags or containers.

Given that limited cash is available to pay for repairs and rebuilding, and housing material in local markets are in short supply, it will take time to re-establish living conditions. On average, households expect that it will take between 6 to 8 months to fully rebuild or repair damaged houses, with those living in evacuation centres requiring longer time to re-build their homes. As a result, 20 percent of people not living in evacuation

centres and whose homes are currently uninhabitable are living in temporary shelters near to their homestead. In the assessed communities, over 2,000 people, especially those who can afford to and have relatives elsewhere, have left their community at least temporarily. Of those that have migrated, about one third come from the coastal areas. Coastal communities are the poorest in the Philippines – and lack of financial resources may have prevented some coastal families from moving out.

The people residing in evacuation centres are predominantly from the poorest segments of the population; almost half of the people who are living still in evacuation centres belong to those with current expenditure levels among the bottom quartile of the population. People in evacuation centres are among those most severely impacted by the typhoon as reflected in almost every indicator presented in this report.

In addition to housing, livelihoods have been severely affected in the wake of Typhoon Haiyan. A diverse set of livelihoods can be found in the Typhoon-affected areas:

In coastal areas, fishing is the principle means of livelihood, currently for 15 percent of households; inland, farming is the most common livelihood with 45 percent of household relying on farming or agricultural wage labour as their main source of family income; In urban areas, salaried employment and skilled employment (28%), daily labour (25%) and wholesale or retail trade (15%) are the predominant livelihoods.

For most livelihoods, income earnings have been cut in half. This has resulted in an increase in the amount of people looking for work. In urban areas the number of people seeking work is up by 10 percent (compared to pre-Haiyan levels). Daily labour (unskilled, non-agricultural) is most impacted, with currently 42 percent in search of work – hence highlighting the opportunity for emergency employment programs for the most affected populations.

Remittances can be a relatively small but important contribution to livelihood strategies. Overall, overseas remittances are received by 6 percent of the affected population, similar to the situation before Typhoon Haiyan. For female-headed households, remittances are particularly important: Eighteen percent of the female headed households regularly received remittances from abroad before the typhoon, a figure that has increased to

25 percent now with generally higher amounts received. Household expenditure in affected areas has also been severely impacted: Overall, average expenditure has decreased by half across all domains, from an average of PP 1,041 before typhoon Yolanda to PP 514 at the time of the assessment. The most significant declines in expenditure were seen in Domain 1 (63 percent), followed by Domain 2 (43 percent) and Domain 3 (24 percent).

While total expenditure has decreased substantially, expenditure on food as a proportion of total expenditure has declined, largely attributable to food assistance efforts in Domains 1 and 2. Between October and November, the proportion of households spending over 65 percent of income on food declined from 85 to 73 percent with the largest declines reported in Domains 1 and 2. In Domain 3, the proportion of households spending a large amount of their income on food has declined only marginally, from 89 percent to 81 percent. This may be largely due to the fact that markets are generally operational in the Central and Western Visayas, and therefore households continue to purchase certain food items, or because households are currently prioritising purchase of household materials to rebuild their homes.

Figure I(a). Proportion of people living in their own house by domain and by sex of household head.

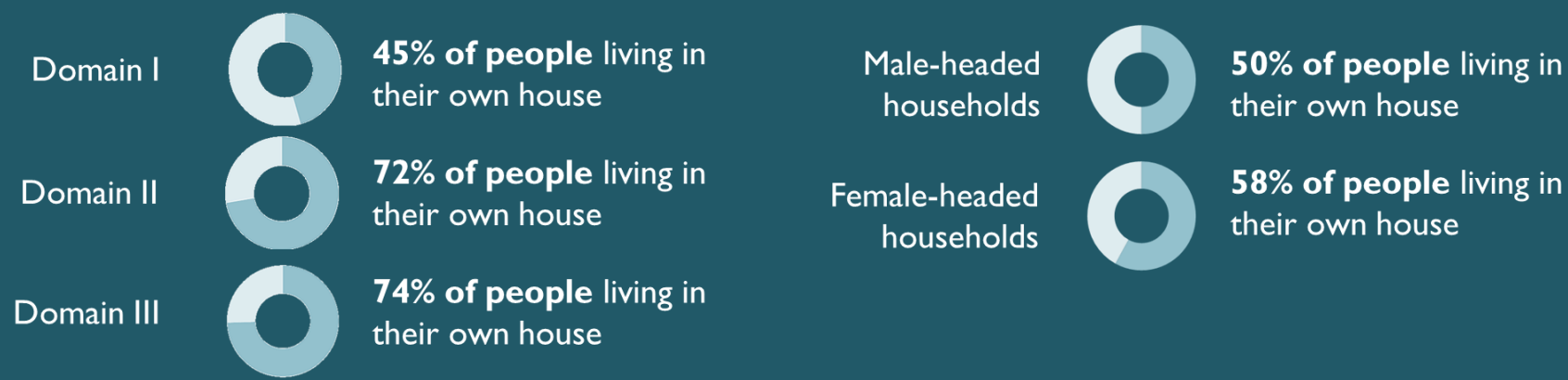
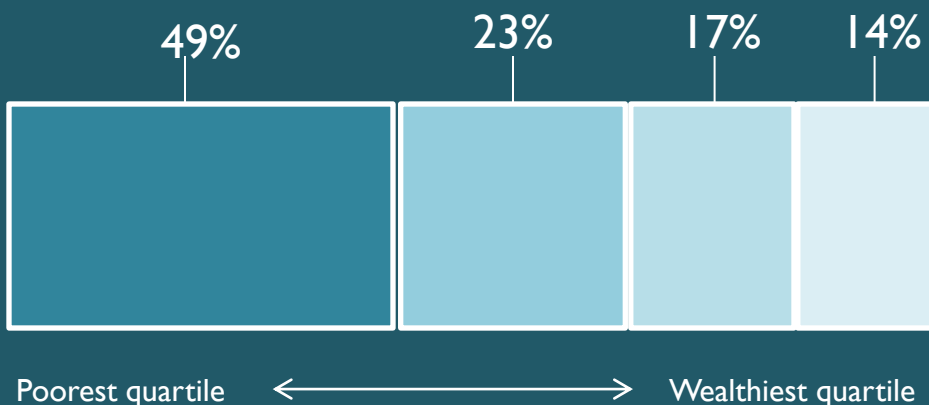


Figure I(b). Proportion of people living in evacuation centres by wealth group



The state of recovery

COMMUNITY SERVICES

Basic community services are being restored quickly in most areas although key services such as schools, maternity health clinics, social protective services, garbage collection and waste management, drainage, and sewage continue to be non-functional.

Community services are quickly being restored in some of the most affected areas. In most barangays, security (police and *tanod* patrols) and banking services are generally operating, or are expected to operate within the next few weeks (Figure 2).

Child school attendance has improved considerably since the typhoon hit, with many 6 to 11 year-old (76.4%) and 12 to 15 year-olds (74%) back in school. However, attendance varies across Domains, with a larger proportion of children remaining out of school in Domain 1 compared to Domains 2 and 3, mostly the result of damaged buildings and school buildings being used as evacuation centres (Figure 3).

Overall, 35 percent of Barangays report that either the pre-school, elementary or secondary school remains non-functional. Non-attendance amongst older children (16 and 17 year-olds) is in part reflective of household income-earning challenges: Almost 20 percent of

households reported that they can no longer afford the school expenses while just over 15 percent report that their children are not attending in order to seek work and contribute to family income.

There is no significant differences in these findings for boys and girls. Children not attending school limits the participation of caregivers, particularly women, outside the home, including accessing humanitarian programmes.

As highlighted in the MIRA I, public buildings were severely affected by the typhoon. In a third of the surveyed barangays, local government buildings continue to be non-operational. This is especially the case in the most affected areas where public buildings have been either destroyed or are used as evacuation centres and distribution points for relief goods.

In addition, in almost a fifth of the barangays, maternity health clinics are not functional. To some extent this is

mitigated by the increasing presence of mobile clinics. However, local government officials mentioned that these clinics were unable to provide sufficient medical services to the entire population.

Waste management services, including garbage collection and disposal, drainage, and sewage continue to be largely non-functional, especially in the more isolated barangays. Given the amount of debris and garbage that has not yet been cleared, the availability of waste management systems is critical. In addition, some of the assessment teams noted that large amounts of debris were being burnt, which releases persistent organic pollutants into the air. This trend may have long-term negative impacts both on the environmental conditions and health of the population. This is an important consideration in the recovery phase.

On a positive note, the rapid recovery of banking services, even in the most affected areas, is encouraging and highlights the potential role of cash-based interventions during the recovery phase.

Figure 2. Percentage change of community services.

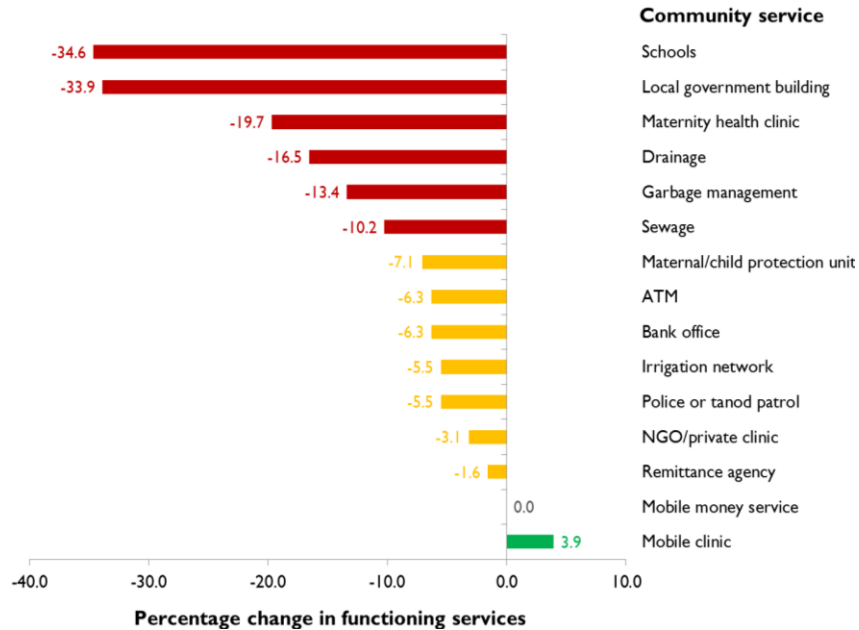


Figure 3 (a). Current attendance rates by Domain.

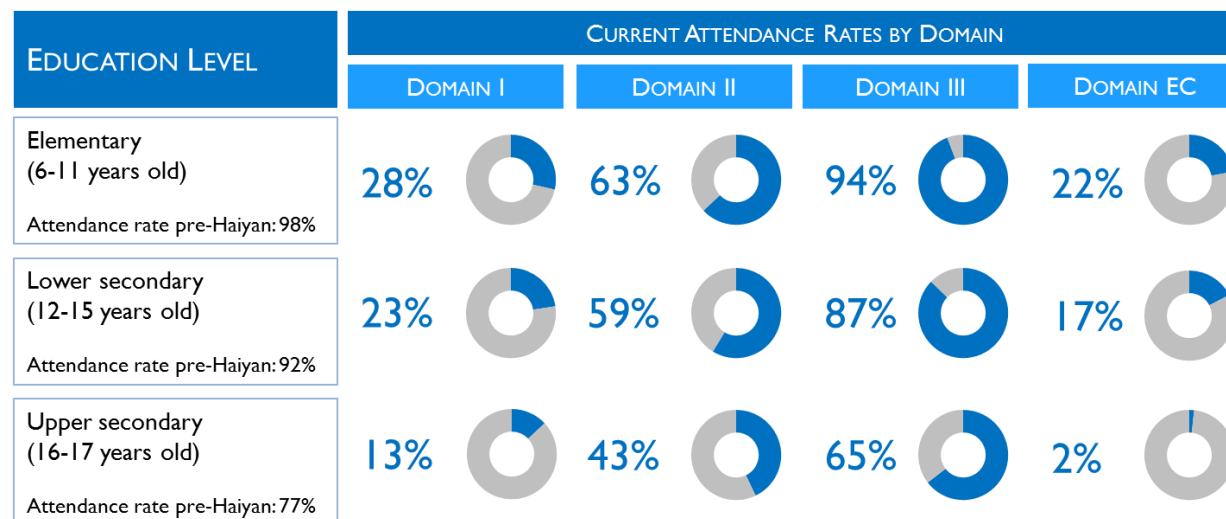
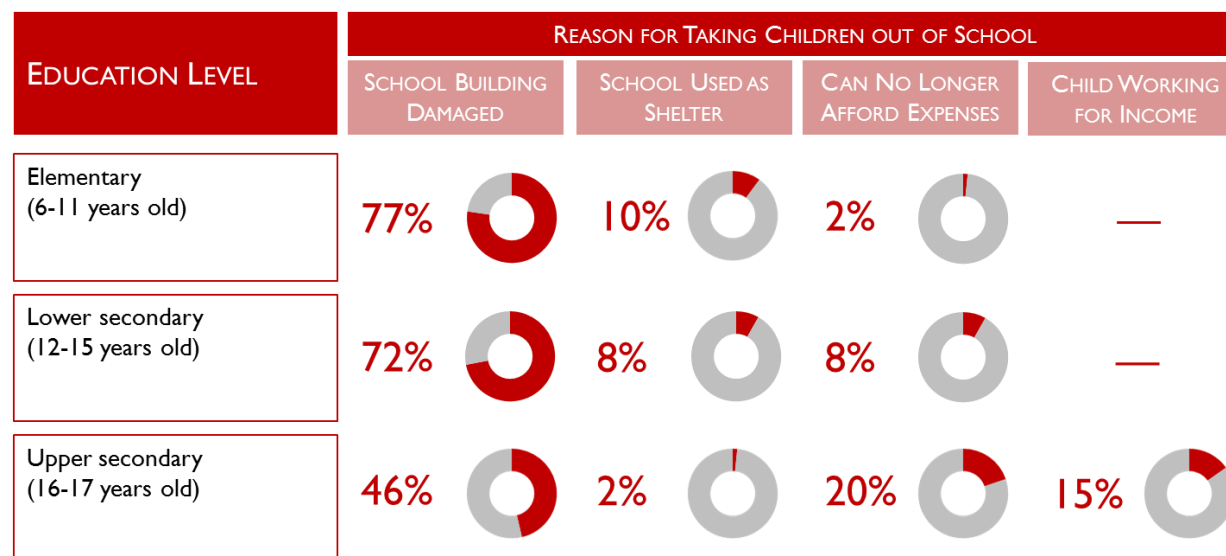


Figure 3 (b). Reason for taking children out of school in each education level.



MARKETS

Markets are rapidly recovering across the affected areas and, in some cases, are fully functional. However, key bottlenecks in the supply chain continue to influence affordability with high and volatile prices observed particularly in the Eastern areas.

People are increasingly able to access markets in affected areas: 78 percent of barangays reported having functional markets or shops in the barangay, and of these, 45 percent reported sufficient stocks able to last for at least one week.

On average, populations in sampled barangays report being within 20 minutes of a functioning market. The average travel time to the nearest market is higher in the easternmost parts of Eastern Samar (60 minutes to the nearest market). Access in urban areas tended to be better than in rural areas (82 percent in urban areas compared to 76 percent in rural areas).

While physical access is improving, economic access remains a major challenge. Prices of most food items have increased since Haiyan, and remain high in most of the affected areas. Rice prices have increased significantly across all domains, resulting in substitutions for less preferred foods. In Northern Cebu, for instance, where rice prices have increased by up to 10 percent, people

are now consuming camote – which is more affordable than rice.

Much of the increase in price relates to supply-chain problems at the manufacturer-, distributor-, and retailer-levels. According to a Rapid Market Assessment (RMA) conducted by the World Food Programme (WFP) between 10 November and 10 December, 2013, the main challenges are:

At the manufacturer-level:

- ✓ Transportation bottlenecks at the national level as Manila prioritises humanitarian aid, which results in delayed deliveries to Cebu – the main hub for most distributors in the Visayan Islands;
- ✓ Delays in shipping from Mindanao due to congestion in ports at Sogod and Ormoc City; and
- ✓ Input constraints for canned goods as manufacturers face shortages of tin cans.

At the distributor-level:

- ✓ Damage to storage facilities and stocks exacerbated by looting in the immediate aftermath of the disaster have resulted in scarcity of certain goods;
- ✓ Delays in replenishments by manufacturers due to congestion at key ports (Tacloban City, Ormoc City, Sogod, and Maasin City); and
- ✓ Limited delivery capacity due to damage to delivery trucks.

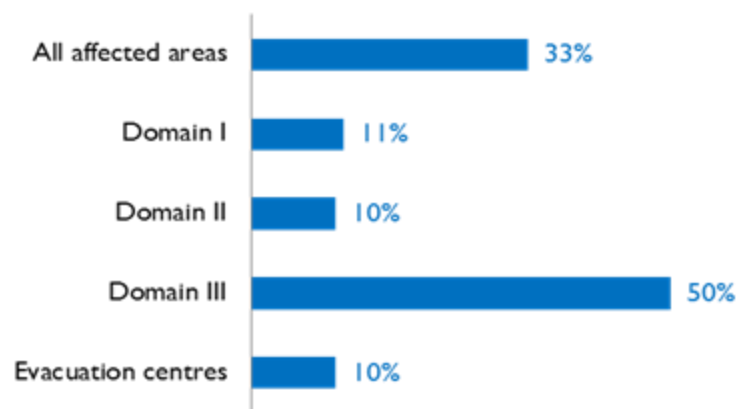
At the retailer-level:

- ✓ Temporary shifts in demand as households receive relief goods (particularly food) and prioritise expenditure on goods for home repairs;
- ✓ Limited capacity to provide credit to households necessitating cash purchases, which is relatively limited in the Eastern Visayas (particularly in Domains I and 2); and
- ✓ Long transport distances to replenish stocks as a result of delays in deliveries from distributors, damage to warehousing, and overall scarcity of transport options, which forces retailers to increase prices.

Markets are recovering more rapidly in Panay and Bantayan Islands due to localized damage and good integration with regional and national markets. Food

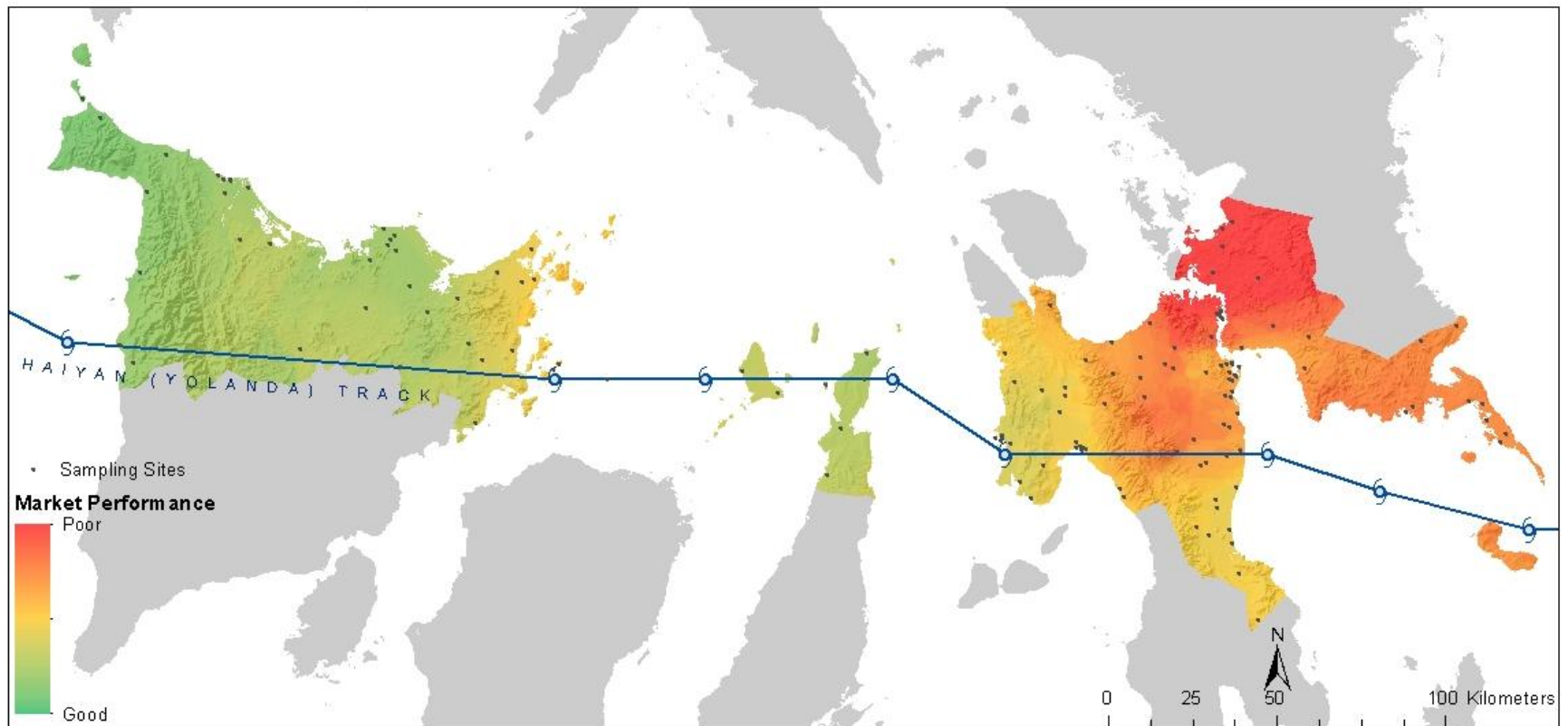
prices have shown less volatility, markets have sufficient stocks and are able to respond to increases in consumer demand, and travel distances from communities are shorter.

Figure 4. Households that report they can buy on credit



Map 2 highlights areas where such conditions for cash interventions are met: Based on the findings of the market survey, cash-based interventions should follow a west-to-east pattern, starting in Panay and Cebu Islands and gradually moving towards Leyte, Samar, and Eastern Samar as conditions in market functionality continue to improve.

Map 2. Market performance.



LIVELIHOODS

Livelihoods, especially in farming and fishing, have been severely affected by the typhoon. Wind damage and powerful storm surges destroyed or damaged key assets and disrupted livelihood activities., resulting in income losses of up to 70 percent. Most agricultural households report that it will take between 6 and 8 months to fully recover.

The main livelihoods in the surveyed domains are farming, livestock rearing and agricultural labour (currently practiced by 32.0 percent of the sampled population, compared to 68 percent pre-Yolanda based on secondary data), salaried and skilled employment (28.9 percent), and daily labourers (19.1 percent). Wholesale/retail traders and fisherfolk each account for around 10 percent of the population respectively. The remainder of the sampled households presently depend on remittances, gifts, agricultural processing, tourism, and operating goods, e.g. taxi drivers. (Figure 5)

Men and women engage differently across main sources of livelihoods. In the sampled areas, wholesale and retail trading was predominantly reported as a female activity, whereas farming, fishing, salaried and skilled employment and non-agriculture daily labour were reported as typical activities carried out by men. Essential non-income earning activities often carried out by women were not recorded in this survey (Figure 7).

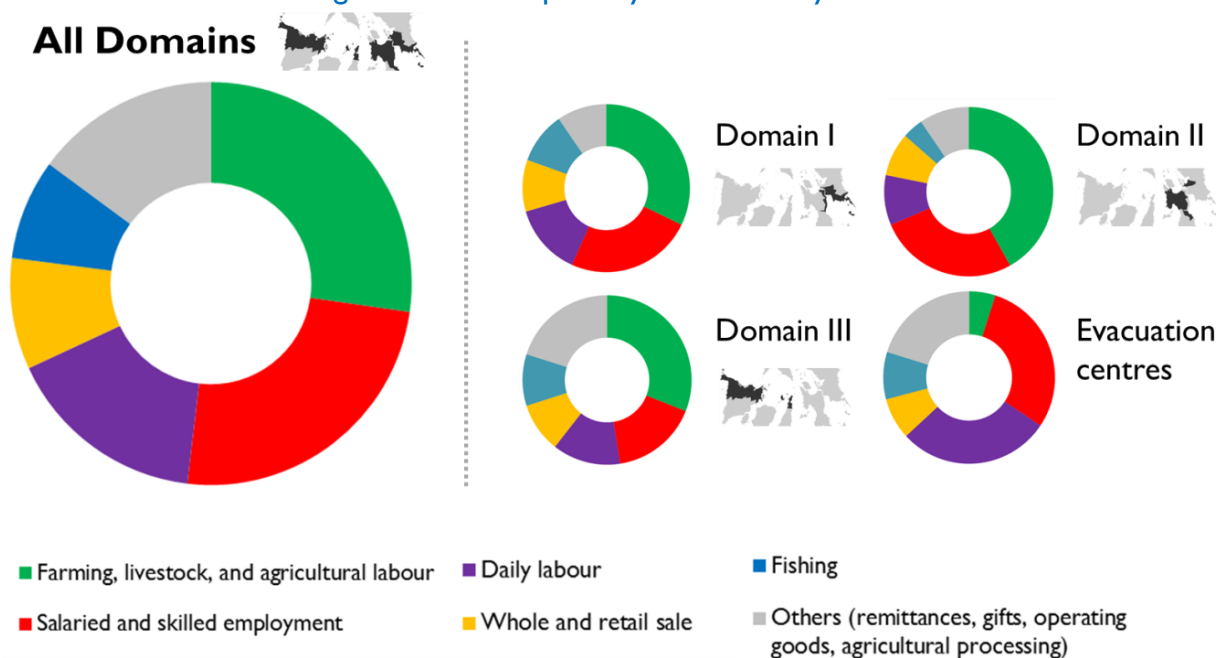
Based on the results of this survey, agriculture and fishing were the most severely impacted: more than half (51 percent) of fisherfolk and 29 percent of farming households reported that their livelihoods were completely destroyed. In addition, more than half of the whole- and retail salers (51 percent) also reported lasting impact on their livelihoods due to the typhoon (Figure 11). By contrast, those in salaried and skilled employment as well as other daily labourers (unskilled, non-agriculture) reported less impact, with the majority reporting no or temporary impact, i.e. disrupted but now restored.

Across all Domains, households reported major impacts on their primary livelihoods, although the impact was most severe in Domains 1 and 2 where the storm caused the most damage: In Domain 1, 48 percent of the population reported complete destruction of their principal livelihoods (Figure 6 and Map 3). This confirms

the findings of the MIRA I that highlighted worse impact on primary livelihood activities in coastal areas. However, this is not to suggest that impact was not also felt in some of the inland communities: In Leyte, many communities also reported lasting damage to their livelihoods, likely related to the extent of damage

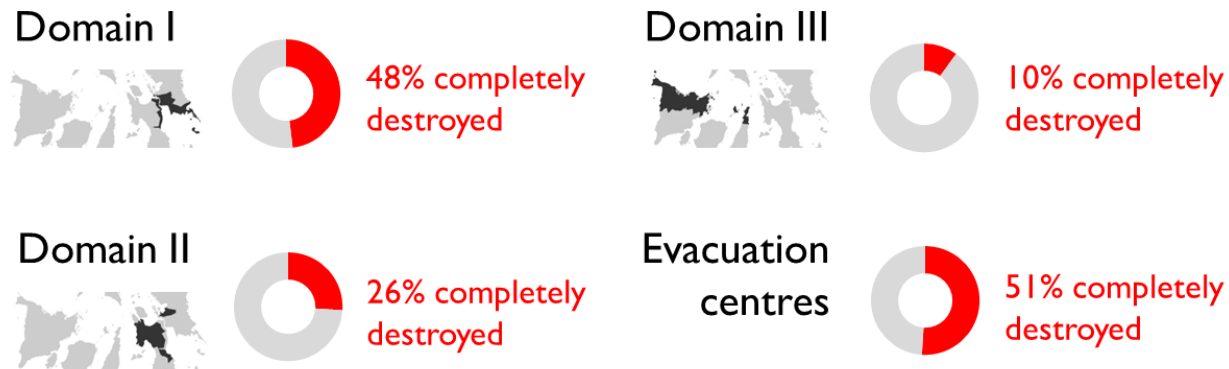
sustained on coconut plantations on which many of these communities depend. Given that coconut plantations can take approximately seven years to grow and become productive, alternative livelihood options may need to be identified and encouraged for affected households.

Figure 5. Current primary livelihoods by domain.

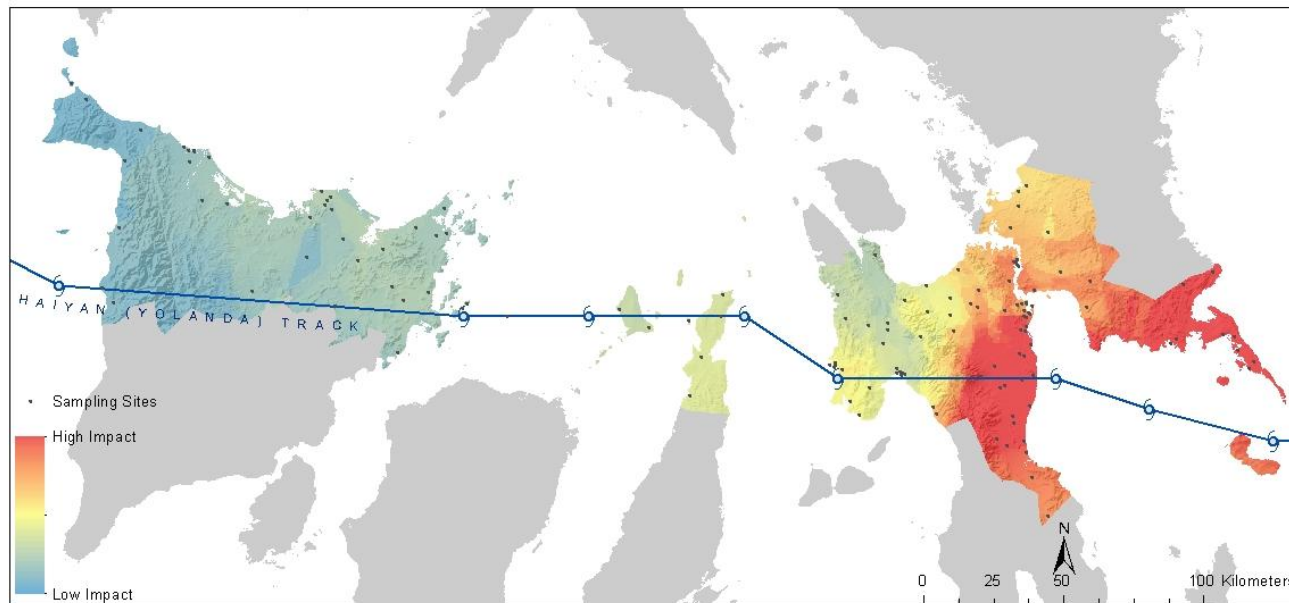


Note for Figure 5: The classification above combines occupations, industries, and status in employment. Therefore, should not be compared directly to the results of the Philippine Labour Force Survey.

Figure 6. Proportion of people stating that their principle livelihood has been completely destroyed due to typhoon Haiyan.



Map 3. Severity of impact on primary livelihoods.



As reported in MIRA I, the main impacts on agriculture and fishing livelihoods related to the loss of rice and other standing crops, including coconuts and sugarcane, directly within the path of the typhoon and damage to boats and fishing nets. These agricultural households estimated that it would take between 6 and 8 months to recover and rebuild their livelihoods.

Figure 9 presents the extent of cultivation for different crops by farming household. Rice is the most commonly cultivated, with 42 percent of households planting rice, followed by coconut, banana and vegetables. Coconut or copra and sugarcane are crops which are locally processed and absorb large numbers of daily wage labourers, either as workers on plantations or in processing industries.

Although losses of standing crops and plantation crops were significant, most of the rice for the 2013 crop season had been harvested before Haiyan, thereby mitigating some of the catastrophic losses that could have occurred in the fields. However, because the harvest is commonly stored at the household-level, losses of stored seed and food stocks occurred in areas with heavy damage to housing. In terms of area destroyed, farming households report that for all crops except rice

(coconut, banana, vegetable, corn, cassava and sugarcane), crop area destruction was more than 90 percent. Paddy fields were damaged to the extent of 72 percent of cultivated area..

Figure 7. Engagement of men and women in livelihoods.

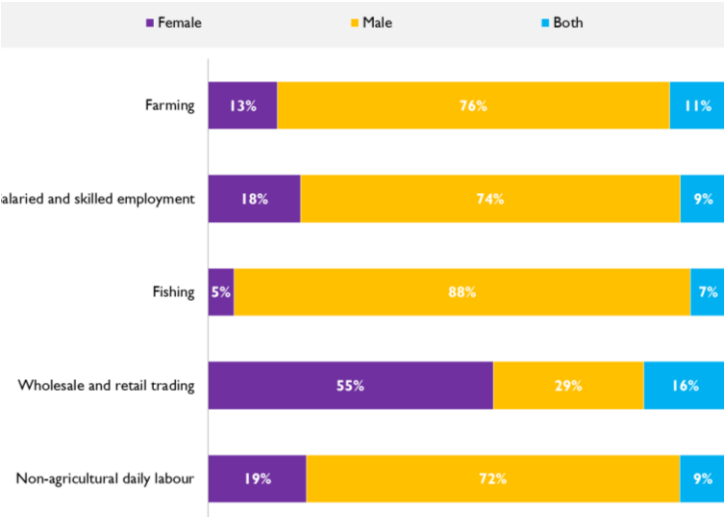


Figure 8. Average number of months that farming and fishing households expect their livelihoods to recover.



Figure 9. Proportion of households growing specific crops

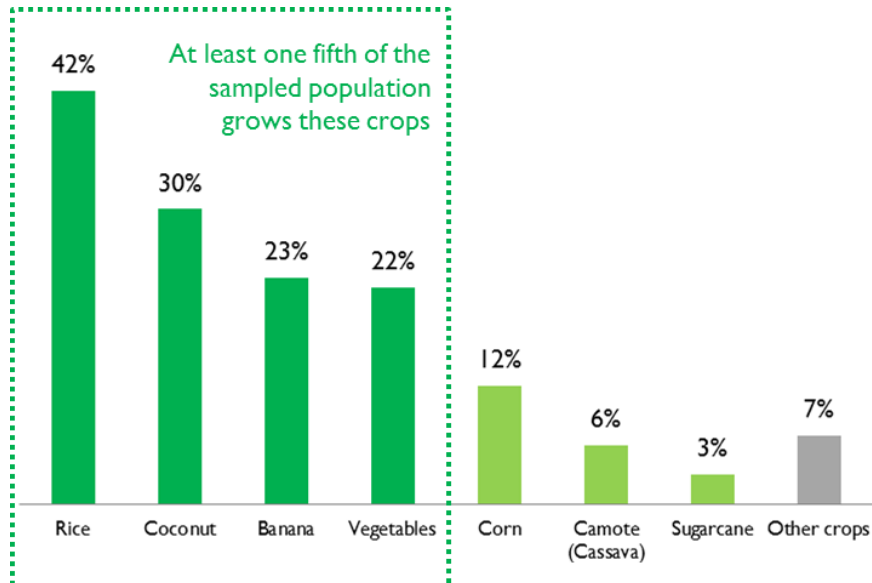


Figure 10. Average income losses by livelihood

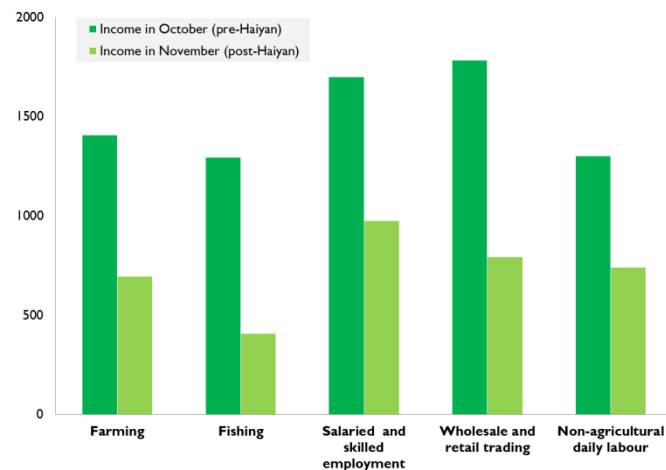
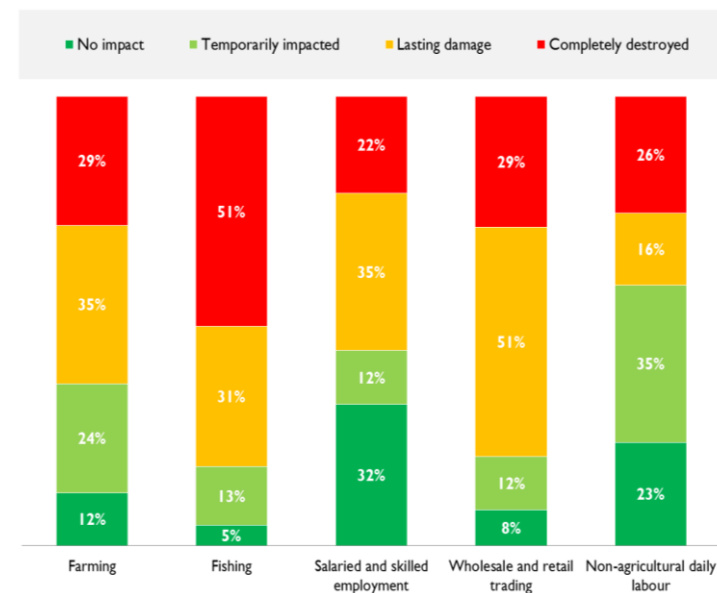


Figure 11. Impact of typhoon Haiyan on key livelihoods.



Fishing communities were hit hard in that they not only lost their boats and fishing equipment but also their houses and catch earnings. Twenty-eight percent of fisherfolk have lost their boat and 35 percent have lost almost all fishing equipment including nets. Many fisherfolk reported being able to resume limited fishing activities (mostly for consumption) by sharing boats and equipment. On average, fishing was disrupted for almost a month in all domains. The main challenge for households that depend on fisheries is not only access to boats and fishing equipment but also access to electricity to refrigerate fish for sale at a later stage. Fisherfolk with seaweed plantation or aquaculture farms, especially in domain 3, were also severely affected

As elsewhere, in the Philippines, animals are considered valuable assets in rural communities and an important secondary source of income throughout many livelihood groups. Overall, 31 percent of households reported livestock losses, mainly of poultry. Figure 12 shows losses in Tropical Livestock Units by domain for farming households.

Income losses are significant. Across all areas, half of income derived from the main livelihood activities was reportedly lost as a result of typhoon Haiyan. The impact was much more severe in Domains 1 and 2 where households reported income losses of 88 percent and 50 percent respectively compared to Domain 3, where households reported income losses of around 30 percent.

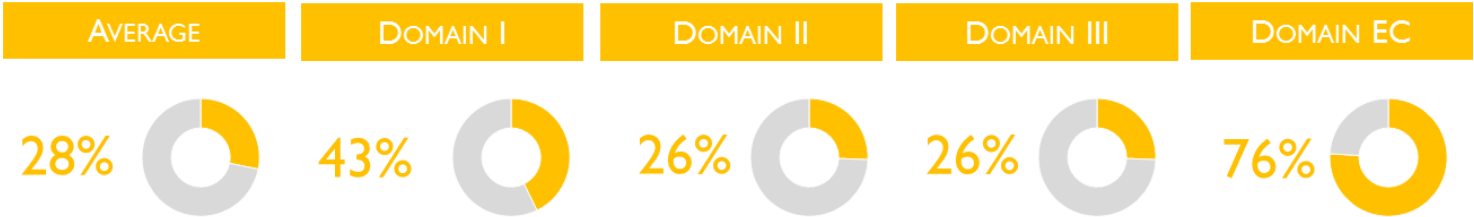
The poorest households were the most severely affected in terms of income losses. The poorest quartile of households (measured in terms of total expenditure in November) reported losing around 75 percent of their income, while the second poorest quartile lost 55 percent, the third poorest lost 43 percent, and the richest quartile lost 27 percent. This trend highlights that the vulnerability of the poorest segments of the population whom now face additional income challenges as a result of typhoon Haiyan. Domains 1 and 2 have the highest poverty prevalence aside from ARMM, based on the 2012 national census.

Note: The tropical livestock unit was calculated by weighing animal ownership as follows: cattle and carabao = 0.7, goats = 0.1, pigs = 0.2 and poultry = 0.01.

In terms of income loss by specific livelihood, fishing and farming were again the most impacted: fisherfolk lost around 70 percent of their income while farmers lost 54 percent in the aftermath of Haiyan. Wholesale/retail traders and non-agricultural daily labourers also reported losses of approximately half of their income in November. Salaried and skilled employment reported smaller but still substantial income losses, of around 38 percent (Figure 10).

Given the level of devastation in Domains I and 2, some households have engaged in emergency employment such as debris clearing. In some cases, cash-for-work activities provide more income than the households were earning before the typhoon. However, as these activities are only temporary, priority should be given to restoring the original livelihoods of the affected populations.

Figure 12. Percentage loss of tropical livestock units (TLUs) for households reporting losses.



FOOD SECURITY

In the immediate aftermath of the typhoon, households reported significant decreases in food consumption. While, the food security situation has improved considerably with the increase in food assistance, the most vulnerable people remain food insecure. Focus should remain on improving food consumption patterns and ensuring dietary diversity.

Food Consumption

Food security was identified as a priority concern in the MIRA I. As a result of a rapid scale-up of food assistance efforts, the situation has improved substantially with the majority of households consuming 3 meals per day. However, approximately 10 percent of households in Domain I, and 11 percent among female headed and poorer households continue to have difficulties in maintaining three meals per day.

On average, affected households have been able to maintain an acceptable diet - mostly helped by food assistance provided. Households consume cereals on a daily basis, meat, fish and eggs 4 to 5 days per week, dairy products 3 days per week and vegetables between 3 to 4 days per week. Consumption of pulses and fruits is low between 1 to 2 days per week.

Despite these improvements almost one third of households have borderline or poor food consumption, as determined by the calculation of food consumption score (FCS). While the differences between Domains are

Note: By giving weights to each food item consumed and considering the frequency of consumption within a period of 7 days, the Food Consumption Score (FCS) can be calculated.

The FCS is calculated as follows:

$$FCS = 2 * (\text{cereals, tubers}) + 3 * (\text{pulses}) + 1 * (\text{vegetables}) + 1 * (\text{fruits}) + 4 * (\text{meat, fish, eggs}) + 0.5 * (\text{oils and fats}) + 0.5 * (\text{sugars})$$

where (...) is the number of days the particular food group was consumed capped at 7 days maximum. For this analysis, poor food consumption is considered to be $FCS < 28$, borderline food consumption is considered to be $28 < FCS < 42$, and acceptable food consumption is considered to be $FCS > 42$.

not major, families living in evacuation centres have on average lower food consumption scores, and a greater proportion of households in Domain 2 have poor or borderline food consumption compared to Domains 1 or 3. This may be explained by the easier access of relief operations into coastal areas.

Over half of all cereals consumed are mainly obtained through food assistance in all domains. In Domains 1 and 2, rice provided through general food distribution schemes provides a much needed food supply for affected households. In Domain 3 where markets are more functional, households obtain cereals through a combination of food assistance and markets (Figure 13(a)).

Animal-source protein, including fish, meat, eggs, and dairy, are obtained primarily from markets. In the more affected areas (Domain 1 and 2), animal-source protein comes from food assistance (canned tuna and sardines) whereas in Domain 3, almost 80 percent of the animal-source protein consumed is obtained from markets. This reiterates the finding that markets are more functional in the Central and Western Visayas. In some of the coastal barangays, fish are also obtained as gifts. Vegetable-source

protein (*mung* beans) is consumed less frequently, with most of the consumption recorded in Domain 3. Most of the pulses are purchased in small markets (Figure 13(b)).

Figure 14 shows the contribution that food assistance has made towards household's food consumption scores. In Domain 1, 60 percent of the value of the FCS is derived from food assistance while in evacuations centres it is as high as 67 percent, highlighting the important role food assistance is playing, as well as the need for continued food assistance to the most affected areas in order to maintain acceptable food consumption levels.

As discussed in the previous section, the concurrent drop in households' income generating capacity, decline in food production ability, and marked increases in the price of most foods, underlines the need for continued food assistance.

Figure 13(a). Sources of cereal by domain.

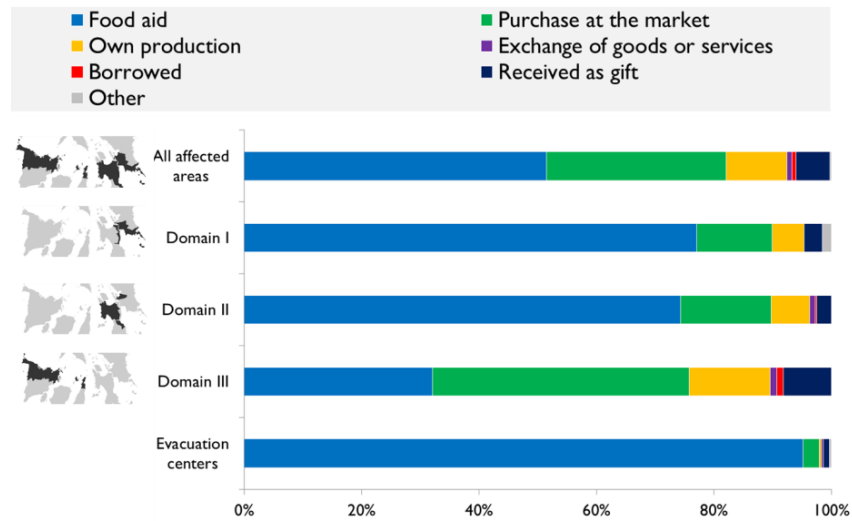


Figure 13(b). Sources of animal protein by domain.

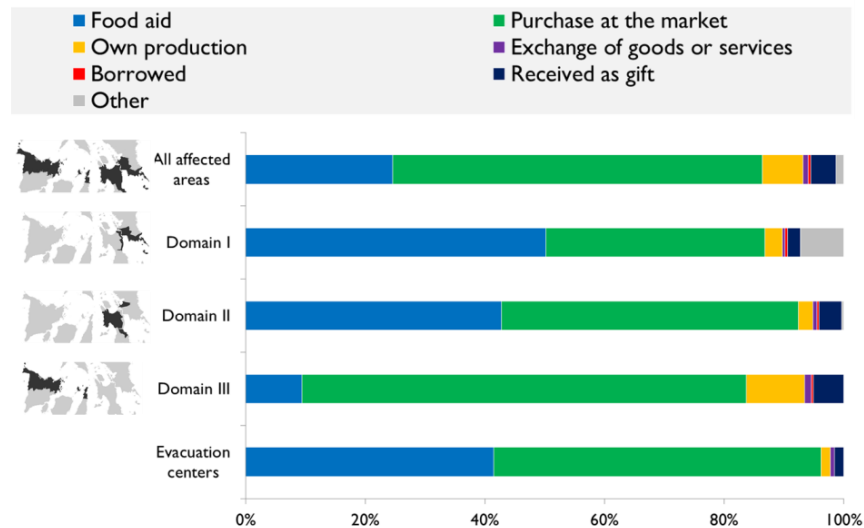
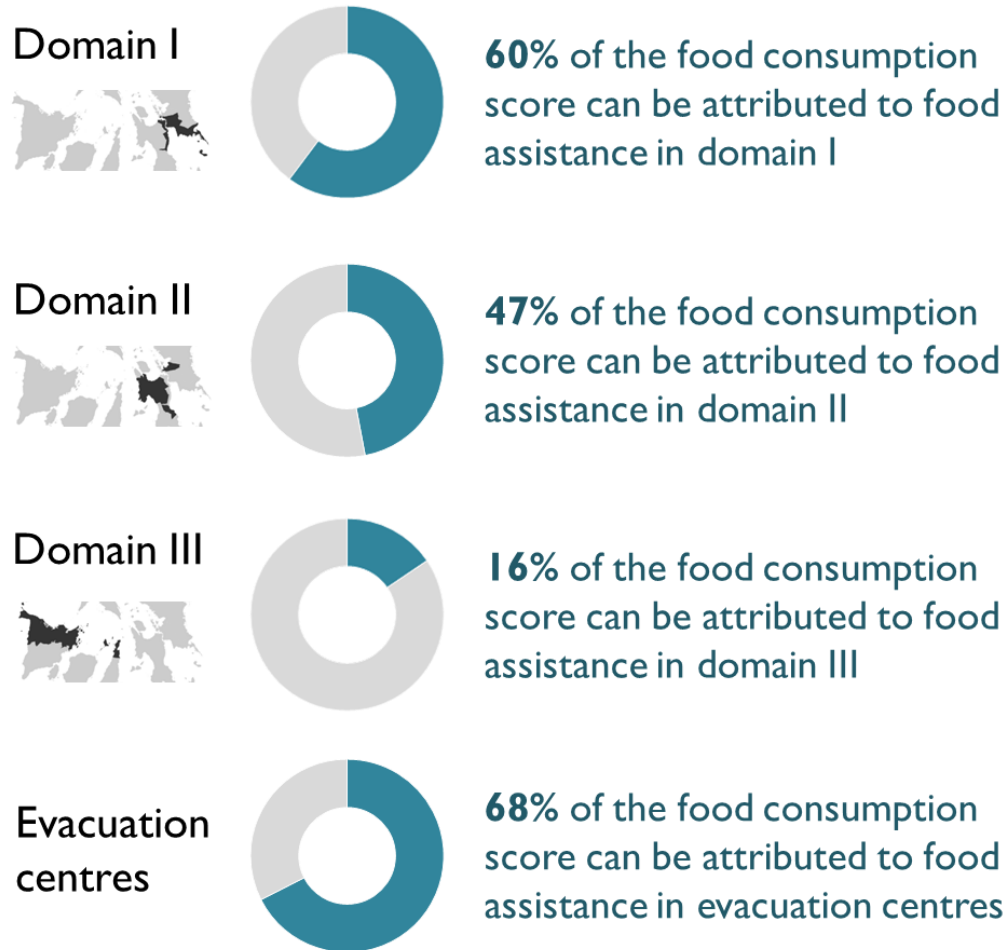


Figure 14. Contribution of food assistance to food consumption score values.



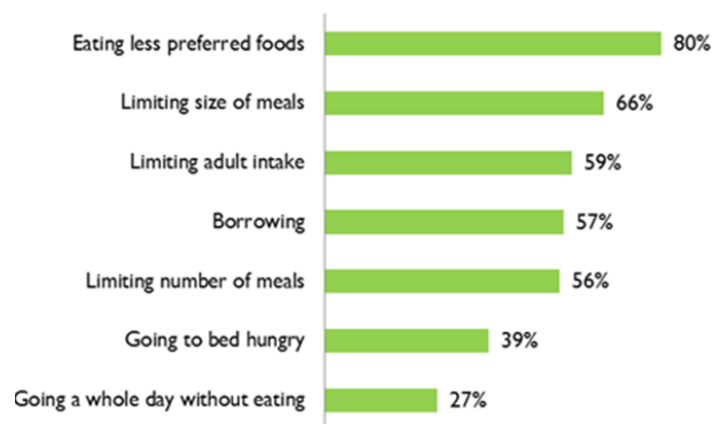
Household coping

While an analysis of the food consumption scores and food sources provides useful information about the food security situation of a population, the information obtained from these indicators does not explicitly consider the coping mechanisms employed by households, which can directly affect household food security status and the affected population's resilience and ability to recover. With livelihoods and assets severely affected, households tend to engage in a series of coping strategies which may include reversible measures such as changes to food consumption patterns, temporary outmigration, relying on relief and community support, tightening of the household's budget and consumption, taking out loans or, in more extreme cases, strategies that are highly detrimental to long-term development, such as selling of productive assets in order to satisfy immediate and basic needs.

Another means of differentiating between coping strategies employed by households is as (1) consumption-based coping strategies (changes to food consumption patterns) or (2) livelihood-based coping strategies. In terms of consumption-based coping strategies, the most frequent measure taken to deal with food shortage at the household level is eating less

preferred foods (80 percent of households). Over half of households also reported limiting the size of meals, limiting adult intake, limiting number of meals or borrowing food. More extreme manifestations of hunger such as going a whole day without a meal observed less frequently (Figure 15).

Figure 15. Proportion of households using food-based coping strategies.



These consumption-based strategies can be summarized into a consumption coping strategy index which combines the measures taken by households under stress, weighted by severity, and provides insight into the intensity of coping in which the household is engaged (Figure 16). By domain, a greater proportion of the

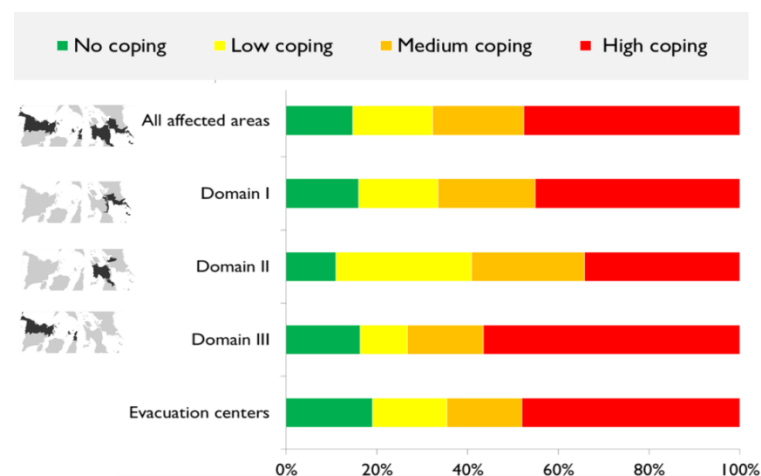
population in Domain 3 (55 percent) and in evacuation centres (45 percent) were employing negative food-based coping strategies than in Domains 1 and 2 which may be reflective of the higher level of food assistance provided in Domains 1 and 2.

Limited data was also collected on livelihood coping strategies. Based on the severity of the actions taken by the households, these coping strategies were grouped into emergency, crisis, stress and insurance strategies according to Table 2. The results are summarised in Map 4. The map shows higher reliance on ‘emergency’ or ‘crisis’ livelihood coping strategies in the easternmost parts of Samar, parts of southern Leyte, and western Panay Island. This trend highlights the livelihood challenges faced by households in the most affected areas as well as in chronically poor, isolated areas of the Western Visayas.

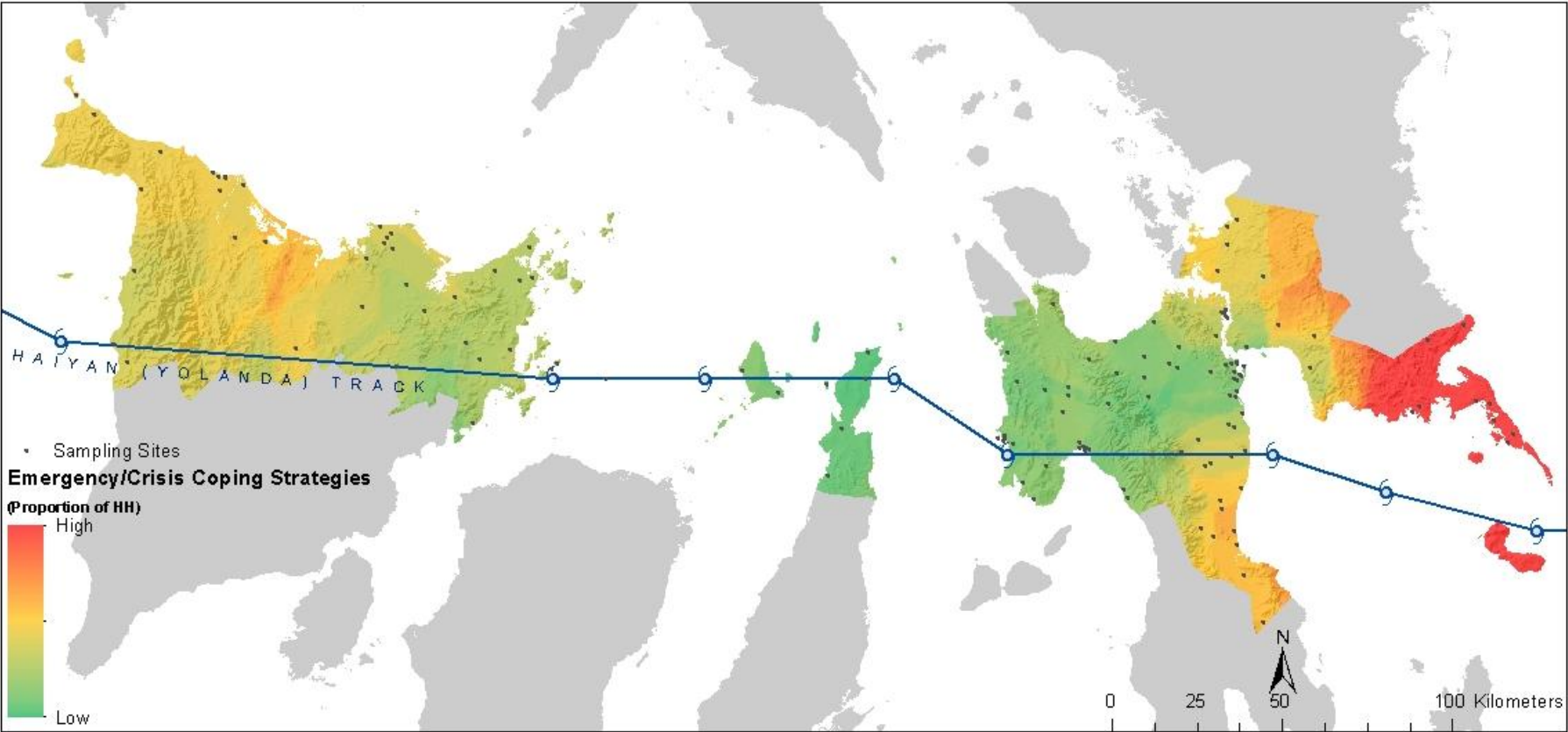
Table 2. Livelihood strategies

Livelihood coping strategies	Indicator	Description
Insurance strategies	1. Able to purchase food items on credit basis	Insurance (or “neutral”) strategies do not significantly affect the future ability to face a crisis. They are part of normal household livelihood strategies.
Stress strategies	2. Pawning household items 3. Take out extra loans	Stress strategies indicate a reduced ability to deal with future shocks due to increase in debts.
Crisis strategies	4. Selling productive assets 5. Take children out of school as no longer can afford school expenses	Crisis strategies directly reduce future productivity including human capital formation.
Emergency strategies	6. Take children out of school to work for income 7. Begging	Emergency strategies affect future productivity and are difficult to reverse and more dramatic in nature.

Figure 16. Proportion of households employing negative coping strategies.



Map 4. Relative use of emergency and crisis livelihood coping strategies.



Food security outcomes

The Consolidated Food Security Indicator Approach (CFSIA) combines information on food consumption and economic vulnerability to provide a more comprehensive picture of food security dynamics at the household level.

Using this approach, the results suggest that 27 percent of the population remains food insecure and needs continued food assistance to prevent further depletion of assets (Table 3 and Figure 17).

Map 5 shows the relative food security according to CFSIA. Domains 1 and 2 have the highest proportion of households that are severely food insecure. The westernmost parts of Domain 3, too, are food insecure. This may be attributable to pre-existing food security problems.

Note: The CFSIA is a standardized measure of food insecurity developed by WFP. It is based on a console of key household food security indicators allowing each household to be classified into one of the following categories: food secure, marginally food secure, moderately food insecure, severely food insecure.

According to this food security classification, households that depend on farming and wholesale/retail trading are the most food insecure. In comparison, households who rely mainly on salaried/skilled employment have a better food security profile.

Figure 17. Households with different food security categories by livelihood.

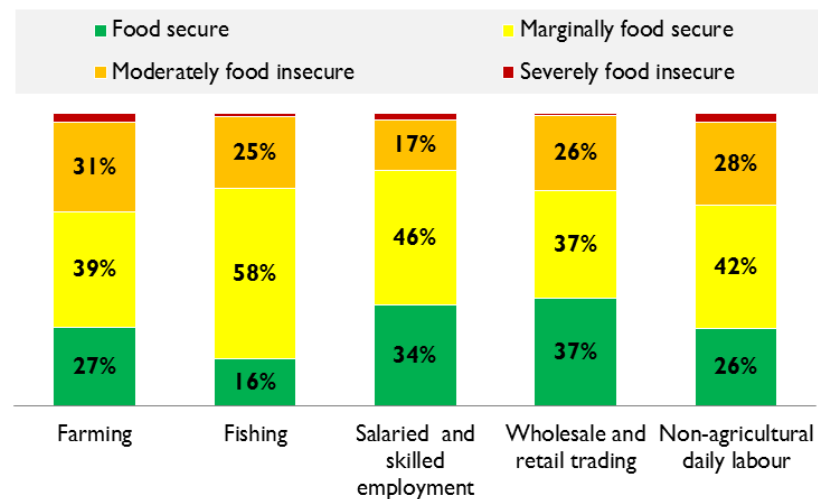
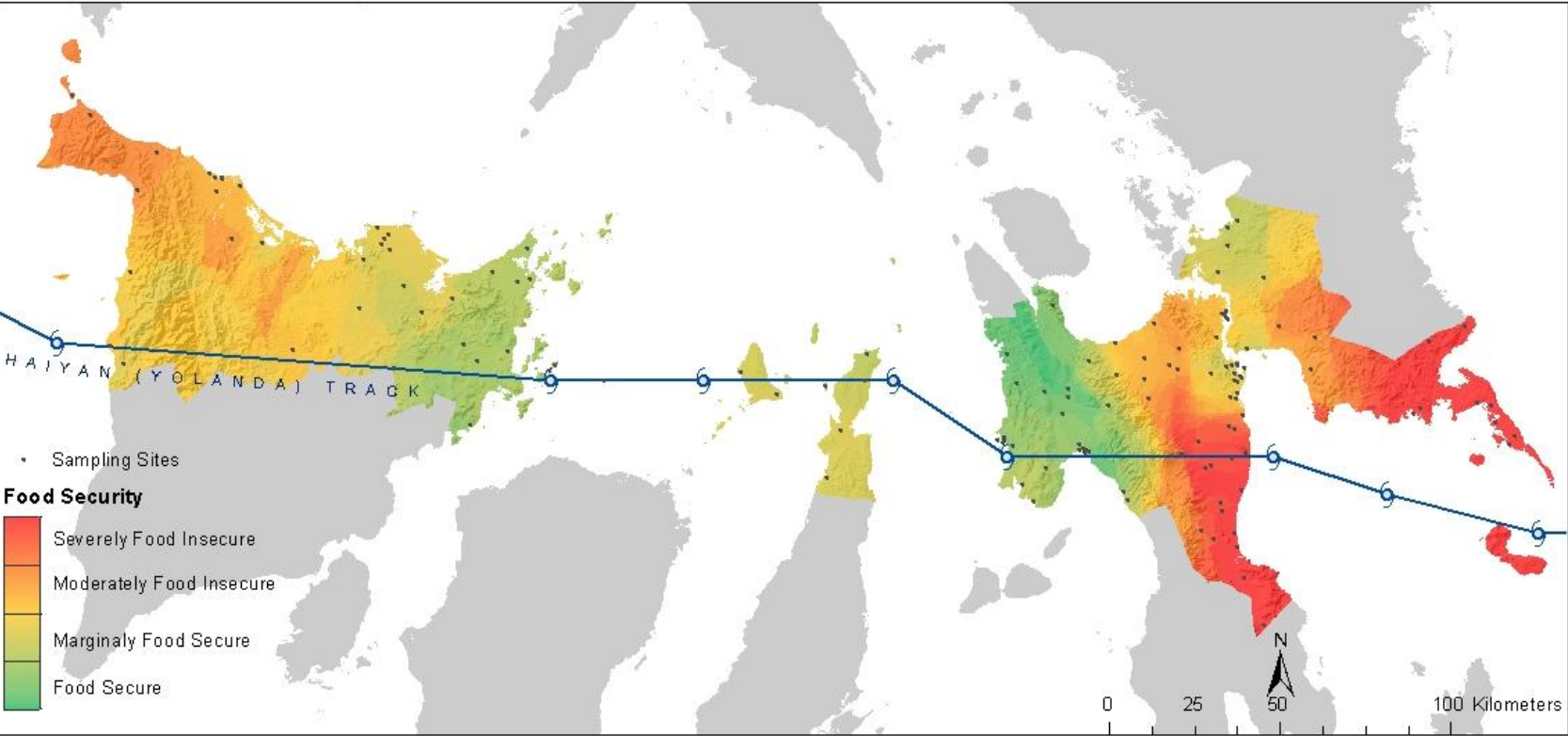


Table 3. Proportion of households that are food secure, marginally food secure, moderately food insecure, and severely food insecure according to the Consolidated Food Security Indicator Approach (CFSIA).

Category		Indicator	Food Secure	Marginally food secure	Moderately food secure	Severely food secure
Current status	Food consumption	Food consumption score	70%		17%	13%
Coping strategy	Economic vulnerability	Amount of total expenditure	25%	25%	25%	25%
	Asset depletion	Livelihood coping strategy categories	64%	15%	8%	13%
			Food Secure	Marginally food secure	Moderately food secure	Severely food secure
Overall WFP food insecurity group			31%	42%	25%	2%

Map 5. Relative food security according to CFSIA.



HEALTH

Access to adequate health services is a key concern for more than a third of the affected population.

The decline in access to health care is especially dramatic in Domain 1, where it declined from 84% to 58%. The presence of medical teams has partly protected those in evacuation centers, where access remained stable at 68%.

More than a fifth of all respondents reported lacking access to a general medical practitioner. Access is especially poor in rural areas for those who were poor (see community profile – Annex II).

One quarter of women reported no access to reproductive health services. Figure 18 shows significant differences between geographic areas. Access is lowest in Domain 2, in rural or inland areas, and in evacuation centres.

Around 30 percent of male and female respondents report difficulties in physical access to health facilities. The major access problems are lack of transport and damaged buildings (Figure 19). These results are validated through a parallel reproductive health facility assessment conducted by the Health Cluster which showed that, after the typhoon, only 11% of birthing and referral facilities have blood transfusion services, 36% have ambulances, 52% run out of basic medicines and supplies, 12% experience low manpower to deliver health services. In addition, the Department of Health, in its 11 December 2013 report, stated that 38% (402 out of 1068) of the health facilities suffer partial damages to their buildings, whilst 18% are completely destroyed.

Figure 18. Main challenges to access health centres according to gender.

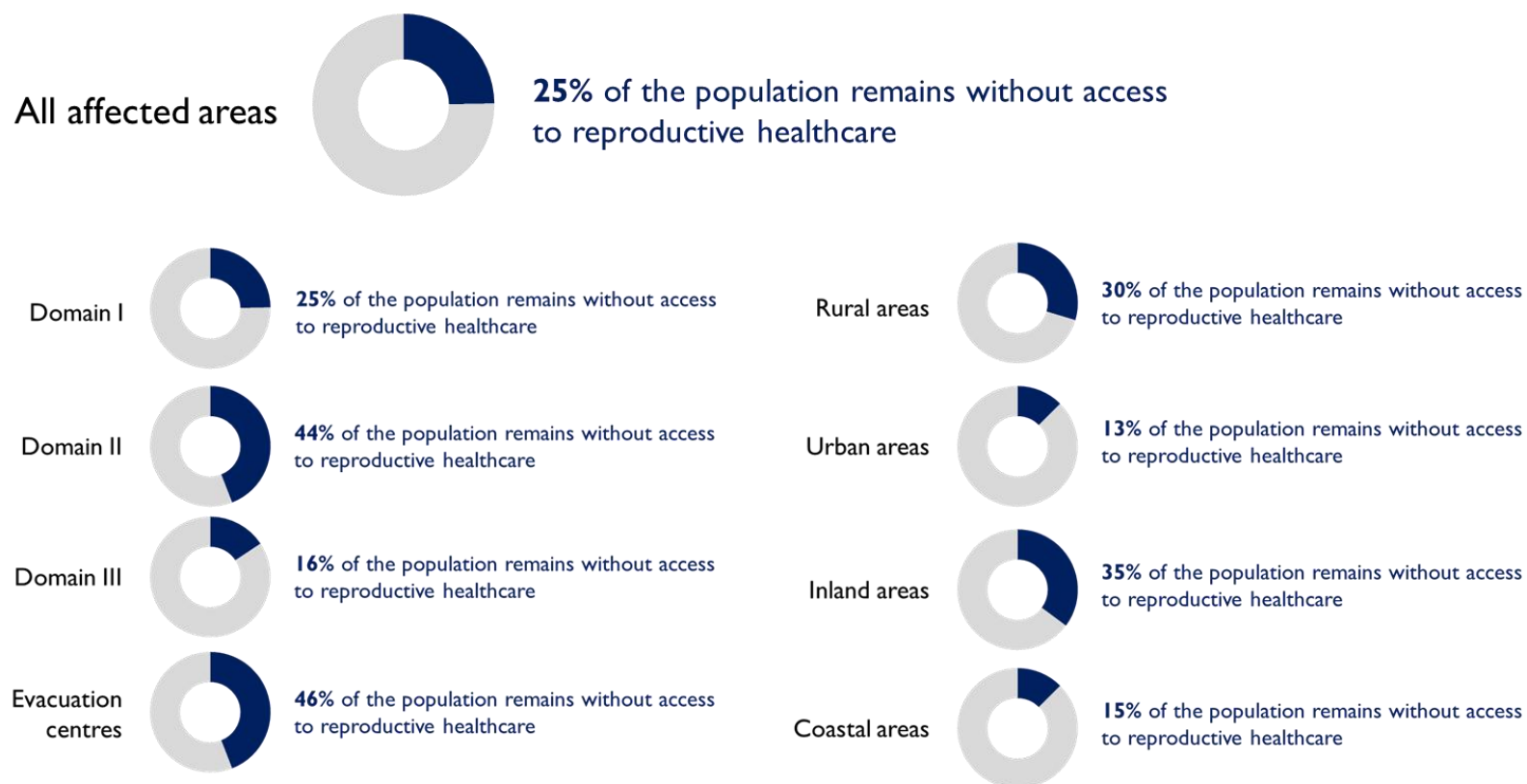
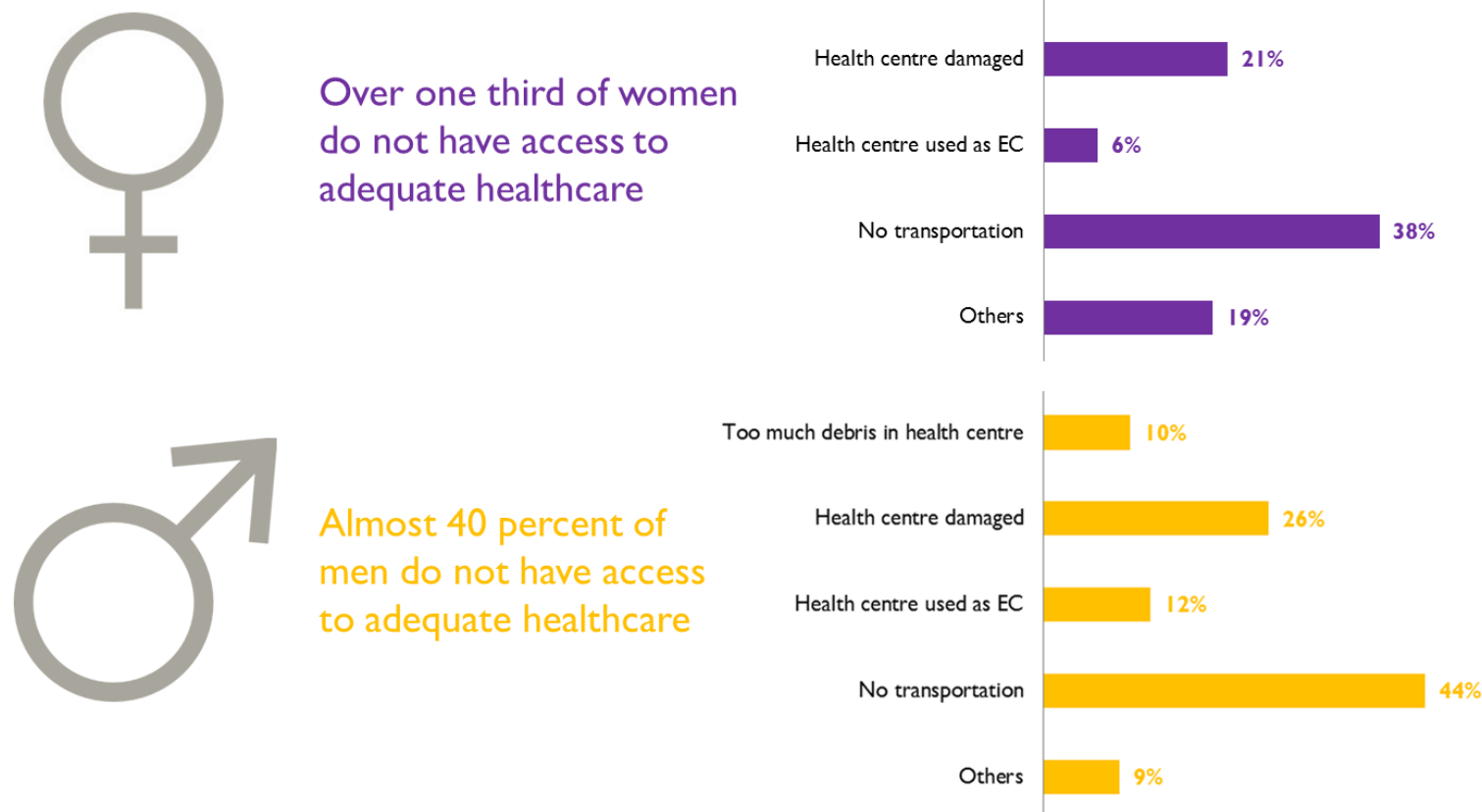


Figure 19. Main challenges to access health centres according to gender.



Water, Hygiene and Sanitation (WASH)

Continued efforts in ensuring access to safe water and good practice of hand washing are essential to prevent an increase in acute malnutrition due to diarrhea.

Washing hands with water and soap, particularly after visiting the toilet, cleaning a child, before eating or handling food and before feeding a child, is internationally recognized as the most cost-effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children less than five years of age. However, monitoring correct hand washing behaviour is a serious challenge. Almost four fifths (79 percent) of the interviewed households indicated to have a space to wash hands and 86 percent of the households stated that they use soap. That one fifth of the population remains without access to a space for handwashing presents a significant hygiene concern.

The majority of households store drinking water (92 percent), mostly in covered containers with narrow necks (49 percent). Some of the households that do not store water reported receiving purified or bottled water, thereby reducing the need to store water at present.

Around half of the population treats water before drinking. The most common treatment methods at present are boiling (53 percent of the population who treats their water boils it) and straining through a cloth (27 percent).

It will be important to strengthen proper storage and treatment of drinking water as contamination by *E. coli* of water sources in the affected areas has been reported in other assessments. Important efforts in water, hygiene and sanitation are needed in order to prevent an increase in acute malnutrition due to diarrhea.

More details on WASH will be forthcoming from the upcoming WASH assessment.

NUTRITION

The nutritional status of boys and girls is still of concern considering the identified aggravating conditions. Preventative interventions focusing on infant and young child feeding should therefore be scaled up.

Only ten cases for admission to supplementary feeding programmes out of 527 observations (less than two percent) were identified. These findings can indicate low levels of acute malnutrition in children aged 6-59 months, based on mid-upper arm circumference screening, but no exact information is available. The development of acute malnutrition might peak from one to three months after the onset of a disaster. The timing and level of increase largely depends on the season when the disaster happened and gaps in response of nutrition and other sectors. The pre-crisis rates of global acute malnutrition in Region VI and VIII are 8.5 and 7.8 percent, respectively. This is rather high and of concern with the presence of aggravating factors. However until now, this hasn't translated into identification of a high number of children identified for admission to therapeutic and supplementary feeding programmes. This might also be explained by the use of MUAC measurements and not the weight-for-height index to identify acute malnutrition. The nutrition cluster is therefore planning comprehensive nutrition surveys in January 2014.

Several aggravating factors suggest that the nutrition status of the affected population may deteriorate in the coming weeks and months. The displacement and concentration of affected families in evacuation centres and among host communities was significant after the typhoon, including in many urban areas. The assessment showed a deterioration of the food security situation, with substantial decreases in household income, food production and in many cases lasting damage to livelihood assets. Livelihoods, especially in farming and fishing, have been severely affected by the typhoon. Households indicated that it will take between 4 to 8 months to recover. From the current analysis, households in domain I and evacuation centres remain most vulnerable but with households in domain 3 applying negative coping mechanisms.

Note: The MUAC is a measure of mortality risk and is used as admission criteria into therapeutic and supplementary feeding programmes. Acute malnutrition is also associated to increased mortality risk.

As a consequence, the affected population's ability to meet food and nutrition requirements remains uncertain now and over the coming months, up to almost one year, in all affected areas. Food consumption and dietary diversity are acceptable for the majority of households. However, the population's heavy reliance on food assistance, both as a source of carbohydrates and protein, casts doubts on the sustainability of sufficient food intake, also putting them at risk of micronutrient deficiencies.

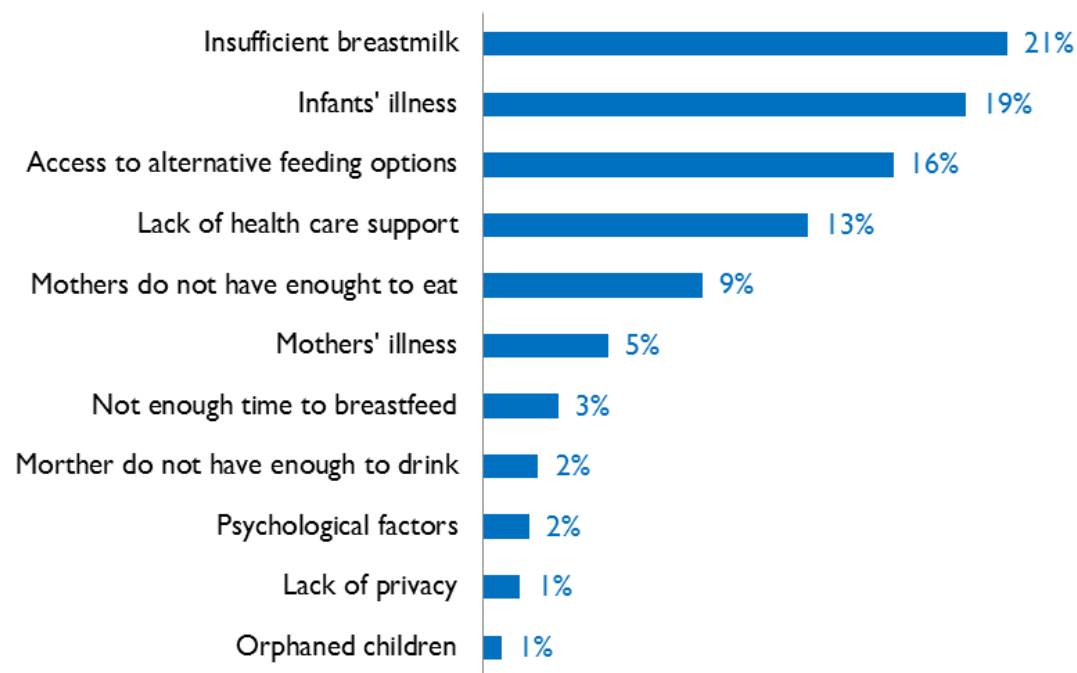
Another critical factor putting the population at risk of malnutrition is the potential increase in morbidity. Some 38% of surveyed population reported limited availability of adequate health services. As explained elsewhere, water, hygiene and sanitation also remain major concerns. Diarrhoea cases have already been raising in some municipalities and with the rainy season approaching in several areas the risk of communicable and vector born diseases will increase. Infant and child illness, especially as in combination with sub-optimal feeding practices can lead very quickly to acute malnutrition.

Findings indicate that access to infant and young child feeding counselling and support has significantly increased from less than 5 per cent in the initial

assessments to above 50 per cent. However, further scale up of services is required to address the main concerns of communities related to infant and young child feeding.

Reported concerns at barangay level include infant and young child illnesses, decrease in breastfeeding, (which is related to increased distress among breastfeeding mothers), access to alternative feeding options and lack of health care support (Figure 20). Limited access to sufficient food by mothers was also an important concern in Domain 3. A relatively high number of communities reported distribution of dried milk powder (average 21 percent, but up to 28 percent in Domain 1) and infant formula (average 10 percent, but up to 17 percent in Domain 1). This can discourage new mothers from breastfeeding and could exacerbate the risk of morbidity, malnutrition and mortality among infants and young children. The concerns should be immediately addressed by enforcing the milk code and by scaling up community services for infant and young child feeding, including breastfeeding promotion and support. This needs to be combined with sustaining efforts in food security, health and WASH sectors to prevent a deterioration of the nutritional status of vulnerable groups.

Figure 20. Proportion of barangays stating infant and young child feeding (IYCF) problems.



Protection during the crisis

PROTECTION CONCERNS & VULNERABLE GROUPS

As populations continue to struggle to rebuild their homes and livelihoods and deal with the stress of the disaster, addressing protection and insecurity concerns must remain a priority, particularly for women and children who are at higher risk of trafficking and sexual abuse.

In general, conditions have proven to be more severe in Domains 1 and 2. Domain 3 reports a higher proportion of household members still unaccounted for. It is thought that the presence of more remote islands in Domain 3 where communication is more difficult may be the reason why there is a higher percentage of missing family members. No data are available on whether these missing household members are female, male, children or elderly.

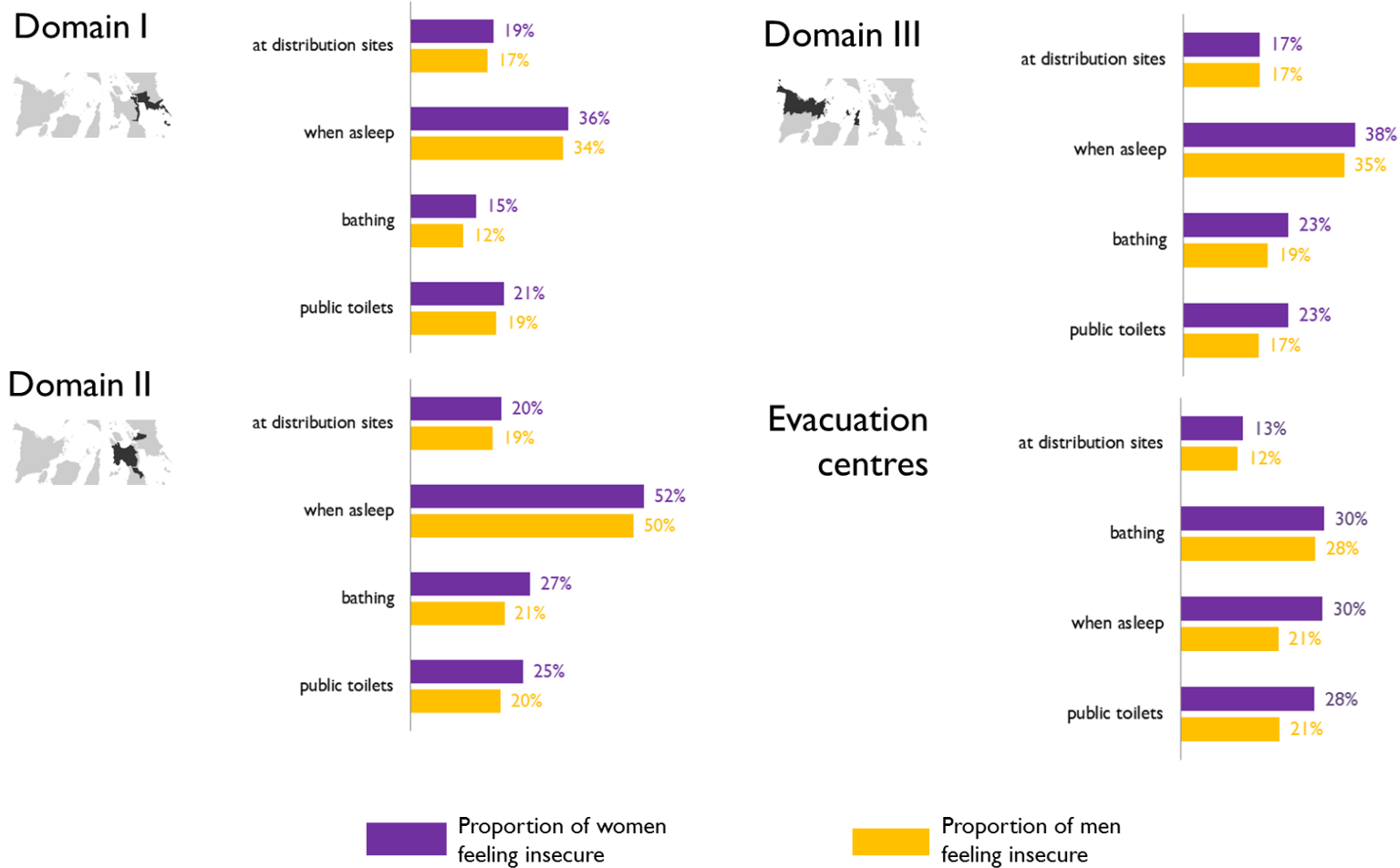
The profile of protection in Annex II lists a number of protection issues that need to be taken into consideration when planning and refining response options and recovery plans. It presents data disaggregated geographically, by sex, by economic activity and wealth level, the protection situation of the household interviewed in terms of access to assistance, safety and security, and well-being.

Damaged houses and debris, uncollected solid waste and

broken pavements and roads pose a high threat for physical injuries. The risks are highest for women with overall 67 percent of household responding that women are at increased risk of physical injuries compared to 34 percent of men.

A key protection issue that emerged is a general feeling of insecurity among men and women, especially in evacuation centres, but also throughout the affected areas. On average, across all geographical areas, sex and wealth categories, 40 percent of households interviewed indicated a feeling of insecurity. Figure 21 provides details on locations where this feeling of insecurity is particularly increased. It shows that a significant larger portion of the households interviewed indicated feeling insecure at night, when people are asleep. The sense of insecurity was highest in Domain 2. Almost one fifth of households express a sense of insecurity among female members in food distribution sites.

Figure 21. Proportion of men and women indicating feeling of insecurity in different locations and situations.



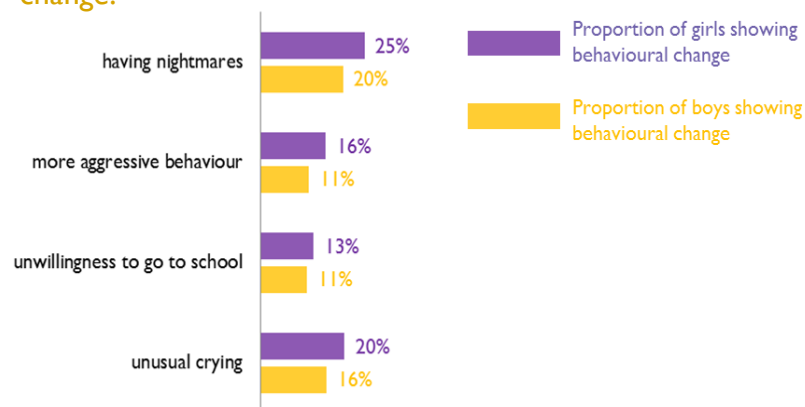
Feeling of insecurity is also expressed in the perceived increased risk of physical and sexual violence as well a serious danger of increased human trafficking. The risk of physical and sexual violence is especially high in evacuation centres where one in every five households indicates that women are more at risk. The risk of physical and sexual violence is also significantly higher in Domain 1 (15.4% for women) compared to other Domains (6.9% and 5.4% for women in Domain 2 and 3, respectively).

The danger of human trafficking will need to be strictly monitored for households still residing in evacuation centres. Around 15 percent of households express an increase risk of human trafficking in these sites for both men and women. Women, children and adolescents from poorer households may be particularly at risk. In other areas, the increased risk of human trafficking is expressed by 4.3 percent of households for females and 2.2 percent of households for males.

The fear of prevailing insecurity is also demonstrated by the fact that women in 26 percent of households are restricting their movements, especially in domain 2. The traumatic experience of the past month may be

specifically hard for children and adolescents of affected families to absorb and accept. This is evident by the fact that almost one third of families report signs of behavioural changes in girls and boys (32.6% and 26.7% respectively). The situation is similar across all Domains, including evacuation centres. Figure 22 summarises the frequency of selective behavioural changes reported. At the community level, the most vulnerable groups are considered to be the elderly and children (both boys and girls). Most barangay officials also consider women – whether single or married – to be more vulnerable to harm than men. Pregnant and breastfeeding women are also considered to be especially vulnerable to harm.

Figure 22. Proportion of boys and girls showing behavioural change.



ASSISTANCE PROVIDED & NEEDS

Major humanitarian assistance efforts since typhoon Haiyan have included food assistance, provision of shelter material and hygiene kits. These activities have helped the affected population cope with the disaster impacts more effectively in the immediate aftermath of the disaster. Provision of recovery assistance including cash and agricultural and fishery inputs have been limited up to now.

Significant national and international assistance has arrived in the Philippines following the flash appeal made by the Government and the United Nations system. This assistance has been instrumental in accelerating the recovery of the affected population.

Almost the entire population (over 96 percent in all Domains and over 99 percent of people living in evacuation centres) has reported receiving assistance of some sort. The most common form of assistance is dry rations (such as high-energy biscuits and uncooked meals), which have reached over 97 percent of the affected populations.

Over a third of the affected population has received hygiene kits, mostly in Domain 1 (50%) and in evacuation centres (83%). Shelter material has been provided to almost one quarter of the population, primarily in

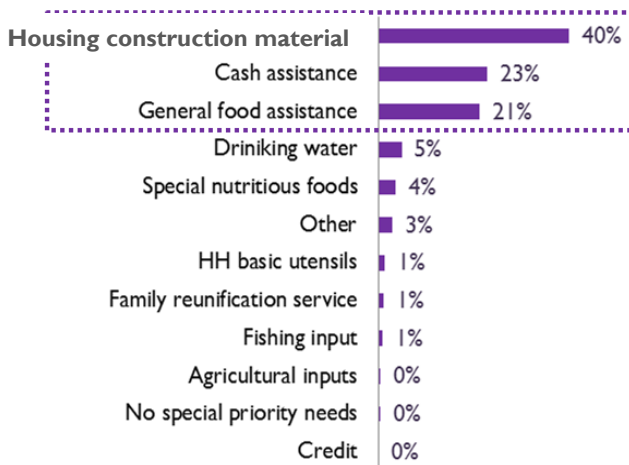
Domains 1 (41%), where the level of destruction on houses was the greatest.

To date, little cash assistance (mostly in Domain 3 and in evacuation centres) and very limited livelihood recovery inputs for agriculture and fisheries (mostly in Domain 1) have been provided. In the next phase of the emergency operation, supporting cash-based interventions and recovery of livelihood assets could allow households to transition more rapidly into a recovery phase.

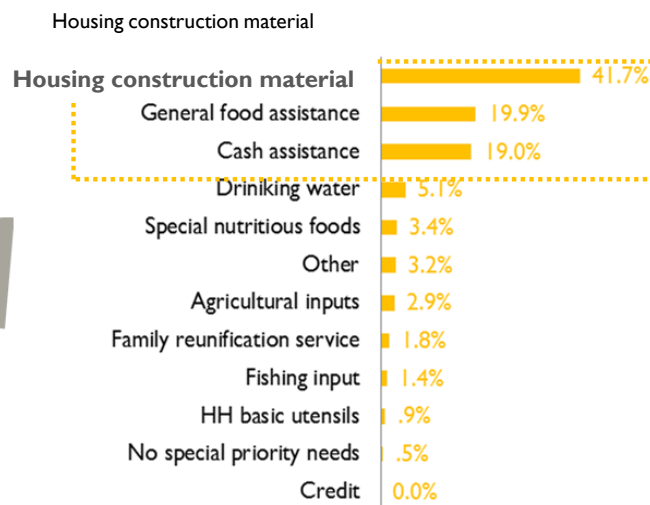
Households express that their immediate priority needs are still reconstruction and repair of housing, continuation of food assistance, and fulfillment of cash requirements. No major differences are observed between priority needs expressed by female and male respondents (Figure 23).

Figure 23. Stated immediate priority needs for women and men.

Priority needs for women



Priority need for men



Annex I: Method

MIRA I provided data and analysis about the impacts of typhoon Haiyan at the community level. This multi-cluster needs assessment provides more detailed and representative data at the household level with the aim to provide insight into the state of recovery.

The sample universe for the assessment was limited to the worst affected areas as identified in the MIRA I. The affected area was divided into three domains according to the varying impact of the storm, i.e. Domain 1, along the east coast of Leyte and the south coasts of Samar and Eastern Samar which was impacted by tidal surge; Domain 2 covering inland areas of Leyte and the Western coast of Samar which suffered significant damage as a result of extreme winds and; Domain 3 covering areas in the direct vicinity of the typhoon path in Central and Western Visayas.

In addition, a separate domain was created for the population residing in evacuation centres.

Households were selected using a two-stage random sampling approach. In the first stage, barangays were selected in such a way that those with more households had a higher probability of being selected than those with less households, this to ensure that, within domains, all households had the same chance of being selected, irrespective of whether the household was located in a populous barangay or not. Map 6 shows the population

distribution against the sample sites. The second stage involved random sampling of seven households in each barangay or evacuation centre. The number of households sampled within each barangay (cluster size) was kept low to minimize the design effect. For almost all barangays and evacuation centres households were selected from available household lists. In case no household lists were available – as was the case for four barangays in Northern Cebu – households were selected by randomly choosing a direction from the geographical centre of the community (by way of spinning a pen in the air), counting the number of households to the edge of the community and calculating the sampling interval by dividing the number of households by seven. Households no longer residing in the community but still on the community household list were replaced in case they were selected.

In total, 1,167 households from 153 barangays and 33 evacuation centres were assessed. The survey was designed to provide a 90% confidence interval with a maximum acceptable margin of error of 7 percent for each indicator.

Indicators were analyzed by geographic domain, degree of urbanization, access to coastal areas, gender of head of households and survey respondent, main economic activity and wealth. The sample sizes for each disaggregation is provided on page 46.

Annex I: Method

The total of all affected areas aggregates data for households in Domain 1, 2 and 3. It excludes data on households still residing in evacuation centres. This is also the case for the data provided for rural, urban, inland and coastal aggregates.

Data is disaggregated by rural and urban as per the official list of barangay classification. Coastal households are those located in a barangay that has a shoreline or are within 1.5 km from the coast.

Female headed households are households in which the female is the principle income earner or the main household decision-maker. It includes widows and separated women as well as households in which the husband has migrated and lives away from the nucleus family.

Almost three quarters of the respondents were female. Data presented by female and male have been restricted in such a way that answers of female respondents were void for male responses and vice versa. In other words, male responses were treated as valid only when answered by a male respondent and female responses were only valid when answered by a female respondent. Data on livelihoods was aggregated into five main

livelihood groups. Farming includes crop producers, livestock rearers and agricultural labourers. Daily agricultural labour was added to farming because of confusing that arose during training and field work about the difference between agricultural labour and households farming on their own land or rented land. Non-agricultural daily labour includes unskilled labour as well as provision of transport services in urban and rural areas.

A wealth classification was made based on expenditure levels of households before the typhoon. Overall household expenditure was divided into quartiles with those in the poorest wealth quartiles having the lowest weekly expenditure.

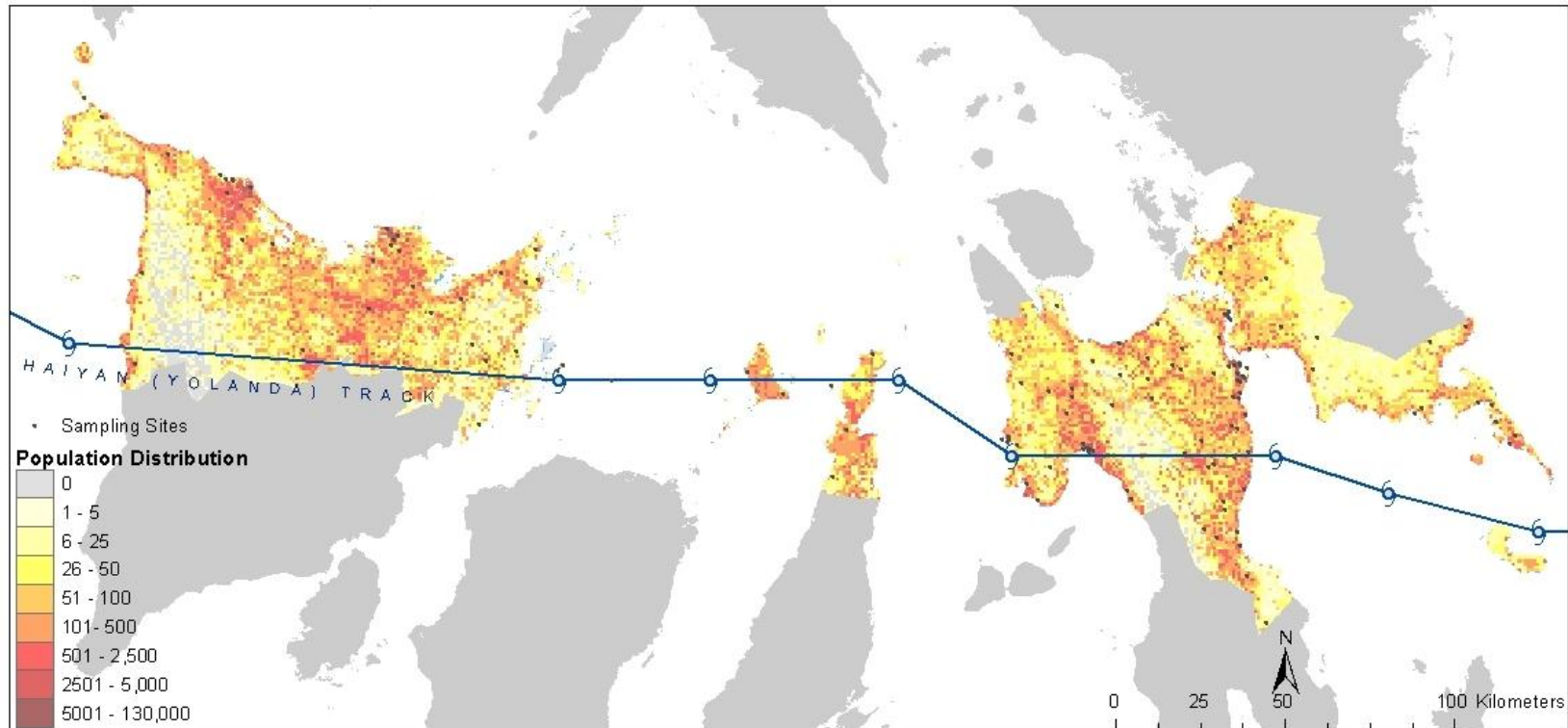
A number of maps presented in this report have been created using a spatial regression technique called Kriging or Gaussian process regression. It is a method of interpolation for which the interpolated values are modeled by a Gaussian process governed by prior covariances. The method predicts the value for a given geographic location by computing a weighted average of the known values in the neighborhood of that geographic location.

Annex I: Method

		n
Geographically	1 All affected areas (excl. evacuation centres)	878
	2 Domain I	262
	3 Domain II	325
	4 Domain III	291
	5 Evacuation centres	289
	6 Rural	648
	7 Urban	202
	8 Inland	417
	9 Coastal	461
Gender	10 Male headed households	926
	11 Female headed households	218
	12 Male responded	328
	13 Female responded	821
Main economic activity	14 Farming	322
	15 Fishing	92
	16 Salaried and skilled employment	281
	17 Wholesale and retail trading	115
	18 Non-agriculture daily labour	357
Wealth	19 Q1 Poorest	279
	20 Q2	254
	21 Q3	317
	22 Q4 Richest	310

Annex I: Method

Map 6. Population distribution and sample sites



Annex II: Profiles

A Profile of Livelihoods

		Income and expenditure				Assets			Recovery	
		1	2	3	4	5	6	7	8	9
		Δ in household income	Δ in household expenditure	Δ # seeking work	Household receiving foreign remittances (%)	House uninhabitable	% of agricultural area destroyed	Δ in tropical livestock unit (%)	# months to re-establish / rebuild house	# of months to re-establish main livelihood
Geographically	1 All affected areas (excl. evacuation centres)	-41.0%	-35.7%	1.7%	20.7%	54.8%	86.3%	-28.2%	7	6
	2 Domain I	-64.7%	-63.4%	5.4%	5.4%	70.7%	89.5%	-42.8%	7	7
	3 Domain II	-40.3%	-42.8%	5.1%	16.7%	53.5%	90.2%	-25.6%	7	7
	4 Domain III	-32.7%	-23.6%	-2.1%	27.3%	50.5%	83.4%	-25.6%	8	5
	5 Evacuation centres	-74.2%	-76.4%	14.4%	10.1%	96.8%	86.7%	-76.0%	7	5
	6 Rural	-41.5%	-33.5%	-1.4%	23.1%	53.8%	85.4%	-27.1%	7	7
	7 Urban	-40.7%	-40.4%	9.8%	16.8%	51.9%	91.0%	-31.4%	8	5
	8 Inland	-34.8%	-30.1%	1.6%	18.0%	62.0%	83.7%	-26.3%	8	6
	9 Coastal	-46.5%	-40.7%	1.8%	23.2%	48.1%	88.9%	-29.7%	7	6
Gender	10 Male headed households	-51.3%	-45.7%	5.9%	16.2%	65.5%	86.1%	-33.7%	7	6
	11 Female headed households	-44.1%	-48.3%	2.5%	25.5%	62.1%	91.7%	-45.9%	7	6
	12 Male responded	-50.0%	-44.2%	3.0%	22.9%	64.5%	89.2%	-28.8%	6	7
	13 Female responded	-49.6%	-46.3%	5.9%	16.5%	64.6%	84.4%	-38.0%	7	5
Main economic activity	14 Farming	-54.5%	-34.1%	0.8%	18.9%	59.6%	81.0%	-25.4%	7	8
	15 Fishing	-69.6%	-71.2%	-6.5%	11.3%	74.2%	100.0%	-40.4%	7	6
	16 Salaried and skilled employment	-38.2%	-47.8%	7.9%	14.4%	66.6%	91.9%	-25.1%	7	4
	17 Wholesale and retail trading	-51.0%	-41.5%	5.0%	14.4%	64.2%	100.0%	-50.1%	8	4
	18 Non-agriculture daily labour	-48.2%	-49.4%	9.4%	22.7%	65.8%	91.5%	-43.4%	7	5
Wealth	19 Q1 Poorest	-46.1%	-35.9%	3.8%	12.4%	65.6%	81.4%	-35.5%	7	5
	20 Q2	-49.7%	-52.4%	0.9%	19.2%	71.0%	88.7%	-24.3%	9	6
	21 Q3	-53.4%	-50.8%	7.4%	22.0%	63.2%	88.2%	-38.1%	7	6
	22 Q4 Richest	-48.7%	-44.8%	8.0%	18.7%	60.5%	86.6%	-29.9%	6	5

Annex II: Profiles

A Profile of Food Security and Nutrition

		Food Consumption					Vulnerability				Nutrition		
		1	2		3		4	5		6	7	8	9
		# of meals (< 3 meals / day)	Food Consumption Score			Poor Dietary Diversity (< 4 food groups)	Share of Expenditure on Food	Coping Strategy Index		Pawning / Extra loans	No soap available in the household	MUAC < 11.5	MUAC < 12.5
			Poor	Borderline	Acceptable			Low coping (<18)	High coping (>18)				
Geographically	1 All affected areas (excl. evacuation centres)	8.5%	13.1%	17.3%	69.6%	7.3%	73.0%	52.3%	47.7%	22.3%	14.0%	0.0%	1.9%
	2 Domain I	11.4%	11.0%	18.0%	71.0%	9.9%	53.0%	54.9%	45.1%	3.5%	7.7%	0.0%	2.8%
	3 Domain II	7.9%	16.3%	15.4%	68.3%	11.7%	69.4%	65.7%	34.3%	4.7%	18.5%	0.0%	1.4%
	4 Domain III	7.9%	12.3%	17.9%	69.8%	4.5%	80.3%	43.4%	56.6%	36.0%	13.9%	0.0%	1.9%
	5 Evacuation centres	6.0%	18.0%	17.6%	64.4%	13.8%	73.5%	51.9%	48.1%	8.0%	11.5%	.6%	1.1%
	6 Rural	8.0%	15.2%	17.3%	67.5%	8.0%	72.8%	50.3%	49.7%	20.2%	15.6%	0.0%	2.5%
	7 Urban	10.8%	7.9%	19.3%	72.8%	5.8%	71.0%	57.1%	42.9%	30.3%	7.7%	0.0%	0.0%
	8 Inland	7.8%	18.4%	18.1%	63.5%	7.1%	78.9%	48.1%	51.9%	23.8%	18.2%	0.0%	.6%
	9 Coastal	9.1%	8.4%	16.5%	75.2%	7.5%	67.3%	55.9%	44.1%	20.8%	10.2%	0.0%	3.2%
Gender	10 Male headed households	7.3%	15.2%	15.1%	69.6%	9.2%	71.9%	52.0%	48.0%	16.2%	13.4%	0.0%	1.7%
	11 Female headed households	11.1%	11.3%	26.6%	62.1%	6.1%	76.8%	52.2%	47.8%	28.0%	14.4%	1.4%	1.4%
	12 Male responded	8.2%	19.2%	13.8%	67.0%	13.2%	69.8%	54.7%	45.3%	14.0%	13.2%	.9%	.9%
	13 Female responded	7.8%	12.4%	18.6%	69.0%	6.7%	74.4%	51.3%	48.7%	20.3%	13.6%	0.0%	1.8%
Main economic activity	14 Farming	8.8%	17.2%	19.0%	63.7%	8.8%	72.3%	49.6%	50.4%	20.5%	18.6%	0.0%	2.4%
	15 Fishing	8.1%	7.9%	13.5%	78.6%	12.2%	62.9%	63.8%	36.2%	9.4%	15.0%	0.0%	3.6%
	16 Salaried and skilled employment	7.4%	12.5%	13.0%	74.6%	7.6%	73.2%	58.1%	41.9%	17.4%	8.9%	.7%	1.6%
	17 Wholesale and retail trading	7.5%	5.1%	21.5%	73.5%	4.1%	78.2%	58.5%	41.5%	20.8%	11.3%	0.0%	0.0%
	18 Non-agriculture daily labour	7.5%	17.6%	18.8%	63.6%	10.4%	74.3%	45.9%	54.1%	20.0%	12.6%	0.0%	1.1%
Wealth	19 Q1 Poorest	10.5%	19.7%	18.6%	61.8%	10.5%	78.0%	46.7%	53.3%	12.6%	14.3%	0.0%	2.0%
	20 Q2	8.1%	18.1%	19.4%	62.6%	11.1%	74.3%	50.1%	49.9%	19.5%	14.2%	.9%	.9%
	21 Q3	5.1%	12.1%	17.1%	70.8%	6.4%	71.6%	51.6%	48.4%	25.2%	14.4%	0.0%	2.1%
	22 Q4 Richest	7.5%	8.3%	14.1%	77.6%	7.4%	69.0%	60.3%	39.7%	17.5%	10.9%	0.0%	1.3%

Annex II: Profiles

A Profile of Protection

		Assistance					Safety and Security						Wellbeing			
		1	2	3	4	5	5		6		7		8		9	
		% of affected households who did receive:					Increased risk of physical injuries		Increased risk of physical or sexual violence		Increased risk of human trafficking		Feeling of insecurity		Signs of behavioural changes in children	
		Food	Cash	Shelter material	fishery inputs	Hygiene kits	male	female	male	female	male	female	male	female	male	female
Geographically	1 All affected areas (excl. evacuation centres)	97.7%	6.1%	23.9%	2.7%	33.3%	33.8%	67.2%	5.6%	7.5%	2.2%	4.3%	38.4%	42.4%	26.7%	32.6%
	2 Domain I	97.7%	1.5%	40.8%	6.6%	50.4%	52.2%	50.6%	13.0%	15.4%	3.1%	3.5%	39.3%	42.0%	31.3%	35.9%
	3 Domain II	97.2%	2.8%	22.2%	1.2%	15.7%	46.2%	54.3%	5.0%	6.9%	1.6%	1.9%	55.1%	58.8%	36.3%	40.9%
	4 Domain III	97.9%	9.0%	19.5%	2.1%	36.2%	21.5%	78.3%	3.4%	5.4%	2.3%	5.7%	30.6%	35.1%	21.0%	27.8%
	5 Evacuation centres	97.2%	12.0%	31.0%	0.7%	82.9%	71.5%	30.6%	13.3%	21.3%	14.7%	15.4%	41.2%	48.1%	28.7%	30.1%
	6 Rural	98.0%	6.1%	25.1%	2.0%	30.9%	34.7%	67.1%	5.8%	6.5%	1.8%	3.6%	38.5%	43.1%	27.5%	33.7%
	7 Urban	96.4%	3.9%	18.0%	4.8%	37.3%	31.9%	66.5%	5.6%	11.0%	3.8%	7.3%	41.0%	43.5%	25.2%	31.7%
	8 Inland	97.4%	5.4%	22.8%	1.9%	26.3%	33.4%	67.9%	4.0%	5.6%	1.2%	4.5%	34.7%	38.9%	28.1%	33.5%
	9 Coastal	98.0%	6.8%	24.8%	3.4%	39.7%	34.2%	66.5%	7.0%	9.3%	3.2%	4.2%	41.8%	45.6%	25.5%	31.8%
Gender	10 Male headed households	97.6%	8.1%	26.0%	1.6%	47.7%	44.7%	56.6%	7.9%	11.9%	6.0%	7.9%	41.4%	45.6%	29.2%	34.1%
	11 Female headed households	97.5%	5.5%	23.5%	4.3%	39.2%	41.5%	61.0%	5.7%	8.0%	3.0%	4.4%	30.6%	39.4%	20.7%	26.0%
	12 Male responded	97.4%	5.4%	27.6%	2.8%	46.6%	42.0%	56.8%	8.5%	10.5%	2.8%	4.4%	36.6%	37.8%	22.9%	27.0%
	13 Female responded	97.7%	8.4%	25.0%	1.8%	45.6%	44.0%	58.4%	6.8%	11.0%	6.2%	8.0%	40.0%	46.2%	28.7%	34.1%
Main economic activity	14 Farming	98.0%	3.1%	24.6%	1.8%	38.6%	33.0%	68.2%	4.8%	6.5%	2.4%	3.7%	42.2%	45.0%	29.0%	33.9%
	15 Fishing	96.5%	6.7%	41.7%	2.4%	58.4%	43.0%	64.0%	5.0%	9.0%	0.0%	0.0%	43.9%	47.6%	17.9%	27.1%
	16 Salaried and skilled employment	98.6%	9.5%	25.6%	3.1%	47.9%	45.4%	51.0%	8.0%	12.9%	6.1%	8.5%	39.3%	45.0%	26.5%	29.9%
	17 Wholesale and retail trading	96.5%	15.0%	25.6%	4.2%	42.2%	52.0%	52.7%	3.4%	5.5%	2.6%	4.0%	40.2%	45.2%	22.4%	31.1%
	18 Non-agriculture daily labour	97.1%	7.8%	22.4%	0.9%	47.4%	48.8%	54.3%	11.4%	15.4%	9.8%	11.6%	35.0%	40.6%	30.0%	33.3%
Wealth	19 Q1 Poorest	99.3%	8.5%	26.4%	2.2%	44.5%	33.1%	29.0%	6.0%	8.4%	1.6%	2.3%	38.6%	42.4%	26.2%	31.6%
	20 Q2	98.4%	8.3%	28.4%	1.3%	47.5%	38.8%	36.2%	5.4%	7.8%	3.8%	6.3%	43.0%	48.3%	28.1%	33.7%
	21 Q3	96.0%	8.3%	23.6%	2.4%	46.0%	49.0%	46.1%	8.5%	13.5%	7.7%	8.8%	38.5%	43.1%	29.9%	35.1%
	22 Q4 Richest	96.8%	5.0%	24.7%	2.2%	44.7%	52.1%	46.5%	9.8%	13.7%	8.4%	11.0%	37.0%	42.3%	24.9%	27.8%

Annex II: Profiles

A Profile of Community Services

		Education centres		Health service		Markets		Other Public Service (% of barangays)			
		1	2	3	4	5	6	7	8	9	10
		Functional school (% of barangays)	Δ in school attendance (5 to 18 years)	No access to primary healthcare	No access to reproductive healthcare	median Δ in expenditure (%)	Functional markets (% of barangays)	Functional solid waste management	Police or tanod patrols	Drainage	Sewage
Geographically	1 All affected areas (excl. evacuation centres)	64.5%	-21%	22.6%	24.8%	-44.4%	78.0%	37.9%	87.9%	55.6%	49.6%
	2 Domain I	30.6%	-70%	23.8%	25.1%	-81.9%	69.4%	36.1%	86.1%	47.2%	54.3%
	3 Domain II	64.6%	-35%	18.5%	44.1%	-48.9%	83.3%	37.5%	81.3%	68.8%	56.3%
	4 Domain III	95.0%	-2%	24.1%	15.7%	-33.3%	79.5%	40.0%	97.5%	47.5%	37.5%
	5 Evacuation centres	N/A	-75%	16.7%	45.8%	-87.5%	N/A	N/A	N/A	N/A	N/A
	6 Rural	64.9%	-20%	28.5%	29.6%	-40.8%	76.3%	37.2%	87.2%	56.4%	46.2%
	7 Urban	64.3%	-22%	7.8%	12.5%	-50.0%	82.1%	39.3%	89.3%	50.0%	57.1%
	8 Inland	63.8%	-20%	28.4%	35.2%	-38.0%	75.4%	29.3%	86.2%	50.0%	41.4%
	9 Coastal	65.6%	-21%	17.3%	15.4%	-48.1%	79.7%	45.3%	89.1%	59.4%	55.6%
Gender	10 Male headed households	N/A	-35%	21.1%	31.0%	-55.6%	N/A	N/A	N/A	N/A	N/A
	11 Female headed households	N/A	-30%	19.5%	26.3%	-56.7%	N/A	N/A	N/A	N/A	N/A
	12 Male responded	N/A	-34%	20.4%	27.5%	-52.3%	N/A	N/A	N/A	N/A	N/A
	13 Female responded	N/A	-34%	20.9%	30.7%	-56.5%	N/A	N/A	N/A	N/A	N/A
Main economic activity	14 Farming	N/A	-31%	28.4%	35.4%	-47.1%	N/A	N/A	N/A	N/A	N/A
	15 Fishing	N/A	-33%	18.6%	19.9%	-80.0%	N/A	N/A	N/A	N/A	N/A
	16 Salaried and skilled employment	N/A	-37%	16.1%	27.4%	-58.9%	N/A	N/A	N/A	N/A	N/A
	17 Wholesale and retail trading	N/A	-34%	13.7%	30.1%	-50.0%	N/A	N/A	N/A	N/A	N/A
	18 Non-agriculture daily labour	N/A	-36%	21.5%	30.0%	-55.6%	N/A	N/A	N/A	N/A	N/A
Wealth	19 Q1 Poorest	N/A	-28%	24.2%	32.8%	-48.0%	N/A	N/A	N/A	N/A	N/A
	20 Q2	N/A	-31%	22.0%	28.9%	-61.6%	N/A	N/A	N/A	N/A	N/A
	21 Q3	N/A	-43%	18.7%	25.9%	-56.3%	N/A	N/A	N/A	N/A	N/A
	22 Q4 Richest	N/A	-40%	19.2%	32.1%	-53.3%	N/A	N/A	N/A	N/A	N/A

Annex III: Participating organisations

A technical team from WFP undertook the analysis and report writing with input from various clusters. OCHA ensured cluster coordination. Financial support was provided by WFP and OCHA.

A total of 20 organisations from 11 different response clusters participated in the design of the questionnaires used for the Multi-Cluster Needs Assessment and provided valuable support to the collection and analysis of data.

1. ACF
2. Canadian Army - DART
3. Central Visayas Network (CENVISNET)
4. DSWD
5. FAO
6. ILO
7. IOM
8. OCD
9. OCHA
10. PDRRMC
11. Samaritan's Purse
12. UNDAC
13. UNDP
14. UNDSS
15. UNFPA
16. UNHAS
17. UNHCR
18. UNICEF
19. WFP
20. World Vision International

