

Analysis of Shelter Recovery

This document presents a summary of the recovery shelter activities that have been or are currently being implemented by shelter partners in response to typhoon Yolanda, structured around the following sections:

1. SCOPE AND LIMITATIONS.....	1
2. EXTENT OF RECOVERY SHELTER SUPPORT	2
2.1 Shelter implementation.....	2
2.2 Technical assistance	3
2.3 Comparison of response to shelter needs	5
2.4 Regional comparison	7
2.5 Progress of Activities	10
3. OUTCOMES	10
3.1 What is the extent of recovery?.....	10
3.2 What do we know about self-recovery?.....	13
3.3 Measuring 'building back safer'	13
4. CHALLENGES.....	15
4.1 Quantifying shelter outputs.....	15
4.2 Quantifying shelter outcomes.....	15
4.3 Gaps in information provision.....	16
5. ACKNOWLEDGEMENTS.....	16

1. SCOPE AND LIMITATIONS

What is included? This analysis covers all recovery shelter activities reported to the Shelter Cluster by the 6th October 2014. The full database is available on the Shelter Cluster website¹.

What do we mean by recovery shelter? Recovery shelter activities are defined within the Shelter Cluster's [Shelter Recovery Guidelines](#)². This does not include emergency shelter activities such as the distribution of tents, tarpaulins and non-food items.

Classification of repairs and retrofitting: Repairs and retrofits have played a major part in the shelter response to Yolanda. These have been undertaken through a number of different modalities – as distributions of materials, as cash or voucher distributions, or directly implemented by agencies. Throughout this document, repairs and retrofits have been classified according to the value of the overall package, in line with the [Shelter Recovery Guidelines](#) – a minor repair/retrofit being a package of between 10,000 to 20,000 PHP, and a major repair/retrofit as 20,000 to 40,000 PHP. Smaller packages (under 10,000 PHP) have been classified as 'Support for Self Recovery' (SSRS) shelter kits, in line with the cluster's strategy.

What is not included? As permanent houses are a recovery solution outlined within the Shelter Recovery Guidelines, they have been included within this analysis, when reported to the cluster. However, these figures do not represent the sum total of **all** intended permanent house building for the Yolanda response; several partners who are undertaking permanent houses are reporting these directly to municipal authorities. Likewise, whilst Government response data has been included within this analysis when reported to the cluster, this data does not represent the full extent of the Government shelter response.

Double counting: The Shelter Cluster's database records information regarding agency's activities, locations, and number of targeted and reached beneficiaries. It does not record beneficiary details, therefore it is not possible to identify cases where a household has been the beneficiary of more than one shelter programme, i.e. whether or not a family has received two shelter repair kits from two different agencies. This can occur when shelter assistance provided has not resulted in sufficient recovery, resulting in a household potentially being evaluated as sufficiently still vulnerable so as to merit further shelter support. This has particularly been the case for some beneficiaries of shelter kit programmes

¹ <https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/20141003%20HSWG%20Database%20for%20website.xlsb>

² <https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/Recovery%20Shelter%20Guidelines.pdf>

2. EXTENT OF RECOVERY SHELTER SUPPORT

This section of the report aims to provide an overview of the overall recovery shelter response, taking into consideration the total number of households that these activities will reach once completed. According to agency information, this will be by the end of 2015 at the latest. Section 2.5 provides an analysis of what has been completed by the 6th October 2014.

2.1 Shelter implementation

According to data submitted to the Shelter Cluster, activities will target a total of 344,853³ households with recovery shelter activities out of approximately 1.1 million⁴ houses damaged or destroyed. Almost all of these activities have confirmed funding, with less than 1% still subject to funding.

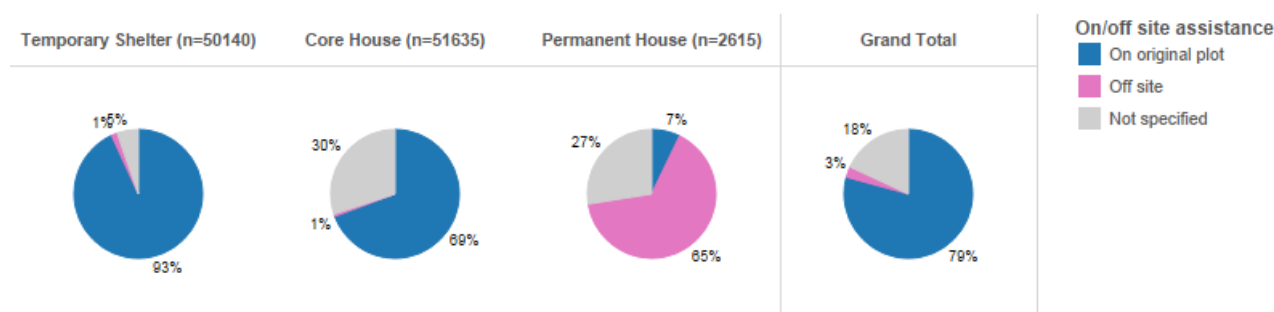
These activities are being undertaken by 78 implementing agencies (increasing to 102 if partner agencies are included), within 1,864 barangays in 124 municipalities across four regions.

In terms of the types of activities, the majority of the response has focused on repairs and retrofits (70%) as opposed to new shelters (30%). Smaller value repair kits of up to 10,000 PHP constituted almost half of the repair and retrofit response. The building of new shelters is fairly equally divided between temporary shelters and core shelters – the main difference between these two shelters is the longevity of the solution – core houses are recommended to use materials designed to last at least nine years, and be provided to households who are likely to be able to stay on their current site for at least the same length of time. Temporary shelters are recommended for beneficiaries whose permanent housing solution has not yet been resolved, and as such may have a shorter lifespan, but this should be at least two years.

Overall, at least 94% of this assistance is being provided on the beneficiary's original plot of land, and only 1% will be delivered on a different plot of land, mostly within resettlement sites. As the majority of recovery shelter assistance has been through the provision of repairs and retrofits, this is unsurprising. However, across programmes where new shelter units are being built, this proportion rises to 3% delivered off-site; this is almost all being provided in resettlement locations, and mostly involves the provision of permanent houses – of the 2,615 permanent houses reported to the Shelter Cluster, 65% of these will be constructed on resettlement sites (Figure 1).

Figure 1. On/off site assistance for 'new build' shelter beneficiaries

Percentages show the proportion of beneficiary households within each category of shelter assistance, according to whether assistance was provided on original site, or on another site.



³ An additional 182 households will benefit from settlement planning activities, though almost a third of this is still subject to funding. Due to the small number of these activities, they are not covered in this analysis

⁴ See section 2.3 for discussions on needs data

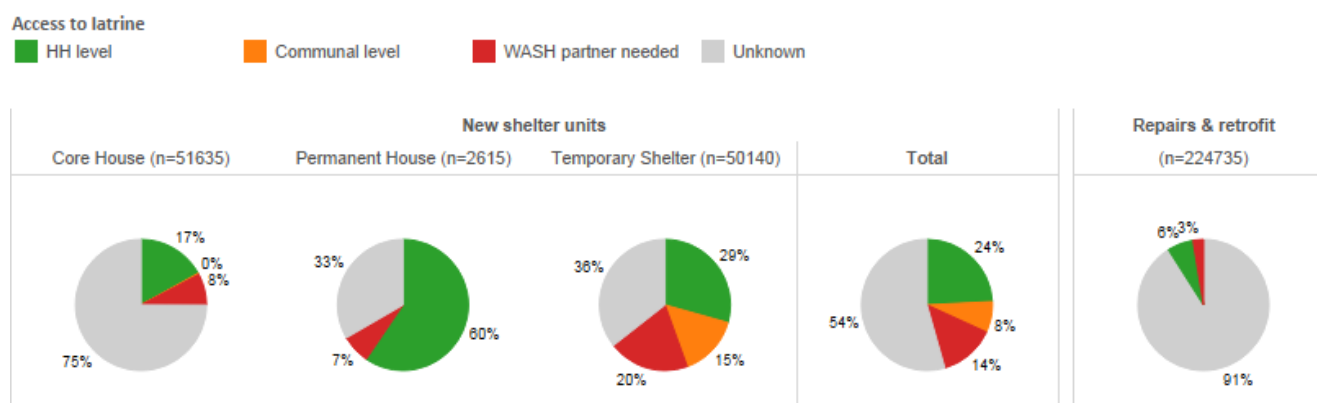
Ensuring safe access to essential services for all shelter and settlement locations is a minimum Sphere standard for shelter⁵. There have been cases in past responses where some shelter programmes have not included the provision of sanitation, relying instead on WASH partners to provide this. Consequently, the cluster has collected data related to access to latrines across shelter programmes in order to highlight opportunities for partnership with agencies providing WASH. This data was collected in terms of the latrine **access** for beneficiary households – therefore this does not always equate to the **construction** of latrines as part of the shelter programme – it could indicate provision by a partner, pre-existing access OR direct provision.

Figure 2 shows the proportion of different levels of latrine access; in many cases, this information was not provided, making analysis less reliable. Across 'new build' shelter programmes, latrine access was available in at least 32% of shelters, 24% of which was at the household level, with a further 8% at the communal level. In 14% of new shelters, latrine access was not available, though in a further 54% of new build shelters, this information was not provided, therefore actual WASH gaps may be even higher. For repair and retrofit programmes, this information was rarely reported.

There are a few possible reasons for this lack of reporting against repair and retrofit programmes. It is possible that the person reporting does not easily have access to this information, perhaps due to it being recorded by the WASH team in their organisation. A second reason is that this information was not collected at the time of the activity – perhaps as a result of many of these programmes being undertaken using a distribution-based modality (i.e. the implementation team may not have visited the shelter). It may also be that WASH was considered to be outside of the scope of the project, therefore was not assessed. Latrine access remains integral to the standard of a shelter response, therefore one recommendation of this report is that more effort is made in future responses to encourage and support agencies to collect and share this information.

Figure 2. Latrine access across recovery shelter beneficiaries

Percentages show the proportion of beneficiary households within each category of shelter assistance, according to the level of latrine access available to these households.



2.2 Technical assistance

In addition to the direct implementation of shelter activities, technical assistance support has played an important role in the overall quality of the shelter response. These activities are critical in ensuring that 'build back safer' know-how and messages are spread across communities, hopefully reducing vulnerability to future storm events. Furthermore, in a shelter response largely consisting of the distribution of repair kits, this knowledge is essential to ensure that households are able to put these materials to use in the best possible way, ensuring the principles of 'do no harm'.

Reporting of technical assistance to the cluster has been structured under two main areas – training and public outreach. The difference between these two activities is that the aim of public outreach is to get messages out to the target audience – a range of modalities can be used to do this – news, radio, SMS, posters, etc. Training goes a step further, as the acquisition of knowledge, skills or competencies. The separate classification of these activities aims to differentiate, for example, between those people who have heard of building back safer, compared to people who have gained knowledge of how to do it.

⁵ <http://www.spherehandbook.org/en/shelter-and-settlement-standard-2-settlement-planning/>

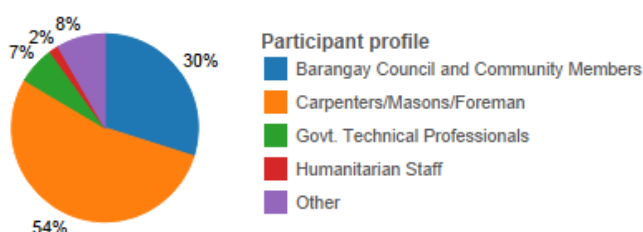
It is believed that there has been significant under-reporting of these activities by partners, likely to be as a result of the Shelter Cluster only introducing this into the cluster reporting format at a relatively late stage of the response, and perhaps without adequate explanation and support for partners in how to provide this information. The result of this under-reporting therefore is that the actual impact of agency technical assistance is likely to be far wider than that which is represented here.

A total of 16 agencies (21% of all reporting agencies) provided information regarding trainings that they have undertaken, covering a total of 78,812 trainees. The overwhelming majority of these trainings (90%) were provided to households and covered either good building practices (such as 'building back safer' principles), disaster risk reduction (DRR), or disaster preparedness. A further 6% of trainings were provided to households on other topic areas (some of which were not related to shelter).

Household trainings have varied in length from 30-minute trainings in good and bad practices in bracing, to 24 hours of training in building back safer. Looking across all household trainings where the hours of training were specified, the average hours of training per trainee was 4.7 hours.

Of the remaining 3% of trainings that were provided to other profiles of participant, most of this was provided to carpenters (Figure 3). These trainings varied in length from a minimum of 2 hours (build back safer concepts and application to housing repair) to 120 hours (Carpentry NCII Level). Taking only those trainings where both hours of training and number of participants were included, the average training time per participant for these profiles was 22 hours.

Figure 3. Technical /professional/ government trainings
Breakdown of participant profiles for trainings provided to technical/ professional/ government representatives.

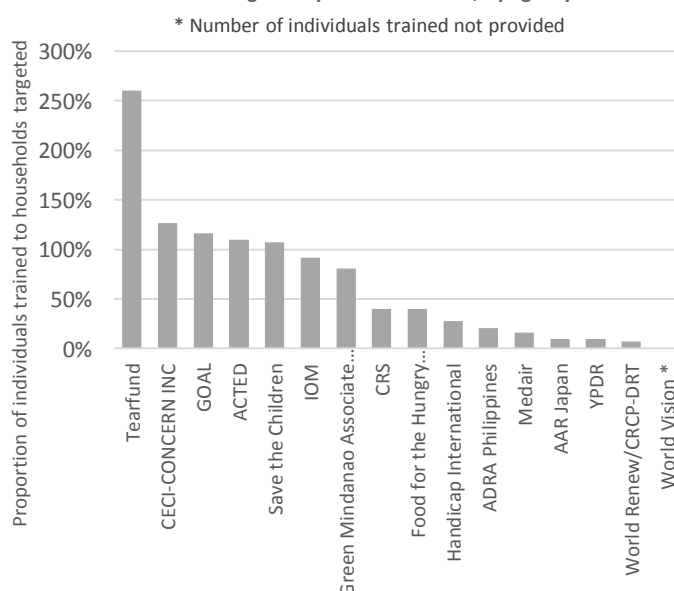


As the majority of trainings have been provided to households, and as this data does not include training activities from many agencies, it is perhaps more appropriate to look at the volume of training per organization, compared to the volume of shelter activities that they are each undertaking. Of the 15 agencies reporting training information (and providing number of individuals trained), trainees (77,812) represented 77% of the overall volume of households that these agencies have targeted with their shelter activities (102,341).

The proportions per organisation vary from 7% to 260% (Figure 4 shows these proportions per organisation). Whilst this is a very approximate measurement⁶, it provides some indication of the extent of agencies training/technical assistance. Some agency programmes, such as IOM, include a 3 – 4 hour training in safe building practices for shelters, for 100% of beneficiary households.

Attempts by the Shelter Cluster to gather information on public outreach activities has had limited success. Only five agencies provided information on public outreach activities; this is felt to reflect the lack of suitable definition by cluster in terms of what is meant by public outreach activities, and also the difficulty in estimating the reach that these activities have had. Consequently, the analysis of this information cannot be seen as accurately quantifying the overall volume of these activities, but will serve mostly to inform the data gathering for the next response.

Figure 4. Proportion of training (individuals) relative to households targeted by shelter activities, by agency



⁶ Training data may only represent what has been undertaken by the agency to date, whereas this has been compared against the total overall beneficiaries of the programme (even those not yet been reached) therefore there is likely to be a temporal difference between these two data sets.

Of the 181 public outreach activities reported to the cluster by 5 agencies, 45% were reported without any classification as to what type of activity these were, perhaps emphasizing agencies' confusion with regard to how to report these activities. Other classifications are shown in Figure 5, as the percentages of activities reported. Table 2 shows the total estimated number of recipients for these activities. Performing arts activities were undertaken by ADRA Philippines, and involved the use of plays, dances and songs in order to promote disaster preparedness at the grass roots level.

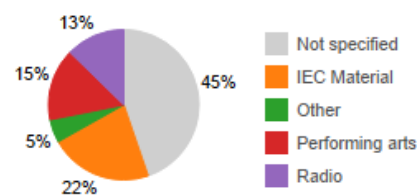
Audience estimates were not provided for radio broadcasts, however these activities (conducted by IOM) represented a total of 23 broadcasts of between 30 and 60 minutes, undertaken in Guiuan, Ormoc, Tacloban and Roxas, and covering a range of themes including shelter beneficiary selection, building back safer and being prepared for disasters. Activities classed as 'other' appear from more detailed descriptions provided by agencies to have still focused primarily on building back safer messages, such as the ones contained within Information, Education and Communication (IEC) materials.

Outreach Type	Number of Activities	Estimated Recipients
Not specified	81	4,000
IEC Material	40	247,194
Other	9	679,980
Performing arts	28	6,970
Radio	23	
Grand Total	181	938,144

Table 2. Outreach types and estimated recipients.

Figure 5. Outreach activities by type

Proportions represent the percentage of outreach activities classified by type.



Social media usage is very high in the Philippines; it is unclear to what extent shelter partners have been able to leverage this in order to communicate messages related to safe building practices, disaster risk reduction or other shelter related issues. This is an area which needs to be more heavily researched by the Shelter Cluster and shelter partners in future responses in the Philippines, and would benefit from inclusion in the shelter cluster communication strategy going forward.

There has clearly been a commitment by agencies towards technical assistance through trainings and public outreach, which cannot adequately be quantified here due to the incompleteness of available information. We have witnessed IEC materials, developed in collaboration with cluster members, being used extensively across the shelter response. Banners printed on A0 sizes tarpaulins can be seen in communities across Region VIII, and posters have been distributed far and wide, and the 8 build back safer key messages have been used by numerous agencies in training guidelines and project proposals.

Given the large variation in trainings, from a few hours to several days, it may be desirable to categorise activities in the future as either 'awareness raising' or 'training', depending on the outcomes of these activities. For instance, the aim of a short household level course may be to increase participant **knowledge/understanding** of building back safer, so that they know to request these features from carpenters in the future. This is quite different to a week-long training for carpenters in techniques for building back safer, which provide them with the actual **skills**. Additionally, the term 'awareness raising' would perhaps be a better way to describe to agencies activities such as IEC materials distribution, which were most certainly under reported under the banner of 'public outreach'. It is evident that a more structured approach to the collection, analysis and dissemination of this information by the Cluster coordination team should be undertaken at an earlier stage of a shelter response, in order to allow a true analysis of the extent of these activities.

2.3 Comparison of response to shelter needs

One of the most frequently asked questions about the shelter situation is 'what are the remaining shelter needs?' Currently, there is no available data source which definitively provides a quantification of **current** shelter needs resulting from Yolanda. Furthermore, agencies have reported that it is becoming increasingly difficult to differentiate between shelters that were damaged by Yolanda and perhaps poorly repaired, and those that are of a generally poor construction standard to begin with.

In order to estimate the extent to which the shelter activities within this report have addressed shelter needs, it is necessary therefore to infer based upon initial damage data, and presumed outcomes of the activities provided by partners within the Shelter Cluster database. What this does not take into account, however, is the extent to which households may have been able to recover using their own capacities. It also does not take into account all assistance

from the government, which whilst limited in scope so far⁷, is anticipated to increase in speed in the coming months. This is therefore a very approximate comparison, which should be interpreted with caution.

Initial damage data collected by municipalities and reported to DSWD through the DROMIC system by the 17th December 2013 indicated the number of damaged houses to be 1,127,041 of which 578,248 were partially destroyed, and 548,793 totally damaged or destroyed. Municipal damage numbers have changed slightly over time, with DSWD reporting an overall figure of 1,012,790 on the 5th March 2014, of which 518,878 were partially destroyed, and 493,912 were totally destroyed. These changes often reflect the validation and registration processes that have been undertaken at the municipal level.

If we compare the total number of households to be reached with shelter activities against this damage data (Figure 6), it would suggest that 34% of damaged households might receive recovery shelter support by the end of 2015. There are a number of caveats that must be taken into consideration however:

Damage data: There may be inaccuracies in the damage data, due to reporting lags, differences in the application of the classification of damage, and field validation.

Under representation of shelter activities: the shelter activities shown are only those that have been reported to the Shelter Cluster. We know that a number of smaller organisations, local NGOs, church groups and the private sector, may have provided assistance, yet not have reported their activities.

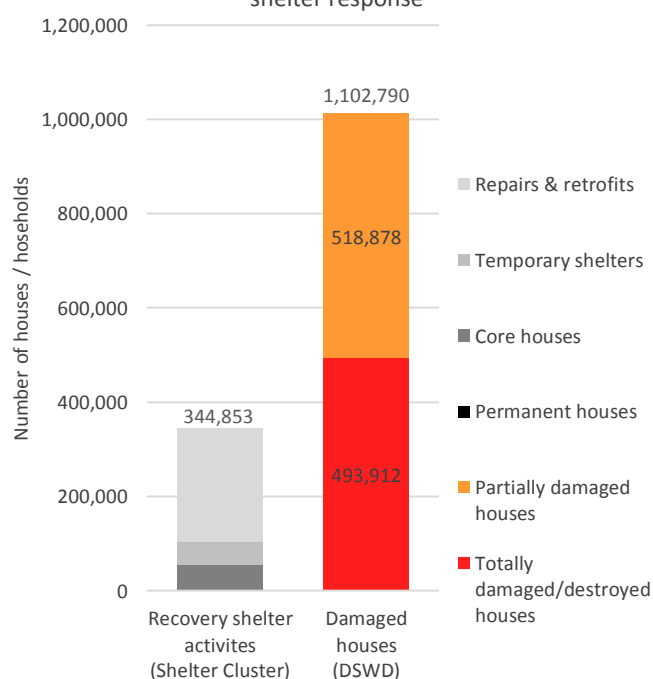
Double counting: this approach assumes that all beneficiary households reported to the cluster are unique, e.g. that no households have been the beneficiary of more than one activity. We know that this is not accurate – partners have identified that in many cases, a household may have received a shelter kit, but this may not have been sufficient for them to recover their house to an acceptable state, therefore they may have been selected as a beneficiary for another shelter kit distribution, or even in some cases as a beneficiary for a temporary or core shelter.

This last issue is one of the main points of concern for the Shelter Cluster, and the biggest challenge in determining the likely remaining shelter caseload. Repairs and retrofits account for 70% of the overall recovery shelter response. Given the substantial impact on livelihoods and the pre-Yolanda poverty rates, especially in Region VIII, these are only likely to be a suitable solution for those people whose homes were partially destroyed, as beneficiaries have shown a low ability to top up assistance provided using their own resources. At the same time, agencies who have chosen to conduct repairs and retrofit as their contribution towards the response, have often followed beneficiary selection criteria which focus on the most vulnerable – and frequently, the level of destruction of the household has been considered within such criteria.

If repair and retrofit activities are compared to only partially damaged houses, the coverage appears more favourable, with the volume of shelter repair and retrofit accounting for around 43% of the volume of needs of partially damaged houses (Figure 7). For totally damaged/destroyed houses however, the building of completely new shelter units would only account for 21% of destroyed houses⁸.

This difference is critical in understanding the overall likely impact of the shelter response. Of the 78 implementing agencies reporting to the cluster, 47 (60%) are providing either only repair/retrofit (36%) or only new build units (24%), with the remaining 40% of agencies offering both (Table 3).

Figure 6. Comparison of overall shelter needs and shelter response

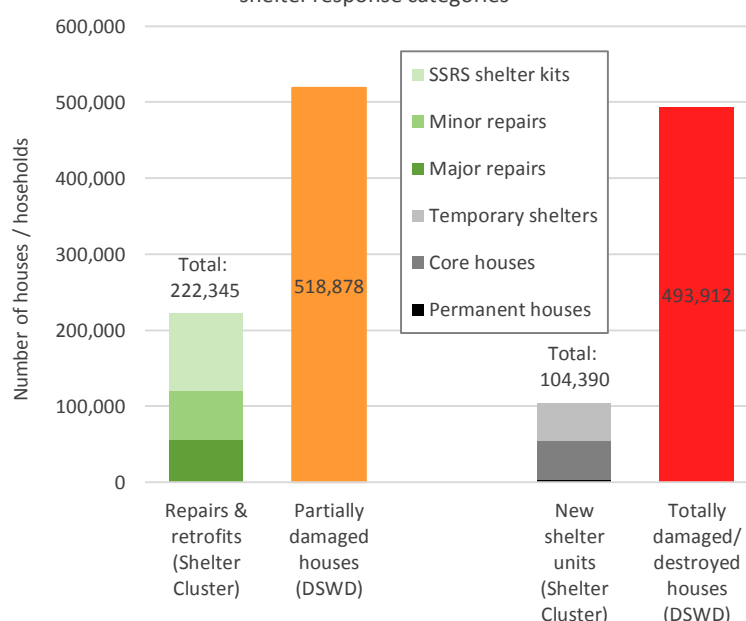


⁷ As of the 30 September 2014, the Government's emergency shelter assistance programme had reached 32,225 families with partially or totally damaged/destroyed houses. All of this assistance has been provided to people within safe zones. (OPARR, 28/10/14)

⁸ Government plans for permanent houses are to build 205,128 'disaster-resilient housing units'. Currently, construction of 8,629 permanent houses is underway (OPARR, 28/10/14). However, these will be targeted specifically at households currently residing in unsafe zones.

Perhaps a more pertinent way to view this is by geographical area – are both repair & retrofit and new build solutions being offered in areas where agencies are working? Within the 124 municipalities where agencies are working, 85 (i.e. 69%) have both repair and new build programs being undertaken by agencies. However, municipalities can be very large, and most agencies have targeted only certain Barangays within those municipalities. If the same comparison is undertaken at the Barangay level; in 50% of Barangays, only either repairs OR new build are underway; in 38% of Barangays, this is only repairs, whilst in 12% of Barangays only new units are being built. If half of the locations where agencies are working have only one main category of support, new build OR repair/retrofit, then one can assume that in many cases, this will not be a perfect fit for the unique circumstances of each beneficiary.

Figure 7. Comparison of housing damage categories to shelter response categories



Agency	No.	Provision of only repair & retrofit OR new shelters		Provision of both repair & retrofit AND new shelters	Total
		Repair & Retrofit only	New build only		
Agency	No.	28	19	31	78
	%	36%	24%	40%	
Municipalities	No.	33	6	85	124
	%	27%	5%	69%	
Barangays	No.	705	227	913	1845
	%	38%	12%	49%	

Table 3. Provision of repair and new build shelters by agency, and within municipalities and Barangays. (Source: Shelter Cluster)

Anecdotal reports from agencies have indicated that, in locations where they are only undertaking a repair and retrofit program, households with a totally destroyed house are very likely to have been selected as beneficiaries due to a likely increased vulnerability on the basis of the extent of damage – however, in such cases, a repair (in particular if this is a smaller repair kit) is unlikely to have resulted in recovery, due to these households having no remaining shelter structure against which to fix these materials.

2.4 Regional comparison

The recovery shelter response has differed in a number of ways across the different regions. Table 4 provides a summary of the overall numbers of households that will be reached across each of the regions, by the different recovery shelter activities. In terms of comparing these to estimated shelter needs, the same comparison can be undertaken as in section 2.3. Whilst reporting a small amount of damage, Region V and Region Caragara have been excluded from this analysis, as no partner activities have been reported in these areas. Between them, they represent just 0.2% of damaged houses.

One of the most significant differences across the regions is the proportion of activities relative to the overall number of damaged houses. Figure 8 shows the total households for all reported shelter implementation activities, relative to the numbers of houses damaged (DSWD, March 2014). In Region VI, the sum of households for all reported shelter activities represents only 18% of the damaged housing numbers, compared to 28% for Region VII and 55% for Region VIII.

This difference between initial damage data and planned activities has been examined in order to understand whether the remaining shelter needs are greater in Region VI than in Region VIII. One very key factor within this is likely to be the rate of self-recovery.

		REGIONS				
Recovery Shelter Interventions		IV-B (MIMAROPA)	VI (WESTERN VISAYAS)	VII (CENTRAL VISAYAS)	VIII (EASTERN VISAYAS)	Grand Total
Repairs & retrofit	Major		8,522	328	47,535	56,385
	Minor	600	30,996	5,064	27,275	63,935
	Mixed		334	150	44	528
	SSRS kit		15,926	15,777	87,912	119,615
	TOTAL REPAIRS & RETROFIT	600	55,778	21,319	162,765	240,463
Building of new shelters	Permanent House		0	860	1,755	2,615
	Core House	700	16,018	5,434	29,483	51,635
	Temporary Shelter		11,877	1,276	36,987	50,140
	TOTAL NEW UNITS	700	27,895	7,570	68,225	104,390
TOTAL HOUSEHOLDS		1,300	83,673	28,889	230,990	344,853

Table 4. Total households targeted by recovery shelter activities, by region. (Source: Shelter Cluster)

The Shelter Cluster undertook a series of household assessments starting with a baseline in November⁹, followed by a monitoring assessment in March¹⁰ and again in July¹¹. In the March assessment, a strong provincial trend was shown in terms of self-recovery, with Aklan, Antique, Capiz and Iloilo (all in Region VI) exhibiting over a 1.5 times higher rate of housing recovery completion (especially for those houses classified as partially damaged). Conversely, Samar, Leyte and Easter Samar showed the lowest levels of ongoing self-recovery.

A number of potential factors have been proposed which may be allowing Region VI to self-recover more rapidly. One of these factors could be the differing **proportions** of housing damage - in areas where the majority of people have been severely affected, community resilience and self-recovery capacities are likely to be more overstretched. The Shelter Cluster's March assessment found

evidence for higher proportions of damage in Samar and Eastern Samar, and lower than the average in Cebu (Region VII) and Iloilo (Region VI). The exact number of **undamaged** houses per municipality has been a missing piece of information in the baseline needs data for the response, which would allow an accurate calculation of housing damage proportions across all areas.

Another factor relates to the impact of Haiyan upon livelihoods - self-recovery of shelter is likely to be a greater challenge for those whose income was impacted, and moreover for those whose livelihoods have not yet recovered.

Figure 8. Comparison of housing damage categories to shelter response categories, by region



⁹ https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/reach_phl_report_haiyan_sheltersectorresponsemonitoring2_sep2014_0.pdf
¹⁰ https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/PHL_Haiyan_Shelter-WASH_Response_Monitoring_Assessment_Final_Report_FINAL_22Apr2014.pdf

¹¹ https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/reach_phl_report_haiyan_sheltersectorresponsemonitoring2_sep2014_0.pdf

The multi-sector rapid assessment¹² undertaken in November 2013 identified greater impacts in Region VIII to Regions VI and VII in terms of the numbers of people whose primary livelihoods were affected, and also in terms of household reported income losses. The Government's PDNA process identified agriculture and fisheries as the most impacted livelihood sector; it is possible that the differing impacts on agriculture across regions could affect recovery. In Region VI, agricultural impacts were most severe in Capiz, particularly in terms of damage to rice fields. In Region VIII, damage to coconut farming appears to have been the most significant agricultural effect; the Eastern Visayas were particularly badly affected, with 33 million of the 46 million coconut trees (72%) across five provinces in the Eastern Visayas region being either totally or partially damaged, according to the Bureau of Agricultural Research's figures. It is possible that livelihoods, and therefore shelter, have recovered more rapidly in Region VI due to the different recovery-lag times on these sectors (replanted coconut trees are not expected to bear fruit for at least 5-7 years).

Other factors proposed as influencing regional differences in self-recovery were the availability of materials (either through markets, or naturally occurring materials) and differences in cash flow. What is worth noting with regards to cash flow is that the Multi-Cluster Needs Assessment identified a geographical trend as observed immediately after Yolanda in terms of coping strategies, with Regions VI and VII being more prone to negative coping strategies than Region VIII. The issue of debt and loans has been highlighted by several shelter partners - one partner in Region VI indicated that in the municipalities in which they were working, over half of assessed households borrowed money after Yolanda, mostly in order to rebuild their homes. It is easy to assume that self-recovery is a positive outcome for affected households, however it is worth bearing in mind that if this was achieved through an increase in household debt, particularly if this is high-interest, then this could affect resilience to future shocks in the longer term.

Given the scale of overall damage as a result of Yolanda, and the overall amount of shelter programming, it is clear that gaps in shelter will certainly remain in the short term. Government assistance activities, whilst not yet started in earnest at the time of this report, are aiming to reach all affected households in safe zones with 10,000 PHP for partially damaged houses, and 30,000 PHP for totally damaged/destroyed houses, and relocation to a permanent house for all families living in unsafe zones (CRRP, 2014¹³). Consequently, these gaps should be addressed over time – though the question remains as to which are the most pertinent gaps in the short term. In terms of prioritisation, this should address the vulnerability of those households who require shelter assistance. Furthermore, as government assistance will be provided primarily through cash or voucher based approaches, there is still a great potential for agencies to complement these activities with technical assistance, to ensure that principles of 'build back safer' are indeed achieved.

Therefore, the process of identifying the remaining gaps in assistance should take into consideration not just the location and volume, but also vulnerability. For instance, a number of agencies have identified that within the areas in which they are working, that those living in 'no-dwelling' zones have often been the ones who, despite fulfilling agency vulnerability criteria, have not received assistance. This has in many cases been due to agencies not being allowed by local authorities to provide assistance in these areas, for fear that this will further encourage people to remain in potentially dangerous locations. However, since very little appropriate land has so far been identified on which relocation sites could be planned, solutions do not appear immediately forthcoming for these households, leaving them potentially even more vulnerable.

Identifying current geographically localised shelter needs across the affected area remains very challenging, due to the differing initial damage numbers reported at national and local levels, the lack of numbers of **remaining** damage (particularly at the barangay level), and the lack of localized self-recovery information. The Shelter Cluster has attempted to identify potential shelter gaps at the municipal level in a shelter gap analysis¹⁴, which brings together a number of different available data sources. This analysis aims to highlight not only those locations where there are gaps between initially reported damage and assistance by cluster partners, but also attempts to identify locations which may face the most challenges in terms of self-recovery. This would be a starting point from which organisations can then contact municipal authorities, who will be the most reliable source of information regarding remaining shelter needs.

¹² http://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/assessments/Multi-cluster_Needs_Assessment_20131220.pdf

¹³ <http://president.gov.ph/wp-content/uploads/2014/08/Revised-DraftYolanda-Rehab-Briefer-as-of-1-Aug-2014-w-status-report.pdf>

¹⁴ <https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/141113%20HSWG%20Shelter%20Gap%20Analysis.docx>

2.5 Progress of Activities

As of the 6th October 2014, shelter partners had completed over 58% of all recovery shelter activities that they have plans to implement. This represents over 200,000 households in terms of overall beneficiary households, though, as stated above, in some cases there will be double counting of beneficiary households. This is particularly likely for repair kits, as one kit alone may not provide sufficient materials for a household to fully recover.

Figure 9 shows the proportions of the different types of shelter programmes which have been completed to date. Whilst a great number of minor and major repair and retrofits have been undertaken, 55% of these activities remain to be delivered, mainly by two agencies – 36% by the Philippine Red Cross, and 14% by IOM. Temporary shelter programmes are 68% complete, of the remaining 16,194 units (32%) to be completed, the majority of this remaining caseload is to be delivered by CRS (53%).

Core shelter activities were 20% complete by the 6th October - this is indicative of the longer timescales required for the implementation of these programmes. Once again, the majority of this remaining caseload will be delivered by the Philippine Red Cross, whose core shelter programme is extensive - they are providing 68% of all Core shelters reported to the cluster. It is anticipated that the majority of all remaining activities will be completed by the end of December 2015.

3. OUTCOMES

Whilst the Shelter Cluster database provides an overview of the outputs delivered by agencies as part of the response, the actual outcome of these activities can only be measured on the ground. The cluster's assessment process (as outlined in section 2.4 above) provides a mechanism for the direct measurement of the outcomes at the household level; this approach is still evolving, just as shelter responses are constantly evolving – for example, indicators and sampling frameworks were modified a number of times in order to align with the reporting requirement of the Strategic Response Plan. This section draws on the evidence gathered within these assessments, in order to evaluate the extent of shelter recovery that has occurred in the Philippines, the contribution that shelter assistance has provided towards this, and to reflect upon the way in which we can measure this.

3.1 What is the extent of recovery?

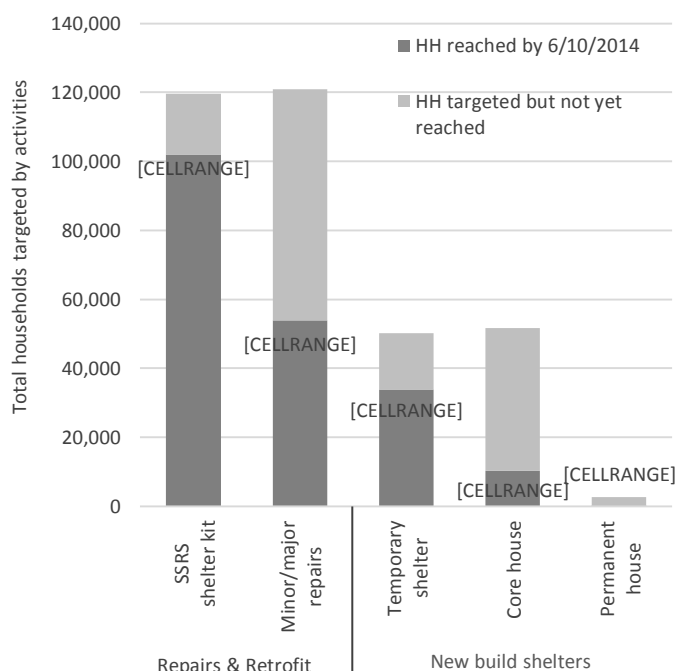
Between the initial baseline assessment in November 2013 and the first monitoring assessment in March 2014, there was a significant overall drop in the damage levels observed by enumerators (Figure 10), from 96% damage overall to 88%, and with a reduced proportion of severe damage (total damage or major damage). From March to July, however, no recovery was observed – in fact slightly higher levels of damage were observed. This was interpreted as demonstrating that recovery efforts had slowed dramatically (and that potentially the **increased** observed damage was due to households engaging in demolition/in the midst of reconstruction).

This pattern is echoed within the response to another question related to recovery, which asks households whether they have started rebuilding yet – and if they have started, whether they anticipate being able to complete this using their own resources (Figure 11). When looking at the priority areas 25km on either side of the storm track, the baseline assessment showed that 13% of households had completed their housing recovery process. By March this had increased to 21%, but by July it had reduced to just 3%.

This was interpreted as being a result of households increasingly looking to longer-term and more durable housing solutions at this point in the recovery process:

Figure 9. Number of households by shelter activity type (Shelter Cluster)

Data labels show percentage completion by 6/10/2014



*'Whereas four months ago, households may have been focused on continued emergency assistance and, thus, answered questions through this lens, households now may be defining "recovery" as having a more durable house, leading to more households responding that they have not yet started recovery and fewer responding that they have completed recovery.'*¹⁵

This leads us to the question— how do we measure recovery? Can it really be measured by the absence of visible damage? Feedback from agencies who are currently selecting beneficiaries is that it is very difficult at this point in the response to be able to discriminate visually between damaged housing resulting from Yolanda, and what is simply poor quality housing.

Figure 10. Observed damage across time.

From Shelter Cluster assessment. Enumerator observed housing damage in November 2013 (initial assessment), March 2014 (Monitoring 1) and July 2014 (Monitoring 2). For explanation of classification, see full report.

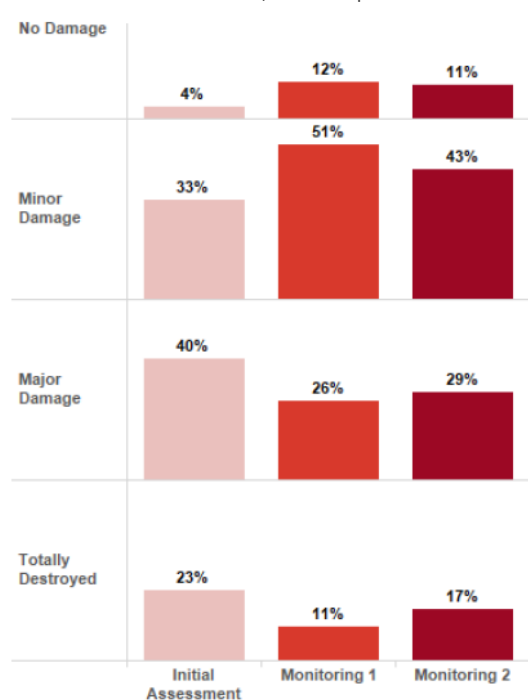
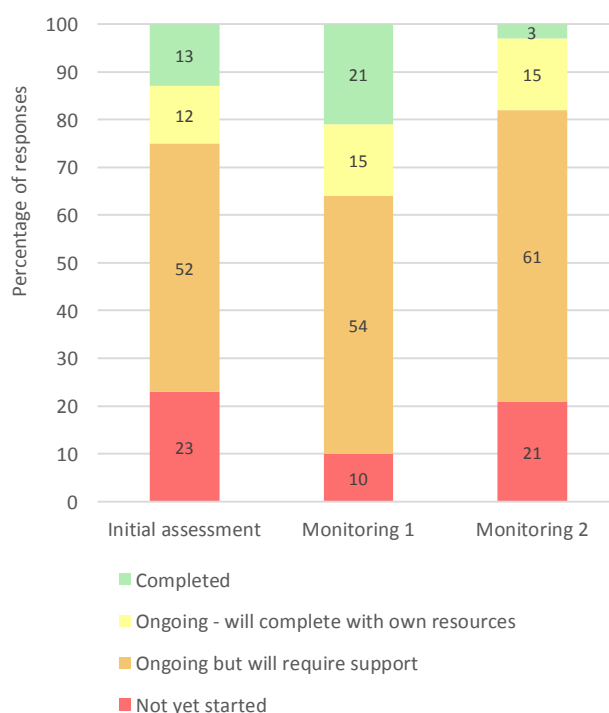


Figure 11. Rebuild status across time.

From Shelter Cluster assessment. Rebuild status in November 2013 (initial assessment), March 2014 (Monitoring 1) and July 2014 (Monitoring 2).



Another way to approach the definition of shelter 'recovery' is through the minimum standards for shelter, as outlined in the Sphere standards¹⁶ for a shelter response; this should involve '**adequate housing**', as defined by:

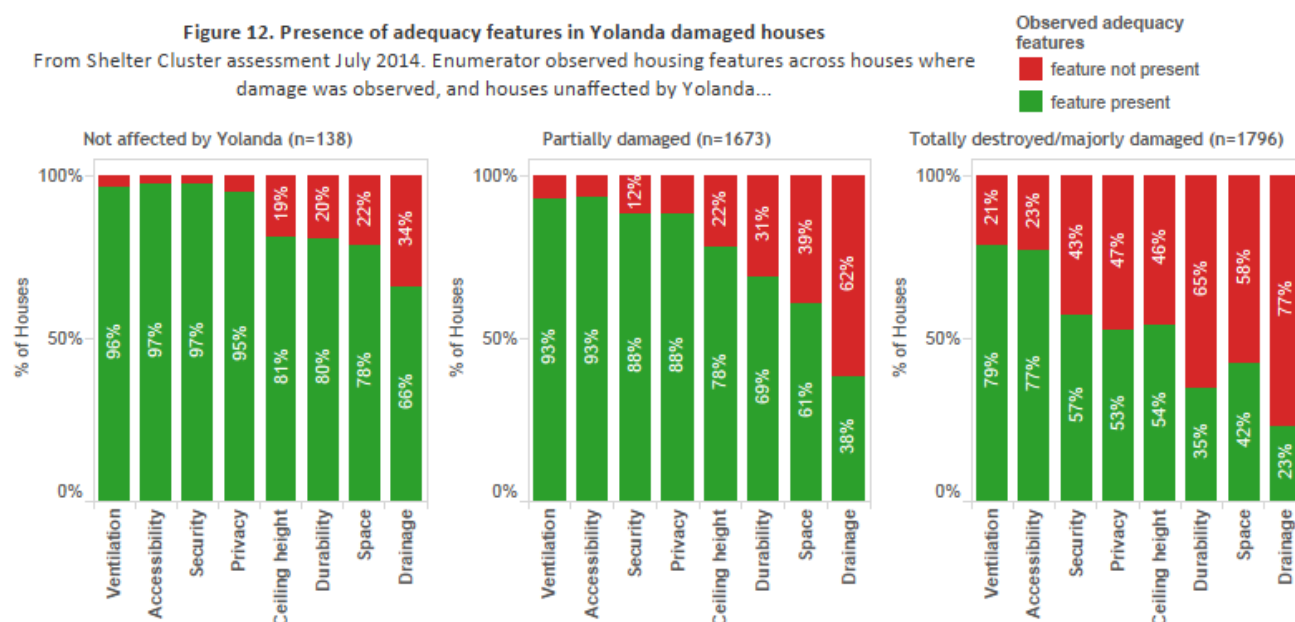
- sufficient space and protection from cold, damp, heat, rain, wind or other threats to health, including structural hazards and disease vectors
- the availability of services, facilities, materials and infrastructure
- affordability, habitability, accessibility, location and cultural appropriateness
- sustainable access to natural and common resources; safe drinking water; energy for cooking, heating and lighting; sanitation and washing facilities; means of food storage; refuse disposal; site drainage; and emergency services
- the appropriate siting of settlements and housing to provide safe access to healthcare services, schools, childcare centres and other social facilities and to livelihood opportunities

In the Shelter Cluster's July monitoring assessment, attempts were made to measure this by enumerator observations of minimum adequacy features of: (1) space (18m²) (2) durability (more than 2 years), (3) drainage, (4) ventilation, (5) ceiling height, (6) privacy, (7) security and (8) accessibility. Each feature was rated as "present" or "not present" by enumerators.

¹⁵ https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/reach_phl_report_haiyan_sheltersectorresponsemonitoring2_sep2014_0.pdf

¹⁶ <http://www.spherehandbook.org/en/shelter-and-settlement-standard-2-settlement-planning/>

Figure 12 shows the percentage of houses currently displaying these adequacy features. This has been split by housing damage category, with partially destroyed houses shown separately to totally destroyed/majorly damaged houses (these two categories showed similar levels across these features). Houses not affected by Yolanda are also shown, though it should be noted that the sample size for this group was very small (138 houses), and therefore there are limitations to the extent to which these findings can be generalised.



It cannot be assumed that the lower frequency of observed adequacy features in categories of higher damage are **all** as a result of damage; it is likely that there is a strong correlation between pre-Yolanda low-adequacy housing, and the effects of storm damage on that housing. However, it may provide guidance as to the key areas where partially and majorly damaged housing could be improved in order to increase overall adequacy.

Whilst it was hoped that this approach could be used to provide some indication of the adequacy of shelter assistance, it has not been possible to do this for the following reasons:

- Respondents may have received several different types of shelter assistance¹⁷ therefore it is difficult to attribute their current, observed situation to one specific assistance type. This is critical, as not all assistance was provided with the aim of 'adequacy' as defined by this measurement (For instance, in emergency shelter situations, the same security, privacy and durability standards will not be as achievable).
- Assistance may have been provided by a number of different sources – in the context of the assessment, this included a category for 'self/friends/family/neighbours as well as 'local organisation', 'international organisation', 'DSWD/NHA' and 'remittances'. Due to the way in which information was gathered, it is not possible to attribute a specific source to a specific type of assistance, therefore it is not possible to attribute the household's current situation to assistance provided by local or international agencies.
- In a response where the strategy has been to support owner-driven repair and where 70% of recovery shelter activities have been repairs and retrofits, it is necessary to understand the household's pre-Yolanda situation in order to determine the extent of recovery – otherwise, it becomes impossible to discriminate between an 'inadequacy' due to insufficient/inappropriate assistance, and pre-Yolanda sub-standard housing. Furthermore, since agencies have beneficiary selection criteria that focus on selecting the most vulnerable households for assistance, these are likely to be those whose post-Yolanda and possible pre-Yolanda housing situations were the most challenging. Drawing cause and effect conclusions between current observed housing adequacy and external assistance is therefore not possible with the current assessment methodology.

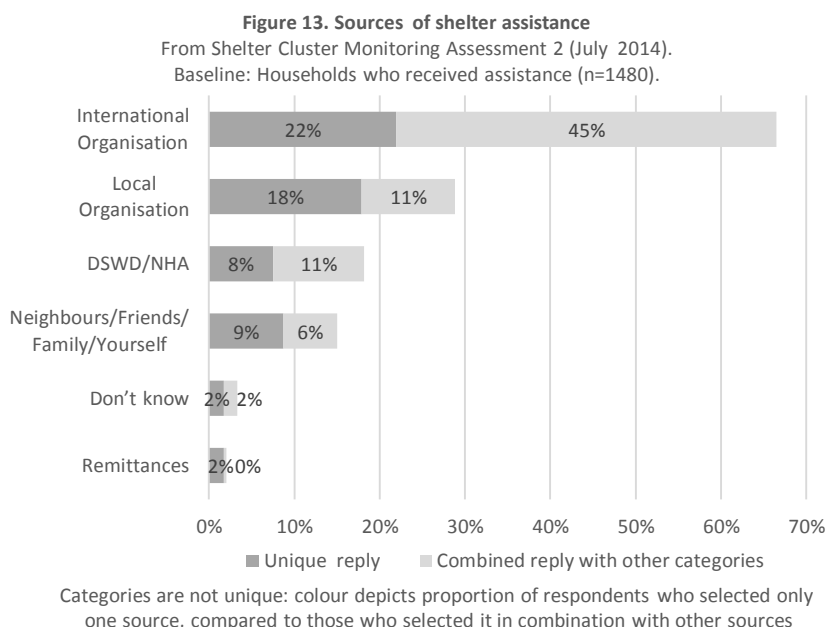
¹⁷ The categories for assistance used in the assessment were: emergency shelter, temporary shelter, host family support, rental support, bunkhouse, permanent housing, core house and materials.

With all of these limitations in mind, there is no doubt that there is still a strong value in understanding how Yolanda affected houses measure in terms of 'adequacy'; given a situation where the same measurements were gathered across the response, this could serve to demonstrate progress over time towards these standards.

3.2 What do we know about self-recovery?

Another important factor for understanding shelter recovery is the extent to which households can self-recover. The challenge of measuring self-recovery is twofold – firstly, in terms of the definition of 'self' and secondly, to attribute recovery to a single source of assistance.

In the shelter cluster assessment, of those households who had received assistance, 40% indicated that this was from more than one source. Figure 13 shows the percentage of respondents who indicated each of the categories as being a source of assistance, as well as the breakdown of those who selected it in combination with other sources, or uniquely. Of those respondents who received assistance, 9% indicated the only source of this assistance as having been neighbours/friends/family/themselves. This cannot be equated to a self-recovery rate, however, as it does not take into consideration the outcome of this assistance (e.g., are they now recovered?). Assistance in this instance can have been either emergency or recovery assistance.



Shelter implementing agencies have noticed through their own detailed assessments that some families are facing large debt from taking out informal loans to repair or rebuild their houses. Some families face critical vulnerability issues as they are not able to repay these loans, although the physical appearance of their house shows some sort of shelter recovery.¹⁸

In order to be able to provide more definitive evidence regarding the proportion of households who can self-recover, definitions should be set in partnership with agencies, and should be complemented by data gathered regarding the use of negative coping strategies.

3.3 Measuring 'building back safer'

The combination of poverty levels, high incidences of typhoons and the largely sub-standard housing stock have been contributing factors resulting in high vulnerability in the Philippines. It is for this reason that the principle of **'building back safer'** has been central to the shelter response. The Shelter Cluster has engaged extensively with partners to define what 'building back safer' consists of, and forms the content of the 8 key build back safer messages¹⁹.

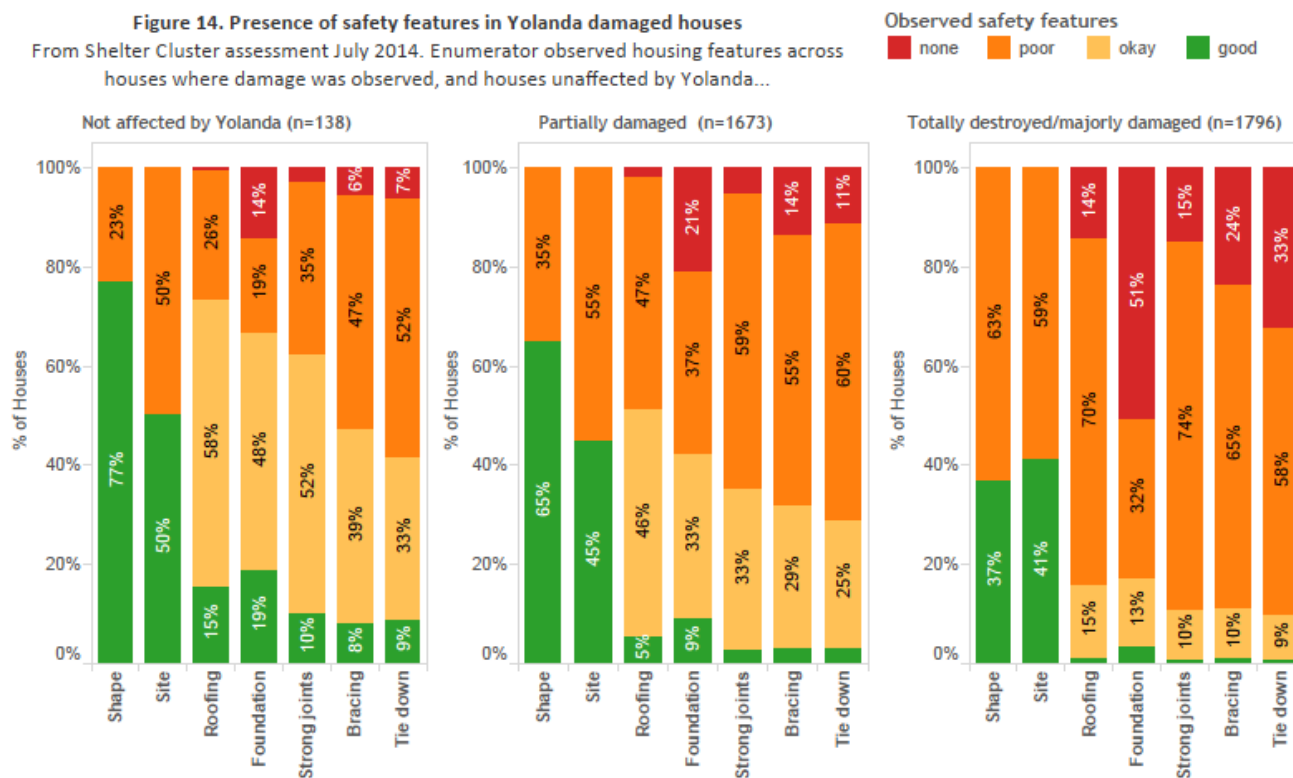
In order to try to measure the extent of 'build back safer', the Shelter Cluster's July monitoring assessment gathered enumerator observations of seven safety features (forming 7 out of 8 of the build back safer messages, the last being preparedness): (1) site, (2) shape, (3) foundation, (4) tie-down, (5) bracing, (6) strong joints and (7) roofing. Enumerators rated each of these features, the options being "none" (e.g. feature not present), "poor", "okay" or "good".

Figure 14 summarises the presence of each of these features across houses affected and unaffected by Yolanda, with affected houses divided into three categories: houses not affected by Yolanda, partially damaged houses, and houses which were majorly damaged or totally destroyed.

¹⁸ https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/140912_Tacloban_TWIG_MinutesDebtLoans_final.pdf

¹⁹ https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/8%20Key%20Messages%20Posters_Final_V1.1_Light_English.pdf

Figure 14. Presence of safety features in Yolanda damaged houses
From Shelter Cluster assessment July 2014. Enumerator observed housing features across houses where damage was observed, and houses unaffected by Yolanda...



Just as with the measurement of adequacy, caution must be taken with regards to inferring cause and effect between safety features and damage levels. Damage levels and safety feature levels are strongly correlated – however, it is not possible to determine to what extent damage resulted from the absence of these features before the storm, or whether the storm damage itself resulted in safety features being compromised. In the case of partially damaged houses, however, it would still be possible for enumerators to visually identify shape, site and foundations, and quite possibly to also inspect the remaining structure for evidence of strong joints and bracing. Roofing and tie down would be the features likely to be most difficult to determine, as partial damage as a result of typhoons frequently involves damage mainly to the roof – but tie down detailing occurs at every level of the building from foundations to roof, so there's a good chance that it could still be checked at ground.

Whilst this provides guidance regarding which safety features are present and to what standard within the current housing stock, as with the measurement of adequacy (section 3.1), it is not possible from this assessment to reliably associate the observed safety features (or lack of them) with a specific form of assistance, or source of assistance. Nevertheless, this provides an insight as to the safety features most lacking in damaged houses, and if measured consistently over time, could provide a basis for determining the extent of building back safer.

What is clear is that a great deal of scope still exists for technical assistance in order to increase the prevalence of good building safety features. Early shelter support (other than tents and tarpaulins), from 3 to 6 months, mostly took the form of 'support for self-recovery' shelter kits of between 5000 and 10,000PHP. These SSRS kits were seen as providing rapid support to a wide number of beneficiaries in a short period of time. However, given that the aim of these interventions was to support owner-driven recovery, and given the limited scope of these kits, it is likely to have been used primarily to conduct repairs, as opposed to being used to introduce new housing safety features that could increase safety (i.e. retrofit, bracing and tie-downs). Discussions with agencies have indicated that confusion still exists amongst agencies regarding the definition of what constitutes a repair, versus a retrofit.

In a largely repair and retrofit based response, technical assistance has the capacity to influence not only the vulnerability of Yolanda affected households to future shocks, but also to increase disaster risk reduction knowledge across non-affected households. Further work needs to be done to ensure the provision of technical guidance around recovery activities, in particular for repairs and retrofit, from the very early outset of a shelter response.

4. CHALLENGES

Whilst progress is being made in terms of the cluster's ability to measure a shelter response, there are clearly a number of areas which could be improved upon in order to provide a more comprehensive evidence base to support partners in their decision-making. A number of specific challenges have been faced in terms of information management for the Yolanda response, outlined within the following sections.

4.1 Quantifying shelter outputs

Over 100 organisations have reported to the Shelter Cluster as part of the Yolanda response; this represents only the activities of agencies and organisations coordinating with the cluster, and therefore does not reflect the shelter support that has been provided by some church groups, civil society, the private sector, or the government response. Since many agencies have only been working in certain Barangays, it has been necessary for information to be collected and reported at this level of detail in order to be meaningful in terms of coordination. The large number of agencies and the level of detail of reporting have presented a challenge in terms of volumes of data, both for the agencies reporting this information, and for the cluster in terms of collecting, consolidating and cleaning this information, in order to correctly represent the work that agencies have undertaken. The currency and accuracy of information has relied upon agencies to provide regular updates, however there has been a need to balance the reporting requirements from agencies to ensure that it does not become too heavy a burden, resulting in delays or in agencies detaching from the process.

The purpose of gathering information on agency activities is to support decision making; information needs evolve throughout a response, depending both on whether the decisions are strategic or operational, and on details related to the response phase (emergency, early recovery, recovery) and the activities being undertaken. Keeping pace with the information needs has been a challenge, particularly when it has required a change to reporting approaches. Shifting from the initial emergency-based reporting system to a reporting system aligned with recovery approaches resulted in a long gap in data gathering by the cluster, during which time agencies were not provided with any consolidated information. This is a lesson learnt for future responses, that such migrations of reporting approaches should be undertaken in such a way as to minimise reporting gaps.

Furthermore, the addition of reporting forms for training and public outreach during this process added an additional reporting overhead for agencies. Whilst guidance notes were included with the form, it is possible that agencies would have benefited from additional support from the cluster to make the transition to the new formats an easier and clearer process. Agency reporting would most likely be strengthened through increased reporting and analysis by the cluster.

4.2 Quantifying shelter outcomes

The greatest challenge has been the ability to report in terms of shelter outcomes for beneficiary households. The cluster's approach to information management has historically been to consolidate agency output information (4W) and to use these as the basis to infer outcomes for households, as laid out in the cluster's strategy. There are many factors, however, that could limit the accuracy of this approach, such as the lack of possibility of identifying double counting of beneficiaries. Attempts have been made to address this shortcoming, for instance through the restructuring of shelter data collection and storage to align with the shelter cluster's recovery guidelines – these are structured more closely around outcomes for beneficiaries in terms of their recovery. It is not certain to what extent to which this has provided more reliably outcome-based information, as there are still a great many limitations to inferring outcomes, as highlighted in previous sections.

The cluster's assessment process provides a more suitable methodology through which to measure outcomes at a household level, through direct observation and representative sampling techniques. However, this too has its limitations and relies upon shared definitions and criteria for measuring outcomes. Given the pre-Yolanda housing situation, establishing an outcome measurement system based on safety and adequacy sets the bar very high. Achieving such goals across such a large affected caseload is beyond the achievable timeline of a humanitarian response – however, by collectively defining a final desired outcome, it is possible to then measure progress towards those goals – this can provide valuable insight in whether the response is 'going in the right direction'. It may also support the development of milestones along the path, for future responses.

4.3 Gaps in information provision

One of the gaps in information from the cluster is sex and age disaggregated data. This is strongly advocated for in order to understand the extent to which a response has addressed the differing needs of the population, however this presents a challenge for the shelter sector, whose response is based around households as the unit of intervention, as opposed to individuals. Whilst agencies generally record household composition details within their beneficiary lists, this information may not be easily accessible in a way that allows it to be reported to the cluster. The cluster attempted to collect this information from agencies in January and February 2014, but very few agencies were able to provide this. Additionally, it is questionable to what extent this is useful if aggregated to a geographical location; for shelter, vulnerability and differing needs will be a result of household composition, therefore aggregating all shelter individuals at one location is unlikely to allow useful analysis in terms of whether shelter vulnerabilities have been addressed.

A proposed approach for the gathering gender and vulnerability specific data for the shelter sector, is instead by household vulnerabilities – such as single headed households, or households containing a person with a disability. Attempts at collecting this from agencies was once more unsuccessful, though it is felt that this could be greatly improved upon if agencies were provided with regular statistics and analysis related to this information. The reality is that reporting places a burden upon agencies who are busy implementing - therefore information requests that do not align well with agencies internal reporting and recording structures, and which are not visibly seen to be used for coordination purposes, will be more likely to be omitted. In future responses, more efforts will be needed by the cluster coordination team to collect information in a way that is user-friendly for partner organisations, and is analysed and disseminated in order to support programming decisions.

Another outcome of the change to the reporting approach is that information has not been collected regarding the modality of support provided to beneficiaries. As such, it is not possible to reflect on the proportion of shelter programming which has been delivered as cash or vouchers, or on any emerging trends in cash programming. Given the significant use of cash programming in the Yolanda response, this represents a missed opportunity to be able to gather evidence that could support discussions related to cash programming in shelter responses.

5. ACKNOWLEDGEMENTS

Many thanks to all of the Shelter Cluster partners for their consistent reporting and engagement throughout the past year, and to the REACH project who have provided the support for the Shelter Cluster assessment process.

20th November 2014.