



**Typhoon Pablo 2012**  
ShelterCluster.org  
Coordinating Humanitarian Shelter

# **SHELTER SECTOR PROGRESS ASSESSMENT IN MINDANAO, PHILIPPINES**

**SHELTER CLUSTER REPORT**  
**FINAL ASSESSMENT REPORT**  
**MARCH 2013**



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Since 2011 REACH has formalized a partnership with the Global Shelter Cluster (GSC) to support the strengthening of its coordination and planning capacity,. Dedicated REACH teams (including assessment, database and mapping experts) are available to be rapidly deployed to the field in the immediate hours after emergencies in order to facilitate interagency assessments and mapping activities on behalf of the shelter cluster. Resulting information products are used to enable better planning and coordination by the cluster, and are widely disseminated.

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## ACRONYMS

<b>CfW</b>	Cash for Work
<b>CGI</b>	Corrugated Galvanized Iron
<b>DSWD</b>	Department for Social Welfare and Development
<b>GSC</b>	Global Shelter Cluster
<b>HLP</b>	Housing Land & Property
<b>HRC</b>	Humanitarian Response Consortium
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies
<b>IOM</b>	International Organization for Migration
<b>NDRRMC</b>	National Disaster Risk Reduction and Management Council
<b>OCHA</b>	Organization for Coordination of Humanitarian Affairs
<b>UN</b>	United Nations

## GEOGRAPHIC CLASSIFICATIONS

Name Used in Report	Definition
<b>Region</b>	Highest form of governance below the national level
<b>Province</b>	Sub division of a region where many government agencies reside
<b>Municipality</b>	A collection of barangays that comprise a broader 'city'
<b>Barangay</b>	An area formed of 10,000 voters; the lowest administrative boundary
<b>Sitio / Purok</b>	Neighborhood or area that is informal and not classified for administrative purposes

## 1. EXECUTIVE SUMMARY

### 1.1. CONTEXT

Typhoon Bopha (known in the Philippines as Pablo) made landfall on the island of Mindanao early on 4 December 2012 bringing heavy rain and wind gusts of up to 210 km/h (130mph). The typhoon's high wind speed and flooding caused extensive damage to the housing stock and infrastructure and widespread disruption in power supply and communications. The final reported casualty total for Typhoon Bopha stands at nearly 1,150 people. Bopha comes a year after Tropical Storm Washi (known in the Philippines as Sendong) killed more than 1,500 people in southern Philippines.

Immediately following the typhoon in December, the humanitarian community and the Government of the Philippines identified shelter damage from high winds, flooding and landslides in the highland areas of Eastern Mindanao as a critical sectoral focus. DSWD estimated at the time that out of 46,831 totally destroyed houses, 21,166 (45%) were from Davao Oriental, while 25,462 (54%) were located in Compostela Valley. Similarly, almost 92% of all partially damaged houses were estimated to come from these two provinces.

Based on this information, the Shelter Cluster commissioned a rapid assessment in early December that covered the municipalities of Boston, Cateel and Baganga in Davao Oriental province and New Bataan municipality in Compostela Valley, all part of the Davao Region (Region XI). The results were published at the end of December in a report which was used to inform initial sector-level response and planning. The rapid assessment report is found in **Annex 11**.

Three months after the crisis, the Shelter Cluster commissioned this progress assessment in order to gauge the state of the response and identify any gaps that might remain. In addition to the municipalities in Region XI, the assessment targeted other areas identified as having been heavily affected by the typhoon – namely Agusan del Sur and Surigao del Sur provinces in the Caraga Region (Region XIII) and all municipalities in Compostela Valley province. Within the municipalities with the highest numbers of affected populations the progress assessment sampled barangays based on the reported level of shelter damage by DSWD (partially damaged or completely destroyed) across three different shelter response levels (100% of emergency caseload met, above 30% emergency caseload met, below 20% emergency caseload met) as reported by shelter cluster members. The selected barangays were then stratified by high and low reported damage levels and high and low concentrations of assistance provided.

## 1.2. ASSESSMENT METHODOLOGY

The assessment was conducted in the field 25 February-1 March 2013 by a shelter cluster assessment team facilitated by a REACH assessment coordinator.

The shelter assessment includes four components of data collection and analysis:

1. **Collection of secondary data from government and agency sources** which has been integrated into the analysis for the final report.
2. **Household surveys** conducted by the assessment teams in rural and urban/ peri-urban locations.
3. **Key informant interviews** conducted with government officials and NGO staff to provide contextual information regarding the overall status of the response so far, land and resettlement issues and difficulties experienced during the response.
4. Finally, there is a **GIS and mapping component** which includes the production of static and web-based interactive mapping of all collected, collated and analyzed data.

Upon request of the Shelter Cluster, a REACH Assessment Coordinator was dispatched to Mindanao. Cluster members were contacted by the Cluster Coordinator and requested to provide human and logistical resources for the assessment. IOM and HRC-Oxfam provided enumerators and data entry staff, while IOM provided vehicles for the duration of the assessment. Twelve enumerators divided into 4 teams, each with a team leader, were placed under the management of the REACH assessment coordinator and deployed to barangays identified based on the reported level of shelter damage by DSWD (partially damaged or completely destroyed) across three different shelter response levels (100% of emergency caseload met, above 30% emergency caseload met, below 20% emergency caseload met) as reported by shelter cluster members. The selected barangays were further broken down within the reported level of shelter damage categories by sampling from barangays with high and low concentrations of assistance provided. Each team used a thematic questionnaire for each household. The thematic areas were: (1) the appropriateness of shelter solutions provided by cluster members, (2) whether the scale of the response addressed reported needs, and (3) how the response has affected livelihoods. Field data collection was verified on a regular basis by each team leader before validation and its inclusion in the database. Shelter Cluster indicators were used where appropriate.

The key informant interviews were conducted by the Assessment Coordinator. These interviews were conducted using a standard tool to record data gathered from the interviews based on key thematic areas. The thematic areas were: (1) the extent to which the determined geographical and sectoral gaps were prioritized by shelter cluster actors, (2) whether the scale of the response provided agencies with enough resources to address reported needs and (3) remaining geographical and sectoral gaps, needs and concerns.

### Full Sets of Data and Maps from the Project

All of the research's raw data, including databases, reports, web-maps, static maps, questionnaires, fact sheets and more can be accessed through the Shelter Cluster at <https://www.sheltercluster.org/Asia/Philippines/TyphoonPablo2012/Pages/default.aspx> and the REACH portal of IMPACT Initiatives: <http://www.reach-initiative.org/countries/philippines/philippines-reports>. The Philippines web-map can be found here: <http://philippines.reach-initiative.org/>



### 1.3. KEY FINDINGS AND RECOMMENDATIONS

1. **A total of 46% of households remain uninhabitable three months after the typhoon. While this is down from 93% in December, it remains a concern, especially as 25% of households are living in makeshift shelters on the land they lived on before the typhoon.** Because of this, shelter should remain the key priority for the Bopha response. While there has been a marked decrease in the number of uninhabitable houses from the initial assessment, the large number of households living in makeshift shelters is still of concern. These households should be prioritized for assistance and/or resettlement.
2. **Drawing on the recommendations of the initial shelter cluster assessment and the shelter cluster strategy, shelter and livelihoods have been prioritized as part of the response to Bopha. The types of assistance outlined in the shelter cluster strategy, however, were not followed. As a result, most of the barangays that have received other shelter assistance (CGI sheets, emergency shelter kits, shelter repair kits) beyond just tarpaulins have lower numbers of uninhabitable houses. However, most of the assessed barangays with the highest numbers of uninhabitable houses are also the barangays that only received tarpaulins as opposed to other types of shelter assistance. Medium term shelter assistance such as shelter repair kits and emergency shelter kits has had more impact on shelter recovery than emergency solutions alone.** Assistance in the form of shelter materials, technical support and tools should be prioritized during the next phase of assistance. Similarly, livelihood support should be part of a complementary support package to spur further self-reconstruction and access to food.
3. **Livelihoods assistance has predominately been in the form of Cash for Work assistance. While this has injected cash into the economy and likely allowed for increased access to food and other consumables, it has not spurred the shelter reconstruction desired by the shelter cluster. This is likely due to the fact that the Cash for Work activities are focused on debris removal and other non-shelter related activities, pulling labor resources away from shelter reconstruction.** It is therefore advisable that CfW activities not only provide households with cash, but also provide them with an opportunity to improve their shelter. Cash for Work activities should be organized around shelter construction, thus providing livelihood and shelter assistance in the same activity. Livelihoods assistance, especially in the form of Cash for Work, should be organized around shelter construction activities.
4. **Overall, the land tenure status for typhoon-affected households has been substantially affected, with 83% of families owning the house or land they currently live on, down from 96% before the typhoon. There is a clear rural/urban divide in the most common land tenure status, however, with 48% of rural households owning their house and not paying rent on the land they live on with the consent of the owner and 21% of urban/peri-urban households owning both their house and lot.** These are the same most common statuses as before Bopha, but the effect can be seen in the decrease in percentage among these statuses and an increase in the number of 'no responses'. Drawing on anecdotal evidence and assessment team feedback, the high numbers of no responses suggests a discomfort in answering this question, as many families are living on land without the consent of the landowner. For those that do have the consent of the landowner, the most common arrangement (in rural settings) is that the landowner is an extended family member that has allowed the household to build a house on the land rent-free. Urban/peri-urban settings provide for much more complex and complicated arrangements given the scarcity of land and the exposure to a more vigilant legal system.



## 2. CONTEXT OF TYPHOON BOPHA IN ASSESSMENT AREA

Typhoon Bopha (known in the Philippines as Pablo) made landfall on the island of Mindanao early on 4 December 2012 bringing heavy rain and wind gusts of up to 210 km/h (130mph). The typhoon's high wind speed and flooding caused extensive damage to the housing stock and infrastructure and widespread disruption in power supply and communications. The final reported casualty total for Typhoon Bopha stands at nearly 1,150 people. Bopha comes a year after Tropical Storm Washi (known in the Philippines as Sendong) killed more than 1,500 people in southern Philippines.

Immediately following the typhoon in December, the humanitarian community and the Government of the Philippines identified shelter damage from high winds, flooding and landslides in the highland areas as a critical sectoral focus. At the time, DSWD estimated that out of 46,831 totally destroyed houses, 21,166 (45%) were from Davao Oriental, while 25,462 (54%) were located in Compostela Valley. Similarly, almost 92% of all partially damaged houses were estimated to come from these two provinces.

Based on this information, the Shelter Cluster, coordinated by DSWD as the cluster lead with the International Federation of Red Cross and Red Crescent Societies (IFRC) and the International Organization for Migration (IOM) as the shelter cluster coordinators, commissioned an assessment in early December that covered the municipalities of Boston, Cateel and Baganga in Davao Oriental province and New Bataan municipality in Compostela Valley. A REACH team<sup>1</sup> was deployed to facilitate and interagency assessment in order to inform the shelter cluster and national and international actors and stakeholders on the scale and impact of the typhoon on shelter. Oversight and support was provided by IMPACT and the United Nations Office of Satellite Imagery (UNOSAT) from their Geneva offices<sup>2</sup>. The results were published in a final assessment report at the end of December.

Three months after the crisis, the Shelter Cluster commissioned this progress assessment in order to gauge the state of the response and identify any gaps that might remain. In addition to the municipalities in Region XI, the assessment targeted other areas identified as having been heavily affected by the typhoon – namely Agusan del Sur and Surigao del Sur provinces in the Caraga Region (Region XIII) and all municipalities in Compostela Valley province.

The purpose of the deployment and this progress assessment was to inform humanitarian decision-making and coordination in relation to shelter and the shelter response three months after the typhoon as well as to identify lessons-learned and best practices. Household level surveys were undertaken to assess the level of direct household shelter and livelihood assistance that had been provided and perceived gaps, while key informant interviews were held with local government officials and NGO staff to understand broader issues dealing with relocation and justifications for response targeting. Static maps and a web-map with interactive functions were developed based on key data collected by the assessment to enable humanitarian stakeholders to quickly reference the relief assistance being provided, how the assistance has affected recovery and any gaps in provision. Further mapping requests from humanitarian agencies can be provided upon request either to the shelter cluster or IMPACT's GIS unit in Geneva.

<sup>1</sup> Please refer to Impact & REACH overview at the beginning of this report

<sup>2</sup> Within the United Nations Institute of Training and Research (UNITAR)

### 3. ASSESSMENT METHODOLOGY

This section describes the methodology developed and implemented in undertaking the shelter sector progress assessment. A sample of affected households across barangays with varying levels of assistance and reported damage was taken in line with time and resource availability.

This section highlights (a) the overall objectives of the progress assessment mission; (b) coordination in planning and implementation of the assessment; (c) the general methodology of the assessment including the use of key informant and household surveys; (d) the coverage of the assessment in terms of households and affected areas; and (e) the scale and scope of the assessment.

#### 3.1. OBJECTIVES

The key objective of the progress assessment is **to assess the progress and efficacy of shelter sector resources and response in the post-Bopha target areas of Region XI and XIII in Mindanao**. Specifically, the assessment aims to inform actors and stakeholders involved in the development of:

- **Revised assistance location and modalities** based on identified gaps and areas with low need
- An understanding of **the affect the current response has had on recovery at the household level** and what this means for mid-term and permanent solutions

This is achieved through the following:

1. The completion of an assessment that will inform further shelter sector coordination responses and the handover of the current cluster response to the Philippine government;
2. Sharing of results at the field and international level to support a planned and coordinated humanitarian aid response in targeted locations and future responses.

#### 3.2. COORDINATION WITH CLUSTERS & AGENCIES

Coordination with key stakeholders and actors was undertaken through the shelter cluster coordinator. As part of the planning for the shelter assessment the shelter cluster team participated in a meeting with the Shelter Cluster Coordinator to identify priorities for the assessment and establish interagency partners to conduct the assessment.

IOM and OXFAM through the Humanitarian Response Consortium (HRC) were identified as partners for the assessment, providing transportation, enumeration staff and data entry capacity.

#### 3.3. GENERAL METHODOLOGY

The shelter assessment includes four components of data collection and analysis. First, there are the secondary data sources of national and regional government and agencies. Second there are the household surveys that serve as the backbone of the assessment. Thirdly, key informant interviews were held with government officials and NGO staff. Finally, there is the GIS and mapping component which includes static and web-based interactive mapping of all data collected, collated and analyzed. The use of these different data collection methods further facilitates the cross-verification of field information, which was conducted as part of the analysis.

**Secondary data:** The assessment team reviewed available data related to the typhoon impact at both national and regional levels, namely DSWD. Data collected and collated by the Shelter Cluster was also used to identify assessment sites and further contextualize field data.

**Household surveys:** The assessment team designed a household survey for households located in typhoon affected areas drafted with the support of the shelter cluster coordinator and endorsed by shelter cluster members. This included demographic information on the households, socio-economic household data, assistance received, as well as a technical

assessment of the shelters in which respondents to the survey were currently residing. See **Annex 2** for the assessment template. The purpose was to generate specific data to inform the remaining needs and type of projects required, and to assess how the response so far has affected recovery. The assessment team used a targeted sampling strategy that used individual barangays as case studies of different damage and response levels to gauge how the response and geographic differences have affected recovery. Households were surveyed in intervals of five, to ensure wide coverage within each barangay. A total of 966 households were surveyed.

**Key informant interviews:** Key informant interviews were designed to understand the ways in which the government and both local and international NGOs have responded to the typhoon. The interviews focused on how agencies prioritized response areas and identification of gaps and difficulties in the response. Twelve interviews were conducted among local government and NGO staff.

**GIS and mapping:** Maps were created using assessment data to illustrate successes and gaps by barangay. These maps are intended to be used as coordination and planning tools to identify areas that need further assistance or where assistance needs to be revised. The web-based interactive map is also being made available with data being updated on an ongoing basis (see [www.sheltercluster.org](http://www.sheltercluster.org)).

### 3.4. ASSESSMENT AREA

Among the multiple locations affected by typhoon Bopha across the region of Mindanao, the initial focus of humanitarian coordination and action has been on the provinces of Davao Oriental and Compostela Valley in Region XI. This shelter sector progress assessment assessed barangays from municipalities covered in the first assessment as well as additional municipalities from Region XIII based on reported damage levels. **Table 1** below illustrates the information used to sample at the municipal level.

**Table 1: Response and Damage by Municipality**

Province	Municipality	Resident Families Pre-Bopha <sup>3</sup>	Totally Destroyed <sup>4</sup>	Partially Damaged <sup>5</sup>	Damage Total <sup>6</sup>	% of Population affected <sup>7</sup>	# Families Assisted <sup>8</sup>	Damage/Number of Families Assisted % Covered	Remaining
COMPOSTELA VALLEY	COMPOSTELA	15,145	8,883	9,658	18,541	122%	6,752	36%	11,789
DAVAO ORIENTAL	CATEEL	7,131	8,786	567	9,353	131%	12,487		Em. Assist. met
COMPOSTELA VALLEY	MONKAYO	17,528	8,023	12,951	20,974	120%	7,420	35%	13,554
DAVAO ORIENTAL	BAGANGA	9,875	6,900	1,738	8,638	87%	20,902		Em. Assist. met
AGUSAN DEL SUR	TRENTO	8,723	5,606	2,331	7,937	91%	897	11%	7,040
AGUSAN DEL SUR	LORETO	7,296	5,014	1,367	6,381	87%	252	4%	6,129
COMPOSTELA VALLEY	LAAK (SAN VICENTE)	13,097	4,848	8,758	13,606	104%	4,270	31%	9,336
COMPOSTELA VALLEY	MONTEVISTA	7,320	4,072	5,495	9,567	131%	2,172	23%	7,395

<sup>3</sup> Average family size based on REACH Assessment Dec 2012 = 5.41 People

<sup>4</sup> DSWD

<sup>5</sup> DSWD

<sup>6</sup> DSWD

<sup>7</sup> Some fields are more than 100% as the source of the families pre-Bopha was based on the estimated family size from the first REACH assessment. The total population (source: National Statistics Coordination Board-2010 Census of Population & Housing 1 May 2010) was divided by 5.41.

<sup>8</sup> Cluster members

SURIGAO DEL SUR	LINGIG	7,478	3,652	3,694	7,346	98%	596	8%	6,750
AGUSAN DEL SUR	VERUELA	7,478	3,245	4,371	7,616	102%	1,496	20%	6,120
COMPOSTELA VALLEY	NEW BATAAN	8,774	3,134	11,765	14,899	170%	8,722	59%	6,177
DAVAO ORIENTAL	BOSTON	2,342	2,556	1,056	3,612	154%	3,725		Em. Assist. met
COMPOSTELA VALLEY	NABUNTURAN	13,530	2,052	7,342	9,394	69%	4,547	48%	4,847
AGUSAN DEL SUR	SANTA JOSEFA	4,650	1,697	2,411	4,108	88%	501	12%	3,607
SURIGAO DEL SUR	BISLIG	17,852	533	7,487	8,020	45%	300	4%	7,720
SURIGAO DEL SUR	HINATUAN	7,159	233	2,800	3,033	42%	300	10%	2,733
DAVAO ORIENTAL	BANAYBANAY	7,231			-		54		

Within the municipalities with the highest numbers of affected populations the progress assessment sampled barangays based on the reported level of shelter damage by DSWD (partially damaged or completely destroyed) across three different shelter response levels (100% of emergency caseload met, above 30% emergency caseload met, below 20% emergency caseload met) as reported by shelter cluster members. The selected barangays were then stratified by high and low reported damage levels and high and low concentrations of assistance provided (**Table 2 & 3**).

**Table 2: Sampled Barangays**

	Emergency Assistance Met	Above 30% Met	Below 20% Met
<b>Totally Destroyed (High)</b>	<b>Cateel</b>	<b>Compostela</b>	<b>Trento</b>
<i>Assistance Provided (High)</i>	San Alfonso	San Miguel	PulangLupa
<i>Assistance Provided (Low)</i>	San Vicente	Osmena	San Ignacio
<b>Partially Damaged (High)</b>	<b>Baganga</b>	<b>Monkayo</b>	<b>Bislig</b>
<i>Assistance Provided (High)</i>	Kinablangan	Salvacion	Poblacion
<i>Assistance Provided (Low)</i>	Bobonao	Awao	Tabon

**Table 3: Additional Sampled Barangays for Baseline Assessment Comparison**

	Boston	New Bataan
<b>Assistance Provided (High)</b>	San Jose	San Roque
<b>Assistance Provided (Low)</b>	Sibajay	Batinao

### Generalizing Results and Statistical Analysis

A non-random sampling method was used to identify households and communities that were included (see above for how communities were selected). Therefore, it is important to note that the results cannot be accurately generalised across all affected communities. This decision was based on the fact that there were not sufficient resources available to provide full coverage of all assisted barangays. Rather, a sample of barangays using specific criteria was used to elicit indicative results of the overall response to date. Therefore, this assessment does not include a statistical analysis.

Nonetheless, given the representative sample taken for each barangay sampled and the identification of barangays across different response and damage levels, these results can be considered indicative of municipalities with similar response and damage situations (see **Table 1**). However, Agencies are encouraged to verify all information.

### 3.5. TRAINING, LOGISTICS AND HUMAN RESOURCES

The assessment was conducted in consultation with the Shelter Cluster coordinator who facilitated inter-agency participation in the assessment. HRC-Oxfam and IOM both provided transportation and staff for the duration of the assessment. The shelter assessment formally began on 25 February 2013 with enumerators from IOM and HRC-Oxfam that had been seconded to the Shelter Cluster and were managed by the REACH Assessment Coordinator. Twelve data enumerators were recruited including four team leaders (four teams of three). The assessment coordination team conducted a half-day training at the Paper Country Inn in Bislig covering topics such as interview techniques and the specificities of the questionnaire tool.

Four vehicles were employed to carry each team daily from Bislig and Tagum City to the assigned assessment sites. Upon return to Bislig and Tagum, a debrief was conducted to address any questions and issues from the day as well as for the team leaders to deliver the reviewed questionnaires from their team for data entry. The data entry team consisted of two individuals recruited by IOM as well as three recruited by the assessment coordination team for a total of five. These individuals received a half-day training reviewing the Microsoft Access database and techniques for minimizing data entry error. Data collection was completed on the 28 February 2013. Data entry was completed on the 1 March 2013.

### 3.6. SCOPE OF ASSESSMENT

The table below shows the areas in which households were surveyed (a geographical representation of the table can be seen in **Map 1** on the following page).

Province	Municipality	Barangay	# of Surveys Conducted
Davao Oriental	Boston	San Jose	48
		Sibajay	77
	Cateel	San Alfonso	62
		San Vicente	61
	Baganga	Kinablangan	53
		Bobonao	99
	Monkayo	Salvacion	70
Compostela Valley	New Bataan	Awao	76
		San Rogue	55
	Compostela	Batinao	63
		San Miguel	63

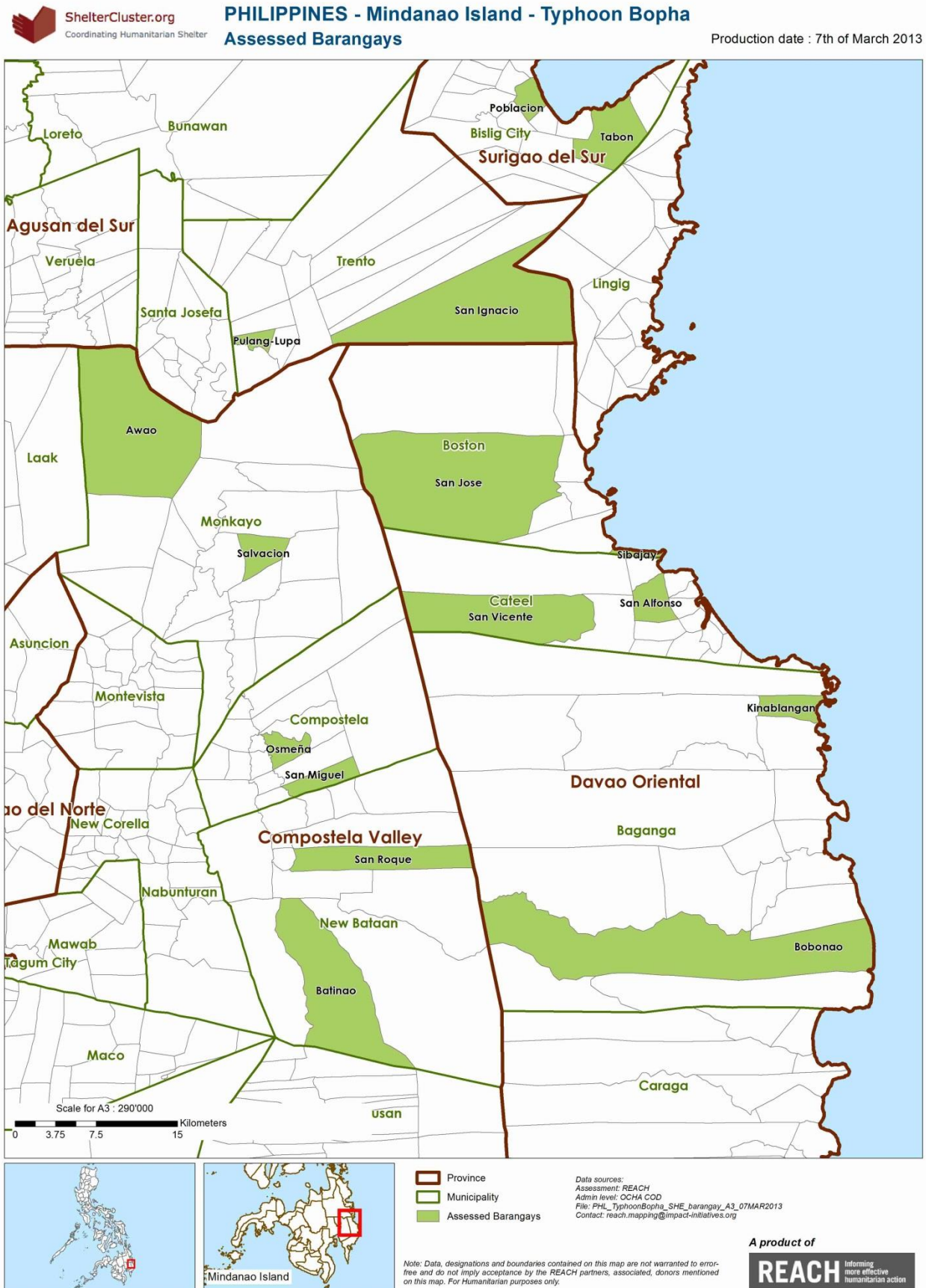
		Osmena	60
Agusan del Sur	Trento	PulangLupa	62
		San Ignacio	65
Surigao del Sur	Bislig	Poblacion	24
		Tabon	28
TOTAL			966



Government-Constructed Bunkhouse in Boston Municipality



Map 1: Assessment Coverage by Barangay





## 4. ASSESSMENT RESULTS

This section includes the results from the household surveys and the key informant interviews. The analysis highlights the summary level information, with detailed breakdowns where trends were observed. Analysis at the barangay level is provided, where feasible given time constraints.

It is worthwhile noting that the information included here has some variations across sites. This is mainly due to the fact that the urban-rural nexus means that the scale of impact on communities differs. For example, while an urban setting may have more damage in aggregate numbers and cost of impact, a rural setting may be more affected as a proportion.

This section first considers demographic information of those surveyed and affected, including identification of vulnerable groups. This is followed by a review of the land tenure status of households – a topic that has implications for relocation and resettlement considerations. An analysis of the most salient impact of the shelter and livelihood assistance to date is then explored. Finally, the type of support needed is highlighted along with any support that has already been provided.

As part of a global effort to standardize information and indicators within the shelter sector, (with the aim of improving transparency, impact monitoring, and cross-country / thematic comparisons) a set of shelter-related indicators has been developed. The final section of the results section provides statistics for some of the indicators as far as the data allows.

The assessment has collected a significant amount of information across a range of data sources. This being a rapid assessment, the amount of time available for in depth analysis and reporting is limited.

This report provides a synopsis of the key issues and summary of the data that has been collected. It is not intended or able to provide detailed programmatic information in its current form - rather, the assessment is designed to be useful for a broader audience. Where it is of value, specific case studies are identified which may differ from the summary information.

In addition, the database of information is available to interested parties, with confidential information removed where necessary.

For more information see:  
[www.sheltercluster.org](http://www.sheltercluster.org)

#### 4.1. SHELTER SECTOR ASSISTANCE PROGRESS IN RELATION TO SHELTER CLUSTER STRATEGY & GLOBAL INDICATOR REVIEW

The shelter sector has been the main focus of assistance throughout the post-Bopha response. The Shelter Cluster has been highly active in coordinating the appeals process, providing technical support and establishing a shelter strategy. The cornerstone of the shelter sector response has been the establishment of a strategy for all shelter implementing agencies to follow (*Figure 1*). In conversations with key informants, there was a general acknowledgement of the usefulness of the strategy even though many of the agencies also admitted that their selection criteria centered on numbers of affected households rather than specific target groups, as outlined below. The second sub-section of this chapter will explore the progress across a sample of Global Shelter Cluster (GSC) indicators using values from the initial assessment and the progress assessment.

##### 4.1.1 Shelter Cluster Strategy

Figure 1: Shelter Sector Strategy

Target groups		Objective of intervention	Emergency activities up to 6wks	Recovery activities 2wk to 24mth
Inside Evacuation Centres (ECs)	<b>1. Displaced</b> HHs living in EC's. e.g. schools.	– Support provided to HHs to return to their original repaired or reconstructed homes.	– Repair of EC's	
	<b>2. Displaced</b> - HHs living in makeshift and or tents which are recognised by DSWD and classified as 'inside EC'	– HHs relocated to transitional camps. – Permanent resettlement.	– Tents – T Shelters	– Full or partial shelter repair kit, or – Permanent house solutions, depending on extent of damage to original shelter
Outside EC	<b>3. Displaced</b> - displaced HHs living in spontaneous settlements in makeshift shelters or tents. Not recognised by DSWD as being 'in side EC's'.	– Support provided to HHs to return to their original repaired or reconstructed homes. – HHs relocated to transitional camps. – Permanent resettlement.	– Tents – T Shelters	– Full or partial shelter repair kit, or – Permanent house solutions, depending on extent of damage to original shelter
	<b>4. Displaced</b> HHs living with host families, etc.	– Support provided to HHs to return to their original repaired or reconstructed homes. – HHs relocated to transitional camps. – Permanent resettlement.	– Host family support – Tents – T Shelters	– Full shelter repair kit, or – Permanent house solutions
	<b>5. Non-displaced</b> HHs living in partially damaged houses.	– Support provided to HHs to repair their partially damaged houses. – Permanent resettlement.	– Emergency shelter kit	– Partial shelter repair kit
	<b>6. Non-displaced</b> HHs living in significantly damaged housing.	– Support provided to HHs to repair or rebuild their significantly damaged houses.	– Emergency shelter kit – Tents	– Full shelter repair kit, or – Permanent house solutions
	<b>7. Non-displaced</b> HHs living in makeshift shelters (or tents) on the plots of their totally destroyed house.	– Support provided to HHs to rebuild their destroyed houses.	– Emergency shelter kit – Tents	– Permanent house solutions
Other	<b>8. Renters:</b> HHs who were renting a property which was damaged or destroyed.	– Support provided to regain rental accommodation.	– Emergency shelter kit – Tents – T Shelters – Rental support	– Rental support

**Notes:**

1. All displaced and non displaced categories are subject to permanent resettlement when the Government declares 'no build zones'.
2. Where appropriate cash grants or vouchers can be considered as a method of implementation – in coordination with appropriate support and monitoring mechanisms.
3. All repairs and permanent structures must be provided in coordination with the appropriate level of technical training, monitoring and guidance.
4. All repairs and permanent structures must comply to the appropriate recognised national standards and with guidance from the National Housing Authority.
5. Maximum recommended time for tents and tarps as a place of main habitation is 3 months.

The initial assessment identified percentages of households that fall into the above target groups. **Table 4** shows the breakdown from the first assessment (column 1) and the corresponding percent of shelter assistance provided to each population group according to the second assessment (column 2). **Overall, it would seem that the majority of the strategy was followed. However, certain groups seem to have been underserved: (1) those living with host families, and (2) those living in Evacuation Centers or other collective shelter locations. These number are somewhat inflated, however, as the majority of the assistance (63%) was in the form of tarpaulins, whereas the strategy called for transitional shelters and emergency shelter kits for most of these groups. Without tarpaulin assistance included (column 3) all population groups are underserved.** While these percentages only come from a sample of barangays that received shelter assistance, they are indicative of the overall response, as the sampled barangays were from a wide cross-section of assistance and damage levels.

**Table 4: Cluster Strategy vs. Assistance Provided**

	Target groups	1. % of Affected Population (from 1 <sup>st</sup> assessment)	2. % of Shelter Assistance (from 2 <sup>nd</sup> assessment)	3. % of Shelter Assistance – no tarps (from 2 <sup>nd</sup> assessment)
Inside Evacuation Centres (ECs)	1. <b>Displaced</b> HHs living in EC's. e.g. schools.	12%	7%	3%
	2. <b>Displaced</b> - HHs living in makeshift and or tents which are recognised by DSWD and classified as 'inside EC'	Not Identified	Not Identified	Not Identified
	3. <b>Displaced</b> - displaced HHs living in spontaneous settlements in makeshift shelters or tents. Not recognised by DSWD as being 'in side EC's'.	2%	5%	2%
Outside EC	4. <b>Displaced</b> HHs living with host families, etc.	17%	1%	0%
	5. <b>Non-displaced</b> HHs living in partially damaged houses.	23%	52%	19%
	6. <b>Non-displaced</b> HHs living in significantly damaged housing.	5%		
	7. <b>Non-displaced</b> HHs living in makeshift shelters (or tents) on the plots of their totally destroyed house.	29%	38%	18%
Other	8. <b>Renters:</b> HHs who were renting a property which was damaged or destroyed.	Not Identified	Not Identified	Not Identified

While it is clear that the cornerstone of the shelter response – the shelter cluster strategy – was read and followed as to population groups to provide assistance to, it is clear that the type of assistance that was provided did not follow the types outlined in the strategy. Timing also was an issue, as many agencies consulted only

began shelter assistance distribution within the past 6 weeks – whereas this was the point that recovery efforts should have been prioritized. Furthermore, one of the notes in the shelter cluster strategy makes it clear that households should not be living under tarps for longer than 3 months. It is now 3 months after the emergency and a large majority of households still live under tarps. The effect of this assistance will be explored in more depth in [Section 4.4](#).

#### 4.1.2 Global Indicators

The GSC established global indicators in October 2012 in order to systematize information management and to (a) gather key data to inform planning and coordination and (b) to establish whether a given activity or strategy is achieving its intended results. [Table 5](#) below outlines values according to these global indicators, as appropriate for this assessment. It should be noted, however, that since the assessment was not conducted in the all of the same barangays across both assessment deployments, a strict comparison cannot be made.

Table 5: Global Shelter Cluster Indicators

Core Indicators					
Theme	Sub-Theme	Indicator	Sub-Division (options)	Initial Assessment	Progress Assessment
Shelter	Access to Shelter	<ul style="list-style-type: none"> <li>Number/ % of population in need of shelter assistance</li> </ul>	<ul style="list-style-type: none"> <li>Settlement type</li> <li>Shelter solution</li> </ul>	<ul style="list-style-type: none"> <li>98%</li> </ul>	<ul style="list-style-type: none"> <li>80%<sup>9</sup></li> </ul>
	Shelter Assistance	<ul style="list-style-type: none"> <li>Number/ % of households in need of shelter assistance receiving shelter support</li> </ul>	<ul style="list-style-type: none"> <li>Shelter solution (emergency, transitional, permanent shelter)</li> </ul>	N/A	<ul style="list-style-type: none"> <li>59% tarp</li> <li>25% CGI</li> <li>11% shelter repair kit</li> <li>29% emergency shelter kit</li> <li>4% bunkhouse</li> </ul>
	Shelter Damage	<ul style="list-style-type: none"> <li>Number/ % of houses/dwellings damaged or destroyed as a consequence of [event]</li> <li>Number/ % of houses/dwellings uninhabitable as a consequence of [event]</li> </ul>	<ul style="list-style-type: none"> <li>Shelter type</li> <li>Settlement type</li> <li>Cause of damage</li> <li>Category/level of damage</li> </ul>	<ul style="list-style-type: none"> <li>98% damaged</li> <li>93% uninhabitable</li> </ul>	<ul style="list-style-type: none"> <li>75% damaged</li> <li>46% uninhabitable</li> </ul>
Vulnerability	Displacement	<ul style="list-style-type: none"> <li>Number/ % of families displaced from original home</li> </ul>	<ul style="list-style-type: none"> <li>Settlement type (at origin)</li> <li>Displacement conditions (formal camp, spontaneous settlement, hosted, evacuation centre)</li> <li>Displacement status (temporary, permanent, returnee etc.)</li> </ul>	<ul style="list-style-type: none"> <li>31% makeshift shelters</li> <li>12% ECs</li> <li>28% in affected house</li> <li>17% host families</li> </ul>	<ul style="list-style-type: none"> <li>43% makeshift shelters</li> <li>7% ECs</li> <li>52% in affected house</li> <li>1% host families</li> </ul>

<sup>9</sup> Including those households displaced.

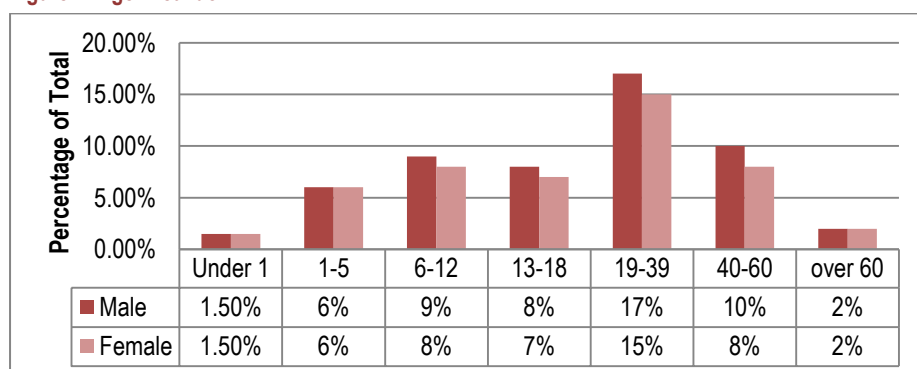
## 4.2. DEMOGRAPHIC & SOCIO-ECONOMIC CHARACTERISTICS OF ASSESSED POPULATIONS

### Key Overall Statistics

- Average number of persons per family: **5.20**
- Average male to female ratio: **1.11 :1 (52% male; 48% female)**
- Percentage of indigenous households: **22%**
- Percentage of large households (7 or more members): **13%**
- % of families with at least two income sources before Bopha: **32%**
- % of families with at least two income sources after Bopha: **18%**
- Average monthly income before Bopha: **PHP 4,920 / 123 USD**
- Average monthly income after Bopha: **PHP 1,845 / 46 USD**

A total of **966 households** were surveyed as part of the household assessment. This represents around **5,000 individuals**. Overall, the demographic profile of the affected population is similar in this assessment as the initial assessment. However, there are some key differences that are explored below. Furthermore, the socio-economic impact of the typhoon is explored with differences between rural and urban/peri-urban setting explored.

Figure 2: Age Breakdown



It is interesting to note that the overall average number of persons per family and the percentage of large households are smaller in this assessment than in the initial assessment<sup>10</sup>. In the initial assessment, the average number of persons per family was 5.41 while the percentage of large households was 28%. In this assessment,

the numbers stand at **5.20 persons per family and 13% of households with 7 or more members**. This suggests that there were likely many households hosting members of extended families and neighbors in their household in the immediate aftermath of the typhoon. However, an analysis by barangay also shows that the barangays in municipalities assessed in the initial assessment continue to have more people per family and overall larger households – **0.31 more people per household and 2% more large households – than the households assessed only in this assessment**. This potentially has implications for resettlement considerations.

The overall age breakdown among assessed households is similar to the results from the initial assessment with **over 40% of household members under the age of 19 (Figure 3)**. The gender disparity found in the initial assessment among individuals aged 19-39 is not present in this assessment and can be explained by the fact that this assessment was conducted in a higher percentage of peri-urban locations, whereas the initial assessment was conducted in a higher percentage of rural settings where there are higher reported numbers of males.

The average number of indigenous households is also lower in this assessment than in the initial assessment, but again can be explained by the fact that the barangays covered in the initial assessment have higher numbers of indigenous

<sup>10</sup> Initial assessment = Assessment conducted in December 2012 in which all barangays in Davao Oriental province and New Bataan municipality were assessed.

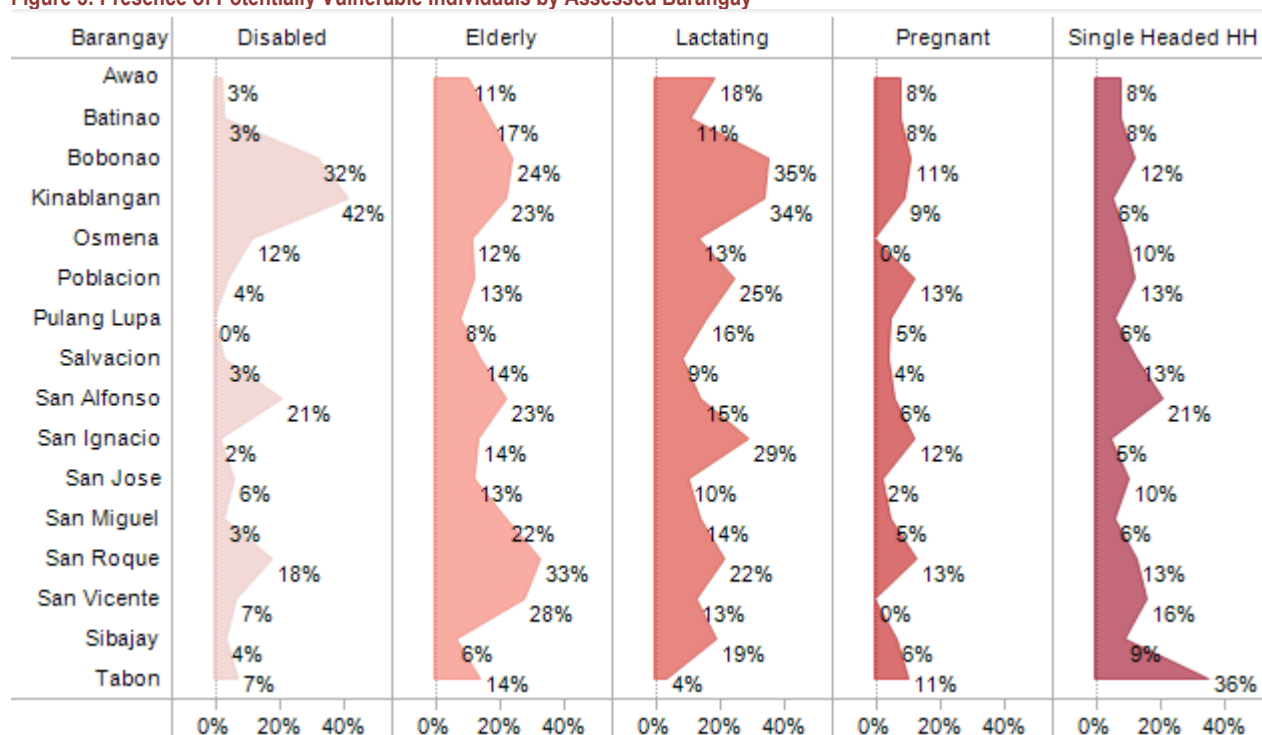
people than the additional barangays in this assessment. **The barangays of Batinao, Bobonao and Kinablangan (all barangays assessed in the initial assessment and this one) had, by far, the highest number of indigenous people at 62%, 89% and 53%, respectively.** This has potential implications for relocation given possible differences in land tenure status, which will be discussed in **Section 4.2.**

### Vulnerability

**As with the initial assessment, a large number of those affected can be considered vulnerable households.** Despite the overall young makeup of the surveyed population, around **17% of households reported having an elderly person** living in the house. In addition, **26% of households had a member that is pregnant or lactating.** A high number of individuals reported having a **disabled member of the family – 10%.** This is much higher than the initial assessment, but is due to the high numbers found in Bobonao and Kinablangan - **32% and 42% of households, respectively.** **Map 2** illustrates this high disability level and the differences between assessed barangays.

Similar to the initial assessment, **single headed households make up 11% of all surveyed households.** Women single-headed households seem to be significantly more prevalent when compared to male single-headed household (**66% of all single headed households are female versus 34% for men**). It is likely that women single-headed households are more vulnerable than other households during the recovery phase – particularly if they are unable to rehabilitate their own homes or build new homes in a relocation site – and therefore their needs in terms of assistance should be ranked as high priority. This is also exhibited in the fact that **2 in 1 households that have been displaced from the location they lived before the typhoon is a female-headed household.** **Figure 4** displays the data to better highlight those barangays with the highest numbers of each vulnerable group.

**Figure 3: Presence of Potentially Vulnerable Individuals by Assessed Barangay**



Shelter and other programs should be aware of vulnerable households, particularly those that would not be capable of constructing their own shelters and would require technical and labor assistance. These households should be a high priority during any relocation or resettlement program and have not currently been taken into account in the assistance that has been provided to date.



Map 2: Percentage of Households with Disabled Member

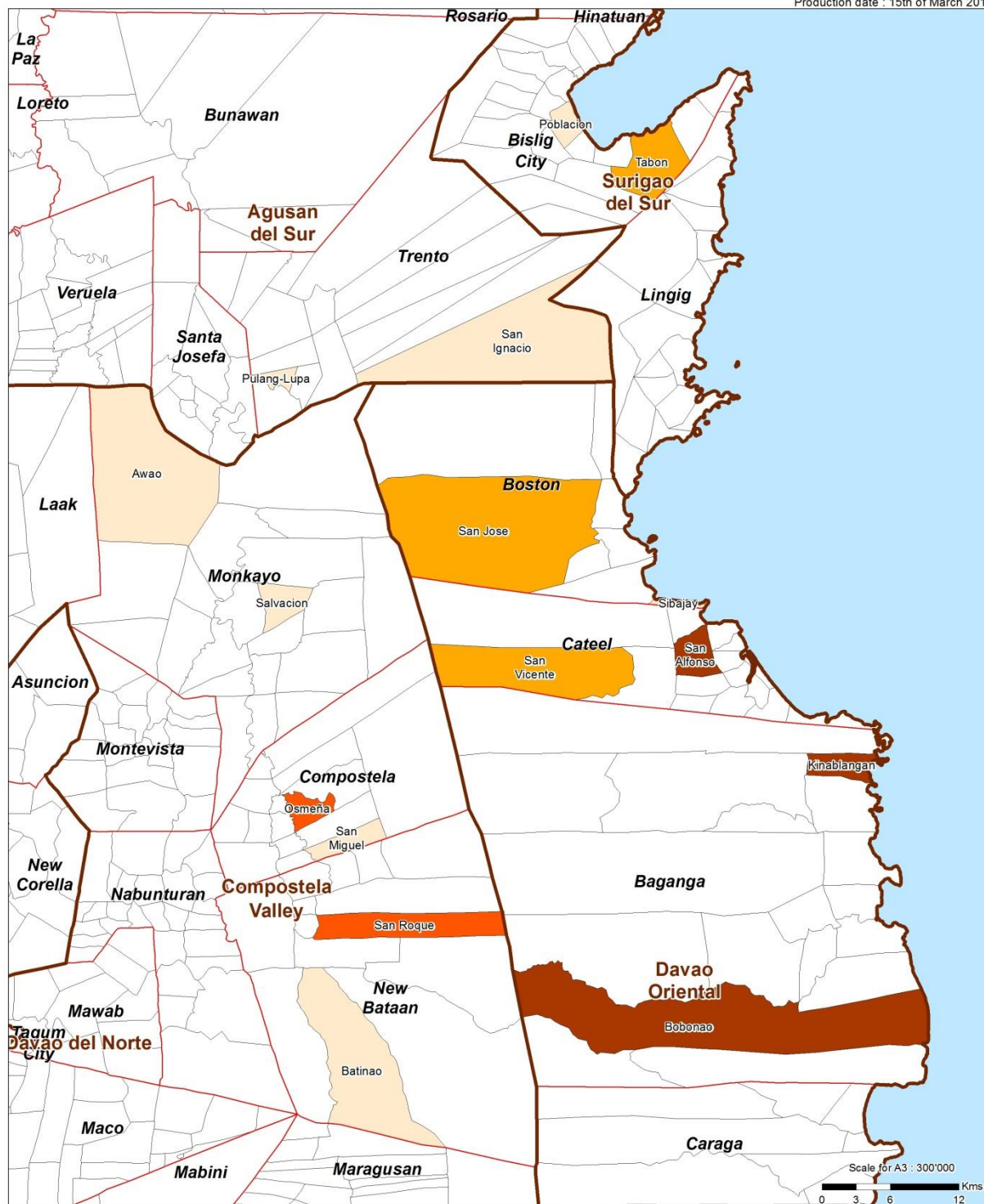


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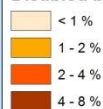
## PHILIPPINES - Mindanao Island - Typhoon Bopha

### Percentage of disabled by Barangay

Production date : 15th of March 2013



#### Disabled by Barangay (%)



- Province
- Municipality
- Barangay

Data sources:  
Assessment: REACH  
Admin level: OCHA COD  
File: PHL\_Bopha\_ASS\_Disabled\_Bgy\_A3\_15MAR2013  
Contact: reach.mapping@impact-initiatives.org

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### **Livelihoods**

As discussed in the initial assessment, the typhoon had a severe impact on livelihoods and access to previously utilized income sources. This assessment found the same breakdown of income sources as in the first assessment, but there has emerged a clear difference in the post-Bopha income levels among urban/peri-urban and rural households. While overall, **32% of households reported having at least two income sources before Bopha and only 18% now**, 80% of urban/peri-urban households reported having only one source of income before Bopha compared to only 66% of rural households. On the whole, **rural households had access to more sources of income than urban/peri-urban households before Bopha (34% versus 20%)**. This potentially explains why **urban/peri-urban households have actually fared slightly worse post-Bopha with an average monthly income of only PHP 1,552 compared to PHP 1,903 among rural households**.

### 4.3. SHELTER PROFILE & EFFECT OF ASSISTANCE ON SHELTER & LIVELIHOODS

#### Key Statistics

- % of families living on the same land as before the typhoon (at time of assessment): **60%**
- % of households currently living in makeshift shelters: **25%**
- % of shelters still having minor typhoon related damage (cat. 3): **29%**
- % of shelters still having major typhoon related damage or collapsed (cat. 4&5): **46%**

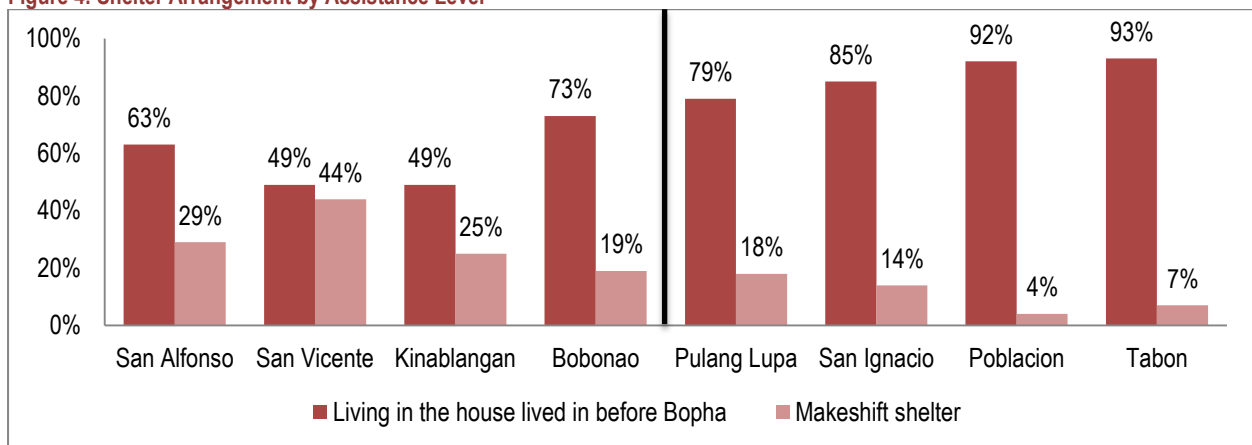
This section will explore the current shelter profile of households assessed and how they compare to the shelter profiles from the initial assessment. While there has been marked progress in rebuilding, it is unequally distributed and largely affected by the types of shelter assistance provided since the initial assessment. Similarly, the effect of livelihoods assistance on the livelihoods of households will be explored in reference to the initial assessment.

#### Shelter Arrangement

A few months after the initial assessment, the **vast majority of households had moved back to the location in which they were living before Bopha (85%)**. However, **25% of all assessed households were living in makeshift shelters** on the land they lived on before the typhoon. Overall, there were very small numbers of other types of shelter arrangements. Looking at current shelter arrangements across reported levels of shelter damage and assistance provided, however, provides a more nuanced picture of the shelter situation.

In those assessed barangays for which the emergency assistance caseload has reportedly been met (San Alfonso, San Vicente, Kinablangan, Bobonao), there are actually higher percentages of households living in makeshift shelters than in those barangays in which less than 20% of the caseload has been assisted (Pulang Lupa, San Ignacio, Poblacion, Tabon). For example, in San Ignacio barangay, 85% of households live on the same site and in the same structure as before the typhoon and only 14% live in makeshift shelters. This is compared to San Vicente barangay in which only 49% of households live on the same site and in the same structure as before the typhoon, with 44% of households living in makeshift shelters. Overall, more support was given in San Vicente, but the type of assistance was mainly tarps whereas households in San Ignacio received a higher proportion of other shelter assistance in the form of Emergency Shelter Kits and Shelter Repair Kits. While there were likely differences in the scale of damage in San Vicente as compared with San Ignacio, this has a clear implication for planning of further assistance. Furthermore, those barangays that are classified as having 100% of the emergency assistance need met have higher numbers of households that have received only tarpaulins, while those barangays with lower reported assistance levels have actually received proportionally more medium-term solution assistance such as Emergency Shelter Kits and Shelter Repair Kits (the implication on shelter damage will be explored in the next sub-section). **Figure 5** illustrates the comparison between shelter arrangements across assistance levels with the darker bar illustrating percentage of households living in the same house that they were living in before the typhoon and the lighter color representing the percentage of households living in makeshift shelters on the same site as their previous house. There is a clear inverse trend in which those barangays with 100% of reported emergency need met (the first four barangays in the chart) have higher number of households living in makeshift shelters than those with only 20% or less of the reported emergency assistance met (the last four barangays in the chart).

Figure 4: Shelter Arrangement by Assistance Level

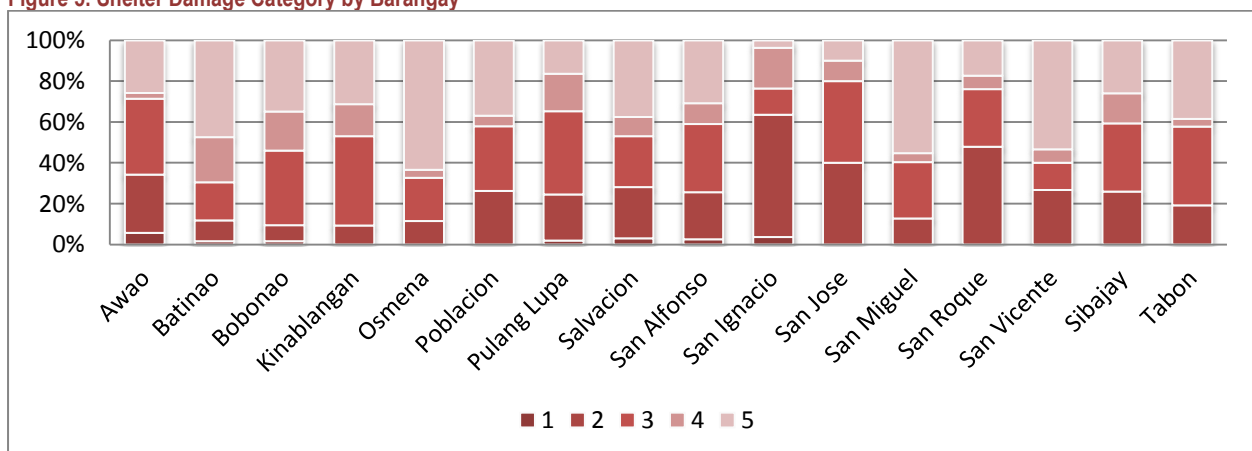


### Shelter Damage

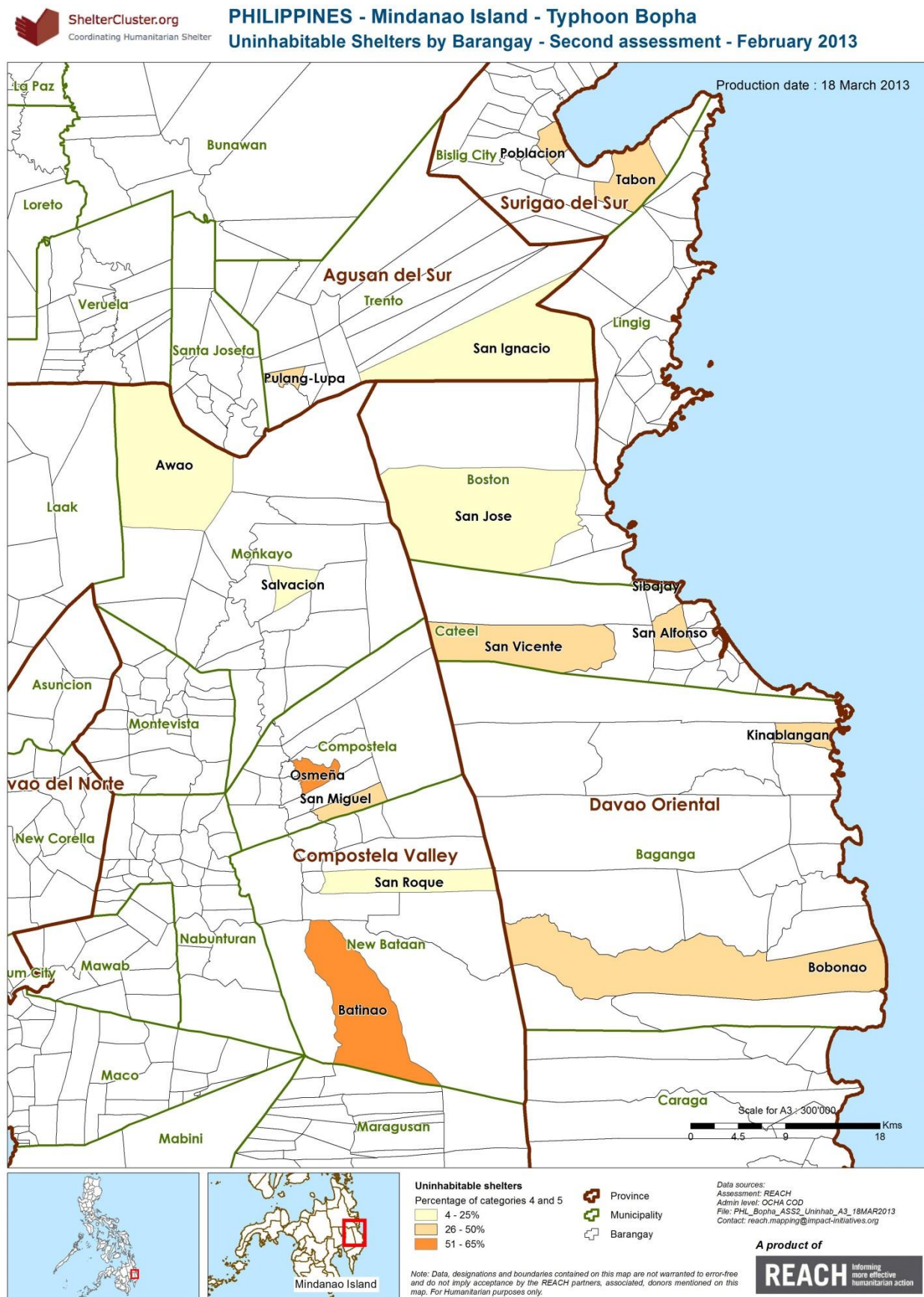
In order to compare shelter damage levels in three months after the typhoon to the shelter damage levels immediately after the typhoon, this assessment uses the same damage classification as the initial assessment – three categories for disaggregating partially damaged houses. Firstly, category 2 whereby there is wind and/or flood damage but no structural damage to the house. Secondly, category 3 whereby there is minor damage to the shell of the house but the main supports remains intact. Thirdly, category 4 whereby the house is currently unlivable and there is significant damage with some support damage but the house itself can be rehabilitated. In addition, category 1 included unaffected housing structures but affected households, while category 5 denoted a completely destroyed house.

In the rapid assessment conducted in December 2012, a clear majority of the affected population surveyed had uninhabitable houses, with 93% classified as category 4 or 5, where the greatest damage was experienced in the coastal barangays of Davao Oriental, especially in Baganga and Cateel. Three months later, this assessment found **high levels of shelter rehabilitation overall, with only 46% of houses ranked as uninhabitable**. 53% of households were ranked as a category 2 or 3. Only the shelters of households that were living in the same house they lived in before the typhoon were classified using this system – if the household lived in a different location, its shelter was not classified. *Map 3* illustrates the percentage of households classified as Category 4 or 5.

Figure 5: Shelter Damage Category by Barangay

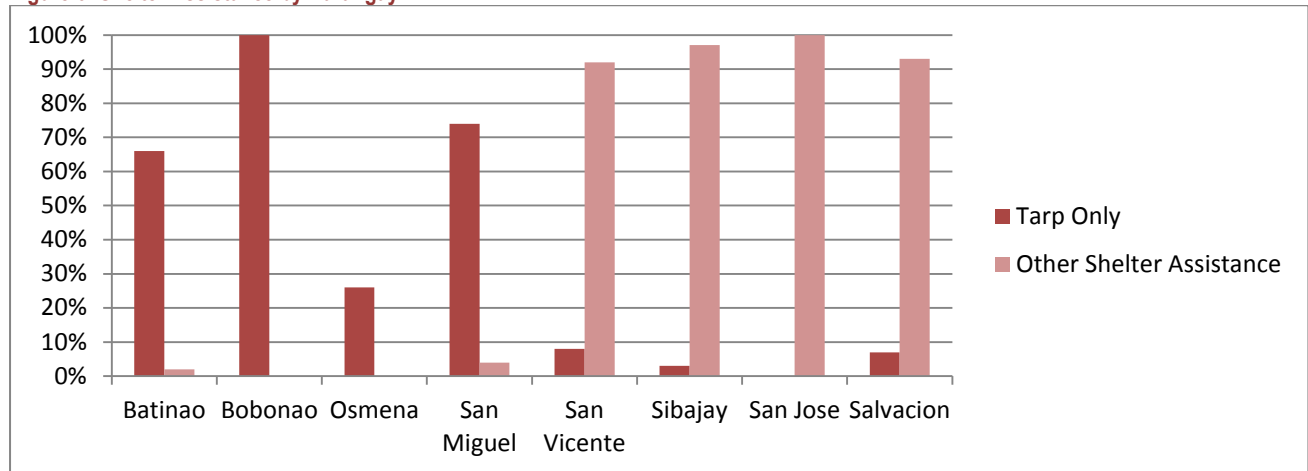


Map 3: Percentage of Uninhabitable Houses



**Figure 6** shows the classification percentages for each barangay. In this chart, the barangays of Batiniao, Bobonao, Osmena, San Miguel and San Vicente clearly have the highest numbers of uninhabitable houses. Almost without exception, these are also the barangays in which the lowest numbers of assessment respondents reported receiving types of assistance other than tarpaulins (such as shelter repair kits, emergency shelter kits or CGI sheets). **Figure 7** illustrates this trend by showing the reported assistance received for these barangays compared with a sample of others with lower numbers of uninhabitable houses. The only barangay that challenges this trend is San Vicente – a location with a high number of reported uninhabited houses that has also received high numbers of other types of shelter assistance. The overall trend suggests that households that received shelter assistance in the form of only tarps have not been able to reconstruct their homes as quickly as those that have received other types of shelter assistance. **Map 4** illustrates the concentrations of shelter assistance by barangay.

**Figure 6: Shelter Assistance by Barangay**





Map 4: Concentration of Shelter Assistance

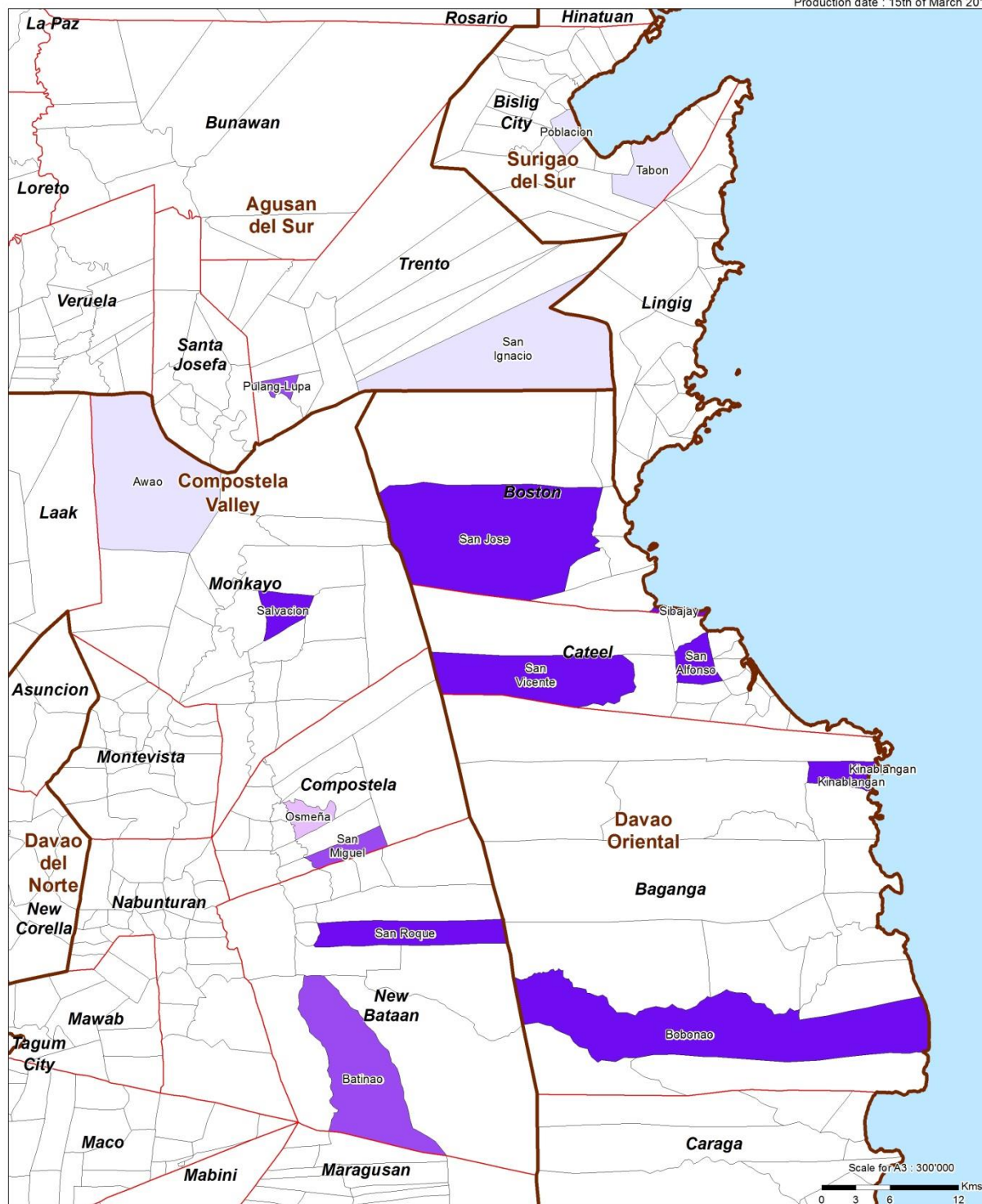


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## PHILIPPINES - Mindanao Island - Typhoon Bopha

### Provided shelter assistance by barangay

Production date : 15th of March 2013



#### Shelter assistance (%)



- Province
- Municipality
- Barangay

Data sources:  
Assessment: REACH  
Admin level: OCHA COD  
File: PHL\_Bopha\_ASS\_ProvSheAssist\_A3\_15MAR2013  
Contact: reach.mapping@impact-initiatives.org

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## Shelter Materials

In order to track shelter reconstruction trends and the effect shelter assistance has had on the types of materials used for rebuilding shelters, the assessment recorded the types of materials used for each element of a house: foundation, frame, roof and walls. The most commonly reported housing materials for each element of the house were the following:

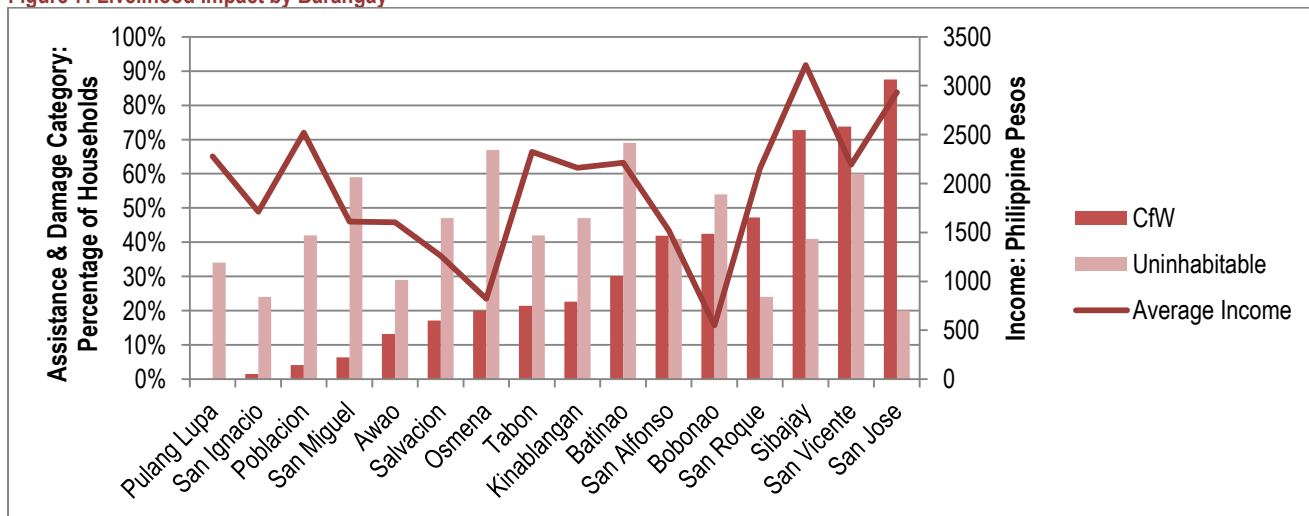
1. Foundation: Timber
2. Frame: Timber
3. Roof: CGI/Tarpaulin
4. Walls: Timber

There were no observable trends among barangays receiving different levels of assistance or having experienced differing levels of damage. It can be concluded, however, that **the vast majority of households are using the same materials to rebuild their homes that they used to build their homes before the typhoon**. The only notable difference is the lack of CGI for roofs and a preponderance of tarpaulins. Homes in Cateel municipality (San Alfonso and San Vicente barangays) also reported slightly higher use of coco-lumber for both the frame and walls. This has potential consequences for structural quality and could be considered a missed-opportunity should these shelters be used as permanent housing.

## Livelihood Assistance

The most common types of livelihood assistance were Cash for Work (CfW) and the provision of seeds. The CfW assistance was provided mostly by the government (DSWD) and local and international NGOs (65% and 28%, respectively) while the seed provision was almost entirely provided by the government. In looking at the livelihood assistance data in reference to average income and scale of current shelter damage, there is no clear trend. **Figure 6** shows all three variables plotted together by barangay. One of the hypotheses of this assessment was that households with livelihood assistance would have a higher average income and better shelter condition. The chart below clearly shows that this is not happening in any tangible way. This is likely due to the fact that the CfW activities are focused on debris removal and other non-shelter related activities. It is therefore advisable that CfW activities not only provide households with cash, but also provide them with an opportunity to improve their shelter. In other words, CfW activities should be organized around shelter construction, thus providing livelihood and shelter assistance in the same activity. **Map 5** illustrates the concentrations of livelihood assistance by barangay while **Map 6** shows the relative shelter damage levels compared to the concentration of CfW provided.

Figure 7: Livelihood Impact by Barangay





Map 5: Percentage of Households Receiving Livelihood Assistance

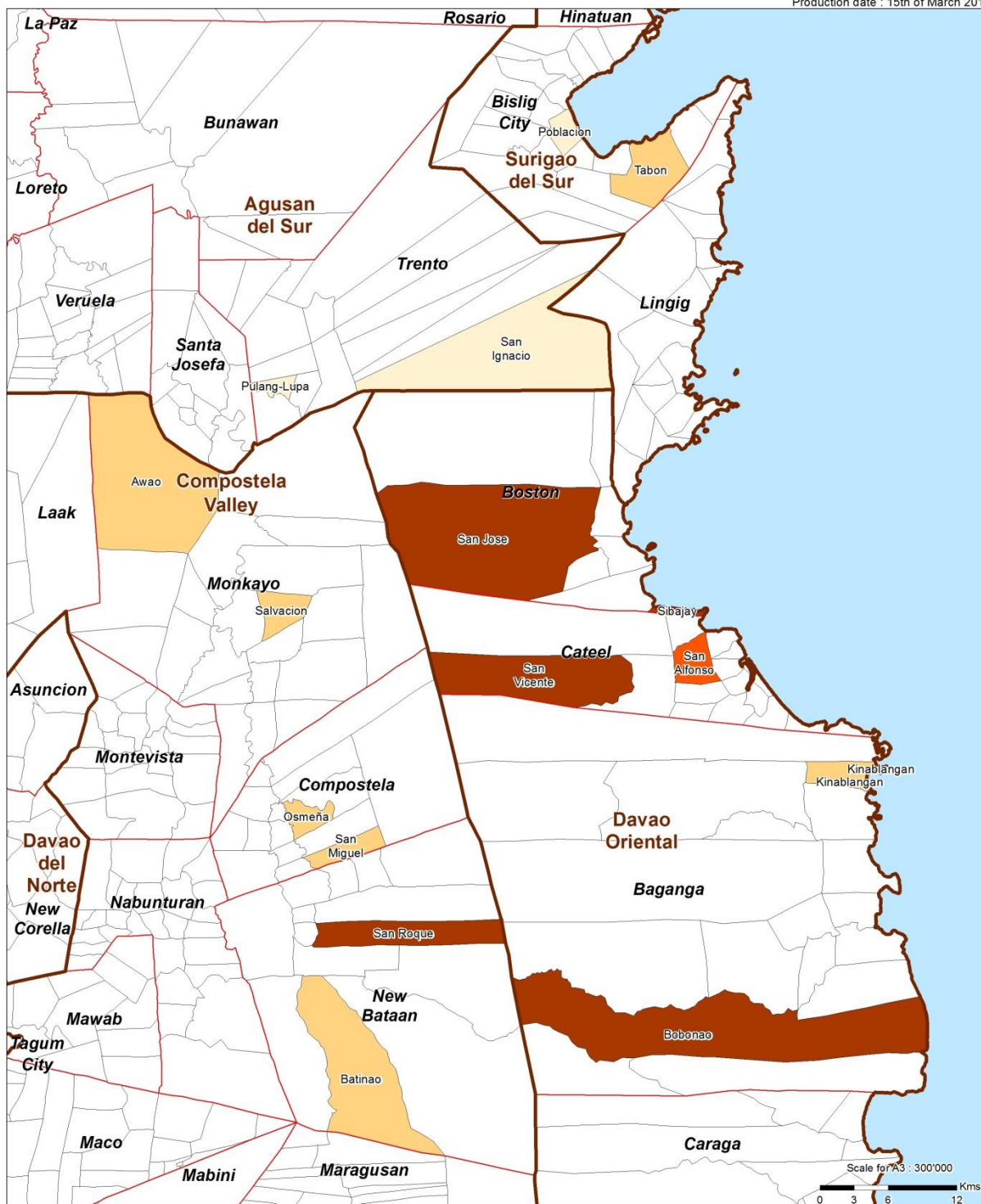


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## PHILIPPINES - Mindanao Island - Typhoon Bopha

### Provided livelihoods assistance by barangay

Production date : 15th of March 2013



#### Livelihoods assistance (%)



- Province
- Municipality
- Barangay

Data sources:  
Assessment: REACH  
Admin level: OCHA COO  
File: PHU\_Bopha\_ASS\_ProvLivAssist\_A3\_15MAR2013  
Contact: reach.mapping@impact-initiatives.org

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Map 6: Cash for Work Provision Relative to Shelter Damage Categories

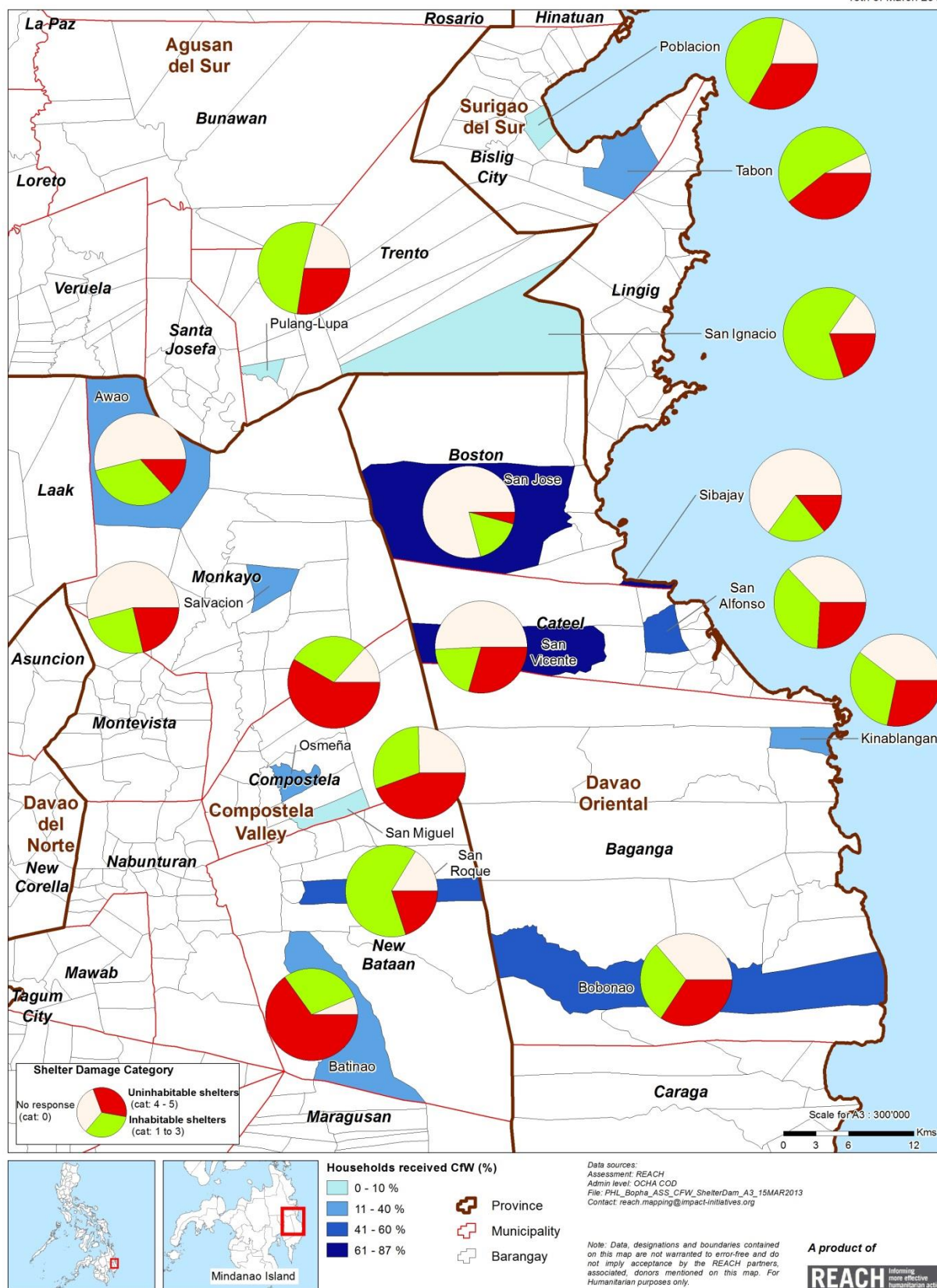


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## PHILIPPINES - Mindanao Island - Typhoon Bopha

### Households received CfW (%) with shelter damage category

Production date  
15th of March 2013



#### 4.4. LAND TENURE STATUS

##### Key Statistics

- % of families that did not own the land or house they lived in before Bopha: **4%**
- % of families that do not own the land or house they currently live in: **17%**
- Most common land tenure status before Bopha:
  - Rural: **Own house, rent-free lot with consent of owner (52%)**
  - Urban/Peri-Urban: **Own house and lot (42%)**
- Most common land tenure status after Bopha:
  - Rural: **Own house, rent-free lot with consent of owner (48%); No response (7%)**
  - Urban/Peri-Urban: **Own house and lot (21%); No response (22%)**

As outlined in the initial assessment, land tenure is an exceptionally important indicator to measure, as it has clear implications for relocation. Unfortunately, there has been a lack of information related to land tenure. This information below attempts to give a general overview of the status of those households assessed. A more in-depth assessment would need to be done, however, to explore land tenure status in relation to government plans for relocation.

Overall, the land tenure status for typhoon-affected households has been substantially affected, with **17% of families not owning the house or land they currently live on, up from 4%**. There is a clear rural/urban divide in the most common land tenure status, however, with **48% of rural households owning their house and not paying rent on the land they live on with the consent of the owner and 21% of urban/peri-urban households owning both their house and lot**. These are the same most common statuses as before Bopha (52% owned their house without paying rent on the lot with the consent of the owner in rural settings, whereas 42% owned their house and lot in urban/peri-urban areas), but the effect can be seen in the decrease in percentage among these statuses and an increase in the number of 'no responses'. Drawing on anecdotal evidence and assessment team feedback, the high numbers of no responses suggests a discomfort in answering this question, as many families are living on land without the consent of the landowner. For those that do have the consent of the landowner, the most common arrangement (in rural settings) is that the landowner is an extended family member that has allowed the household to build a house on the land rent-free. Urban/peri-urban settings provide for much more complex and complicated arrangements given the scarcity of land and the exposure to a more vigilant legal system.

**Table 5** provides a breakdown of current land tenure status by barangay. It is interesting to note that the barangays of **Batinao and Salvacion report high numbers of households living on ancestral domain land (14% and 11%, respectively)**, yet the other barangays with high reported numbers of indigenous people (Bobonao and Kinablangan) do not report any ancestral domain land tenure. 24% of households in Batinao also responded as having 'other' land tenure status, specifying 'common' as the type. This is likely an indication of a form of indigenous land tenure. 46% of households in Poblacion barangay also responded as having an 'other' tenure status, mostly specifying 'government' as the type. This should be explored further with a follow-up assessment focused on land tenure status and its ramifications for relocation. **Maps 7 and 8** illustrate the land tenure situation in all assessed barangays before and after Typhoon Bopha.

Table 6: Land Tenure Status by Barangay<sup>11</sup>

Tenure Status	Awao	Batina o	Bobon ao	Kinabl angan	Osme na	Pobla cion	Pulan gLupa	Salvac ion	San Alfons o	San Ignaci o	San Jose	San Migue l	San Roque	San Vicent e	Sibaja y	Tabon
NR	1%	3%	16%	23%	12%	4%	2%	4%	10%			27%	27%		1%	18%
Own house and lot	4%	25%	36%	13%	40%			14%	32%	25%	25%	33%	38%	28%	5%	11%
Own house but rent lot			9%	34%	3%	4%	35%		13%	12%	13%	3%	11%			29%
Own house, rent-free lot WITH consent of owner	91%	30%	23%	13%	25%	21%	48%	54%	32%	62%	56%	29%	16%	66%	79%	32%
Own house, rent-free lot WITHOUT consent of owner	3%		1%		2%		2%	3%	6%	2%		2%		3%	3%	
Rent house/room including lot		2%		2%	2%		2%	3%				2%			1%	
Rent-free house and lot WITH consent of owner	1%	2%	3%		2%			1%	3%		6%	2%	4%		3%	4%
Rent-free house and lot WITHOUT consent of owner			1%					1%								
Ancestral domain land		14%						11%								
Other		24%	5%	8%		46%	2%	7%	3%			2%		3%	8%	

<sup>11</sup> Highlighted fields show highest concentrations of households per tenure status category.



Map 7: Land Tenure Status Before Bopha

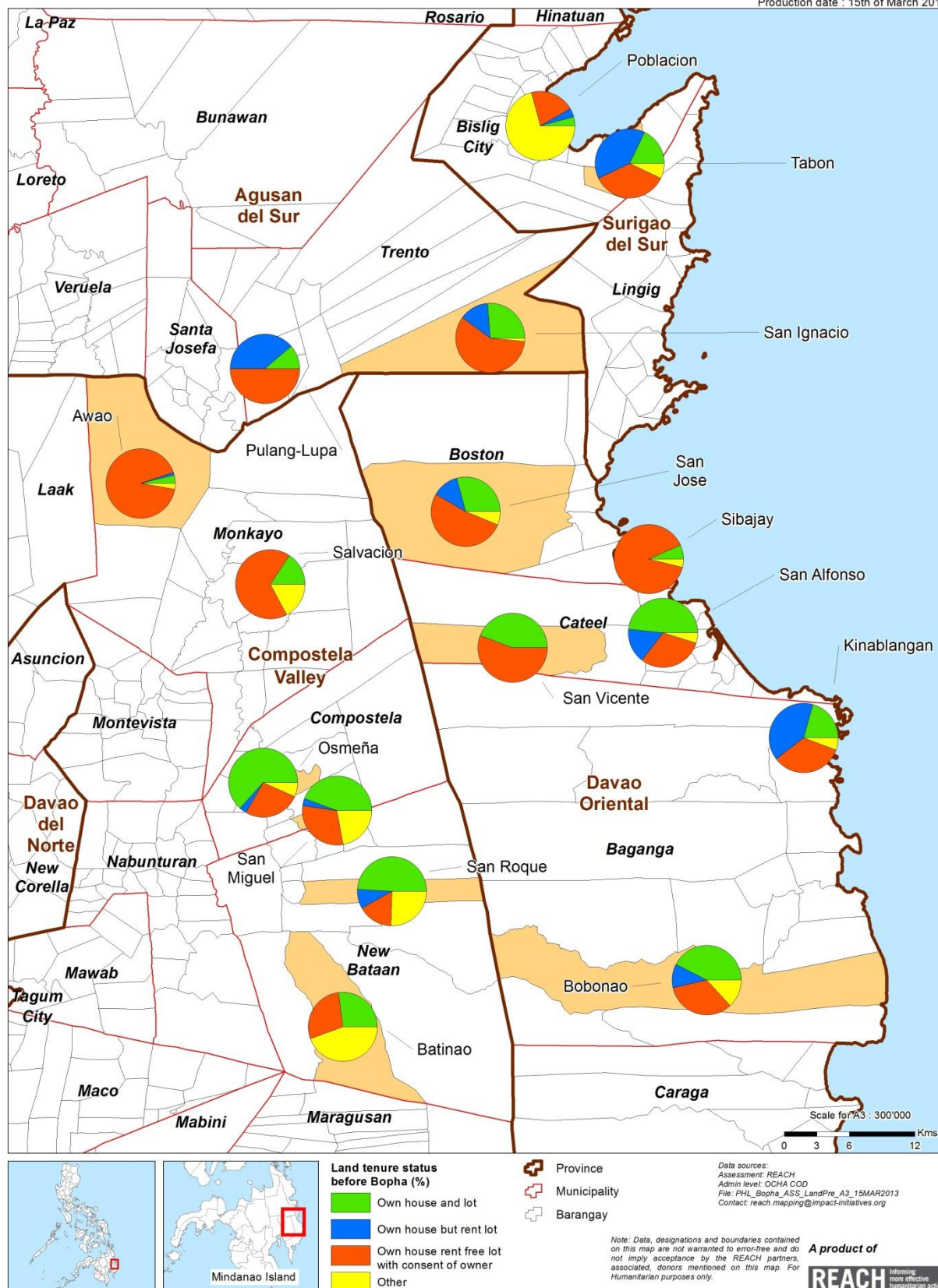


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### Land tenure status before Bopha

Production date : 15th of March 2013



Map 8: Land Tenure Status After Bopha

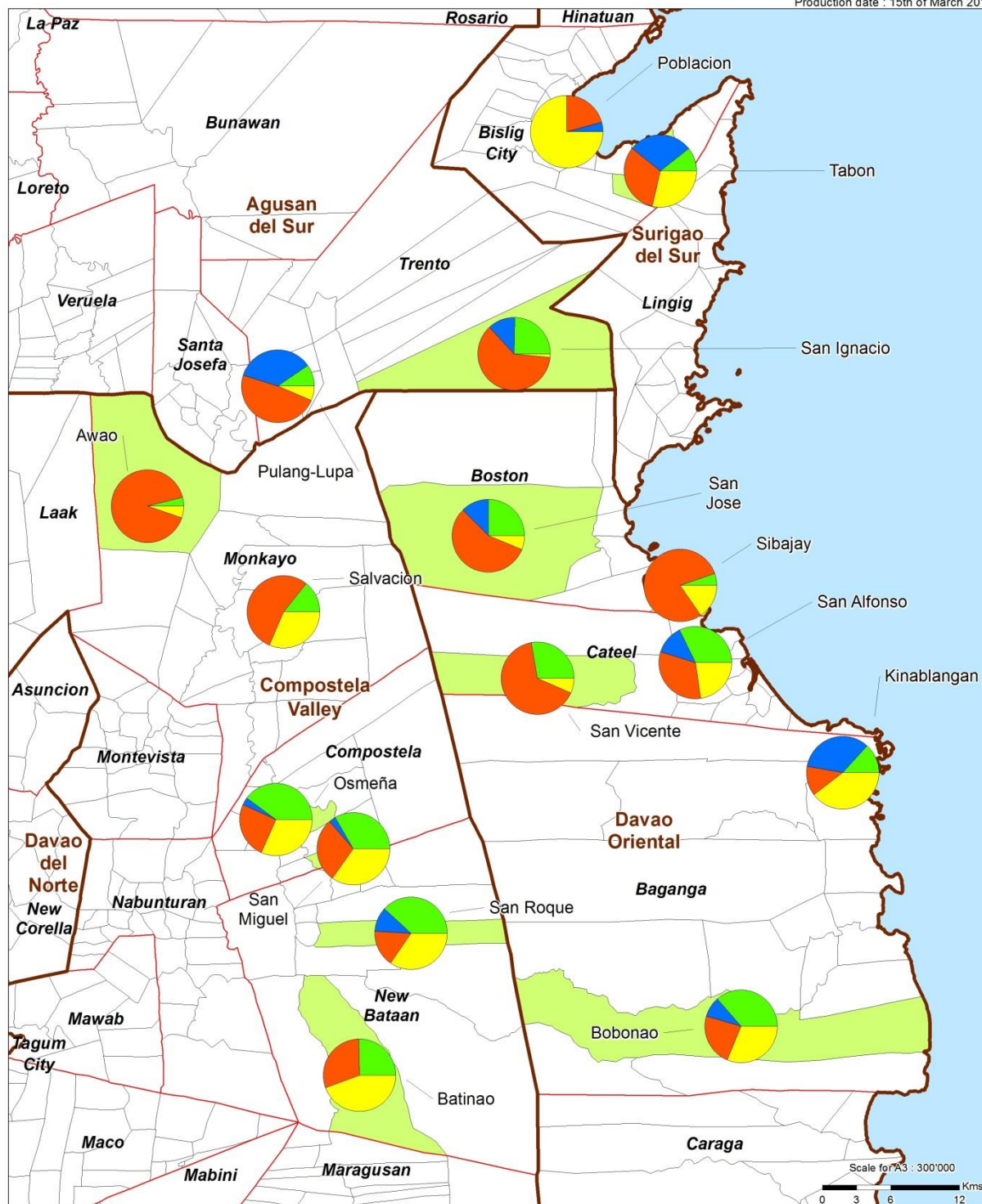


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### Land tenure status after Bopha

Production date : 15th of March 2013



**Land tenure status after Bopha (%)**

- Own house and lot
- Own house but rent lot
- Own house rent free lot with consent of owner
- Other

Province  
Municipality  
Barangay

Data sources:  
Assessment: REACH  
Admin level: OCHA COD  
File: PHL\_Bopha\_ASS\_LandPost\_A3\_15MAR2013  
Contact: reach.mapping@impact-initiatives.org

Note: Data, designations and boundaries contained on this map are not warranted to error-free and do not imply acceptance by the REACH partners, associated donors mentioned on this map. For Humanitarian purposes only.

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#### 4.5. REMAINING NEEDS & GAPS IN ASSISTANCE

##### Key Statistics

- Primary needs: **food, livelihoods**
- Secondary needs: **financial support, shelter materials**
- Key gaps: **coordination, geographic/material coverage**

In the initial assessment, the key needs were difficult to define, as the assessment was conducted so soon after the typhoon and individuals had many needs. Now, three months after the typhoon, households are able to define and prioritize needs. **The primary needs defined by households are food and livelihood support. 80% and 76% of households, respectively, identified these as their primary needs.** Secondary needs include financial support and shelter materials. There was no discernible trend or major variation among barangays, settings or assistance levels. The need for food is not an issue of lack of availability, but rather lack of access. With further livelihood support, a household's ability to purchase food or grow its own food will increase.

In discussions with government officials and NGO staff, a couple key gaps in the current response were identified. These gaps are focused on the shelter response thus far. Lack of coordination between local government and among NGOs was identified as a major constraint of the response thus far. Key informants outlined that response areas and types of assistance were not being coordinated or standardized, leading to duplication in some cases as well as some areas not having ample assistance coverage. This was especially the case in Baganga municipality where multiple government entities are reportedly attempting to take a coordination role causing confusion over which one is actually in charge. NGOs expressed frustration and confusion with this process and most conceded that coordination of geographic and material coverage has not been done as well as it should have been.

The assessment was conducted just as the government was beginning to make decisions about relocation and No Build Zones. This analysis cannot make any clear conclusions about this process, as it was still ongoing. It will be important that any communication about relocation and No Build Zones be very clear and provided to all stakeholders in a timely fashion.



## 5. CONCLUSIONS & RECOMMENDATIONS

1. **A total of 46% of households remain uninhabitable three months after the typhoon. While this is down from 93% in December, it remains a concern, especially as 25% of households are living in makeshift shelters on the land they lived on before the typhoon.** Because of this, shelter should remain the key priority for the Bopha response. While there has been a marked decrease in the number of uninhabitable houses from the initial assessment, the large number of households living in makeshift shelters is still of concern. These households should be prioritized for assistance and/or resettlement.
2. **Drawing on the recommendations of the initial shelter cluster assessment and the shelter cluster strategy, shelter and livelihoods have been prioritized as part of the response to Bopha. The types of assistance outlined in the shelter cluster strategy, however, were not followed. As a result, most of the barangays that have received other shelter assistance (CGI sheets, emergency shelter kits, shelter repair kits) beyond just tarpaulins have lower numbers of uninhabitable houses. However, most of the assessed barangays with the highest numbers of uninhabitable houses are also the barangays that only received tarpaulins as opposed to other types of shelter assistance. Medium term shelter assistance such as shelter repair kits and emergency shelter kits has had more impact on shelter recovery than emergency solutions alone.** Assistance in the form of shelter materials, technical support and tools should be prioritized during the next phase of assistance. Similarly, livelihood support should be part of a complementary support package to spur further self-reconstruction and access to food.
3. **Livelihoods assistance has predominately been in the form of Cash for Work assistance. While this has injected cash into the economy and likely allowed for increased access to food and other consumables, it has not spurred the shelter reconstruction desired by the shelter cluster. This is likely due to the fact that the Cash for Work activities are focused on debris removal and other non-shelter related activities, pulling labor resources away from shelter reconstruction.** It is therefore advisable that CfW activities not only provide households with cash, but also provide them with an opportunity to improve their shelter. Cash for Work activities should be organized around shelter construction, thus providing livelihood and shelter assistance in the same activity. Livelihoods assistance, especially in the form of Cash for Work, should be organized around shelter construction activities.
4. **Overall, the land tenure status for typhoon-affected households has been substantially affected, with 83% of families owning the house or land they currently live on, down from 96% before the typhoon. There is a clear rural/urban divide in the most common land tenure status, however, with 48% of rural households owning their house and not paying rent on the land they live on with the consent of the owner and 21% of urban/peri-urban households owning both their house and lot. These are the same most common statuses as before Bopha, but the effect can be seen in the decrease in percentage among these statuses and an increase in the number of 'no responses'.** Drawing on anecdotal evidence and assessment team feedback, the high numbers of no responses suggests a discomfort in answering this question, as many families are living on land without the consent of the landowner. For those that do have the consent of the landowner, the most common arrangement (in rural settings) is that the landowner is an extended family member that has allowed the household to build a house on the land rent-free. Urban/peri-urban settings provide for much more complex and complicated arrangements given the scarcity of land and the exposure to a more vigilant legal system.

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