ONE ASEAN
ONE RESPONSE

SITUATION UPDATE No. 5
Typhoon Mangkhut (Ompong)
The Philippines

No. 5

adinet.ahacentre.org/reports/view/1304 | https://reliefweb.int/disaster/tc-2018-000149-phl

Wednesday, 19 September 2018, 20:00 hrs (UTC+7)

This Situation Update is provided by the AHA Centre for use by the ASEAN Member States and relevant stakeholders. The information presented is collected from various sources, including but not limited to, ASEAN Member States' government agencies, UN, IFRC, NGOs and news agencies.

Typhoon Mangkhut – General updates (as of 19 Sept 2018)

Regional Summary	Affected
Mimaropa	7,415
NCR	29,885
Calabarzon	31,676
CAR	84,771
Region II	139,355
Region I	340,960
Region III	462,737
Total	1,096,799

1,096,799 people affected
264,034 families affected

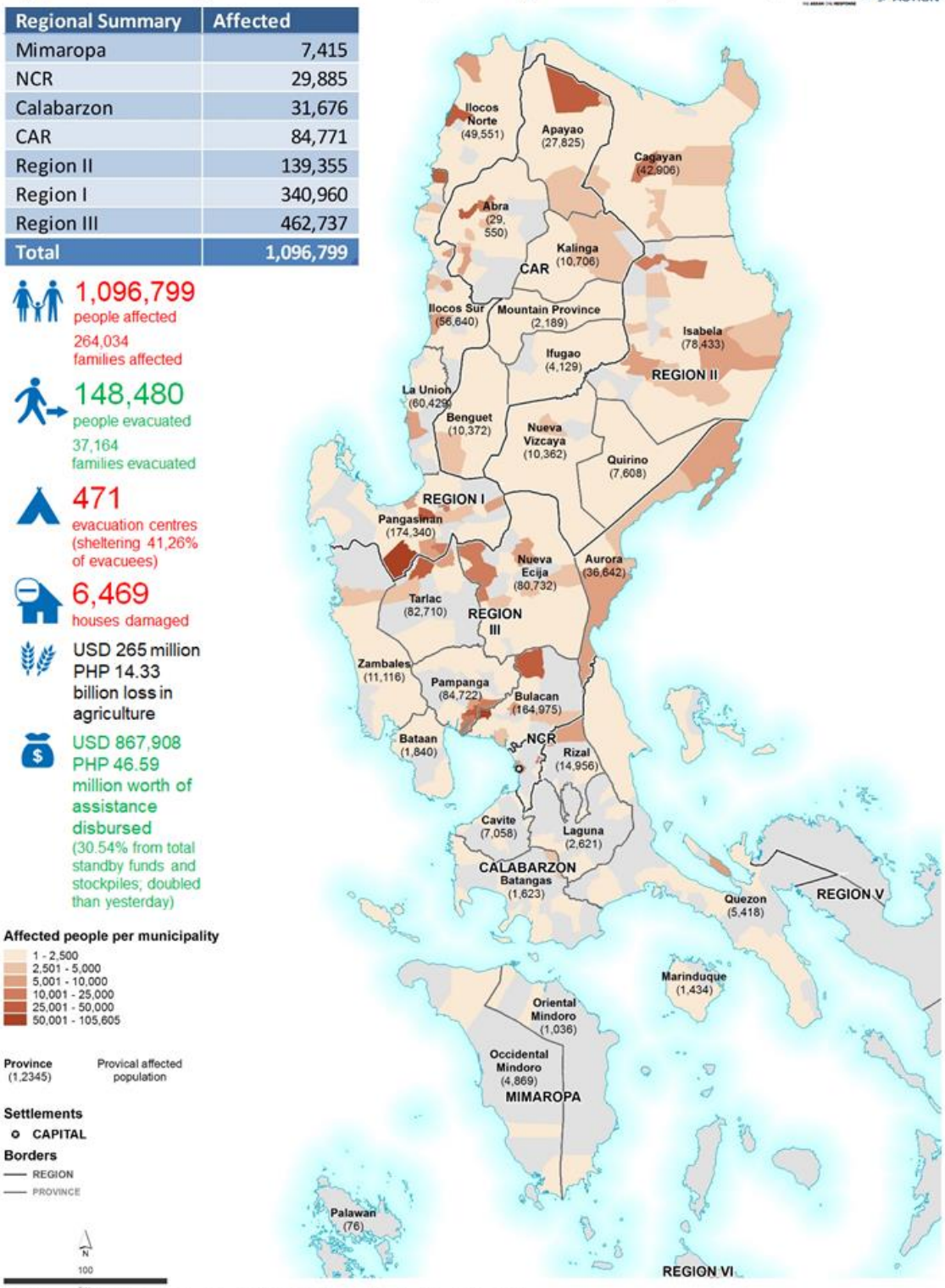
148,480 people evacuated
37,164 families evacuated

471 evacuation centres (sheltering 41.26% of evacuees)

6,469 houses damaged

USD 265 million PHP 14.33 billion loss in agriculture

USD 867,908 PHP 46.59 million worth of assistance disbursed (30.54% from total standby funds and stockpiles; doubled than yesterday)



Data Sources: NDRRMC, OpenStreetMap, NAMRIA, PSA. Map created by MapAction (19/09/2018)

Color code: Red indicates deterioration, Green indicates improvement, and black indicate no changes in situation in comparison with the previous update

1. HIGHLIGHTS

a. Based on Situation Report Number 26 from the National Disaster Risk Reduction and Management Council (NDRRMC) of the Philippines, a total of 1,096,799 people (264,304 families) have been affected in 3,780 barangays of 468 cities/municipalities in Regions I, II, III, Cordillera Administrative Region (CAR), National Capital Region (NCR), CALABARZON, and MIMAROPA. An initial estimation suggests cost of damage in agriculture sector of Regions I, II, III, CALABARZON, and CAR is accounted around PHP 14,339,237,631 (USD 265 million).
b. The Local Government Units (LGUs) of affected areas are leading the post-disaster assessment and emergency response. Seven LGUs in Region I, II, and CAR have declared state of calamity. Collectively, national government agencies, LGUs, and NGOs have disbursed and mobilized around 30.54% of the initial standby assistance and stockpiles prior to the response.
c. Following the landfall 15 September the AHA Centre has dispatched In-Country Liaison Team (ICLT) to the Philippines. The AHA Centre organised the Urgent Meeting of the Governing Board of the AHA Centre, and convened Executive Briefing for Country Permanent Representatives and Defence Attaches on 17 September 2018, to provide updates on situational awareness and identification of regional response should such need arise. Following the meetings, the AHA Centre made an offer of assistance to the Government of the Philippines through the NDRRMC.
d. Following the field observation in Buenguet Province (Region CAR) and coordination meeting with CAR Region DRRMC, the AHA Centre ICLT and In-Country ERAT have now returned to Manila to continue coordination with the NDRRMC.
e. Situation Update of the AHA Centre is available on a daily basis at https://ahacentre.org/situation-updates/. Prior to Situation Updates, the AHA Centre has released Flash Updates on Typhoon Mangkhut, which are available at the following address: https://ahacentre.org/flash-updates/.

2. SUMMARY OF EVENTS, FORECAST AND ANTICIPATED RISK

a. Typhoon Mangkhut (Ompong) has caused landslides at several sites in the provinces of Antique, Kalinga, Mountain Province, Benguet (Itogon and Tuba), and Baguio city. Figure 1 shows a landslide site observed by the AHA Centre's ICLT and ERAT.
b. Until 19 September 2018, a total of 229 areas were flooded in Region I, III, CALABARZON, and MIMAROPA. On average the flood water level is around 2-3 meters. The Pampanga river basin and the San Roque and Magat dams remain under flood watches. The deepest flood water level was reported in Camias area, San Miguel, Bulacan Province, with around 3-4 meters. Recent progress suggests flood water already subsided in 35 areas (15.28%) within Bautista, Pangasinan Province (Region I), Butaan Province (Region III) and Occidental Mindoro Province (MIMAROPA) (NDRRMC).

Figure 1 Landslide Site in Itogon, Benguet Province

c. Following the activation of Sentinel Asia's Observation by the AHA Centre, Japan Aerospace Agency (JAXA) made observation using Satellite ALOS-2 on 18 September 2018 for understanding the extent of flooding. As of 19 September 2018, 10 images covering Northern Luzon have been made available to Sentinel Asia's Data

Analysis Nodes (DAN), NDRRMC, and AHA Centre. Sentinel Asia's DANs are currently analyzing the imagery. Figure 2 below shows an example of the observed flooding areas.

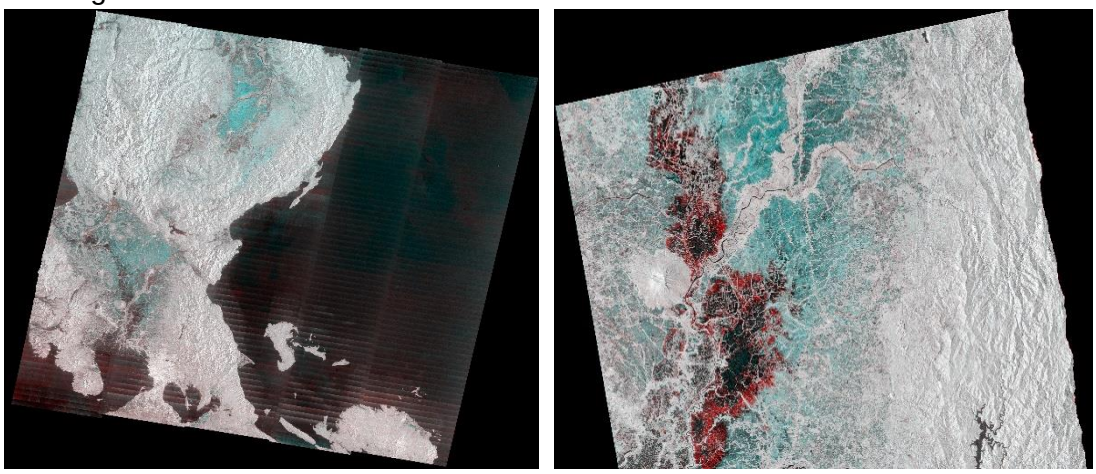


Figure 2 Observation on Typhoon Mangkhut Affected Areas by ALOS-2 (JAXA) – Note: Currently Sentinel Asia's DANs are analyzing the satellite imageries

d. Department of Environment and Natural Resources has suspended small-scale mining operations in Cordillera Autonomous Region (CAR), to prevent further danger following the typhoon. Based on the pre-landslide imagery below and ERAT field report, it can be seen that the area of landslide search and rescue operations is around 1 hectare with soil displacement around 630 meters north-bound and burying small mining site 25 meters below the tip of landslide. This interpretation is requiring ground feedback from the responders.

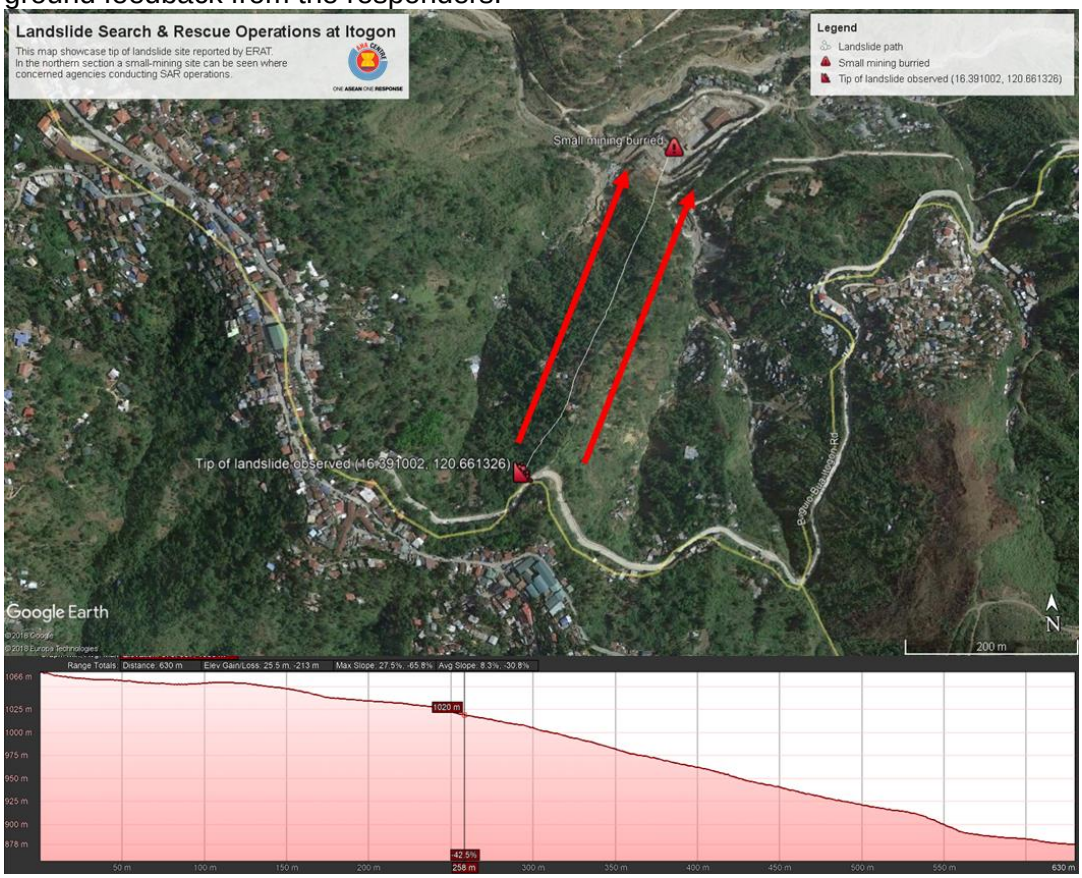


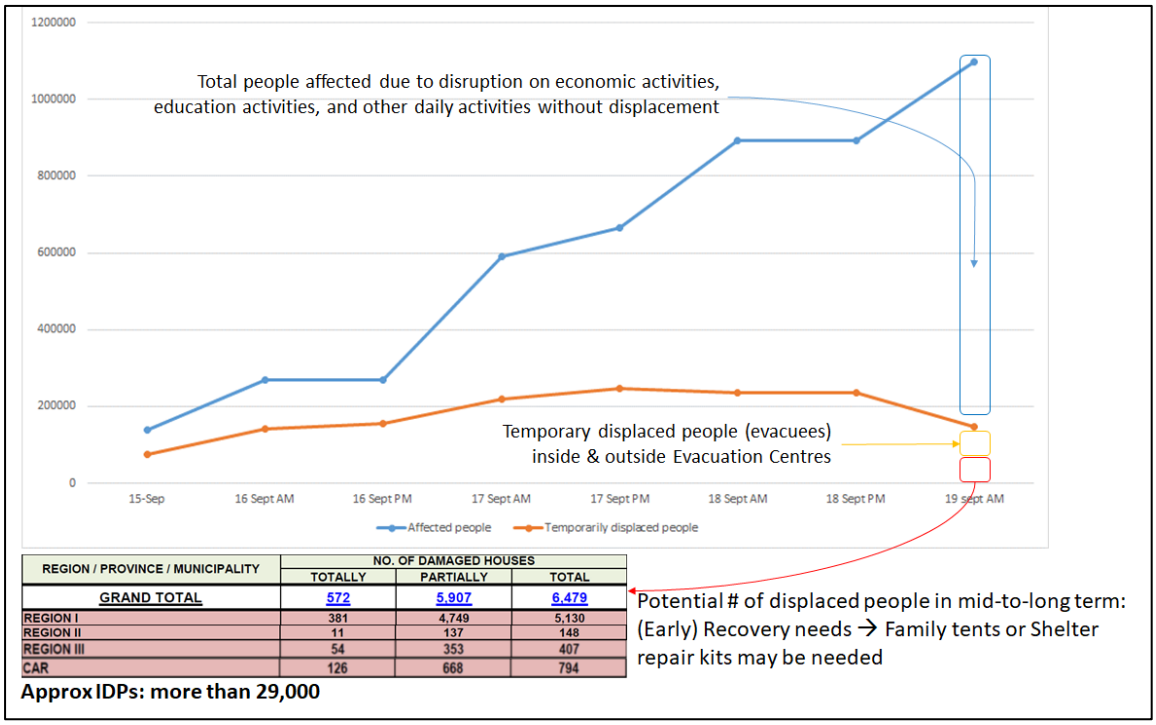
Figure 3 Landslide Search and Rescue Operation Area and Elevation Profile in Itogon, Benguet

3. ASSESSMENT OF DAMAGE, IMPACT, AND HUMANITARIAN NEEDS

a. A total of 8 confirmed fatalities and 2 missing were reported in Region I, III, CAR, and NCR (NDRRMC). The related authorities are still in the process of validating number of fatalities and missing persons in the affected areas.

b. Based on Situation Report Number 26 from the NDRRMC of the Philippines, a total of **1,096,799 people (264,304 families)** have been affected in 3,780 barangays of 468 cities/municipalities in Regions I, II, III, Cordillera Administrative Region (CAR), National Capital Region (NCR), CALABARZON, and MIMAROPA (blue line in Figure 4). This number is increasing from the previous day as data is becoming more available with more access available for the assessment teams.

c. A total of 148,480 people / 37,164 families are taking refuge inside and outside evacuation centres across the affected regions. There are currently 471 evacuation centres open, sheltering 61,271 people / 15,577 families (around 41.26 % from the total IDPs) (NDRRMC). There is already a downgrading trend on temporarily displaced people (evacuees) as all evacuation centres have closed in NCR (orange line in Figure 4). In addition, Figure 5 shows the distribution of temporarily displaced people, evacuation centres, and proportion of evacuees inside and outside of evacuation centres.



REGION / PROVINCE / MUNICIPALITY	NO. OF DAMAGED HOUSES		
	TOTALLY	PARTIALLY	TOTAL
GRAND TOTAL	572	5,907	6,479
REGION I	381	4,749	5,130
REGION II	11	137	148
REGION III	54	353	407
CAR	126	668	794

Approx IDPs: more than 29,000

Potential # of displaced people in mid-to-long term: (Early) Recovery needs → Family tents or Shelter repair kits may be needed

Figure 4 Daily Record of Affected People, Temporarily Displaced People, and Humanitarian Needs Interpretation (AHA Centre, using data from NDRRMC)

d. Until 19 September 2018, the number of confirmed affected houses has significantly increased to 6,479 and they are reported from Region I, II, III, and CAR as information becomes available. From this figure, 572 houses were totally damaged and 5,907 houses partially damaged. As can be seen in Figure 6, potentially this accounted for around 29,000 displaced people in mid-to-long term period, which may be interpreted as the humanitarian needs in shelter sector. The distribution of damaged houses can be seen in Figure 4. As can be seen in Figure 4 the concentration of housing damages can be found in Region I and CAR, particularly in provinces of Ilocos Norte (total of 2,714 houses damaged-partially and totally), Ilocus Sur (693 houses damaged),

Zambales (388 houses damaged), Benguet (348 houses damaged), Ifugao (311 houses damaged), Zambales (388 houses damaged).

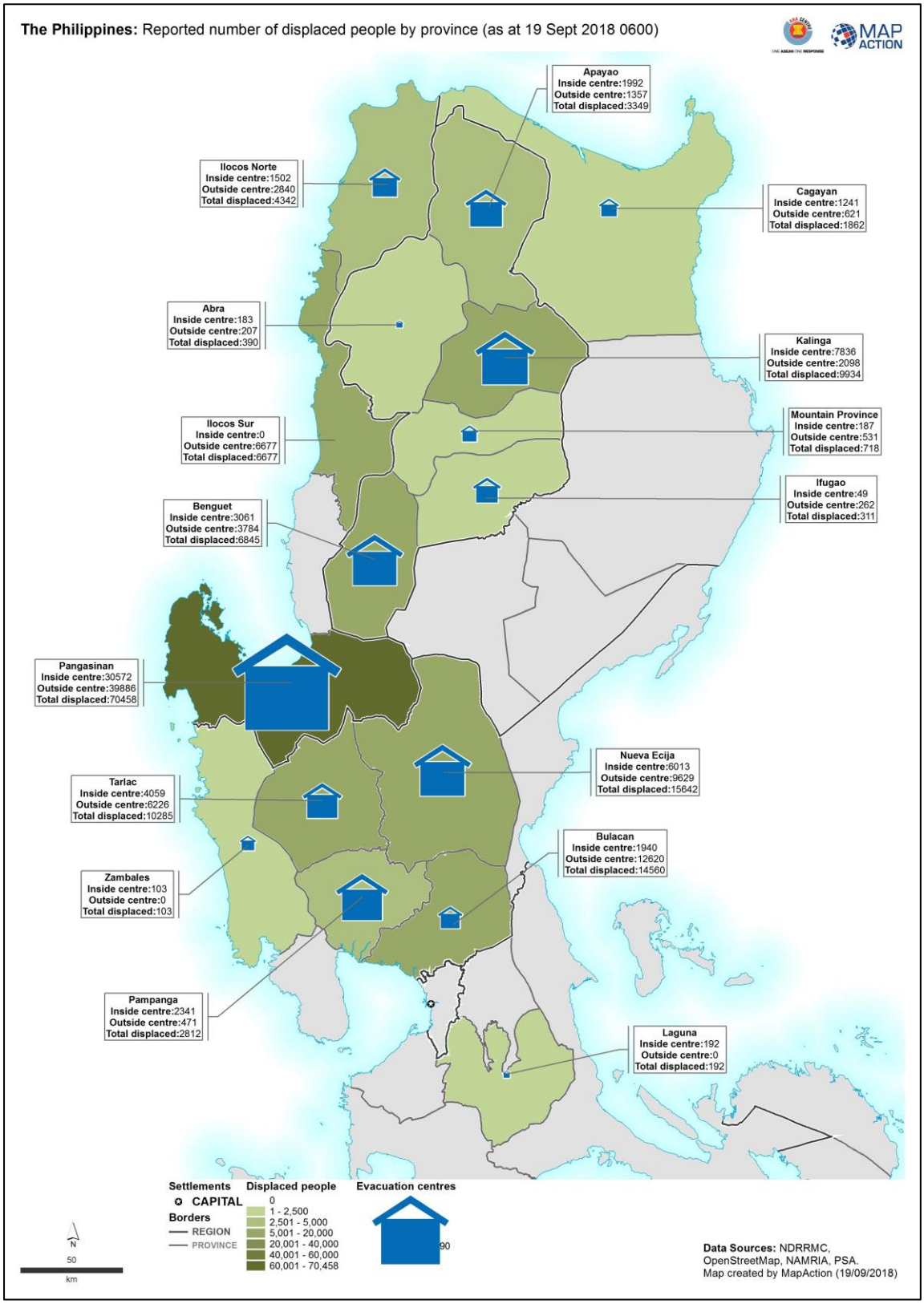


Figure 4 Reported Number of Displaced People and Proportion of Available Evacuation Centre suntil 19 September 2018

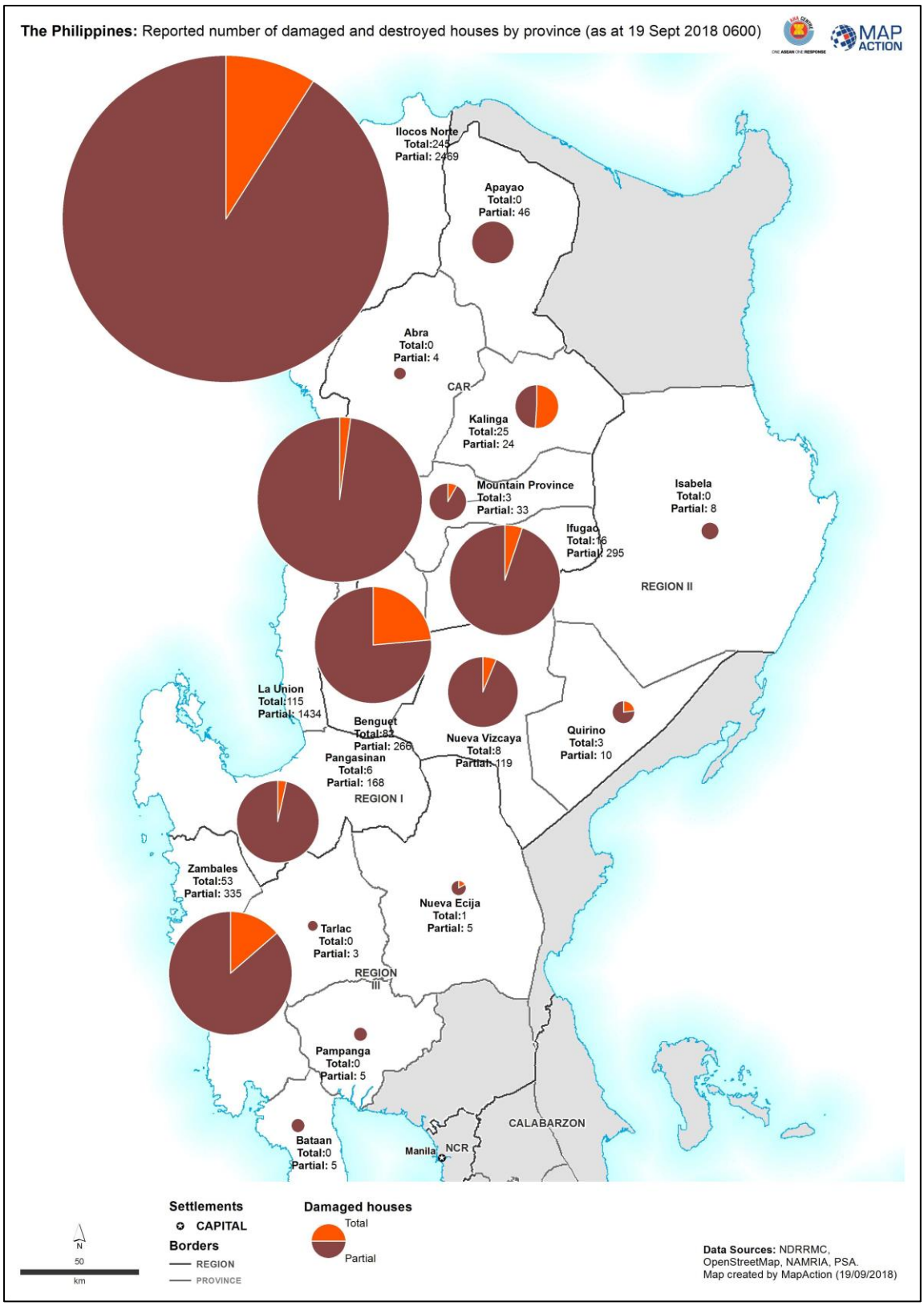


Figure 6 Distribution of Damages Houses reported until 19 September 2018

e. According to the health sector assessment conducted by the Department of Health and World Health Organization (WHO) Philippines country office, the immediate health concerns on the ground include drowning and injuries, increased of possible mental health needs, and potential outbreaks of water-borne and vaccine-preventable diseases, particularly in recognition of the low immunization rates in the affected areas.

In addition, 19 health facilities sustained partial damages but all have remained functional.

f. According to the United Nations Office for Coordination of Humanitarian Affairs (OCHA) Philippines, food, agricultural assistance, shelter, and livelihood support are the primary immediate needs.

g. In the latest situation report of the NDRRMC, a total 161 areas in Region I, CALABARZON, V, VIII, IX, X, CAR, and NCR experienced power interruption. Loss of power may be caused by affected transmission facilities of National Grid Corporation of the Philippines or distribution facilities of electric cooperatives. In the most recent report, 57 areas were already restored. This figures slightly increased from the previous update. In addition, 82 transmission lines were reported affected by the weather disturbance in North and South Luzon.

h. As of 19 September, 4 million learners in Regions I, II, III and CAR are affected as classes remain suspended in more than 10,800 schools, according to the Department of Education (DepEd). At least 230 schools, mostly in Region II, are still being used as evacuation centres. Nearly 870 schools in the four regions have classrooms which have sustained damages or were destroyed. In Region II, 501 schools have 260 classrooms that were destroyed and 711 that sustained major damage. DepEd estimates the total cost to repair or rebuild education facilities in the four regions alone to be about PHP640.3 million (USD 12 million), not including the cost to replace furniture, computer equipment and learning materials.

i. A total of 289 road sections and 6 bridges were affected in Regions I, II, III, V, and CAR, with 193 road sections and 4 bridge already passable on 19 September 2018 (NDRRMC).

j. The estimated cost of damage to agriculture sector in Region I, II, III, Calabarzon and CAR is around PHP 14,339,237,631.02 (around USD 265 million) (NDRRMC). From the total amount of damage cost in the five regions, around 62.5% is attributed to damage to rice fields followed by damage cost to corn fields (31.4%), high-value commercial crops HVCC (5.5%), agri-infrastructure (0.1%), and livestock and poultry (0.03%). In details, breakdown percentage of damage per category in each region is as follows and can be seen in Figure 7:

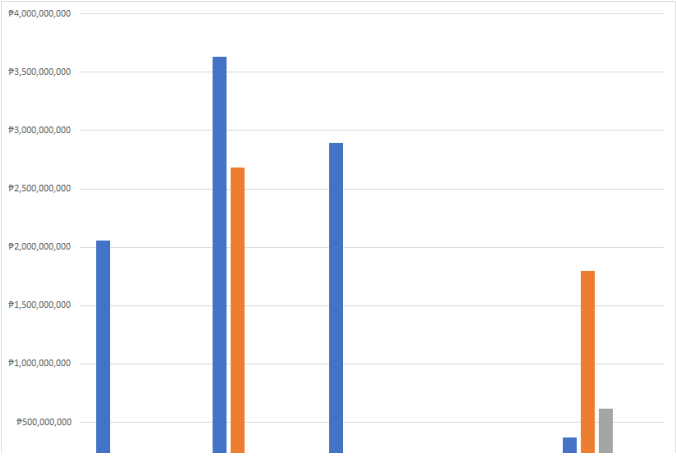


Figure 7 Breakdown of Damage and Loss in Agriculture Sector by Region (AHA Centre, using data from NDRRMC)

i. Region I: The total damage is PHP 2,073,824,707, due to damage to rice fields (99%), agri-infrastructure (1%), and no data recorded for the other three categories.

ii. Region II: The total damage is PHP 6,488,159,756, due to damage to rice fields (56%), corn fields (41%), HVCC (3%) and no data recorded for the other two categories.

iii. Region III: The total damage is PHP 2,913,454.094, due to damage to rice fields (99%), corn fields (1%), and no data recorded for the other three categories.

iv. Calabarzon Region: The total damage is PHP 10,606,370 and a 100% is due to damaged rice fields, and no data recorded for the other categories.

v. CAR Region: The total damage is PHP 2,853,192,704, due to damage to rice fields (13%), corn fields (63%), HVCC (21%), livestock and poultry (19%), and agri-infrastructure (2%). In total, around 171,932 farmers were affected in the CAR Region.

4. ACTIONS TAKEN AND RESOURCES MOBILISED

Response by Government of the Philippines

a. A total of 38,515 families / 151,872 people were pre-emptively evacuated by the Government in Regions I, II, III, CALABARZON, V, CAR, and NCR prior to the landfall (NDRRMC). Throughout the preparedness and emergency response period, the NDRRMC has sent a total of 45 Early Alert and Warning Messages (EAWM) to the public, starting from 13 September 2018.

b. Regional/Local Disaster Risk Reduction and Management Councils (R/LDRRMCs) in Regions I, II, III, CALABARZON, MIMAROPA, V, VI, VII, VIII, CAR, and NCR are leading the preparedness and emergency response operations. Based on each LGU's resolution, the following LGUs have declared state of calamity:
   - Province of Ilocos Norte
   - Province of Cagayan
   - City of Ilagan (Isabela Province)
   - City of Tuguegarao (Cagayan Province)
   - Province of Kalinga
   - Province of Quirino
   - Mayoyao (Ifugao Province)

c. Government agencies continue to provide relief, clear debris and restore lifelines to affected communities. To date, DSWD reports it has distributed 69,400 food packs and 30,600 relief goods (family, hygiene and sleeping kits, and jerry cans with water purification tablets) in Regions I, II, III and CAR.

d. Spokesperson of the Dept. of Energy (DOE) states that electricity supply has been restored in 54% of the affected households. However, the disrupted access due to landslides and floods hinders the restoration process. DOE continues to assess the damage to power-supply infrastructure and has set deadlines in the restoration-energy plan.

e. The National Economic and Development Authority (NEDA) will lead the process of Post-Disaster Needs Assessment for estimating the cost of rehabilitation and formulation detailed in the Rehabilitation and Reconstruction Plan.

f. A total of PHP 46,932,149.33 (around USD 767,908) worth of assistance has been provided by Office of Civil Defense, Department of Health, Department Social Welfare and Development, Local Government Units, and NGOs (NDRRMC) until 19 September, i.e. significantly increased from around PHP 9 million on the first day of landfall (15 September). From the latest amount on 19 September, around PHP 38.9 million has been channeled to be absorbed at the local level, i.e. around 25.33% of the standby assistance and stockpiles prior to the landfall.

   Figure 8a below provides distribution of assistance until 19 September, in comparison with the previous day and to the stand-by funds and assistance prior to the landfall. Overall, there has been a steady increase on a daily basis.

   Furthermore, Figure 8b shows the progress of disbursement and mobilisation by region. As can be seen absorption at Region I is performing well, in comparison to other regions. However, it seems there are challenges for mobilisation to Region II, CAR, and III, despite steady progress. Potentially this can be explained with the number of road sections that still cut-off in those regions, as reported in the NDRRMC report. A further analysis on the disbursement and mobilisation on types of assistance with its geographical distribution is required in the near future approaching to the final first week from the landfall.

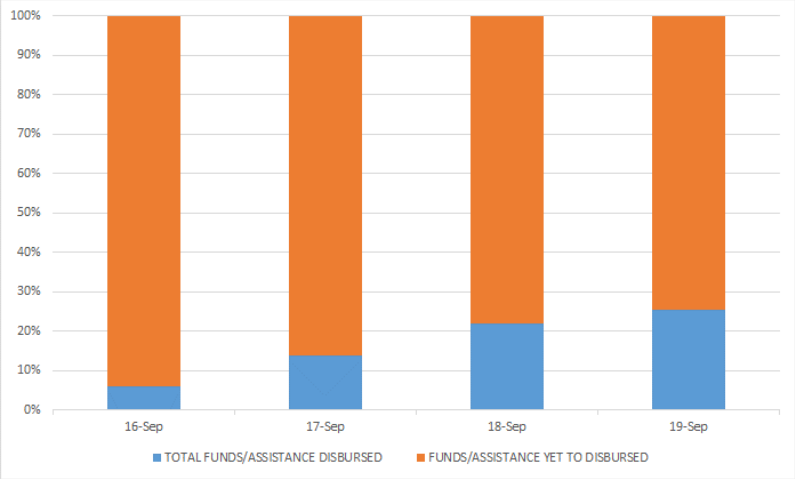


Figure 8a Progress of Assistance Disbursement and Mobilisation by OCD, DOH, DSWD, LGUs and NGOs until 19 September 2018: Percentage of assistance in comparison to stand-by funds and stockpiles prior to landfall of Typhoon Mangkhut (Calculated by AHA Centre based on data from NDRRMC)

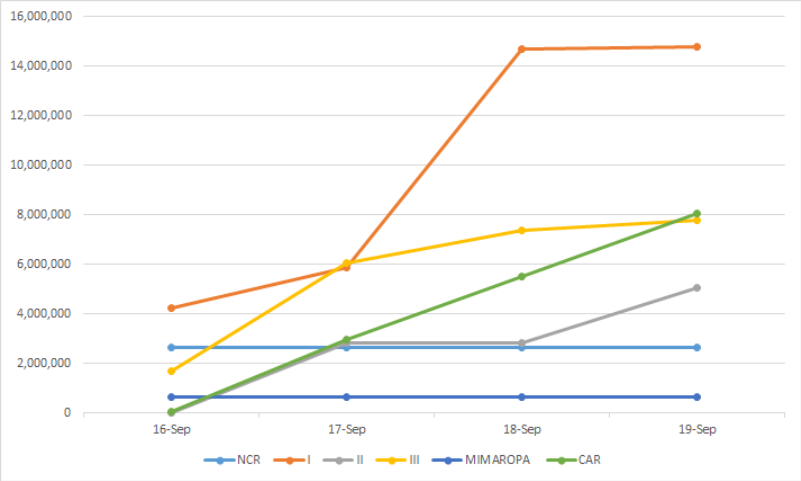


Figure 8b Progress of Assistance Disbursement and Mobilisation by OCD, DOH, DSWD, LGUs and NGOs until 19 September 2018: Value of assistance distribution (in PHP) by region (Calculated by AHA Centre based on data from NDRRMC)

Response by the AHA Centre

a. The AHA Centre organised the Urgent Meeting of the Governing Board of the AHA Centre, participated by 7 ASEAN Member States and the ASEAN Secretariat on 17 September. It was then followed by an Executive Briefing for Country Permanent Representatives and Defence Attaches. Both meetings provided updated situational awareness following Typhoon Mangkhut and identification of possible regional response. Representatives from the NDRRMC participated in the Governing Board Meeting and updated the situation and emergency response activities at the local and national levels.

b. Following the meeting, the AHA Centre made an offer of assistance to the Government of Philippines through the NDRRMC, including:
   - Deployment of ASEAN-ERAT regional team with expertise on information management
   - Mobilisation of ASEAN relief items from the DELSA regional stockpile in Subang, Malaysia, and/or alternatively through local procurement
   - Facilitation of mobilisation of ASEAN Member States' assets and capabilities

c. The AHA Centre is maintaining coordination with NDRRMC, Manila Observatory, and Sentinel Asia, on the results of satellite imageries provision from Japan Aerospace Agency and on standby position to receive imagery analysis results from Sentinel Asia's DANs, as stated in Section 2b.

Response by ASEAN Dialogue Partners

a. Assistance from the European Union (worths EUR 2 million) is being mobilised and to be disbursed in partnership with humanitarian organisations in the country who are already working in areas devastated by the typhoon.
b. The US Government through USAID/OFDA is supporting the relief operations conducted by DSWD and WFP in northern Luzon. Furthermore, USAID also partners with an NGO in providing hygiene kits for 5,500 individuals in Cagayan.

Response by Humanitarian and other Partners

a. There are 25 Philippines-based UN agencies, international NGOs and national NGOs (members of Humanitarian Country Team / HCT) conducted assessment activities in the following provinces: Cagayan, Apayao, Kalinga, Ilocos Norte, and Benguet, i.e. as can be seen in Figure 9. Based on AHA Centre's communication with some of the HCT members, most results are for own organisation assistance, and planning purposes.

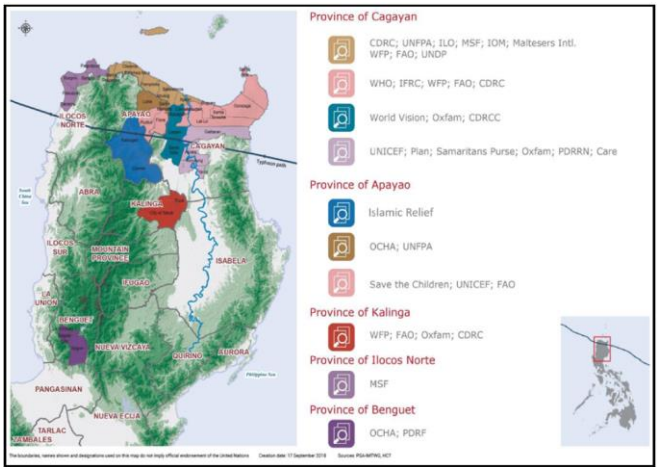


Figure 9 HCT Assessment Activities

b. World Food Programme (WFP) is mobilising 1,000 metric tonnes of food-items to support 166,000 families. The WFP has also pre-positioned generators, storage tents, and other equipment in its Luzon warehouses.
c. On 16 September, WHO staff based in Philippines were deployed to the affected area to join partner organisations in conducting rapid assessment of health needs of the affected communities and the impact on health system. The DOH and WHO also co-led a health cluster meeting on 18 September. The WHO is planning to support the DOH on coordination of health cluster partners; assessment of health risks and needs; prevention, detection, and containment of outbreaks of epidemic-prone diseases; support for the rehabilitation and continuation of health services; technical support, including on psychological first aid and risk communication.
d. IFRC and Philippines Red Cross have launched an international emergency appeal to provide assistance worth of USD 2.8 million to benefit 100,000 people affected by TY Mangkhut within the next 12 months. Further details on the emergency appeal is available in this PDF report.
e. Catholic Relief Services (CRS) is responding to the aftermath of Typhoon Mangkhut by mobilising water purification kits, storage kits and cash assistance for urgent needs and shelter kits. CRS team has been on the ground conducting assessment since Sunday, 16 September 2018.
f. Commercial telecommunications (with data) has been restored in most areas with the national telco providers offering free calls, charging, and Wi-Fi services at numerous emergency shelters in Northern Luzon.
g. Episcopal Relief & Development in partnership with the Episcopal Church in the Philippines (ECP) is currently determining the option to support the Philippines Government to mobilise relief support. Some Episcopal churches have also been used

as evacuation centres over the weekend. The organisation through the Episcopal Community Action for Renewal and Empowerment Development Program (E-CARE) is planning to assist with livelihoods recovery by providing rice seeds and planting equipment.

h. The Salvation Army has distributed emergency food parcels including rice and canned meat and fish to 4,000 families in the flood-hit region in Northern Luzon, Bataan and Zambales. The assistance was augmented by the provision of clean water and plastic bags to help residents cleaning up the damaged properties. The Salvation Army has also distributed supplies to 500 families in Iloco Sur.
i. Oxfam has delivered clean water to 500 families in the disaster-affected area. The organisation and partners provided clean drinking water to three indigenous communities in Rizal municipality, in the southwestern part of Cagayan.

5. RECOMMENDATIONS AND PLANNED ACTIONS

Recommendations to be considered by humanitarian partners

a. Based on the recent disaster impact observation, humanitarian partners are advised to enable geotagging function during field assessment for improving understanding on the geographic of the impact.
b. Humanitarian partners conducting assessment onsite are advised to share their findings with the national response cluster coordinated by the NDRRMC. In addition, humanitarian partners are advised to share their activities and types of relief items or assistance provided to the community. The AHA Centre stands ready to facilitate remote data analysis on humanitarian operations and information management.
c. Based on the coordination meeting between the AHA Centre's ICLT and NDRRMC, there may be an anticipated needs in terms of food security, as rice and corn are highly affected. This is in anticipation of additional risk in mid to long-term period once the family-food packs distribution reaching its peak.
d. Recommended hashtags that are being used to share updates related to Typhoon Mangkhut are #OmpongPH, #walangpasok (class suspension), #laginghanda (preparedness measure), #ResponsePH, and #ReliefPH

AHA Centre's plans

a. The AHA Centre's ICLT and ERAT will be in Metro Manila Capital Region on 20 September 2018 onwards to continue coordination with the NDRRMC and other relevant government agencies for potential support from ASEAN.
b. The AHA Centre will provide further updates as situation progresses and more information is available.

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AHA Centre - Emergency Operations Centre (EOC) in cooperation with MapAction.

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ABOUT THE AHA CENTRE

The AHA Centre - ASEAN Coordinating Centre for Humanitarian Assistance on disaster management - is an inter-governmental organisation established by 10 ASEAN Member States – Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam - to facilitate the cooperation and coordination among ASEAN Member States and with the United Nations and international organisations for disaster management and emergency response in the region.

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