Philippines: Typhoon Mangkhut (Ompong)

Number of people affected (as of 20 September 2018)
- > 10,000
- 10,001 - 50,000
- 50,001 - 100,000
- 100,001 - 150,000
- > 150,000

The boundaries, names shown and designations used on this map do not imply official endorsement of the United Nations.
Executive Summary

Background on the emergency

In the early morning of 15 September 2018, Typhoon Mangkhut (locally named Ompong) made landfall in Baggao, Cagayan, in northern Luzon as a Category-5 typhoon. The typhoon caused widespread flooding and multiple landslides. High winds destroyed homes and crops and left vital infrastructure damaged. Prior to the disaster, an impact analysis conducted by OCHA estimated that 4.6 million people were living in areas potentially affected by the disaster.1 As of 20 September, over 1.4 million people in 31 provinces in Regions I, II, III, IV-A, IV-B, the Cordilleras Administrative Region (CAR) and Metro Manila had reportedly been affected by the typhoon.2

Prior to the typhoon, local governments pre-emptively evacuated 152,000 people in Regions I, II, III, IV-A, V, CAR and Metro Manila from their homes to evacuation centres.3 By 18 September, more than 236,000 people had been displaced by the disaster, with over 162,300 people seeking shelter in at least 1,780 evacuation centres, and more than 73,600 people staying with host families.4 Many of those displaced began returning home or to host families by 19 September. As of 20 September, it was reported that almost 44,600 houses had been damaged including more than 3,600 houses that had been destroyed.5 This number is expected to continue to rise. The houses most vulnerable to the typhoon were those constructed from light materials, of which there are an estimated 202,000 such buildings in the four most-affected regions.6 While the national authorities have confirmed eight deaths, 21 injured and two missing in Regions I, III, CAR and Metro Manila as of 19 September,7 they are still validating at least 55 other deaths. The media, citing various national authorities, have reported at least 100 deaths, mostly due to landslides.

The areas most severely impacted by Typhoon Mangkhut are Regions I, II, III and CAR in northern and central Luzon. The full extent of the impact is still unknown as many locations remain inaccessible due to landslides, power cuts and disrupted communications. The number of casualties, damaged homes and people affected are expected to increase as debris clearing progresses and isolated areas become accessible.

The regions affected by the typhoon are predominantly agricultural, with at least 2.3 million people engaged in employment in the agricultural sector.8 The region is a major producer of rice and corn, and the country is facing an ongoing rice shortage.

Prior to the typhoon, there were already a number of pre-existing vulnerabilities that are likely to have left people especially vulnerable to the impacts of the typhoon, including about 15 per cent of the population living below the poverty line,9 approximately eight per cent of the population relying on dug wells or natural sources for water and on pit latrines for sanitation,10 higher-than-average rates of malnutrition among children less than 5 years old,11 and vaccination rates of 60 per cent or lower, based on data shared by the Department of Health.

4. OCHA, as of 18 September - https://reliefweb.int/sites/reliefweb.int/files/resources/20180916%20Typhoon%20Mangkhut%20Update%20no%205%20FINAL.pdf
5. DROMIC Report #20, op. cit.
6. OCHA Philippines Pre-disaster Indicators Dashboard - https://public.tableau.com/profile/ocha.philippines.im#!/vizhome/Pre-disasterIndicators-Dashboard/Dashboard1
9. OCHA Philippines Pre-disaster Indicators Dashboard, op. cit.
10. Ibid.
Assessment areas
Assessment methodology

At the invitation of the Office of Civil Defense, an inter-agency rapid needs assessment was undertaken in parts of Regions I, II and CAR on 17-18 September 2018. A total of 25 organizations participated, including in-country international and national non-governmental organizations, private sector, international aid agencies, and UN agencies, forming eight teams that undertook the assessments in 34 municipalities in five provinces.

The assessment teams met with the Office of Civil Defense (OCD) regional offices to coordinate plans with government assessment activities and to determine the locations of the assessment. It was agreed that government assessments would focus on impact and damage to infrastructure, while the Humanitarian Country Team-led teams would focus on assessing humanitarian impacts and needs. The objectives for the assessment were to better understand priority humanitarian needs in the most vulnerable typhoon-affected areas, provide information to support any government decision to request international assistance, and inform resource mobilization.

The assessment methodology comprised a combination of key informant interviews, focus-group discussions and direct observations. The assessment teams used the Humanitarian Country Team’s 72-hour rapid needs assessment form, and where possible referenced Rapid Disaster Assessment and Needs Analysis form used by the National Disaster Risk Reduction and Management Council.
Findings and Recommendations

Protection, including child protection and gender-based violence

Following disasters such as Typhoon Mangkhut, the risk of protection concerns including separated and unaccompanied children, child labour, psychosocial trauma and gender-based violence (GBV) is known to increase. Displacement, for example, amplifies the risk of missing persons, separated, and unaccompanied children, and having families separated, while evacuation or temporary housing may not provide access to basic facilities that are safe for women and children. Prior to the disaster, 16 percent of women age 15-49 in CAR had experienced physical, sexual or emotional violence perpetrated by their partners; the risk of these rates increase rises following a disaster such as a typhoon. Given the protection risks faced by typhoon-affected communities, protection concerns will be mainstreamed through the activities of clusters in this plan, including ensuring risk mitigation measures are in place in all cluster responses.

There is also a lack of accurate, disaggregated data on Indigenous Peoples, persons living with disabilities in the typhoon-affected areas. Field assessments found most evacuation centres were inadequate to meet the needs of persons with disabilities, and many did not have sanitation facilities designed for humanitarian contexts, which may pose significant risks to women, minors and persons who are LGBTQI of being abused or exploited.

Cash as a response modality

The assessment highlighted a strong preference for cash as a response modality to ensure affected people are able to meet their immediate needs for food and other items, purchase the materials needed to repair their damaged homes, and restart their livelihoods. Cash is effective in assisting remote areas where accessing relief assistance is a challenge. Initial assessments indicate that markets are operational and that most needed items are available, although there may have been an increase in the price of some essential goods.
Based on initial assessment findings, the priority sectors following Typhoon Mangkhut are food security and agriculture, including nutrition; shelter, early recovery and livelihoods; water, sanitation and hygiene; health; and education. The possibility of protection risks such as child labour, forced labour, trafficking and gender-based violence, are heightened after emergency events such as Typhoon Mangkhut. While the assessment did not identify specific protection concerns, the need for interventions that are sensitive to people’s protection needs must be prioritized.

A majority of the population in the typhoon-affected areas are dependent on farming and fishing as a source of livelihood. The Department of Agriculture estimates over 550,000 ha of agricultural land has been affected by the typhoon, and agricultural losses could reach at least PHP16.8 billion (US$267 million). Extensive damage to high value crops, fisheries and poultry has also been reported by provincial authorities in the province of Benguet. The disruption to agricultural production will negatively impact communities’ food security over the coming months. The loss of the September and October harvests of corn and rice will have serious impacts on farmers’ livelihoods and potentially exacerbate food insecurity and malnutrition. Additionally, the prices of basic commodities have increased following the typhoon in assessed areas, which will have an added burden for affected families.

The common perception among those assessed is that there are currently no immediate serious problems with regards to the nutritional status of the displaced population. However, it was observed that quantities of micronutrient powders are limited and there are no stocks of ready-to-use therapeutic food to manage severe acute malnutrition. Although nutrition was not identified as a priority sector requiring assistance, the nutritional status of the population will be seriously affected if the prevailing issues on food insecurity and livelihood are not addressed on time and sustainably.

**Key immediate needs**

- Cash assistance for farming households to ensure they can access adequate food or rebuild their livelihoods
- Targeted food distributions for the most vulnerable households, including those who have lost their homes
- Food supplements for children, and pregnant and lactating women at risk of malnutrition.
- Timely agricultural inputs, including rice and corn seeds for the November/December planting season, fertilizers, hand tools, repairs to storage facilities, replenishment of fishing equipment losses
- Assistance to help families’ replant kitchen gardens

**Shelter, camp coordination, camp management**

Low-income households living in houses made from light materials sustained the most severe damage during the typhoon. Most people who moved to evacuation centres as a pre-emptive measure have already begun to return to their homes to repair and salvage damaged roofs and walls of their houses. Families whose houses were totally destroyed, but have left the evacuation centres, are reportedly either living in the ruins of their houses, or are staying with friends and relatives. No open-air camps were observed during the assessment.

Those most in need of immediate assistance are families who have lost their homes, low-income households who cannot afford the repairs or purchase of materials, and vulnerable and marginalized sectors, including single female- and child-headed households, elderly persons and Indigenous Peoples.

**Key immediate needs**

- Cash assistance to repair or rebuild homes
- Cash assistance to host families who are supporting displaced people
- Shelter repair materials, with a strong messaging component on build-back-safer and construction techniques to reinforce timber frame houses and lightweight roofs
Early recovery and livelihoods

The majority of population in typhoon-affected areas are dependent on farming and fishing as a source of livelihood. Many have no alternate source of income as their crops (rice and corn) have been destroyed, poultry and other livestock have been killed. As such, they may be forced to adopt negative coping strategies to support their families, including selling assets, such as land, or taking out high-interest loans.

Key immediate needs

- Cash assistance to support farmers who have lost crops and livestock to restart their livelihoods.

Water, sanitation and hygiene

The majority of people in the assessed areas rely on protected wells, hand pumps or developed springs for their source of water. Flooding in several barangays in the assessed municipalities of Buguey, Lal-lo, Lasam, Alcala, and Abulog, Cagayan province, has submerged nearby hand pumps, open dug wells and toilet facilities. There are also anecdotal reports that shallow wells are producing turbid water. According to the assessment, Jerry cans, hygiene kits and household treatment products are readily available in the market.

Key immediate needs

- Necessary hygiene materials
- Access to safe water supplies and sanitation facilities in the community (including schools, child development centres and health facilities)
- Restore/repair damaged water and sanitation facilities

Health, reproductive health, mental health and psychosocial support services

Since the typhoon, there have been no significant disruptions in health service delivery in affected areas, although some health facilities sustained minor damage. Essential health services—outpatient consultations, maternal and child health services—continue to be provided, and only one out of 19 safe birthing facilities has been damaged and is not functional. Power generators are reportedly able to maintain the integrity of cold chain equipment at the rural health clinics.

However, the flood water, which remains in many areas, has left people exposed to risks, including from waterborne diseases. The extent of the disaster is also likely to raise potential mental health and psychosocial issues that may require interventions.

Key immediate needs

- Strengthened disease surveillance mechanisms at health facility level
- Waterborne disease and vector control
- Immunization activities to prevent the outbreak of vaccine preventable diseases
- Sexual reproductive health services, including maternity and safe delivery kits
- Mental health and psychosocial support services
- Immediate repair of damaged health facilities

Education

A number of classrooms have been destroyed or damaged, while a small number of classrooms are still being used as evacuation centres, hindering learners’ return to education. Teaching and learning materials, computers, and classroom furniture have been damaged and need to be replaced. Due to the loss of livelihoods, concerns have also been raised the possibility of children being forced to drop out of school and the need to support teaching staff whose houses may have been damaged or destroyed.

Key immediate needs

- Temporary learning spaces and repair or reconstruction of classrooms
- Replacement of learners’ and teachers’ materials and equipment
- Psychosocial first aid
ANNEXES
General Assessment Findings

Data from the Department of Education as of 18 September 2018 present affected learners since the suspension of classes on 13 September:

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Divisions</th>
<th>Number of Schools</th>
<th>Number of Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region II</td>
<td>9</td>
<td>2,524</td>
<td>684,482</td>
</tr>
<tr>
<td>CAR</td>
<td>8</td>
<td>1,828</td>
<td>322,548</td>
</tr>
</tbody>
</table>

Data gathered from the joint assessment visits and separate interviews with Department of Education Division and District officials, school heads, teachers, learners and Municipal Social Welfare and Development Officers in the provinces of Cagayan (Region II), and Kalinga and Apayao (CAR) are consistent with these data on learners. The Rapid Assessment was instrumental in highlighting the following issues: (1) structural damages to schools and Child Development Centers (CDCs); (2) issues affecting resumption of classes in schools and child development centers and children going back to schools and CDCs; and (3) the need for continuation of education and early learning activities. Among the key informants, the most urgent educational need identified was the repair of damaged buildings. There is also the need to manage the use of classrooms as evacuation centres, as this can hinder the early resumption of classes and further delay opportunities for quality early learning and education. While national policy discourages the use of classrooms and CDCs as evacuation centres, measures should be taken to ensure the safety and provision of basic necessities and services for displaced children and families even as LGUs and schools strive to ensure children realize their right to quality education and early learning towards achieving their full potential. Key informants also listed the following issues and factors that can also contribute to the delay in resumption of classes and children going back to schools and CDCs: (1) the destruction of learners’ materials (e.g. textbooks, school supplies), teaching materials (e.g. curriculum guides), and school furniture (2) loss of livelihood and source of income of families, which may result in school age children dropping out of school, and for older children to work; and (3) teachers needing financial support with their own homes damaged.

Pre-crisis data in the 3 provinces where the rapid assessments were conducted are as shown below (OCHA, 2018):
Specific Assessment Findings

Cagayan
Given the province’s size at 34 municipalities and 1,055 barangays, there are 27 totally damaged classrooms, 89 partially damaged classrooms, and 2 partially damaged CDCs. For the totally damaged classrooms, both barangay LGUs and school heads expressed the need for immediate provision of TLSs and reconstruction. Along with the damaged structures were damaged toilets and furniture: at least 50 tables, and around 80 chairs for different grade levels. Aside from the damaged buildings, the use of at least 2 ES classrooms as evacuation centres in the province provides challenges as the LGU and schools balance the rights of children to quality education and that of the internally displaced. With the impact of Typhoon Mangkhut on shelter and schools and Child Development Centres especially those along riverbanks, more than a hundred learners’ supplies, and almost 700 sets of textbooks in different levels and subjects need to be replaced. In the Municipalities of Alcala and Gattaran, both children, school and local government officials expressed concern on the possibility of increased dropouts as a result of the financial difficulties the loss of livelihood will bring to families.

Kalinga
The rapid assessment indicated there are 30 totally damaged classrooms and at least 22 partially damaged classrooms. TLSs were requested to replace totally damaged classrooms, even as some of these were also TLSs provided in response to Typhoon Haima. Learners’ and teachers’ materials were destroyed and needed replacement, with actual numbers for verification.

Apayao
Partial data as of Sept. 17, 10am of the Schools Division of Apayao, shows that out of 202 schools, 105 schools have reported with damaged infrastructures. From these schools with reported damage, there are 20 totally damaged classrooms, 121 major damaged, and 205 minor damaged. The totally and major damaged classrooms were reported from the Municipalities of Flora, Luna, Pudtol, and Conner. The need for 50 temporary learning spaces is still subject for validation. Final reports are expected to be released by September 20.
Specific Assessment Findings

Recommendations

To further strengthen coordination between LGUs and schools, maximise channels and mechanisms provided by the Central Office of the Department of Education and encourage community involvement, the following recommendations were broached in light of the assessment results:

• Affected schools to send as soon as possible and follow up on developments on the Rapid Assessment of Damage Report (RaDaR) directly to the Central Office for vetting to initiate and facilitate the downloading of funds for temporary learning spaces (TLSs), clean-up and minor repair and reconstruction, hygiene kits, learners’ kits, teachers’ kits (DepEd, 2018)
• Immediate provision of TLSs for schools with totally damaged and unusable classrooms for early resumption of classes
• Repair of damaged CDCs and classrooms, gymnasiums and toilets/ comfort rooms and the corresponding debris clearing using a “Cash for Work” scheme (to pump/prime the local economy in light of the loss of livelihood of families), coordinated between concerned schools, barangay LGUs and municipal LGUs
• For the longer term, continuous monitoring and assessment of the condition of TLSs or other transitional and semi-permanent structures used as classrooms to ensure safety and conduciveness for learning by DepEd in coordination with the DPWH (RA 10821)
• Coordinate and have open communication between the LGU and school to ensure that the use of the classrooms and other rooms in the school as evacuation centres shall be as brief as possible
• The LGU to identify alternative sites, again taking into account safety and provision of basic necessities and services for the children and families (RA 10821)
• Provide support to households, especially for vulnerable groups (e.g. the Agta families in 2 classrooms), with partially damaged houses with shelter materials such as GI sheets, nails and plastic sheeting
• Immediate replacement of damaged school furniture and learners’ materials
• Provision of support for teachers and Child Development Workers (CDWs) displaced or with totally damaged houses to facilitate their own return to the schools and CDCs
• Assist communities in the transition to recovery, cash transfer programming, including multi-purpose cash transfers to meet immediate needs
• Set up of Child Friendly Spaces and conduct of early learning activities particularly for preschoolers for the continuation of early learning and education activities necessary to facilitate a return to normalcy especially for children affected by emergencies
• Psychosocial support to teachers and learners
Food security, agriculture and livelihoods

Key Findings:

1. Majority of the affected population are dependent on farming and fishing for their major source of livelihood. Most of the production areas for rice are currently various stages of growth, and reproductive and maturing stage for corn. Disruptions in agricultural production in the affected areas, including staple food rice and corn, will negatively impact the food supply for the following months. At the same time, this may also result to missed harvest and foregone earnings for farmers and fisherfolk for the harvest season of September to October, further exacerbating food insecurity and malnutrition in the affected areas. Farmers are also likely to experience more financial difficulties to face household needs as they try to recoup and recover from their losses resulting from the damaged crops and missed harvest.

The Department of Agriculture (DA) in its 17 September 2018 initial report estimates that Typhoon Mangkhut affected at least 553,704 hectares of agricultural areas, with damages and losses of at least USD 265 million on rice, corn, infrastructure and livestock/poultry. Of this, rice contributed to the largest share of losses amounting to USD 168 million, followed by corn at USD 84 million.

2. Most of the affected families were preemptively evacuated and immediately returned to their houses after the onslaught of TY Mangkhut. There are some immediate need for emergency food distribution especially for families with totally damaged houses to help alleviate their situation while rebuilding their homes.

3. The extent of damage and losses in crops and fisheries pose a risk in food security and nutrition in most municipalities visited. It is envisaged that given the current situation, without any immediate interventions, farmers may resort to adopting poor coping mechanisms such as consuming immature crops and poor quality food, borrowing money to buy food, reduce number of meals, sell labour in advance, and/or selling of agricultural assets for food and consumption of less diversified food groups sacrificing nutrition for all members of the family. This may pose risk especially among young children, women and pregnant/lactating mothers given their vulnerability to malnutrition.

Food availability will likewise be affected as production is heavily affected because of the extensive damage in crops. This will affect the stability of local supply, especially rice which is a staple in every Filipino household. During the assessment, key informants signified the need for cash-based intervention to augment the families’ income to be able to access food while recovering from livelihood and income losses. It was also noted that prices of basic commodities increased after the typhoon which will increase the burden to the affected families.

While there is currently enough food available to meet the immediate needs of the people while in ECs and those who stayed in their friends or relatives, there is a need to complement food assistance through provision of food packs to households as they wait for the rice to be harvested by next month. This should also to support the continued diversified food augmentation of government and other humanitarian players based on the RNA.
Agriculture Watch
Typhoon Mangkhut ("Ompong") 2018

Reported Damage to Agriculture as of 17 Sept 2018

Running Reported Damages (Million PhP)
- Not yet reported
- < 1,000
- 1,000 - 2,000
- 2,000 - 3,000
- 3,000 - 4,000
- 4,000 - 5,000

**AFFECTED:**
- No. of Farmers
- Rice
- Corn
- High Value Crops
- Root Crops
- Livestock/Poultry
- Infrastructure

Note: Reports are still for field validation.

ILOCOS REGION
- 2,058 M
- 16 M

CORDILLERA
- 170,941
- 370 M
- 1,798 M
- 613 M
- 6 M

CENTRAL LUZON
- 527
- 2,897 M
- 17 M

CAGAYAN VALLEY
- 109,157
- 3,631 M
- 2,682 M
- 175 M

CALABARZON
- 388
- 11 M
- 0.008 M
- 0.005 M

DATA SOURCES:
Damage Report as of 17 Sept 2018 (DA, 2018)
Typhoon Puth (PAGASA, 2018)
Recommendations:
It is highly important to be able to support affected farmers and fisherfolk in immediately restoring their production activities and livelihoods to resume economic activities and minimize prolonged dependence on food aid. The affected farmers should be provided with appropriate and timely agricultural assistance, including rice and corn seeds for immediate planting for the November/December planting season, fertilizers for rice and corn, assorted vegetable seeds and hand tools, as well as equipment for planting and harvesting, together with the provision of storage facilities.
Fisherfolk should also be able to replace their fishing gears (gill net and hook and line), construct or repair of fish cages, including provision of fingerlings and feeds.
To lessen the vulnerability, farmers and fisher folks should be given alternative livelihood options (agriculture and non-agriculture), that may include start-up capital, including cash-based interventions (multi-purpose cash transfers). Most of the affected farmers are engaged in backyard gardening, which were also damaged by the typhoons. The planting of vegetables will contribute to households’ nutritional intake, promote crop diversification, serve as source of cash, and in some case, helps articulate the role of women and children in household food production and security.

Assessment results and recommendations by Municipality

<table>
<thead>
<tr>
<th>Municipality, Province</th>
<th>Observation</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>Abulog, Cagayan</td>
<td>During displacement in ECs the LGU distributed relief packs (300 units) including dry food and 2.5 kg of rice to the most vulnerable households. Scarcity of rice in the markets but may not reach the target number.</td>
<td>Huge loss of crops and cultivations of corn and rice, 11 barangays out of tot of 20 are flood prone and 3 very bad affected by flooding on the coastline and by the river. Flooding was up to the chest in those barangays. small farmers the most in need of assistance. Provide support to farmers to recommence farming.</td>
</tr>
<tr>
<td>Alcala, Cagayan</td>
<td>The LGUs initially distributed food packs good for 3 days in the evacuation center. They have available prepositioned food items available for distribution.</td>
<td>The main source of livelihood of almost 95% of farmers cultivate corn, rice and high value crops vegetables. With this kind of damage, farmers will have no source of Food assistance as farmers can harvest the damaged corn or other crops for home consumption, enough for a few days. However, additional supply for food. Provide alternative livelihood to farmers thru vegetable planting, and cash crop. Provision of farm inputs (seeds, fertilizer), including</td>
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<tr>
<td>Municipality, Province</td>
<td>Observation</td>
<td>Recommendations</td>
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<tr>
<td>Baggao, Cagayan</td>
<td>The local government unit thru the MDRRM office has mentioned a committed volume of rice by the National Food Authority for the rice needs of Alcala affected barangays. The LGU will release funds in response to these needs. Damaged corn that are ready to be harvested can be recovered for family consumption in the next few days. There are no reported incidents of severe acute malnutrition of children. Shortages of food may occur months after the typhoon to majority of farmers. The flooding in 5 barangays of West Alcala may have impact to shortages of safe water for drinking and other domestic consumption.</td>
<td>livelihood, food, and even money to pay for the tuition fees of their children in a period of 5 months after the typhoon. Farmers may be able to sell of their products but for low price due to poor quality, hence low income. The next planting season is in December which will take another 4 months supplements is being requested by the RHU.</td>
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<td></td>
<td>It’s been 3 weeks since the fisher folks haven’t had any income yet. Farmers had to prematurely harvest their crops. Insecurity linked with loss of livelihood will become a problem in the coming weeks.</td>
<td>cash labor for land preparation and planting. The LGU, for now, has only commitment to provide seeds amounting to P3,000 to affected farmers.</td>
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</tbody>
</table>

The market is slowly getting back to normal but access is still very difficult due to muddy roads brought by continuous rains. Cash transfer programming, including multi-purpose cash transfers to meet immediate needs.
<table>
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<tr>
<th>Municipality, Province</th>
<th>Food Assistance</th>
<th>Livelihood</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buguiay, Cagayan</td>
<td></td>
<td>Most of the affected population rely on fishing and farming for their livelihoods. Food insecurity linked with loss of livelihood might become a problem in the coming weeks. Only a few crops were not harvested prior to the typhoon.</td>
<td>Alternative livelihood options and farm inputs</td>
</tr>
<tr>
<td>Camaliguan, Cagayan</td>
<td></td>
<td>Most of the households are famers and farmworker Farmers suffered income losses because they sold their palay at substantially lower prices just before the typhoon. They harvested their palay prematurely. Some buying stations are damaged and laborers are temporarily without work. Some people still busy cleaning and repairing house instead of earning daily income.</td>
<td>Provision of food packs because of disruption in their daily income. Provision of planting materials and other inputs due to substantial destruction of rice farms</td>
</tr>
<tr>
<td>Municipality, Province</td>
<td>Observation</td>
<td>Recommendations</td>
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<tr>
<td>Claveria, Cagayan</td>
<td>Have reduced ability to purchase and/or produce food</td>
<td>The immediate provision of food kits</td>
<td>Assist rice, coconut, banana farmers to recover through multi-purpose cash transfers for immediate needs.</td>
</tr>
</tbody>
</table>

80% of the Claveria community are farmers and fishermen. Rice and fishing industries have been visibly affected with livestock farming moderately affected. Approximately 3,500 people from each sector have been affected.
Major damage to crops and fishing cages just prior to harvest means that the majority of households will:
1. Have no income in the near future
2. Have to repay loans taken out for seeds based on future crop yields.

| Gattaran, Cagayan | Municipal government has started the distribution of relief goods in barangays that have compiled and submitted the list of affected families. Currently, the main source of food come from existing household food stock and local markets. The price of 1 kg of rice was reported to increase from Php55 per kilo to Php70 per kilo since the typhoon. | Households need liquid cash to augment current food stocks expected to last for only 2-3 days. Assist communities in the transition to recovery, cash transfer programming, including multi-purpose cash transfers to meet immediate needs, followed by cash-for-work and food-for-work programmes in the near future (e.g. repair of classrooms/day care). | Require agricultural inputs such as seedlings, fertilizers, and tools to support them in the next three months. |

<p>| | The main sources of livelihood are farming corn and rice. Food insecurity linked with loss of livelihood will become a problem in the coming weeks and pose nutritional problems for children in the future. Some males shifting to carpentry and daily labor while waiting for the harvest (expected to be in October/November). | | |</p>
<table>
<thead>
<tr>
<th>Municipality, Province</th>
<th>Observation</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gonzaga, Cagayan</strong></td>
<td>As assessed, immediate food assistance is needed</td>
<td>Majority depends on fishing as livelihood</td>
</tr>
<tr>
<td><strong>Lal-lo, Cagayan</strong></td>
<td>Most of the affected population rely on fishing and farming for their livelihoods. Farmers were able to harvest their crops prior to the typhoon.</td>
<td></td>
</tr>
<tr>
<td><strong>Lasam, Cagayan</strong></td>
<td>Majority rely on rice and corn farming. Food insecurity linked with loss of livelihood will become a problem in the coming weeks.</td>
<td></td>
</tr>
<tr>
<td><strong>Alacapan, Cagayan</strong></td>
<td>Difficulty for poor affected households to sustain basic needs in the coming weeks.</td>
<td>Majority rely on rice and corn farming</td>
</tr>
<tr>
<td><strong>Pomplona, Cagayan</strong></td>
<td>Majority of the households are engaged in agriculture and fisheries activities. It is expected that the typhoon will damage their rice crops which is 80% and corn - 100%. It is also expected that damage to fish cages and loss of fishing gears (gill nets and hook and line) Given this situation, the population is expected to have food insecurity and loss of income in particular for small rice and corn farmers</td>
<td>There is a need to complement food assistance thru provision of food packs to households as they wait for the rice to be harvested by next month.</td>
</tr>
<tr>
<td>Municipality, Province</td>
<td>Food Assistance</td>
<td>Livelihood</td>
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<td>------------------------</td>
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<tr>
<td>Sta. Ana, Cagayan</td>
<td></td>
<td>Fishing and Farming</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Due to totally damaged crops (rice and corn) which is supposed to be harvested on October and November, farming families are left not only without food, but into more debt. Fishing activities were halted for weeks now. Source of income is scarce</td>
</tr>
<tr>
<td>Rizal, Cagayan</td>
<td>The market is slowly getting back to normal but access is still very difficult due to muddy roads brought by incessant rains.</td>
<td>Food insecurity linked with loss of livelihood will become a problem in the coming weeks.</td>
</tr>
<tr>
<td>Sta. Praxedes, Cagayan</td>
<td>The LGU and CSWD were able to provide to food packs to 1,281 families. There was already an observed increase in farm gate price of wet paddy (P21.50 to P22/kg); dry paddy (P24 to P25/kg); and milled rice (P50-52/kg).</td>
<td>Majority of the families in the municipality are engaged in farming and fishing. The area of standing irrigated hybrid rice is 345 hectares (ha). 93% of the standing crop is expected to be affected with an average of 25% loss in yield. Most of the paddy rice (pala) are about to be harvested before the typhoon hit the area. This will significantly cause food insecurity and loss of income to small holder farmers.</td>
</tr>
</tbody>
</table>
|                        |                |                | The immediate provision of agriculture and fisheries-based inputs (seeds, fertilizer and fishing gears) to restore the livelihoods of the affected farmers and fishers, which is their major source of income.
<table>
<thead>
<tr>
<th>Municipality, Province</th>
<th>Observation</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conner, Apayao</td>
<td>75% of the families depend on farming. Rice, corn, and fruits are the main crops in the area. There will be food insecurity in the coming weeks as most of the crops are damaged.</td>
<td></td>
</tr>
<tr>
<td>Kabugao, Apayao</td>
<td>90% of the families rely on farming and majority of the crops are corn. Crops have been destroyed. 260 families have no source of income after the typhoon.</td>
<td>Provision of food assistance. Provision of farm inputs and cash for work.</td>
</tr>
<tr>
<td>Luna, Apayao</td>
<td>The demand for food will increase. However, families don't have resources to buy as their crops are badly damaged by the typhoon. Food prices in the market went up. 260 families have no source of income after the typhoon. Agricultural crops (rice/corn/vegetables) was severely damaged. According to MDRRMO almost 90% of palay was destroyed.</td>
<td>Provision of alternative livelihood for affected farmers.</td>
</tr>
<tr>
<td>Sta. Marcela, Apayao</td>
<td>Most of the affected population rely on farming for their livelihoods. Agricultural crops (rice/corn/cassava) was severely damaged. According to MDRRMO almost 90% of palay was destroyed amounting to 272 Million pesos.</td>
<td>Provision of alternative livelihood for affected farmers and fisherfolks.</td>
</tr>
<tr>
<td>Rizal, Kalinga</td>
<td>About 374 families were given food packs. The CAR DSWD. Farming is the main source of livelihood of families in the</td>
<td>The immediate need of the municipality is support among</td>
</tr>
<tr>
<td>Municipality, Province</td>
<td>Food Assistance</td>
<td>Livelihood</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>provided to 332 families and the LGU provided food packs to 44 families.</td>
<td>municipality. Crops such as rice and corn are the main produce of the municipality.</td>
</tr>
</tbody>
</table>
Health and reproductive health

Pre-crisis health situation

According to the 2017 Field Health Services Information System, Cagayan is the second province with the highest incidence of diarrhoeal cases (see Table 1). Furthermore, official RHIS figures also shows that Cagayan province only has 86.81% of household with access to safe water compared to other provinces in the region (see Table 2).

Table 1: Children with Diarrhoea in Region 2 Cagayan Valley

<table>
<thead>
<tr>
<th>Area</th>
<th>Diarrhoea Cases</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 2</td>
<td>4,480</td>
<td>4,112</td>
<td></td>
<td>8,592</td>
</tr>
<tr>
<td>Batanes</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Cagayan</td>
<td>1,071</td>
<td>881</td>
<td>1962</td>
<td></td>
</tr>
<tr>
<td>Isabela</td>
<td>2,001</td>
<td>1,838</td>
<td>3839</td>
<td></td>
</tr>
<tr>
<td>Nueva Vizcaya</td>
<td>689</td>
<td>666</td>
<td>1355</td>
<td></td>
</tr>
<tr>
<td>Quirino</td>
<td>160</td>
<td>128</td>
<td>288</td>
<td></td>
</tr>
<tr>
<td>Cauayan City</td>
<td>306</td>
<td>352</td>
<td>668</td>
<td></td>
</tr>
<tr>
<td>Iligan City</td>
<td>105</td>
<td>109</td>
<td>214</td>
<td></td>
</tr>
<tr>
<td>Santiago City</td>
<td>61</td>
<td>54</td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>Tuguegarao City</td>
<td>81</td>
<td>72</td>
<td>153</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Environmental Sanitation – Household with Access to Safe Water.

<table>
<thead>
<tr>
<th>Area</th>
<th>HH No.</th>
<th>HH w/ access to improve safe H2O supply</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Region 2</td>
<td>771,777</td>
<td>665,558</td>
<td>86.24</td>
<td>419,087</td>
<td>63.08</td>
</tr>
<tr>
<td>Batanes</td>
<td>4,061</td>
<td>100.00</td>
<td>21</td>
<td>0.42</td>
<td>0</td>
</tr>
<tr>
<td>Cagayan</td>
<td>241,279</td>
<td>129,444</td>
<td>88.81</td>
<td>131,114</td>
<td>62.60</td>
</tr>
<tr>
<td>Isabela</td>
<td>265,181</td>
<td>245,441</td>
<td>92.56</td>
<td>172,655</td>
<td>70.15</td>
</tr>
<tr>
<td>Nueva Vizcaya</td>
<td>79,629</td>
<td>71,716</td>
<td>90.06</td>
<td>47,700</td>
<td>66.51</td>
</tr>
<tr>
<td>Quirino</td>
<td>45,345</td>
<td>41,111</td>
<td>9.07</td>
<td>1</td>
<td>0.02</td>
</tr>
<tr>
<td>Cauayan City</td>
<td>34,120</td>
<td>29,833</td>
<td>87.58</td>
<td>20,827</td>
<td>69.70</td>
</tr>
<tr>
<td>Iligan City</td>
<td>37,719</td>
<td>36,459</td>
<td>96.66</td>
<td>26,429</td>
<td>72.48</td>
</tr>
<tr>
<td>Santiago City</td>
<td>32,476</td>
<td>32,476</td>
<td>100.00</td>
<td>19,186</td>
<td>59.11</td>
</tr>
<tr>
<td>Tuguegarao City</td>
<td>31,068</td>
<td>31,068</td>
<td>100.00</td>
<td>2,352</td>
<td>7.57</td>
</tr>
</tbody>
</table>
A damaged health facility in Barangay Paddaya Weste Annex, Municipality of Buguey. This barangay health station, which is also a Safe Birthing Facility, has a catchment area of four other barangays with a total population of 2,780.

There are still areas which remain flooded. People are exposed to certain risk and hazards – contaminated flood water, debris, and people who are fixing their damaged houses are prone to certain injuries.

The extent of the emergency poses mental health and psychosocial issues. Reduced income due to loss of livelihood and shelter may increase the risk of the population experiencing early symptoms psychological distress. The affected population,
especially children and the most vulnerable ones, need immediate psychosocial support services.

A damaged home in Barangay Guiddan, Abulug, Cagayan. The woman with her child is a 4Ps parent leader.

The extent of the emergency poses mental health and psychosocial issues. Reduced income due to loss of livelihood and shelter may increase the risk of the population experiencing early symptoms psychological distress. The affected population, especially children and the most vulnerable ones, need immediate psychosocial support services.

Specific Assessment Findings (per Municipality)
Please see attached Annex: Specific Assessment Findings per Municipality

Identified Priority Actions and Recommendations for Health

1. Strengthen disease surveillance mechanisms at health facility level
   a. Identification of areas where disease surveillance is not yet activation/not yet functional and address barriers to implementation, including technical support
   b. Regular PIDS reporting
   c. Logistics support to Disease Surveillance Officers (DSOs) to ensure timely reporting

2. Water-borne disease and vector control measures
   a. Provision of water treatment supplies – e.g. jerry cans, water purifiers, aquatabs, etc
   b. Roll-out prophylaxis for leptospirosis in flooded areas.
   c. Dengue prevention and control (4-S campaigns)
   d. Intensify health promotion activities

3. Ensure cold-chain integrity and vaccination of children
   a. Conduct assessment and monitoring of cold-chain during the period of interrupted power supply
   b. Conduct catch-up immunization activities to prevent outbreak of vaccine preventable diseases

4. Sexual Reproductive Health services
   a. Provision of maternity and safe delivery kits to PLW especially in damaged health facilities
   b. Ensure that there's a functional service delivery network to pregnant needing CS deliveries
   c. Ensure MISP for SRH is implemented

5. Mental Health and Psychosocial Support services
   a. Provision of psychosocial support activities to children and other vulnerable groups
   b. Ensure that there's a functional referral system for clients needing further level of mental health services
   c. Conduct refresher training to health workers for screening (symptom recognition and referral)

6. Health infrastructure
   a. Immediate repair of damaged health facilities
Nutrition

Pre-crisis Nutrition Situation

According to the 2015 National Nutrition Survey, the provinces of Cagayan, Kalinga, and Apayao have comparatively pre-crisis chronic malnutrition (stunting) rates. In the same survey, it was found that both Cagayan and Apayao have the highest wasting rates in their respective regions (see Table) while Kalinga Province has the lowest wasting rates among all provinces.

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Stunting</th>
<th>Wasting</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>33.4</td>
<td>7.1</td>
</tr>
<tr>
<td>CAR</td>
<td>36.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Abra</td>
<td>42.7</td>
<td>9.0</td>
</tr>
<tr>
<td>Apayao</td>
<td>35.8*</td>
<td>10.3</td>
</tr>
<tr>
<td>Benguet</td>
<td>32.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Ifugao</td>
<td>42.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Kalinga</td>
<td>35.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Mt. Province</td>
<td>38.2</td>
<td>5.9</td>
</tr>
<tr>
<td>Region 2</td>
<td>29.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Batanes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cagayan</td>
<td>31.1</td>
<td>9.6</td>
</tr>
<tr>
<td>Isabela</td>
<td>24.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Nueva Vizcaya</td>
<td>32.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Quirino</td>
<td>44.1</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Pre-crisis nutritional data (NNS 2015) for provinces of CAR and Region II

* prevalence estimates with coefficient of variation greater than 20%

In addition, 2017 Field Health Service Information System (FHSIS) nutrition data coming from Cagayan Valley (Region 2) show how the different provinces performed based on key indicators such as exclusive breastfeeding, introduction of solid food at 6-8 months, vitamin A coverage, and iron supplementation coverage (see Table below).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Batanes</th>
<th>Cagayan</th>
<th>Isabela</th>
<th>N. Vizcaya</th>
<th>Quirino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants exclusively breastfed until 6mos (%)</td>
<td>37.9</td>
<td>49.7</td>
<td>51.5</td>
<td>65.9</td>
<td>61.6</td>
</tr>
<tr>
<td>Received solid foods 6-8mos (%)</td>
<td>89.9</td>
<td>98.3</td>
<td>93.2</td>
<td>92.7</td>
<td>94.0</td>
</tr>
<tr>
<td>Infants 6-11 given Vit A (%)</td>
<td>49.2</td>
<td>100</td>
<td>95.8</td>
<td>99.8</td>
<td>89.5</td>
</tr>
<tr>
<td>Children 12-59 given Vit A (%)</td>
<td>35.4</td>
<td>44.7</td>
<td>48.7</td>
<td>87.2</td>
<td>37.1</td>
</tr>
<tr>
<td>Infants 6-11 given Iron (%)</td>
<td>11.7</td>
<td>32.7</td>
<td>44.8</td>
<td>54.6</td>
<td>58.7</td>
</tr>
<tr>
<td>Children12-59 given Iron (%)</td>
<td>10.5</td>
<td>3.8</td>
<td>4.8</td>
<td>14.6</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Pre-crisis Nutrition Data in Cagayan Valley Region (FHSIS, 2017)

Aggravating factors such as: 1) reduced income of households because their main source of livelihood (rice/corn farming) has been damaged by the typhoon, 2) reduced intake of quality and diverse types of food secondary to food insecurity, 3) limited access to safe water and poor hygiene practices that may cause water-borne illnesses and other infections, 4) limited access to and coverage of health care and nutrition services, and 5) difficulties to promote, protect and support optimal IYCF practices - may all further cause the deterioration of the nutritional status of infants, young children and mothers.

General Assessment Findings

For Nutrition, the common perception among those surveyed is that there are currently no serious problems with regards to the nutritional status of the displaced population. Similar to previous emergencies in other areas of the country, it was observed that the interviewed key informants are usually not aware of nor understand the importance and determinants of nutrition. Food adequacy is usually equated with nutrition. Also, only a few assessment teams had members with technical backgrounds on nutrition. Together with the above
perception, this unfortunately limits the breadth and depth of nutrition data captured during this assessment.

Some assessment teams were able to interview health and nutrition service providers and community members and also obtained pre-crisis local level data that allowed the triangulation and analysis of assessment findings.

Most of the population who were evacuated at the height of the emergency have already returned to their homes. Around 50-90% infants aged 6 months and below were reported to be exclusively breastfed. According to interviewed officials, mothers were reported to have high levels of understanding of the importance and benefits of breast milk and the risks of infant formula/breast milk substitutes especially during times of emergencies. Fortunately, there were no reports of infant formula donations in all surveyed areas. Widespread or uncontrolled donations of breast milk substitutes especially during emergencies pose a great risk to the health of infants and young children.

According to key informants, nutrition services in general are expected to be provided by the Rural Health Units and Health Centers and that these are not expected to be disrupted. Health and nutrition staff and volunteers can be approached should there be a need for further services. Although there is a general perception that supplies for nutrition are adequate, it was observed that there were limited multiple micronutrient powders to improve the quality of complementary food being used in the camps and there were no Ready-to-Use Therapeutic Food for the management of Severe Acute Malnutrition.

All three provinces have already been trained on Nutrition in Emergencies, however, capacities of health and nutrition workers on the management of acute malnutrition (both moderate and severe) are limited. Almost all of the respondents identified food as the most immediate need for nutrition followed

Majority of the communities are dependent on existing household food stores which are expected to last less than 7 days. Although markets are functional and accessible, prices of basic food commodities such as rice have increased and cash flow of households coming from the main sources of livelihood such as farming and fishing has been disrupted affecting their purchasing power. Also, potential water quality issues coupled with the few reported cases of diarrhoea in some municipalities may increase risk of transmission of water-borne diseases.

Specific Assessment Findings (per Province)
Cagayan
No perceived issues on nutrition. The key informants had varying degrees of available information on how many infants 0-6 months are exclusively breastfed – some assessment teams were able to get key informants from the RHU while some were not as successful. No donations of infant/milk formula, bottles, teats, and other paraphernalia were reported. Nutrition services were conducted prior to the emergency such as vitamin and mineral supplementation and IYCF and were expected to continue despite the emergency. Due to lack of Ready-to-use Therapeutic food (RUTF) stocks, services for the management of
severe acute malnutrition were not available. Key informants reported that diets of young children are usually composed of rice/corn, vegetables, and at times, chicken eggs. Post-typhoon, children's diets (including those of PLWs) need to be diversified with increased availability and access to fresh produce. Main sources of livelihood (rice and corn farming, fishing, and manual labour) were severely disrupted by the typhoon which damaged crops and fishing/farming implements. Relative to the observed livelihood and food insecurity needs, acute malnutrition cases may increase and further contribute to increased morbidity and already high stunting rates – thus the situation needs to be closely monitored.

**Apayao**

Around 90-100% of the displaced population have returned to their homes one to two days after the typhoon's landfall. Key informants coming from municipalities perceive that nutrition is not a problem for their camps. Similar to Cagayan, key informants had varying degrees of available information on breastfeeding practices – some assessment teams were able to get key informants from the RHU while most were not as successful. All municipalities covered reported that they did not receive any donations of breast milk substitutes, bottles, and teats. Due to lack of Ready-to-use Therapeutic food (RUTF) stocks, services for the management of severe acute malnutrition were not available.

**Kalinga**

At the provincial level, key informants perceived that there were problems in the nutritional status of infants, young children and pregnant and lactating women. Around 90-100% rates of exclusive breastfeeding for infants <6months were reported. No donations of infant/milk formula, bottles, teats, and other paraphernalia were reported. Nutrition services have been conducted prior to the emergency such as vitamin and mineral supplementation and IYCF and are expected to continue. Due to lack of Ready-to-use Therapeutic food (RUTF) and multiple micronutrient powder stocks, services for the management of severe acute malnutrition and micronutrient supplementation to improve diets of children are not available.

**Recommendations**

Although nutrition was not identified as a priority sector requiring assistance, the nutritional status of the population will be seriously affected if the prevailing issues on food insecurity and livelihood are not addressed on time and sustainably.

Compounded with the pre-crisis levels of malnutrition, childhood wasting and stunting may increase if immediate measures to address WASH, food insecurity and livelihood issues are not taken. Vigilant monitoring and non-acceptance of milk donations are strongly recommended to prevent increased mortality and morbidity of infants and young children. Diets of young children, pregnant and lactating women also need to be diversified with fresh produce. Parent and caregivers need to also be supported and counselled on optimal infant and young child feeding practices.

The nutritional status of affected populations, particularly the vulnerable groups (including children with disabilities, adolescents in general and the pregnant teens and adolescent mothers in particular and indigenous peoples) should thus be closely monitored and both preventive and therapeutic nutrition interventions be set in place as early as possible. Stocks of key nutrition supplies such as multiple micronutrient powders and RUTF need to be replenished.

**Identified Priority Actions**

1. Support regional and local nutrition clusters in effectively coordinating and monitoring both nutrition-specific and nutrition-sensitive interventions.

2. Support the conduct of regular nutrition-specific assessments to monitor the nutritional status of vulnerable groups.
3. Continue advocacy on non-acceptance of milk code donations and do vigilant monitoring and reporting of Milk Code Violations, if any.

4. Support LGUs as they restart and strengthen implementation and improve coverage of both preventive and therapeutic nutrition interventions:
   a. Provision of skilled breastfeeding (BF) and IYCF-E support to pregnant and lactating mothers/caregivers of girls and boys 0-23 months through establishment of Mother-Baby Friendly Spaces for breastfeeding, communication, counselling, and mentoring supervision by peer support groups, barangay nutrition scholars and health workers and promotion and support for appropriate complementary feeding (CF).
   b. Prevention, identification, and appropriate management of moderate and severe acute malnutrition among girls and boys 0-59 months, pregnant and lactating women through the establishment of community-based programs.
   c. Prevention and control of micronutrient deficiencies (Vitamin A, anaemia, iodine, and other micronutrient deficiencies) through communication, counselling and the distribution of micronutrient supplements and fortified nutritional products to vulnerable populations (boys and girls 6-59 months, PLW, elderly, pregnant teens and adolescent mothers) integrated into ongoing/future health and nutrition activities.
   d. Closely monitor growth and nutritional status of affected population, specifically infants and young children, pregnant and lactating women.
   e. Advocate for strengthening the implementation of nutrition-sensitive programs especially that most affected families are farming families.
   f. Continue capacity building activities for LGUs relevant to improving complementary feeding programs as well as monitoring of food security and nutrition data that will help them plan ahead of time even before a disaster happens.

5. Working with the following key clusters will help prevent the deterioration of nutritional status of affected population and vulnerable groups in the first month of response:
   a. Food Security and Livelihood Cluster to support general distribution of standard food packs to affected families; explore mechanisms for livelihood and cash assistance and ways to support purchase and distribution of fresh produce to diversify diets, targeting families with infants, young children, and pregnant and lactating women.
   b. WASH Cluster to support LGUs in ensuring the availability of safe drinking water, regular testing and quality monitoring, access to sanitation and hygiene facilities, support to strengthen hygienic practices, and regular collection of segregated solid waste.
   c. Health Cluster to ensure prevention and control of communicable and non-communicable diseases.
Protection, child protection, gender-based violence

Based on the Department of Social Welfare and Development’s National Household Targeting System (NHTS) database, the following are the vulnerable groups in the three provinces.

**APAYAO**

- **Female**
  - 1
  - 43
  - 276
  - 623
  - 989

- **Male**
  - 21
  - 201
  - 388
  - 324
  - 944

**CAGAYAN**

- **Female**
  - 4
  - 162
  - 1,333
  - 2,535
  - 4,409

- **Male**
  - 83
  - 386
  - 1,604
  - 1,466
  - 3,477

**KALINGA**

- **Female**
  - 2
  - 55
  - 513
  - 1,091
  - 1,485

- **Male**
  - 10
  - 157
  - 674
  - 412
  - 1,391

Gender-based violence

Gender-based violence and human trafficking are pre-existing. In Region I, 33.1 percent of women age 15-49 have experienced physical, sexual or emotional violence perpetrated by their husbands/partners and 20.6 percent of women in Region II and 16.0 per cent of women in Cordillera Administrative Region (CAR) experienced the same (National Demographic and Health Survey, 2017).

In terms of reported GBV cases, a municipality in Cagayan has five (5) reported cases of rape where victim-survivors are adolescent girls from April-August 2018 while another municipality in Cagayan has two (2) reported cases of rape from January-February 2018. One case is an incest rape where victim-survivor is a 16-year old girl, while the other case, victim-survivor is a 5-year old girl perpetrated by a 15-year old boy. Reported cases of intimate partner violence (violation of Republic Act 9262) are low in some areas because the issue is considered as a private matter between couples and managed through mediation.

Family Separation

Missing persons, separated, and unaccompanied children. Noting that this typhoon emergency caused prolonged inundation of low-lying areas resulting in displacement of population, the risk of having families separated as they try to evacuate and flee to safer areas may be expected. This separation may be further complicated and prolonged due to inaccessibility of mountainous areas due to landslides. Separated/unaccompanied children are more at risk of disappearance, exploitation, and neglect in an emergency.

Adolescent mothers are also considered as at-risk groups. Cagayan Valley has the highest teenage fertility rate with 18.1% based on Young Adult Fertility and Sexuality study conducted in 2013.
Livelihood & Protection
Major damage to livelihood means families would have no income in the near future and would experience reduced ability to purchase or produce food for the household. One negative coping mechanism identified by affected families is to borrow money with high interest rates. Lack of livelihood options may make poor individuals vulnerable to the modus operandi of illegal recruiters and traffickers who typically make fabricated offers of high-paying employment opportunities in urbanized cities and/or other countries.

Risks of child labour. In a municipality in Cagayan, children are being asked to help their families repair houses and recover crops in the field. This may bring danger to the child’s physical and psychosocial well-being due to the hard labour they are expected to do. The National Baseline Study on Violence Against Children 2015 highlighted that in post-emergency situations, children particularly adolescents, may also be asked to work and ‘help more’ within and outside of the household, and thus may be involved in hazardous labour that includes being taken out of school.

Psychosocial Support
It has been documented that distress on men caused by losses or devaluation of their traditional roles as breadwinner may contribute to intimate partner violence and other types of gender-based violence. Most affected children and their families have psychosocial needs related to the emergency. Most children who have experienced stressful situations will initially show changes in social relations, behaviour, physical reactions, emotions and spirituality. Reactions such as sleeping problems, nightmares, withdrawal, problems concentrating and guilt are normal, and can be overcome with time with psychosocial support. Prolonged displacement further exacerbates this problem.

Food Security & Protection
In some assessed community/ECs, inadequate supply of goods and the increased in prices of commodities (e.g. rice cost Php70 per kilo from Php 55 posed additional challenge to poor affected families.

Shelter & Protection
Families living in a partially damaged house may experience physical accident and injury due to falling parts of houses or sharp objects. For those with totally damaged houses, most are temporarily staying with relatives. Overcrowding and shared sleeping spaces in host families may increase the risks of child protection and gender-based violence.

Camp Coordination and Camp Management (CCCM)
Evacuation centres in all typhoon-affected areas do not have gender-specific latrines. WASH facilities are not designed for humanitarian context. This may pose significant risk to women, children and adolescents of being abused or exploited. Facilities are also inadequate to respond to the needs of vulnerable groups such as PWDs and IDPs. Not all municipalities have designated Violence Against Women and Children (VAWC) desk officers and standby female police officers in the evacuation centres.

Lack of disaggregation of information on vulnerable groups (specifically adolescents, indigenous peoples, children with disabilities, pregnant & lactating women) is observed from all typhoon-affected areas. Data on number of affected individuals are lumped together without identifying sex- and age-disaggregation and sector classification.
RECOMMENDATIONS

Disaggregation of data by sex, age and other vulnerability factors

- Information should be disaggregated by age, sex, disability, child-headed and single-headed households, solo parents, poor individuals and elderly, to cater to specific-needs of those affected by the emergency.

- Ensure sector-specific assistance is provided, i.e. needs of persons with disabilities, adolescent mothers, children at risk, among others, are considered.

Sector-specific recommendations

- Provide psychosocial support to affected population to improve sense of self and community efficacy, adaptive coping skills, and build resilience. Child survivors, as well as their parents, require assistance in their return to normalcy through quality psychosocial support, including opportunities for safe play, recreation and non-formal education. A mechanism is required to coordinate MHPSS interventions planned by several clusters.

- Conduct regular consultations with women, girls, and groups with special needs on food security, livelihood, and shelter issues to ensure any protection concerns are addressed.

- Design and implement livelihood, emergency employment and cash-for-work programs in ways wherein women and other vulnerable groups have safe and equal access to these programs so they may meet their basic needs and may be less vulnerable to the sexual exploitation and abuse that are often pervasive in crises. Develop clear program exit strategies that link participants to follow-on economic opportunities or microfinance services so that participants and their families are not put at economic or survival risks when the program ends.

- Implement clear, consistent and transparent criteria for qualifying for shelter assistance. Prioritize those with the least resources to repair or rebuild their houses.

- Ensure evacuation centres are safe places for vulnerable groups to prevent further protection risks among children and adolescents, pregnant & lactating mothers, persons with disability, elderly and indigenous peoples groups.

- Assess the scope of family separation. Scale up advocacy around prevention and response to trafficking in persons in the affected provinces, cities, and key transit hubs. Dissemination of key child protection messages on the risks associated with family separation.

Inter-agency protection mechanisms at various governance levels

- Establish accessible and well-understood protection mechanisms within the evacuation centres including referral, feedback and complaint to ensure that GBV and Violence Against Women and Children (VAWC) victims-survivors can access life-saving, survivor-centered, and multi-sectoral services.

- Provide technical support to PNP Women and Children’s Protection Desk (WCPD), local councils for the protection of children (LCPCs) and local committees on anti-trafficking and violence against women and children (LCAT-VAWCs) to link them with community based women and children protection networks in affected areas.

- Enhance awareness of community members on the dangers of human trafficking and support a proactive community approach to mitigate those dangers.
Shelter, camp management, non-food items

Overall observations for shelter/NFIs sector for Cagayan province:

The low-income households living in houses made from light materials were the most affected by the typhoon. There is evident damage to lightweight houses, which are most predominantly timber framed houses with CGI roofing and bahay kubo (= traditional houses with bamboo/timber frame and nipa shingles/ thatch or local grass for roofing). Those built in concrete block walls and CGI roofing reported less damages, only to the roofing part to partial or total extent (CGI only, CGI and timber rafters).

Displaced HHs who reported destroyed houses or heavily damaged (uninhabitable) houses are staying with host families (neighbours) – no open air and informal settlement observed, no temporary shelters/makeshift on plots observed. The majority of those HHs who went back to their homes are already repairing roofs / salvaging roofing materials with their own means and labour. Residents are currently using salvaged materials for repair and require additional GI sheets, nails and repair tools.

The Municipal authorities have started consolidating data on totally and partially damaged houses as they receive reports from barangay captains.

Figures of totally damaged houses are sometimes very high in certain barangays, but following site visits it was apparent that the categorization into partial and totally damaged (government standard) is not always clear/ highly subjective. The figures once consolidated will need further verification and clarification of the categorization process.

In some instances, HHs reported they had received shelter repair assistance during Haima response and this time around they lost their house. Increased sensitisation and Build Back Safer messaging on reinforcement and repair of timber frames would be advised in preparation to the typhoon seasons.

Some barangays in coastal areas tied roofs with ropes in preparation to the typhoon, received assistance and sensitization, alerts etc. from the barangay captains and the municipal office / LDRRMO through barangay visits, and this proved to be effective.

Self-recovery and repairs already largely happening in all barangays, those staying behind are those who cannot afford to buy CGI.

Most vulnerable groups identified for immediate support:

1. HHs who lost their house (totally damaged houses), the majority living in lightweight structures in timber frame and CGI for roofing or traditional timber/bahay kubo houses. The areas most impacted by strong winds and/or flooding were the barangays on the coastline and by the rivers (no storm surge reported, river flooding up to the chest reported);

2. Low income households who cannot afford the repairs or purchase of materials, such as small labour or renter farmers, single headed /female headed households, the elderly, IPs (Indigenous People).

Damaged house in Abulog, Cagayan Credit:IFRC
Overall recommendations for shelter/NFIs for Cagayan Province:

Clarification and sensitization/information on difference between partial and heavy damage would be advised. House damage verification, detailed house damage assessment advised.

There is a need for host family support (CASH) due to the number of displaced HH being hosted by neighbours.

Short term/ emergency shelter assistance recommended:

1. Multi-purpose cash transfers for recovery of immediate needs.
2. Cash for host family support, cash for displaced temporarily staying with host.
3. Distribution of Shelter Repair Kit to partially + totally damaged houses. The SRK corresponds to the IFRC/shelter cluster standard Shelter kit (kit including shelter toolkit + 2 shelter grade tarps) paired with a strong component on build back safer messaging and awareness raising for households, barangay captains, municipalities, community volunteers regarding repair/reinforcement of timber frame houses and lightweight roofs.

Medium term / shelter recovery assistance recommended:

1. Shelter market assessment on local availability of high quality CGI, min. thickness 0.475 mm (28 gauge) and timber (in case of cash interventions).
2. Detailed / in depth house damage assessment and data validation of totally and partially damaged houses;
3. Local carpenters training on BBS techniques for safer construction and repair.
4. Distribution of conditional cash + CGI distribution + technical assistance component for those rebuilding their heavily damaged and destroyed houses.

Overall observations for CCCM sector for Cagayan province:

All evacuated households have moved back from the evacuation centres as of Sunday 16/09 after spending 2 nights in the ECs. The Evacuation Centres are closed/empty and people moved back to their homes, to start repairing their houses (with partial damage, still habitable) or staying with neighbours (heavily damaged or destroyed houses, uninhabitable).

Clearing roads and drains is performed pro bono by voluntary community groups, mobilised by the barangay captains – no cash for work advised by the municipal authorities.

Overall recommendations for CCCM for Cagayan Province:

While Municipalities are reporting on the number of affected HHs and individuals by barangay and consolidating figures on the number of damaged and destroyed houses, there is no data available in terms of displaced and non-displaced households.

IOM is conducting DTM (Displacement Tracking Matrix) data collection in the 3 provinces of Cagayan, Apayao and Kalinga.

Overall observations for shelter/NFIs sector for Apayao and Kalinga provinces:

The low-income households living in houses made from light materials were the most affected by the typhoon. There is evident damage to lightweight houses, which are most predominantly timber framed houses with CGI roofing and bahay kubo (= traditional houses with bamboo/timber frame and nipa shingles/ thatch or local grass for roofing). Those built in concrete block walls and CGI roofing reported less damages, only to the roofing part to partial or total extent (CGI only, CGI and timber rafters).
Displaced HHs who reported destroyed houses or heavily damaged (uninhabitable) houses are staying with host families (neighbours). The majority of those HHs who went back to their homes are already repairing roofs / salvaging roofing materials with their own means and labour. Residents are currently using salvaged materials for repair and require additional GI sheets, nails and repair tools.

Access to affected areas is difficult due to the landslides that followed the TY (Benguet municipality, casualties and missing persons reported). Some areas are still isolated due to the high water of the river. No reports have been received since the landfall of the typhoon.

Self-recovery and repairs already happening in all barangays, those staying behind are those who cannot afford to buy CGI.

Most vulnerable groups identified for immediate support:

1. HHs who lost their house (totally damaged houses), the majority living in lightweight structures in timber frame and CGI for roofing or traditional timber/bahay kubo houses.

2. Low income households who cannot afford the repairs or purchase of materials, such as small labour or renter farmers, single headed /female headed households, the elderly, IPs (Indigenous People).

Overall recommendations for shelter/NFIs for Apayao and Kalinga Province:

Clarification and sensitization/information on difference between partial and heavy damage would be advised. House damage verification, detailed house damage assessment advised.

There is a need for host family support (CASH) due to the number of displaced HH being hosted by neighbours.

Short term/ emergency shelter assistance recommended:

1. Multi-purpose cash transfers for recovery of immediate needs.

2. Cash for host family support, cash for displaced temporarily staying with host.

3. Distribution of Shelter Repair Kit to partially + totally damaged houses. The SRK corresponds to the IFRC/shelter cluster standard Shelter kit (including shelter toolkit + 2 shelter grade tarps) paired with a strong component on build back safer messaging and awareness raising for households, barangay captains, municipalities, community volunteers regarding repair/reinforcement of timber frame houses and lightweight roofs.
Medium term / shelter recovery assistance recommended:

1. Shelter market assessment on local availability of high quality CGI, min. thickness 0.475 mm (28 gauge) and timber (in case of cash interventions).

2. Detailed / in depth house damage assessment and data validation of totally and partially damaged houses;

3. Local carpenters training on BBS techniques for safer construction and repair.

4. Distribution of conditional cash + CGI distribution + technical assistance component for those rebuilding their heavily damaged and destroyed houses.

Overall observations for CCCM sector for Kalinga and Apayao province:

All evacuated households have moved back from the evacuation centres as of Sunday 16/09 after spending 2 nights in the ECs. The Evacuation Centres are closed/empty and people moved back to their homes, to start repairing their houses (with partial damage, still habitable) or staying with neighbours (heavily damaged or destroyed houses, uninhabitable).

Clearing roads and drains is performed pro bono by voluntary community groups, mobilised by the barangay captains – no cash for work advised by the municipal authorities.

Overall recommendations for CCCM for Kalinga and Apayao Province:

While Municipalities are reporting on the number of affected HHs and individuals by barangay and consolidating figures on the number of damaged and destroyed houses, there is no data available in terms of displaced and non-displaced households.

IOM is conducting DTM (Displacement Tracking Matrix) data collection in the 3 provinces of Cagayan, Apayao and Kalinga.
Water, sanitation and hygiene

Pre-crisis WASH Situation

In Cagayan province, 92% of households have access to sanitary toilets, which is higher than regional and national average. While households in Kalinga and Apayao provinces have significantly lower access to sanitary toilets than the national average – 55% and 74%, respectively.

Typical of a rural community, all three provinces are predominantly served by a Level 1 water supply, characterized as either a protected well, hand pump or a developed spring but without a distribution system. There are more households in Kalinga and Apayao provinces that have access to Level 2 water supply or communal stand post. While, Cagayan province, have more households with individual water connections (Level 3).

<table>
<thead>
<tr>
<th>Geographic Location</th>
<th>Total Households</th>
<th>Households with sanitary toilets</th>
<th>Households with access to supply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level 1</td>
</tr>
<tr>
<td>NATIONAL</td>
<td>86.00%</td>
<td>27.23%</td>
<td>14.29%</td>
</tr>
<tr>
<td>REGION 2</td>
<td>771,777</td>
<td>88.62%</td>
<td>63.08%</td>
</tr>
<tr>
<td>Cagayan</td>
<td>241,279</td>
<td>92.37%</td>
<td>62.60%</td>
</tr>
<tr>
<td>CAR</td>
<td>345,257</td>
<td>82.30%</td>
<td>19.33%</td>
</tr>
<tr>
<td>Apayao</td>
<td>25,455</td>
<td>74.91%</td>
<td>62.72%</td>
</tr>
<tr>
<td>Kalinga</td>
<td>43,265</td>
<td>55.56%</td>
<td>39.71%</td>
</tr>
</tbody>
</table>

a/ Department of Health (2017) Field Health Service Information System   b/ Data for Apayao province on water supply is from the 2015 Field Health Service Information System report, while the rest are 2017 FHSIS report

While there is a good proportion of households with access to improved water supply and sanitation facilities in these provinces, they remain vulnerable to hazards due to their geographical location (flood prone, far from falling debris), type of water and sanitation technology used (dependence of electricity and resilience of the structure); and, can be further compounded by a lack of capacity to maintain these facilities and provide a continuity of service even after a disaster.

General Assessment Findings

During the time of the assessment (Sept 17, second day after the landfall), most of the local government units (LGUs) have just started to collate information and assess their situation as basis for declaring a state of calamity and release the DRRM fund for response activities. The assessment findings below would warrant further validation as more information are received from the barangays.

Cagayan Province

Cagayan is at the north easternmost tip province in Region 2. It is a 1st income class province with a total current operating income of over PhP2.2 billion in 2017 (BLGF website).

Assessment teams have visited 22 out of 28 municipalities in Cagayan to cover areas that are in the path of the typhoon, or are along the Cagayan River, which are at risk for flooding. As of this writing, assessment reports for the municipalities of Santa Praxedes, Penablanca, Rizal, Santo Nino, Santa Teresita and Ballesteros have not been received.

At the time of assessment, most of the affected families have returned home and only a small number of evacuation centres remain open, especially for families whose houses have been destroyed. Others continue to stay with their relatives as they continue to repair their houses.

When Typhoon Ompong hit the province of Cagayan, nearly all its municipalities sustained damage to houses due to very strong winds (185 kph). Based on available data, all municipalities that have been assessed reported damage to houses -- 6,452 houses destroyed (irreparable) and 31,003 partially damaged. Unfortunately, status of household toilets among those that reported damage in their houses have not been assessed yet. There is a very high chance that toilets, especially those located outside their houses, could have been affected with roof/walls torn or destroyed.
There are several barangays in the municipalities of Buguey, Lal-lo, Lasam, Alcala, and Abulog, that are near the Cagayan River which were flooded and eventually submerged nearby hand pumps, open dug wells and toilet facilities. Although, the flood has started to subside now that the weather has improved. Municipal Health Offices in Gattaran, Alcala, Lal-lo and Lasam have expressed need for household water treatment products as they currently have nothing to distribute to households whose drinking water sources are affected by flooding.

Cut powerlines also affected existing level 3 water supply systems that are hugely dependent on electricity (such as the water district in Gattaran), and have no access to generator sets. It is not known how long it will take to restore the power. However, alternative sources of drinking water abound in these areas – in poblacion barangays or town centres, there are water refilling stations that remain operational (have their own gensets), and local suppliers of bottled water. Price ranges from 20-30 pesos per 20-L container. Also, a huge number of handpumps remain operational. However, there are anecdotal reports of shallow wells producing turbid water, such as in Gattaran.

Local governments of Pamplona, Claveria, Lasam and Abulog have reportedly distributed hygiene kits and water kits at the height of displacement, but not all families in evacuation centres have been covered or some of the kits contain limited number hygiene products. Only Gattaran have reported plans to distribute non-food items to home-based affected families after the typhoon.

Jerry cans are often used as drinking water storage. Hygiene products (toothbrush, toothpaste, soap, sanitary pads, etc.) are readily available at the local market. Household water treatment products such as hyposol or aqua tabs are not often readily available at the local market. However, even Rural Health Units apparently do not have any stock in place to distribute to flood affected households. Ceramic filters are likely to be available in the two of the largest shopping malls (Robinsons Place, SM Mall) located in the provincial capitol, Tuguegarao City.

In the local market of Alacapan, availability of roofing materials (which could also be used to repair toilet superstructure) have reportedly been insufficient to meet the demand. It is not known whether it remains the same for the rest of the municipalities, but markets are functioning and the main road connecting all municipalities are accessible. One isolated barangay remains in Gattaran -- Barangay Bolos Point (facing the Pacific Ocean), which can be reached by land travel through Santa Ana municipality and a 6-hour boat ride to the barangay.

No information has been received from the local officials and residents in the area. Gattaran officials expressed concern but their hands are tied trying to respond to the needs of the other barangays.

The province of Cagayan is home to several indigenous groups – Ibanag, Itawis, Malaweg, Itawit, Gaddang and Agta, but majority of the residents remains to be of Ilocano descent. In the areas that have been assessed, Agta communities are perceived to have poorer access to water and sanitation facilities affecting their hygiene practices. Their houses are made of lighter materials and are often located in remote areas of their barangay, such as in Tanglagan, Gattaran.

In terms of external assistance, there is an offer of support from Red Cross to tanker drinking water in the two poblacion barangays served by Gattaran Water District, which is currently not operational. Oxfam has reportedly distributed hygiene kits in the municipality of Rizal.
Kalinga Province

Kalinga is a landlocked province in the Cordillera Administrative Region, with a predominantly IP community. It is a 3rd class province with a total current operating income of over PhP1 billion in 2017 (BLGF website).

Assessment teams have planned to visit the two municipalities of Rizal and Pinukpuk out of seven municipalities in Kalinga. But only Pinukpuk was reached by the team, as the road leading to Rizal was blocked and they had to find an alternate route, as of this writing(?).

When Typhoon Ompong hit the province of Kalinga, pre-emptive evacuation of residents was enforced. As many as 1,455 families / 6,231 individuals from towns of Balbalan, Lubuagan, Pasil, Pinukpuk, Rizal and Tabuk City have stayed in designated ECs and informal ECs (NDRRMC SitRep No. 13). During this time, nearly all LGUs have distributed hygiene kits, among other things, to families staying in ECs.

To date, there are no more families in evacuation centres despite reported damaged houses. Based on available data from the province, an estimated 74 houses have been destroyed (irreparable) and 1,594 are partially damaged (torn roof/ walls). Of this number, 24 totally damaged houses and 909 partially damaged houses are from Pinukpuk. Yet again, there are no reports on the status of household toilets among those that reported damage in their houses.

With an already very low toilet coverage pre-typhoon, there is a chance that the number of households without toilets would increase. Shelter assessments should include checking on needed repairs for household toilets, as well.

The assessment team reported that six barangays in Pinukpuk can only be reached on foot, at this time, and any material distribution support would be a challenge. Barter system is also being practiced in some of the barangays in Pinukpuk.

The province has not received any further reports on damage to water facilities. But it is possible that information has just not reached them yet, such as the case in Pinukpuk. A landslide has cut off a portion of the water distribution pipes. There is no data if the actual water source for the system sustained any damages, and the number of service connections affected. This can be further validated as actual site visit was not made.

Apayao Province

Apayao is also a landlocked province within the Cordillera Administrative Region located at the northernmost tip of Luzon. It is a 4th class province with a total current operating income of Php890 million in 2017 (BLGF website).

Assessment teams have visited 6 out of 7 municipalities in Apayao to cover areas that are in the path of the typhoon, and these are: Conner, Kabugao, Luna, Santa Marcela, Flora and Pudtol. However, reports from Flora and Pudtol are still unavailable.

Like in other provinces, most of the affected families have returned home. Very few houses have been damaged in the four municipalities that have been assessed.

In Kabugao, access to the municipality is still not clear of debris, but passable. About 13 of 22 barangays are only accessible by boat through the river, due to the typhoon. In the municipality of Luna, Barangay Calayucay is a geographically isolated area with over a hundred residents. Since the typhoon’s landfall, no reports have been received by the local government.

A water system in Kabugao is reportedly destroyed which effectively cuts off water supply to seven barangays. There could be alternate water sources in this area, but households need to ensure the quality of water that they are drinking no matter where they get it from. The Municipal Health Office in Kabugao has in fact provided hyposol to the affected households, but these are due to expire within the month. Additional hyposol would be needed should the repair of the water system take longer than expected.
Recommendations

In the first 1-3 months after the disaster, interventions should focus on the following objectives:

- Enable families to practice good hygiene through provision of necessary hygiene materials
- Provide interim access to safe water supply and sanitation facilities in the community (including schools, child development centres, health facilities)
- Restore/repair damaged water and sanitation facilities

The range of support will change as the situation develops, and as more validated information are received from the barangays. Whenever possible, support measures to increase resilience of the communities to access water and sanitation facilities. Work on strengthening governance structures on WASH to ensure local capacity is built and institutionalized through government policies, plans and budgets.

Below is a summary of issues from across all three provinces, and recommended actions to take.

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>RECOMMENDATION</th>
<th>POSSIBLE SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitation –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excreta disposal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential damage to toilets in households, day care centres, schools and health centres</td>
<td>- Assess damage to toilet facilities</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Repair or construct new toilets, depending on nature of damage</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Provide toilet materials depending on extent of damage to the toilet</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Promote importance of using a toilet (or other’s toilet) in the interim while repair/construction is ongoing</td>
<td></td>
</tr>
<tr>
<td>Toilets that are still flooded</td>
<td>-</td>
<td>Where there are a cluster of households using the same toilet that is currently flooded, look for possible site to build semi-temporary toilet</td>
</tr>
<tr>
<td>Drinking water supply</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Water districts without access to power supply</td>
<td>Support fuel for gensets if needed, to limit any increase in operating expenses</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Promote alternative water sources available within the community</td>
<td></td>
</tr>
<tr>
<td>Piped water systems that have been cut off</td>
<td>Technical assessment for further damage sustained by the water system</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Provide materials (water pipes and other construction materials), if needed</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>Promote alternative water sources available within the community</td>
<td></td>
</tr>
<tr>
<td>Turbid water from shallow wells</td>
<td>Technical assessment of shallow wells to check for any further damage to the structure. Water output could clear up after a number of days.</td>
<td></td>
</tr>
</tbody>
</table>

CAGAYAN: In all 22 municipalities that have been assessed

Cagayan: Lal-lo, Lasam, Buguey (Paddaya Este & West), Acalas, Abuiyong

Cagayan: Gattaran (Water District), Lassam

Apayao: Kabugao,
Kalintang:

Cagayan:
<table>
<thead>
<tr>
<th>ISSUE</th>
<th>RECOMMENDATION</th>
<th>POSSIBLE SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>If households have no alternate source of drinking water, promote messages on sedimentation-boiling; or provide flocculant-disinfectants to treat turbid water coupled with proper guidance on its use</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>Promote alternative water sources available within the community</td>
<td>Cagayan: Gattaran</td>
</tr>
<tr>
<td>-</td>
<td>Provide chlorine tablets or solutions to households</td>
<td>Apayao:</td>
</tr>
<tr>
<td>Kalinga:</td>
<td>Chlordane treatment to handpumps once flood was subsided</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>Where possible, protect / elevate the handpumps to allow access even if flooded</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>Promote alternative water sources available within the community</td>
<td>Cagayan: Lal-lo, Lasam, Buguey (Paddaya Este &amp; West), Alcala, Abuyog</td>
</tr>
<tr>
<td>-</td>
<td>Support communities with hygiene promotion messages on keeping their water sources safe to drink, handwashing and use of toilets.</td>
<td>-</td>
</tr>
</tbody>
</table>

**Identified Priority Actions and Recommendations for WASH Cluster**

- Identify availability of WASH stockpile from the respective provinces and regional DOH offices; share / link to LGUs in need of the assistance; and fast track deployment or release of the materials or resources
- Mobilise support from NGOs who have been operating in the provinces in the implementation of WASH response
  - Support the LGUs to coordinate external assistance on WASH – from assessment, planning and implementation of response interventions
  - Set-up monitoring mechanism and coordination platform at the province level
Early recovery

Typhoon Ompong made landfall in the northeast municipality of Baggao, Cagayan at 1.40AM on 15 September 2018. With a speed of 20 kph and wind gustiness of 255 kph, it wrought havoc to all the areas in its path. Destruction was visible as dawn came with roofing materials from both light and sturdy houses and establishments are scattered along the roads, corn and rice farms and in standing trees. Steel/metal, cement and wood electrical posts did not escape the ferocity of Typhoon Ompong. Up to now, there is no power in the City of Tuguegarao up to Aparri in the north, all the way westward towards Santa Praxedes in western Cagayan. Pagudpud, the most northern municipality of Ilocos Norte is still without power.

On the ground, soon-to-be harvested corn lay waste on the wet ground. This is the view one sees from the farms in Tuguegarao going up to Aparri up to Santa Praxedes. Farmers say that before Ompong, they were expecting a bumper harvest due to the very good climatic conditions in the north. This is also true for the affected rice lands, already in maturing stage.

There was extensive physical damages to public school buildings and other facilities. Whole roofing section of 4-classroom buildings were blown away, destroying/damaging books, tables and chairs and other learning materials. Isidro T Cabaddu, local chief executive of the municipality of Camalaniugan said that the municipality will have a difficult time repairing damaged school facilities as the LGU has only Php 1M allocation. He said that efforts should be undertaken, including outside resources, for children to immediately return to their studies.

A large number of government/public facilities at the barangay level have also been damaged. These are the barangay halls, multi-purpose centres, daycare buildings and barangay health stations.

For Cagayan Valley-affected LGUs, it is proposed to immediately conduct [conditional] cash transfer to farming households to clean/clear up damaged farm lands. Cash transfer will enable farming households the necessary cash to purchase shelter/home materials to repair their homes. Should the government push through with its Emergency Shelter Assistance [ESA], the cash transfer shall augment government’s assistance. It can also be utilized by the farming households to purchase food and other essential items, medicines, clothes and expenses for basic education.

Another is to provide production inputs in the form seeds, farm implements among others to enable rice and corn farmers to plant again. Cash is also needed for land preparation and farm inputs [fertilizers, pest control].

Repairing government/public facilities such as schools and barangay halls shall be prioritized integrating Build-Back-Better.