

Philippines:

Typhoon Hagupit Category: 5



Need for international assistance	Not required	Low	Moderate	Significant	Urgent
			X		
Expected impact	Insignificant	Minor	Moderate	Significant	Major
				X	

Crisis Overview

Category 5 **Typhoon Hagupit**, locally known as Ruby, made landfall on the evening of 6 December over the town of Dolores in Eastern Samar province (Eastern Philippines). **This may be the first of at least six landfalls the typhoon may make between 6 and 8 December.** Hagupit's 600km diameter means that about 50 million people are living in vulnerable areas. Hagupit is moving very slowly, which has the potential to **increase the overall impact of the storm**, as each community in the path of the typhoon will be subject to high winds and torrential rainfall for much longer. **At least 49 of 81 provinces are potentially at high risk.** As of 7 December, only Albay province in Bicol region has been declared in a state of calamity.

Key Findings

Anticipated scope and scale	Typhoon Hagupit may have a high humanitarian impact, given the maximum sustained wind speed and the likely affected population and their vulnerability.
Priorities for humanitarian intervention	Shelter and NFIs, WASH, food security, access, communication.
Possible humanitarian constraints	Extensive geographic area and hard-to-access areas; port congestion may delay supply chains (government is prioritising transport channels for the delivery of assistance, especially via Cebu); closure of Guiuan airport and overstretched commercial shipping from Manila and Cebu to Tacloban; power shortages and damage challenging consistent access to electricity and fuel.

Expected Crisis Impact

Computer models by the two agencies tracking the typhoon closely – the US military's Joint Typhoon Warning Center in Hawaii and the Philippine weather agency – predicted different directions: the US agency said Hagupit may veer northwest after coming inland and sweep past the southern edge of Manila. The Philippine agency, PAGASA, projected a more southern path (International Media 05/12/2014). **Hagupit is currently packing winds of up to 215 km/h, and predicted to bring storm surge of up to 4m, causing floods and landslides due to rainfall.** Authorities have identified 49 provinces as potentially affected, including several provinces in the Calabarzon. Mimaropa, Bicol, and Eastern Visayas are within 100km of the forecast path (NOAH 06/12/2014). After making initial landfall in Dolores, Eastern Samar, Hagupit is expected to make landfall in **Masbate, Sibuyan Island, Romblon, Tablas Island and Oriental Mindoro** (ASEAN 07/12/2014). Storm surge of 4–5m may occur in Samar, Leyte, Masbate, Biliran, Cebu, Quezon and Camarines Sur (NOAH 06/12/2014). 250,000 people are living in coastal areas below 5m (GDCAS 07/12/2014). Reports on 6 December indicate communication and power outages (Humanity Road 06/12/2014). As of 7 December, Hagupit's impact is expected to be lower, although international humanitarian actors have stressed caution; pockets of particularly affected populations may be in areas that are initially difficult to evaluate, and attention for these populations is key for proper needs assessment and response.

Vulnerable Groups Expected to be Affected

In areas still recovering from typhoon Haiyan, households may be less able to cope with the potential impact of typhoon Hagupit (OXFAM 05/12/2014).

Region	Number	Total population	Projected no. affected	Percentage of pop. affected
Metropolitan Manila	NCR	11,855,975	697,443	5.8%
Central Luzon	Region III	10,137,737	712,255	7%
Calabarzon	Region IVA	12,609,803	912,988	7.2%
Mimaropa	Region IVB	2,744,671	513,759	18.7%
Bicol	Region V	5,420,411	775,014	14.3%
Western Visayas	Region VI	7,126,576	957,128	13.4%
Central Visayas	Region VII	6,821,168	781,572	11.5%
Eastern Visayas	Region 8	4,089,158	719,273	17.6%

Source: DSWD/DROMIC, PAS-ASA, GADM, OCHA

Early Warning and Disaster Preparedness

Based on previous experiences in the area, timely evacuation, early warning systems, preparedness, pre-positioning emergency response teams and supplies have proved that disastrous consequences can be avoided.

The Government began preparedness measures for Typhoon Hagupit on 2 December by initiating pre-disaster risk assessments in areas that may be affected by the typhoon. Emergency response operation centres were activated and national and local authorities began pre-positioning relief supplies and personnel for deployment. The Government conducted assessments of evacuation centres, supported by humanitarian partners in areas still recovering from Typhoon Haiyan (Western, Central and Eastern Visayas). In Eastern Visayas, most evacuation centres are still not repaired, particularly in Samar and Eastern Samar provinces. Authorities are considering the possibility of establishing open evacuation centres if required; additional tents will be needed. For the first time in the Philippines, a Humanitarian Civil-Military Coordination Centre will be co-located in the NDRRMC operations centre to support the response clusters operations including the use of military assets to delivery relief supplies.

On 3 December, the Philippine Department of the Interior and Local Government (DILG) ordered local leaders in the Visayas and Mindanao to evacuate residents of coastal communities in preparation for Hagupit. In the eastern region of Bicol alone, which sits in Hagupit's direct path, the Government was aiming to move 2.5 million into evacuation centres (AFP 05/12/2014). Authorities in Manila, about 800km to the west of where Hagupit was expected to initially make landfall, said they were preparing for heavy flooding on Monday 8 December (AFP 05/12/2014).

Pre-emptive evacuation orders were also issued particularly in coastal areas and communities affected by the Mayon Volcano in Bicol, taking into account that heavy rains may trigger volcanic mudflows. The Department of Social Welfare and Development (DSWD) reported that 120 evacuation centres were open, hosting around 30,500 people from Eastern Visayas and Caraga, as of 5 December. Over 500,000 people along the typhoon's projected path had sought refuge in evacuation centres by noon. As of 7 December, that figure had increased to 716,639 people (ASEAN 07/12/2014).

Mandatory and pre-emptive evacuations were enforced in coastal, low-lying areas and near riverbanks. Government hospitals, rural health units and birthing centres

will be on call and open 24 hours (Government 06/12/2014). In Tacloban, many have taken shelter in the sports stadium. Government officials reported that about 19,000 people from coastal villages are in 26 evacuation centres; the number was expected to double as the authorities began forcing people to evacuate (BBC 06/12/2014).

Aggravating Factors

Proximity of Critical Infrastructure

- Nearby and affected airports: Fernando AB, Lubang, Marinduque, Legaspi, Catarman, Masbate, Calbayog, Pinamalayan, Borongan, Dolores, Catbalogan, Sorsogon (GDACS 06/12/2013).
- Nearby major ports: Batangas, Borongan, Calapan/Batangas, Catbalogan, Gasan, Legazpi, Masbate, Tbanga, Coal Harbor, Bulan, Magallanes Bay, Casigura, Sorsogon, Donsol, Catuanan, General Luna, Port Balanacan, Santa Cruz, Pagapas, Tilic and affected (GDACS 06/12/2014).

Thousands of passengers have been stranded after more than 150 flights were cancelled in central and southern Philippines over 5–6 December, and sea services have been suspended (BBC 06/12/2014).

Other Factors of Vulnerability

- **Tropical Depression Queenie:** Queenie made landfall on 26 November, (Government, 26/11/2014). As of 30 November, 47,000 people were affected in Southern Tagalog, Western Visayas, Central Visayas, Northern Mindanao, Davao and Caraga; 1,400 are in evacuation centres. Almost 3,000 houses have been completely damaged and 2,600 partially damaged (OCHA, 01/12/2014).
- **Mayon Volcano:** A Level 3 Alert was declared on 15 September over a possible eruption of the Mayon Volcano, as well as an extended high-risk zone of over a 6–8km radius, covering Legazpi, Ligao, and Tabaco cities of Albay province (OCHA, 01/10/2014). 11,700 people out of 60,545 affected remained in 12 evacuation centres as of 30 November (Government, 18/11/2014; OCHA, 30/11/2014). There are concerns over camp management, coordination, WASH, and education (OCHA, 29/09/2014). As of 1 December, the volcano's condition remains unstable (Government, 01/12/2014). Humanitarian actors have warned of possible 'lahar' (volcanic mudflow) due to continued rainfall caused by Hagupit (IFRC 06/12/2014).
- **Heavy rains in October:** 19,640 people were affected following heavy rains in Midsayap, Cotabato province, on 28 October (Government, 11/11/2014). Flooding in Capiz province on 19–20 October affected 66 villages and submerged

rice fields (Government, 20/10/2014). As of 18 October, rains since 7 October had affected 83,895 people in Zamboanga city and in Maguindanao and Lanao del Sur provinces, ARMM. 940 people were in nine evacuation centres. Another 41,400 were affected in Sultan Kudarat municipality in Soccsksargen (OCHA, 13/10/2014).

- **Typhoon Rammasun:** Over 1.6 million people were affected (97 dead, 460 injured and five missing) after Typhoon Rammasun hit the Philippines on 15–16 July. Nearly 120,000 houses were destroyed or damaged, along with crops and fisheries (OCHA, 22/07/2014).
- **Typhoon Haiyan:** Ten months after typhoon Haiyan struck, more than two million people were lacking adequate shelter or housing (FAO, 09/10/2014). Some 456,000 people (95,000 families) live in unsafe or inadequate emergency or makeshift shelters, sometimes in flood-prone areas (Government, 31/08/2014), and solutions are needed for 20,000 people living in 56 displacement sites and requiring shelter, WASH, and protection support (UNHCR, 07/11/2014). With 89% of affected households still reporting varying levels of typhoon-related damage, longer-term assistance such as supporting self-recovery, assisting households in no-build zones, helping with safer reconstruction, and enabling access to healthcare, schools, public transportation, and livelihood opportunities is required (UNHCR, 30/09/2014). Resettlement has begun for families in Tacloban still living in tents. Nearly 1,500 people have moved to relocation sites and 550 more are scheduled to move by end November. A further 200 families living in tents in Tanauan municipality are also being relocated (OCHA, 31/10/2014).

Political Stability and Security

- Splinter groups on Mindanao and smaller neighbouring islands continue their violent opposition to the Government. Increased violence between the Government and opposition groups has been reported in November as a consequence of government efforts to capture outlaws.
- As of 30 November, 22,400 people remain displaced in evacuation centres and transitional sites, with an additional 15,200 who are staying with relatives, one year after fighting between an MNLF faction and the army in Zamboanga (OCHA, 30/11/2014). Disease outbreaks in the camps have left some 160 evacuees dead; sanitary conditions are a major concern (OCHA, 09/09/2014).
- By late August more than 5,000 people were displaced in Sultan Sa Baronguis Mangui in Maguindanao, as a result of violent confrontations between two MILF factions (Government, 01/09/2014). As of 14 November, security operations have displaced 1,720 people in Talipao municipality in Sulu and Sumisip municipality in Basilan. Humanitarian actors have noted difficulties in reporting as fighting continues to intensify, and the number of displaced is expected to rise (OCHA, OCD, 30/11/2014).

Key Characteristics of Host Population and Area

Demographic profile: 92.3 million. Population density is 308/km² (2010). Level of urbanisation in 2010 was 45%. Half of the household population in 2010 was younger than 23.4 years (NSO 2012). Ethnic groups: Tagalog 28%, Cebuano 13%, Ilocano 9%, Bisaya/Binisaya 8%, Hiligaynon Ilonggo 8%, Bikol 6%, Waray 4%, other 25% (CIA 2000).

WASH: 26% of the population (25 million people) lack access to improved sanitation, including 8% still practising open defecation (UNICEF, 01/05/2014).

Health: Under-five mortality rate: 25 per 100,000 live births (WHO 2010). Life expectancy at birth: 67.61 years for males, 73.14 for females. Maternal mortality ratio: 99 per 100,000 live births. By October, 117 cases of measles had been confirmed, mostly in Benguet, Baguio and Kalinga provinces, compared to 60 during the same period last year, with a reported death in Baguio city in Benguet province (Government, 20/10/2014).

Food security: High prices of main staple rice lead to food security concerns. A 4.7% increase on the September 2013 Consumer Price Index was seen in September (FAO, 10/10/14).

Nutrition levels: underweight 22%, stunting 32%, wasting 7% (UNICEF 2007-2011).

Literacy levels: Simple literacy over 10 years: 95.6% (NSCB 2008).

Response Capacity

The Philippine authorities and humanitarian partners have activated response plans and are supporting pre-emptive evacuation of at-risk populations in areas along Hagupit's most dangerous bandwidth. Emergency responders and supplies have been readied to ensure that assistance is delivered promptly (IFRC 06/12/2014).

National and International Response Capacity

The Philippines Government, alongside the National Disaster Risk Reduction and Management Council (NDRRMC) are coordinating the response under eight response clusters, which include: Camp Coordination and Camp Management, Protection and Emergency Shelter; Food and Non-Food Items; Logistics; Emergency Telecommunications; Search, Rescue and Retrieval; Health; Management of the Dead and Missing; and Education. The "response cluster" is led by a government department supported by Humanitarian Country Team member agencies that co-lead key sectors within a response cluster (OCHA 05/12/2014). Philippine authorities are

working closely with a number of international actors, including but not limited to: OCHA, IOM, UNDP, ILO, WFO, FAO, UNHCR, WHO, IFRC.

A “One Stop Shop” has been put in place at the Cebu International Airport in order to expedite customs procedures for humanitarian organisations bringing relief goods into the country. Relief packages will be assembled in Cities of Davao, Cagayan de Oro, Butuan and Koronadal in Mindanao (OCHA 05/12/2014).

While national legislation is in place, the absence of fully functional disaster management structures and plans at the local level reflects a broader weakness in the capacity of local government units to translate laws into a more resilient reality (Oxfam, UNISDR 04/12/2014).

Lessons Learned

Typhoon Haiyan

On 8 November 2013, Typhoon Yolanda (Haiyan) – one of the strongest typhoons ever recorded – made landfall in the coastal areas of Eastern Visayas (Samar, Eastern Samar, and Leyte). Coastal livelihoods, infrastructure, and services were also affected in areas along the typhoon path in the Central (northern Cebu and Panay) and Western Visayas (Coron), although less severely.

An estimated 14.1 million people were affected, 6,183 killed and 4.1 million displaced, including 102,000 to evacuation centers. More than 1.1 million houses were damaged and about half of them completely destroyed.

Shelter: With 515,179 houses destroyed and 551,546 partially damaged (55% of houses), people needed **support to repair or reconstruct their houses, build makeshift shelters and clear debris and rubble**. Temporary housing also needed to be made available for families forced to relocate. Public buildings were severely affected, being either destroyed or used as evacuation centres and relief distribution points (MIRA I, 11/2013).

Health and WASH: Communities were left without sufficient access to health, water and sanitation. 46–62% of health facilities were severely damaged and unusable in affected municipalities, as well as many of the main water works and toilet facilities. **The deployment of local and foreign medical teams to affected areas was critical** (MIRA I, 11/2013). Major health concerns during the emergency included **storm-related injuries, waterborne illnesses, reproductive health issues, respiratory infections linked to overcrowding, psychological conditions, and risks of**

malaria, polio, and dengue fever propagation. Priorities were to re-establish essential health services and uninterrupted access to safe water and medical supplies, provide trauma care and continuity of treatment for chronic diseases, and establish early detection of outbreaks (WHO, 16/11/2014). Sanitation and hygiene promotion have been identified as the most critical issues in the relief and recovery operation, due partly to general lack of sanitary conditions in the evacuation centres and transitional areas (REACH, 01/2014).

Food and nutrition: Food security was a major concern for the majority of affected communities. Pre-existing acute malnutrition rates were higher than the national average in the affected areas and expected to worsen with precipitating factors such as a possible rise in illnesses and limited access to safe water. **Support to livelihoods and agricultural production, by re-establishing markets, re-planting fields, and re-enabling access to food sources, were key priorities** (MIRA I, 11/2013).

Strong cooperation and common approaches across sectors are necessary to ensure more effective cash-based programming. Food security can be supported by a range of cash modalities but potential negative impacts have to be monitored.

Scaling up community services for infant and young child feeding has to be combined with sustained efforts in the food security, health and WASH sectors to prevent a deterioration of the nutritional situation of vulnerable groups particularly; health sector partners should work together with the Department of Health so that a single effective assessment can be carried out immediately after the emergency.

Livelihoods: As farming and fishing were major sources of income in affected areas, extensive destruction to respective infrastructures severely impacted people's livelihoods (MIRA II, 12/2013). Rice and standing crops directly within the path of the typhoon were completely destroyed, and the damage to coconut trees with a long recovery time was of particular concern. Some 30,000 fishing boats were destroyed and 1 million metric tons of crops lost, while over a third of families lost their livestock, mostly affecting small agricultural communities (CARE, 11/2014). Markets were also severely affected: significant price increases were driven by supply-chain issues, including transportation/shipping delays due to congestion, distributors' limited delivery capacity and household demand shifts. **The most urgent needs were to replant the damaged fields and repair fishing assets, but also to resume employment and livelihoods, clear debris and rehabilitate public infrastructure, including local markets in urban areas** (MIRA I, 11/2013).

Immediate, short-term sources of income through cash for work programmes help restore the economy and provide much-needed income for vulnerable families, especially in partnership with government support; social protection coverage and networks need further strengthening in the rural areas; temporary housing should be sited as close as possible to sources of livelihoods to prevent dislocation; those who depend on family-based livelihoods, wage labour and the informal sector are particularly vulnerable to disasters.

Protection: The main protection considerations as a result of the typhoon included **loss of legal documents** (which could lead to significant land and property rights issues), **lack of adequate communication between family members, and lack of adequate physical protection**. In evacuation centres, overcrowding and lack of lighting heightened the likelihood of sexual and gender-based violence (MIRA I, 11/2013). The needs of older people and people with disabilities need to be taken into account.

Education: 90% of schools were damaged in the most highly affected areas. **A quick resumption of schooling was important** to ensure that students were able to catch up (MIRA I, 11/2013). To avoid disruption, humanitarian response efforts should focus on establishing temporary learning spaces, rehabilitate partially damaged structures, evacuate IDPs by the start of the school term, and ensure proper WASH, food and psychological support.

Access to mass communication and media was highly affected by the Typhoon. **Radio communication proved the best way to ensure communication** with affected people in the early response (MIRA I, 11/2013).

Data: The large number of agencies and the level of detail of reporting have presented a challenge in terms of volumes of data, both for the agencies reporting this information, and for the cluster in terms of collecting, consolidating and cleaning this information. Migration of reporting approaches from emergency to recovery should be minimise reporting gaps. The greatest challenge has been the ability to report in terms of shelter outcomes for beneficiary households. One of the gaps from the cluster was sex and age disaggregated data. This is strongly advocated in order to understand the extent to which a response has addressed the differing needs of the population (Shelter Cluster).

Vulnerable groups affected: People with special needs and vulnerabilities included unaccompanied teenagers and children, the elderly, people with disabilities, single-headed households with children, and people below the poverty line, who may not

have the capacity to self-recover at the same rate as others. Of the 14.1 million people affected, it is estimated that 4.8m were under the poverty threshold. These populations are particularly at risk of resorting to negative coping strategies, such as sale of assets, reduced food consumption, survival sex, family separation, or begging. Populations in remote, isolated, or inaccessible areas were particularly vulnerable and had to be prioritised in the response (MIRA I, 11/2013).

Displacement: Meeting the needs of the displaced population, in particular those who are unable to return to their homes from evacuation centres, was a priority. People living in evacuation centres were predominantly from the poorest segments of the population, without any alternative to evacuation centres (MIRA I, 11/2013).

Humanitarian and operational constraints: Roads, bridges, buildings, communication facilities, power, water supply, and other infrastructure and services in the path of the typhoon were all partially or fully destroyed, cutting off many communities from assistance and humanitarian aid in the days that followed. International military support enabled staff, food and other humanitarian assistance, including emergency telecommunications and logistics equipment, to reach Tacloban and other hard-to-access areas like Guiuan in the early weeks. Given the expanding UN footprint, there remains an emphasis on awareness, communications and tracking of the security situation (MIRA I, 11/2013).

Disaster preparedness has yet to be improved: many communities did not understand the importance of evacuation and the devastating impact a tsunami-like wave could have; many evacuation centres – many of which were schools – were not built to withstand the strength of this typhoon; and many communities did not feel safe and supported (Plan, 04/11/2014).

Social protection systems: having protection systems in place before disaster strikes is critical to addressing livelihood losses; they can serve as a platform to quickly deliver assistance to the affected and vulnerable (World Bank, 07/11/2014).

Capacity-building at the local level, including with local authorities, civil society organisations and communities themselves, is a necessary foundation for a more operational and inclusive disaster management system in the Philippines. In the 2014 Post-Haiyan Tacloban Declaration, DRRM stakeholders called for local governments to be identified as first responders and builders of local resilience in times of disaster; improved governance within all DRRM stakeholders; the protection and empowerment of vulnerable groups; the possible contribution of the military in early response in case of big disasters; and recognition of the role of the media in

raising awareness, distributing early warning and disseminating best practices on DRRM (UNISDR).

The disaster management law is currently under review. The NDRRMC and the ministries involved are working on developing national response plans for particular hazard scenarios and a pre-disaster risk and damage assessment working group that models the principal impacts of specific hazards to enable pre-positioning of relief supplies. It is also working on an IDP law that would protect people displaced by natural disasters and will likely strengthen focus on a rights-based approach to displacement (Brookings, 05/11/2014).

Source: Pacific Disaster Center

