

OVERVIEW

Typhoon Rai (known locally as Odette) hit the Philippines on 16 December 2021, with gusts of up to 270km/h and maximum sustained winds of 195km/h near the centre. Rai affected over 9.4 million people in more than 8,000 barangays in the Mimaropa, Bicol, Eastern Visayas, Central Visayas, Western Visayas, western Mindanao, Northern Mindanao, Caraga, and Davao regions (OCHA accessed 23/01/2022; ECOWEB 24/12/2021; PAGASA accessed 23/01/2022). The typhoon made nine landfalls until 19 December. On 21 December, the Government declared a state of calamity in the Central Visayas and Western Visayas regions (NDRRMC 21/01/2022). Nearly 65% of the typhoon-affected population and over 70% of the damaged houses are in these two regions – the most affected by the typhoon (OCHA accessed 23/01/2022).

The Philippines is a typhoon-prone country hit by an average of 20 typhoons yearly. The country is vulnerable to the damage caused by these typhoons, particularly because 60% of the population lives in coastal areas. The severity and frequency of typhoons are also increasing because of climate change (Skoufias 19/02/2020; FutureLearn 17/11/2021; Mongabay 16/10/2019).

The following sections provide an overview of the impact of the typhoon on Regions 6 (Western Visayas) and 7 (Central Visayas) by province.

REGION 6 (WESTERN VISAYAS)

In the early morning of 17 December, the eye of typhoon Rai passed over Negros Occidental province in Western Visayas region with a sustained wind speed of 175km/h gusting at 240km/h. It left the region 12 hours later (NDRRMC 21/01/2022; Rappler 17/12/2021). The typhoon caused torrential rains, strong winds, floods, and storm surges (OCHA 24/12/2021). The region experienced disruptions to communication lines beginning 16 December. As at 26 December, local authorities were still working on restoring connectivity. Local companies have also been unable to restore communication lines in nearly half of the region. As at 21 January, communication issues persisted for nearly 50% of affected lines (NDRRMC 21/01/2022). The typhoon damaged at least one health centre and 166 public schools (CI 24/12/2021; One News 24/12/2021; Paney News 30/12/2021) and caused significant damage to agriculture. Floodwater and storm surges damaged rice, coconut, and corn farms; fisheries; agricultural machines and equipment; and livestock and poultry, with damages amounting to over USD 100 million (NDRRMC 21/01/2022). Repercussions on the livelihoods of people in the affected areas will likely last several months given that over 87% of people in Western Visayas region work in the agricultural sector (PSA 11/2020).

The Western Visayas region is home to two indigenous groups of over 94,000 people: the Ati group concentrated in Aklan, Antique, Capiz, Iloilo, and Negros Occidental provinces and the Suludnon group, also known as Panay-Bukidnon, who live in Antique, Capiz, and Iloilo provinces. The indigenous population is one of the most vulnerable groups affected by the typhoon given high rates of poverty and their reliance on agriculture. They are also likely to be excluded from receiving assistance because of discrimination (NCCA accessed 16/01/2022; ILO accessed 16/01/2022; ECOWEB 24/12/2021; Domingo and Manejar 01/07/2020).

Negros Occidental

Around 1.1 million people out of 2.6 million (over 42% of the provincial population) were affected by the typhoon in Negros Occidental. Nearly 61,000 houses were totally damaged and 124,000 partially damaged. The heavy rains caused the Hilabangan and Sipalay Rivers to overflow and flood Kabankalan and Sipalay cities in the province. Floodwater subsided by 24 December (OCHA accessed 19/01/2022; CI 24/12/2021; ECOWEB 24/12/2021; PSA 13/07/2021). As at 21 January, all roads in the province were passable by all types of vehicles; local authorities were still clearing debris (NDRRMC 21/01/2022). The province experienced power outages starting 16 December. Local electric companies had restored power in some cities as at 28 December, but as at 20 January, power had not been fully restored (The Visayan Daily Star 20/01/2022). Local government units, provincial government units, the Department of Social Welfare and Development (DSWD), and NGOs are present in the province and assisting the affected population. Delivered assistance includes family food packs, financial support, safe drinking water, NFIs, and hygiene kits (NDRRMC 08/01/2022). The loss of crops, the damage to small businesses, and the increase in food prices in local markets are affecting people's livelihoods, which are likely to recover slowly (ADRA 03/01/2022).

Needs

Shelter: as at 21 January, 300 of the initial over 679,000 IDPs remained displaced. These people, save for at least 60, take shelter in nine evacuation centres (DSWD 21/01/2022; OCHA accessed 19/01/2022). The prices of construction materials are increasing, affecting people's ability to repair their homes. This situation is likely to prolong displacement (ADRA 03/01/2022).

WASH: the typhoon and subsequent flooding have affected water pumping. People have resorted to alternative water sources that are likely contaminated because of flooding, increasing health risks (ADRA 03/01/2022). As at 9 January, the local water company had not fully restored water pumping in the province, leaving people still in need of drinking water (The Manila Times 09/01/2022).

Health: health facilities sustained damage, likely reducing people's access to health services (Panay News 30/12/2021). Crowded evacuation centres and the inability to practice good hygiene have also contributed to the spread of COVID-19 (Rappler 11/01/2022; OCHA accessed 10/01/2022). Lastly, people whose houses and livelihoods were affected by the typhoon are experiencing emotional distress and anxiety and need psychological support (ADRA 03/01/2022).

Aklan

The typhoon affected more than 67,000 of 615,500 people (nearly 11% of the provincial population), damaged around 20 houses, and partially damaged over 300 houses. Rai initially displaced over 25,000 people, but as at 10 January, all IDPs have returned to their homes. The municipality of Buruanga was the most affected area in the province (DSWD 21/01/2022 and 14/01/2022; OCHA accessed 19/01/2022; PSA 13/07/2021). As at 19 December, all roads in the province were already passable by all types of vehicles and had been cleared of debris (OCHA accessed 10/01/2022; DSWD 09/01/2022; NDRRMC 21/01/2022). The local electric company had also restored the power supply (AKELCO accessed 12/01/2022).

Capiz

The typhoon affected more than 193,000 of 805,000 residents (nearly 24% of the population), damaged ten houses, and partially damaged over 300 houses. Rai initially displaced over 82,000 people. As at 1 January, all IDPs had returned to their houses (DSWD 21/01/2022; OCHA accessed 19/01/2022; PSA 13/07/2021). The typhoon affected the municipalities of Sigma and Dumarao the most in the province (DSWD 21/01/2022). As at 8 January, all roads in the province were already passable by all types of vehicles (NDRRMC 08/01/2022), but as at 21 January, local authorities were still clearing debris (NDRRMC 21/01/2022). People in the affected areas experienced power interruptions between 16–19 December until the local electric company restored power in the province (Rappler 19/12/2021).

Antique

The typhoon affected nearly 130,000 of 613,000 residents (21% of the population), damaged around 1,450 houses, and partially damaged 8,600 houses. Rai initially displaced over 34,000 people. As at 21 January, 360 people remained displaced outside evacuation centres, while all IDPs in evacuation centres had returned to their houses (DSWD 21/01/2022; OCHA accessed 19/01/2022; PSA 13/07/2021). The typhoon affected Belison, Hamtic, and Libertad municipalities the most in the province (DSWD 21/01/2022). As at 23 December, all roads in the province were passable by all types of vehicles (NDRRMC 08/01/2022), but local authorities were still clearing debris as at 21 January (NDRRMC 21/01/2022). People in the affected area experienced power interruptions between 16 December and 11 January, until the local electric company restored power to all barangayas in the province. However, restoring power connection for some houses is still underway (Antico 11/01/2022). IDPs need shelter kits and building materials for reconstruction efforts (PNA 23/12/2021).

Iloilo

The typhoon affected over 276,800 of 2.05 million people (13% of the population), damaged nearly 600 houses, and partially damaged 28,000 houses. As at 21 January, out of nearly 150,000 people initially displaced by the typhoon, only 365 remained displaced – the majority outside evacuation centres (DSWD 21/01/2022; OCHA accessed 10/01/2022; PSA 13/07/2021). The typhoon affected San Enrique, Sara, Zarraga, and Ajuy municipalities the most in the province (DSWD 21/01/2022). As at 19 December, all roads in the province were passable by all types of vehicles, but local authorities were still working on clearing debris as at 21 January (NDRRMC 21/01/2022). People in the affected area started experiencing power interruptions on 16 December. As at 21 December, the local electric company had restored power in the city (GMA 21/12/2021). Landslides and floods damaged water pumping systems and affected people's access to water. As at 17 January, affected people were still in need of drinking water (PRC 17/01/2022). Many people in the affected areas have lost their livelihoods as they depend on agriculture and fishing (Daily Tribune 20/01/2022).

Guimaras

The typhoon affected over 61,000 of 188,000 people (over 32% of the population), damaged over 100 houses, and partially damaged nearly 1,450 houses. Over 93% of the affected population were in the municipalities of Sibunag and Nueva Valencia (OCHA accessed 19/01/2022; DSWD 21/01/2022; PSA 13/07/2021). Rai initially displaced more than 7,400 people. As at 21 January, more than 150 people remained displaced outside evacuation centres, while all IDPs in evacuation centres had returned home (OCHA accessed 19/01/2022; DSWD 21/01/2022). As at 19 December, all roads in the province were passable by all types of vehicles, and local authorities had cleared all the debris (NDRRMC 21/01/2022). People in the affected area experienced power interruptions starting 16 December. As at 9 January, the local electric company had restored power in the province (GUIMELCO 09/01/2022).

REGION 7 (CENTRAL VISAYAS)

Overview

Typhoon Rai made landfall in the municipality of Bien Unido, Bohol province, the municipality of Carcar, Cebu province, and the municipality of La Libertad, Negros Oriental province, within the Central Visayas region on the night of 16 December and the early morning of 17 December, with wind gusting at 240km/h. The typhoon slightly weakened as it was passing over the northern parts of Bohol and weakened further as it made landfall in Carcar, Cebu province (NDRRMC 21/01/2022; Rappler 17/12/2021; OCHA 24/12/2021; PAGASA accessed 23/01/2022). Rai caused storm surges in coastal areas, as well as flooding and landslides, damaging over 40 facilities, including health centres, city halls, roads, bridges, and flood-control systems (NDRRMC 21/01/2022; Al Jazeera 16/12/2021). The typhoon affected more than 6,000 schools, including 719 classrooms, impacting over 1.7 million students (SunStar 09/01/2022; The Catalyst 24/12/2021). Given the COVID-19 lockdown, public schools have been using a blended learning method by distributing printed modules and hosting online classes. Because of the typhoon, many children lost their modules and are in need of learning materials. The regional office of the Department of Education also suspended online classes in Central Visayas because of connectivity issues that started when the typhoon hit the country. As at 13 January, nearly half of the communication lines had not been restored (NDRRMC 21/01/2022; Inquirer 11/01/2022). Rai caused significant damage to agriculture. Floodwater and storm surges damaged rice, coconut, and corn farms; fisheries; agricultural machines and equipment; and livestock and poultry. The damages amount to over USD 12 million (NDRRMC 21/01/2022). Agricultural damage will likely affect people's livelihoods in the affected areas for several months, given that over 65% of people in the Central Visayas region work in the agricultural sector (PSA 11/2020).

The indigenous population makes up 0.25% of the population (around 20,000 people in total). As is the case in Western Visayas, indigenous people in Central Visayas belong to one of the most vulnerable groups affected by the typhoon (NCCA accessed 16/01/2022; ILO accessed 16/01/2022; ECOWEB 24/12/2021; Domingo and Manejar 07/2020).

Bohol

The province sustained severe damages because of the typhoon. The most affected areas in the province include the municipalities of Bien Unido, Buenavista, Hetafe, Inabanga, Talibon, Trinidad, and Ubay (DSWD 21/01/2022). Rai affected around 1.2 million of 1.3 million people (nearly 92% of the population), damaged nearly 81,000 houses, and partially damaged 183,000 houses (DSWD 21/01/2022; OCHA accessed 19/01/2022; PSA 13/07/2021). The typhoon damaged around 35 facilities, including fire stations, city halls, and health centres, and interrupted communication lines and power and water supplies starting 16 December 2021 (UNFPA 19/12/2021; NDRRMC 08/01/2022), which will likely be restored in mid-February (Bohol Chronicle 17/01/2022). As at 21 January, one road in Guiwanon remained unpassable, while 41 roads within the province were only passable by light vehicles because of debris. Fallen trees, power posts, and soil erosion have limited the use of these roads (NDRRMC 21/01/2022). As at 21 January, electric power had not been fully restored. It is unlikely that the local electric company will be able to fully restore power before mid-April (Power Philippines 21/01/2022; ABS-CBN News 11/01/2022). The DSWD delivers humanitarian assistance mostly in the form of family food packs (NDRRMC 21/01/2022). Many people in the affected areas have lost their livelihoods as they depend on agriculture and fishing. The typhoon affected both those sectors, and those people are likely to remain reliant on food assistance.

Needs

Shelter: out of over 270,000 people initially displaced by the typhoon, more than 27,000 remained displaced outside and inside evacuation centres as at 21 January (DSWD 21/01/2022; OCHA accessed 19/01/2022). Damage to houses was the most severe in Barangay Fatima in the municipality of Ubay and Barangay Valladolid in the municipality of Loboc, where almost all houses were damaged (DSWD 21/01/2022). The overcrowdedness of evacuation centres was likely resolved after the majority of IDPs returned to their homes. IDPs are in need of building materials to restore damaged houses, but reconstruction material prices are rising (PhilStar 21/01/2022; OCHA 13/01/2022).

WASH: electricity outages affected water pumps in the province – an issue that has been limiting the population's access to water since 16 December (GMA News 06/01/2022; ABS-CBN News 30/12/2021). The situation limits people's access to functional sanitation facilities and is likely to affect their ability to practice hygiene. People's use of contaminated open water sources as an alternative water source to cover their needs increases health risks. Clean drinking water and hygiene kits are among the urgent needs of the affected population (IFRC 06/01/2022; BusinessWorld 05/01/2022; UNICEF 27/12/2021).

Health: flooding destroyed several health facilities within the province, limiting affected people's access to health services. Gastroenteritis and acute watery diarrhoea are spreading among the affected population because of the consumption of contaminated water. The situation is further increasing the demand for health services (IFRC 06/01/2022; Business World 05/01/2022; UNICEF 27/12/2021).

Protection: the lack of safe spacing between adults and children in crowded evacuation centres and the lack of separate WASH facilities for women and girls expose women and children especially to the risk of sexual violence and abuse (UNICEF 27/12/2021).

Cebu

The typhoon affected more than 2.2 million of 3.3 million people (over 66% of the population) in Cebu province (DSWD 21/01/2022; OCHA accessed 19/01/2022; PSA 13/07/2021). Rai damaged over 112,000 houses and partially damaged 417,000 (OCHA accessed 19/01/2022). The typhoon affected Lapu-Lapu, Talisay, and Toledo cities the most in the province (DSWD 21/01/2022). As at 16 December, damaged electric poles, fallen trees, and debris had made the majority of roads unpassable. As at 21 January, the Sariling Bridge in the municipality of Malabuyoc and three roads to Alegria, Talisay, and Toledo cities remained unpassable, while five roads were only passable by light vehicles because of debris (NDRRMC 21/01/2022; PNA 29/12/2021). As at 11 January, the Government had cleared debris from main roads, but operations were still continuing on secondary roads (SunStar 11/01/2022). The province has also experienced power outages since 16 December (NDRRMC 08/01/2022). As at 21 January, power had been fully restored (Rappler 21/01/2022; SunStar 11/01/2022 and 12/11/2021; PNA 05/01/2022). The DSWD delivers humanitarian assistance mostly in the form of family food packs. Cebu city also rationed food assistance because of food supply shortages that affected local food prices (NDRRMC 21/01/2022; ECOWEB 24/12/2021). Most affected people rely on food assistance because of the devastation of their livelihoods, as storm surges destroyed fishing boats and damaged crops (Rappler 21/01/2022; NDRRMC 21/01/2022).

Needs

Shelter: out of more than 407,000 people initially displaced by the typhoon, around 28,000 remained displaced inside and outside evacuation centres as at 21 January, with at least 27,000 IDPs taking shelter in around 130 evacuation centres (OCHA accessed 19/01/2022; DSWD 21/01/2022). The affected population is in need of building materials to restore their homes (PhilStar 21/01/2022; OCHA 13/01/2022).

WASH: water shortages were already affecting people in the city of Cebu (ECOWEB 24/12/2021). As at 7 January, the local water company had not restored water pumping in the province and is likely to remain unable to do so until the end of January (PhilStar 07/01/2022). Because of the damage inflicted on fishing boats and crops and the subsequent disruption of livelihoods, affected people are unable to buy water (Rappler 21/01/2022; NDRRMC 21/01/2022). The situation limits people's access to functional sanitation facilities and is likely to affect their ability to practice hygiene. People's use of contaminated open water sources as an alternative to cover their needs increases health risks. Clean drinking water and hygiene kits are among the urgent needs of the affected population (IFRC 06/01/2022; BusinessWorld 05/01/2022; UNICEF 27/12/2021).

Health: evacuation centres in Cebu are overcrowded and lack running water, limiting people's ability to practice social distancing and proper hygiene. This limitation increases the likelihood of a COVID-19 outbreak, which would be difficult to control given the lack of isolation facilities (Manila Bulletin 05/01/2022). Gastroenteritis and acute watery diarrhoea are spreading among the affected population because of the consumption of contaminated water. These issues are increasing the demand for health services (IFRC 06/01/2022; BusinessWorld 05/01/2022; UNICEF 27/12/2021). The lack of electric power is affecting the functionality of hospitals in Olango Island in Lapu-Lapu city. Damages to the only sea ambulance on the island also make it difficult to transfer patients to better-equipped hospitals (Rappler 21/01/2022).

Protection: overcrowded evacuation centres do not allow for safe spaces and separation between adults and children, increasing the risk of violence and exploitation (Manila Bulletin 05/01/2022).

Negros Oriental

Negros Oriental province sustained severe damages because of the typhoon. Rai affected over 433,000 of 2.6 million people (over 16% of the population) (OCHA accessed 19/01/2022; ECOWEB 24/12/2021; PSA 13/07/2021). Storm surges damaged over 19,900 houses and partially damaged 81,400 (OCHA accessed 19/01/2022; NDRRMC 08/01/2022). The municipalities of Mabinay and Bindoy and the city of Guihulngan were the most affected (DSWD 21/01/2022). Road conditions have improved since the typhoon hit, but as at 21 January, two roads in Barangay Manlipac were still unpassable because of landslides, and seven were only passable by light vehicles because of debris. The situation has necessitated alternative routes, and road conditions are likely to affect the delivery of humanitarian assistance in the province (NDRRMC 21/01/2022). While strong winds toppled over power poles and caused power outages, the local electric company had restored power in the affected areas as at 4 January (NDRRMC 08/01/2022). The DSWD provides humanitarian assistance mainly focused on food (NDRRMC 21/01/2022). Affected people rely on food assistance as flooding and landslides limited access to local markets (IFRC 10/01/2022).

Needs

Shelter: more than 46,000 people were initially displaced inside and outside evacuation centres. As at 21 January, around 700 remained displaced in eight evacuation centres (DSWD 21/01/2022; OCHA accessed 19/01/2022). House reconstruction materials are among the immediate needs of the affected people (IFRC 10/01/2022).

WASH: as at 19 January, water supply networks were not fully functional yet. The affected population in the province are in need of drinking water (UMC 19/01/2022; PRC 17/01/2022; PNA 12/01/2022).

Livelihood: the typhoon affected a third of the farms in the province (DSWD 21/01/2022; PNA 04/01/2022). The municipalities of Bindoy, Jimalalud, Tayasan, and Mabinay, the poorest in the region (poverty rate in the municipality of Bindoy is 63.7%, in Jimalalud 62.5%, in Tayasan 52.8%, and in Mabinay 52.7%), sustained the highest levels of damage (DSWD 21/01/2022; PSA 17/08/2021). Damage to crops and fisheries is likely to affect the livelihoods of agricultural families in the area and worsen existing poverty.

Siquijor

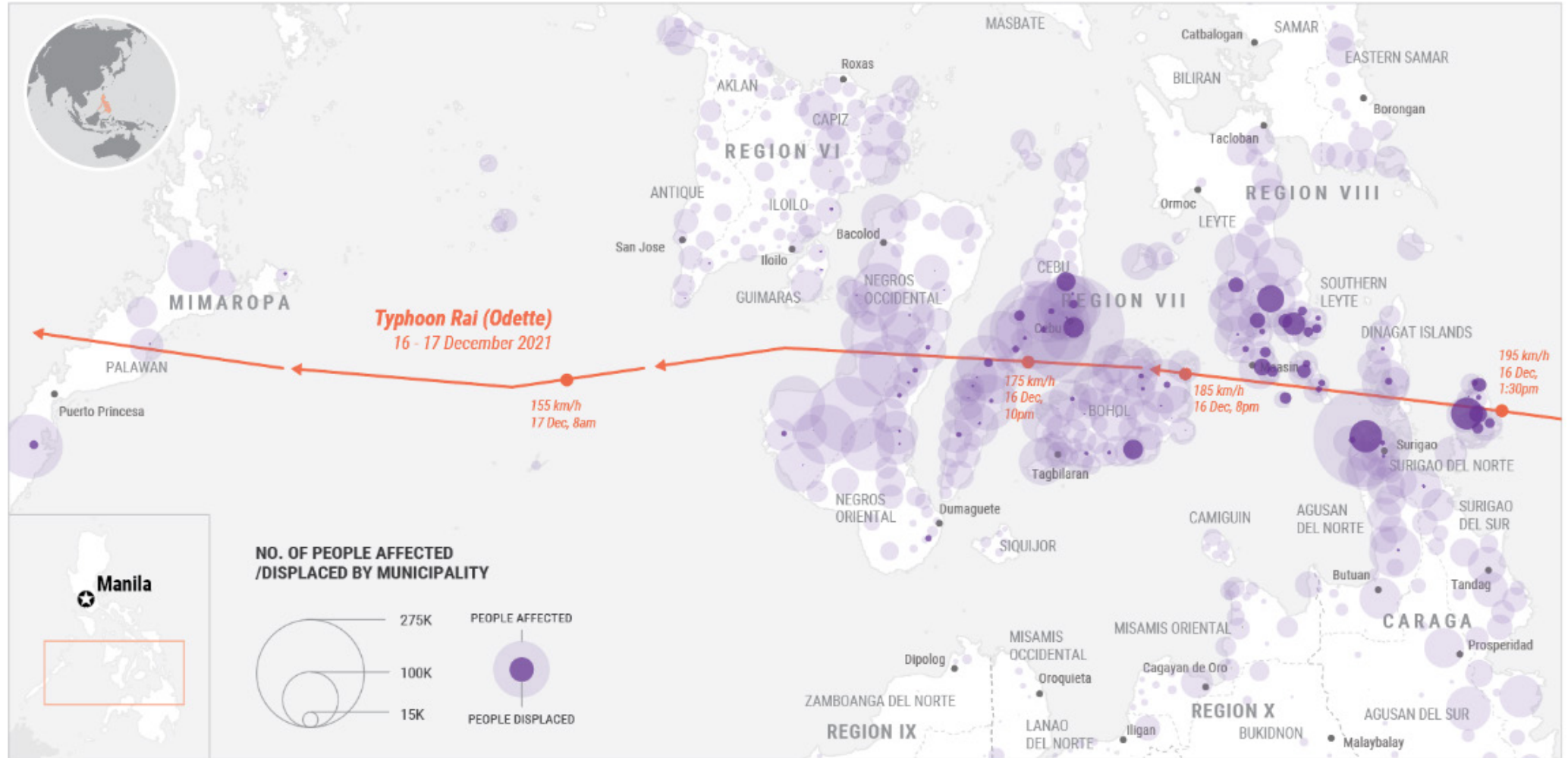
Siquijor province suffered relatively less damage compared to other provinces, with 16,800 of 103,400 people (over 16% of the population) affected by the typhoon (OCHA accessed 19/01/2022; ECOWEB 24/12/2021; PSA 13/07/2021). Over 200 houses were damaged, and nearly 4,000 were partially damaged (OCHA accessed 19/01/2022). The typhoon initially displaced around 11,000 people, but IDPs both inside and outside evacuation centres had returned home as at 9 January (DSWD 21/01/2022; OCHA accessed 19/01/2022; OCHA accessed 10/01/2022). The municipalities of Siquijor (also the capital of Siquijor province) and San Juan were the most affected (DSWD 21/01/2022). Heavy winds caused power interruption in the province, but the local electric company had restored power in 78% of the affected houses as at 2 January (PROSIELCO accessed 02/01/2022). People's livelihoods in the affected areas are likely to be impacted because of the damage to fisheries (one of the main economic sectors in the province). The typhoon did not affect access to water in the province (UNICEF 19/12/2021).

Registered damages to agriculture

PROVINCE	NUMBER OF AFFECTED MUNICIPALITIES	TYPE OF PRODUCT	COST OF DAMAGES IN PHP
Negros Occidental	161	Crops, livestock, machinery, infrastructure, equipment	3,892,448,424
Aklan	27	Crops, high-value crops	10,256,229
Capiz	22	Crops	157,435,353
Antique	57	Crops, livestock, high-value crops	145,039,220
Iloilo	94	Crops, Infrastructure and equipment	755,622,308
Guimaras	33	Crops, livestock, poultry, infrastructure, equipment	330,974,842
Bohol	1	Fisheries	200,000,000
Cebu	1	Fisheries	282,700,000
Negros Oriental	2	Crops, fisheries	128,441,700
Siquijor	1	Fisheries	7,000,000

Source: NDRRMC (21/01/2022)

Typhoon Rai (Odette) landfall and affected and displaced populations



Source: OCHA (13/01/2022)