SITUATION UPDATE
TYPHOON RAI IN THE PHILIPPINES
Wednesday, 22 December 2021, 11:00 hrs (UTC+7)

This Situation Update is provided by the AHA Centre for use of the ASEAN Member States and relevant stakeholders. The information presented is collected from various sources, including but not limited to ASEAN Member States’ Government Agencies, UN, IFRC, NGOs, Humanitarian and Dialogue Partners, and News Organisations.

Typhoon RAI (Odette)

The Philippines: Super Typhoon Rai (Odette)

Affected population by Municipality [as of 08:00, 21 Dec 21]

KEY FIGURES

<table>
<thead>
<tr>
<th>Category</th>
<th>Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affected persons</td>
<td>2.6M</td>
</tr>
<tr>
<td>Displaced persons</td>
<td>662.5K</td>
</tr>
<tr>
<td>Dead</td>
<td>177</td>
</tr>
<tr>
<td>Injured</td>
<td>275</td>
</tr>
<tr>
<td>Missing</td>
<td>38</td>
</tr>
<tr>
<td>Houses</td>
<td>159.8K</td>
</tr>
<tr>
<td>Worth of damages</td>
<td>11M USD</td>
</tr>
<tr>
<td>Worth of assistance</td>
<td>720.9K</td>
</tr>
</tbody>
</table>

Typhoon RAI (Odette)

Figures are the latest updates as of 22 December 2021.
1. HIGHLIGHTS

a. On 14 December 2021, the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) has identified Severe Tropical Storm (STS) “RAI” (locally known as “ODETTE”) at 890 km east of Mindanao (8.3°N, 134.4°E), the Philippines. On 15 December 2021, “RAI” has intensified into a Typhoon as it moved westward over the Philippine Sea, east of Mindanao. On 16 December 2021, Typhoon “RAI” further intensified and made its first landfall in Siargao Island, Surigao Del Norte at 12:30 PM (UTC+7), bringing severe wind and torrential rains, moderate to heavy rains and light to moderate over several areas. On the same day, Typhoon “RAI” made a second landfall in Cagdianao, Dinagat Islands at 2:10 PM (UTC+7), third at Liloan, Southern Leyte at 3:50 PM (UTC+7), fourth at Padre Burgos, Southern Leyte at 4:40 PM (UTC+7), fifth at Pres. Carlos P. Garcia, Bohol at 5:30 PM (UTC+7), sixth at Bien Unido, Bohol at 4:30 PM (UTC+7), and seventh at Carcar, Cebu at 9:00 PM (UTC+7). On 17 December 2021, Typhoon “RAI” made its eighth landfall in La Libertad, Negros Oriental at 11:00 AM (UTC+7), and finally, it made its ninth landfall in Roxas, Palawan at 2:10 PM (UTC+7). “RAI” left the Philippine Area of Responsibility (PAR) on 18 December 2021 at 11:40 PM (UTC+7) (DSWD).

Typhoon RAI landfalls in the Philippines (Data sources: PAGASA).

b. A total of 678,043 families or 2,628,048 persons were affected by Typhoon “RAI” in 4,750 Barangays (villages/district/ward) in Regions V, VI, VII, VIII, IX, X, XI, XII, MIMAROPA, and CARAGA (DSWD). Most areas affected by Typhoon "RAI" are experiencing power outage and limited internet access; hence, the challenge in gathering data on affected population and other significant updates. Ongoing assessment and validation are continuously being conducted (NDRRMC).

see complete Number of Affected Families / Persons table at DSWD.
c. The National Disaster Risk Reduction and Management Council (NDRRMC) of the Philippines organised response missions to the affected provinces. It also maintains close coordination with its partners. President Duterte conducted an aerial inspection of some of the areas affected by Typhoon RAI in Southern Leyte. President Rodrigo Duterte also personally visited the affected areas.

d. On 21 December 2021, NDRRMC accepted the AHA Centre’s offer of humanitarian assistance, specifically the mobilisation of ASEAN stockpiles stored at the Disaster Emergency Logistics System for ASEAN (DELSA) Satellite Warehouse in Camp Aguinaldo, Quezon City, Philippines. These regional stockpiles are funded by the Japan-ASEAN Integration Fund (JAIF) and Direct Relief. The AHA Centre is currently facilitating the mobilisation of the stockpiles, in coordination with the NDRRMC-OCD.

e. ASEAN, through the ASEAN Foreign Ministers’ Statement, has express sympathies to the Republic of the Philippines especially to the affected people by Typhoon RAI. ASEAN reaffirms its solidarity with the Governments and peoples of the Republic of the Philippines and stands ready to extend its cooperation and support.

2. SUMMARY OF EVENTS

a. 12 December 2021 (UTC+7)
  - 08:00 AM: The Low Pressure Area outside the PAR, southeast of Palau has developed into a Tropical Depression.
b. 13 December 2021 (UTC+7)
   • 10:00 AM: The Tropical Depression outside the PAR maintains its strength as it continues to move westward.

c. 14 December 2021 (UTC+7)
   • 10:00 PM: Severe Tropical Storm “RAI” entered the PAR and was locally named “ODETTE”. Tropical Cyclone Wind Signal (TCWS) No. 1 issued over southeastern portion of Eastern Samar; Dinagat Islands, the eastern portion of Surigao del Norte including Siargao and Bucas Grande Islands, and the northern portion of Surigao del Sur.

d. 15 December 2021 (UTC+7)
   • 7:00 AM: “ODETTE” intensifies into a typhoon as it moves westward over the Philippine Sea east of Mindanao. TCWS No. 2 issued over the eastern portion of Surigao del Norte and Surigao del Sur.
   • 10:00 PM: TCWS No. 3 issued over Dinagat Islands, Surigao del Norte, the northern portion of Agusan del Norte, and the northern portion of Surigao del Sur.

e. 16 December 2021 (UTC+7)
   • 10:00 AM: TCWS No. 4 issued over Southern Leyte, and the eastern portion Bohol, Dinagat Islands, Surigao del Norte including Siargao and Bucas Grande Islands.
   • 12:30 PM: 1st landfall in Siargao Island, Surigao del Norte
   • 2:10 PM: 2nd landfall in Cagdianao, Dinagat Islands
   • 3:50 PM: 3rd landfall in Liloan, Southern Leyte
   • 4:40 PM: 4th landfall in Padre Burgos, Southern Leyte
   • 5:30 PM: 5th landfall in Pres Carlos Garcia, Bohol
   • 6:30 PM: 6th landfall in Bien Unido, Bohol
   • 9:00 PM: 7th landfall in Carcar, Cebu

f. 17 December 2021 (UTC+7)
   • 11:00 AM: 8th landfall in La Libertad, Negros Oriental.
   • 4:00 PM: 9th landfall over Roxas, Palawan.

g. 18 December 2021 (UTC+7)
   • 1:00 AM: “RAI” decelerates while moving West Northwestward towards the Kalayaan Islands.
   • 3:00 PM: “RAI” exited the Philippines Area of Responsibility (PAR).

h. As of 20 December 2021, 22:00 (UTC+7) Typhoon “RAI” has rapidly weakened into a tropical depression and the location of the storm’s centre was at about 19.3 degrees North latitude; 112.4 degrees East longitude, about 180km east of Hainan Island (China). It is forecasted that in the next 6 hours, the tropical depression will move to the northeast, about 20km/h and weaken into a low pressure area in the northern part of the East Sea. Thus, the storm is no longer capable of affecting Vietnam’s sea and land (NHCMF).
i. According to the Pacific Disaster Centre (PDC), as of 21 December 2021, 0500 (UTC+7), the cyclone has weakened to Tropical Storm “RAI” and is headed Northeast at about 20 km/h (13 mph), and is expected to weaken over the next 24 hours. It is cautioned, however, that the storm’s actual position may shift significantly over the next few days. TS “RAI” is not expected to cross over a major landmass within the next 48-72 hours (although it may impact smaller islands along the way).

3. ASSESSMENT OF IMPACT AND HUMANITARIAN NEEDS

Assessment of Impact in The Philippines

a. According to NDRRMC’s Situational Report as of 22 December 2021, 7AM UTC+7:

i. Incidents were reported in some areas of Region II, CALABARZON, MIMAROPA, Region V, Region VI, Region VII, Region VIII, Region IX, Region X, Region XI, Region XII, CARAGA, BARMM, and NCR.
ii. Total dead reported: 177, injured: 273, and missing: 38.

iii. 18 roads still not passable, while 49 roads were passable (previously reported as not passable).

iv. 4 bridges still not passable, while 5 bridges were passable (previously reported as not passable).

v. A total of 239 cities/municipalities experienced power interruption/outrage. Of which, power supply in 34 cities/municipalities were already restored.

vi. A total of 2 cities/municipalities experienced water supply interruption/outrage.

vii. A total of 135 cities/municipalities experienced interruption in telecommunications in MIMAROPA, Region 7, Region 8, Region 10, CARAGA, and BARMM.

viii. A total of 5 airports were reported non-operational, of which, 5 airports were already operational.

ix. A total of 25 domestic flights were cancelled.

x. A total of 122 Seaports ports were reported non-operational. Of which, 55 seaports were already operational.

xi. A total of 1551 passengers, 690 rolling cargoes, and 5 vessels, were stranded in MIMAROPA, Region 6, Region 8, Region 9, Region 10, and CARAGA.

xii. A total of 15,618 damaged houses are reported in MIMAROPA, Region 6, Region 7, Region 8, Region 10, Region 11, Region 12, CARAGA, BARMM.

xiii. A total of 391,760 persons were pre-emptively evacuated.

xiv. A total of 4.5M USD worth of damages to infrastructure.

xv. A total of 6.5 USD worth of damages to agriculture.

xvi. Face Mask 500’s, Rice, Sardines, Family Food Packs, Meals, Sleeping Kits and Hygiene Kits were provided to MIMAROPA, Region 6, Region 10, Region 11, and CARAGA.

b. According to DSWD-DROMIC Report #15 on Typhoon Odette as of 22 December 2021 (05AM UTC+7), there are:

i. 104,806 families or 418,371 persons are taking temporary shelter in 2,018 evacuation centers in Regions VI, VII, VIII, X, MIMAROPA, and CARAGA.

ii. 71,391 families or 244,141 persons are temporarily staying with their relatives and/or friends in Regions VI, VII, VIII, MIMAROPA, and CARAGA.

iii. 176,197 families or 662,512 persons are still displaced in Regions VI, VII, VIII, X, MIMAROPA, and CARAGA.
iv. A total of **159,842 houses** were **damaged**; of which, **61,918** are **totally damaged** and **97,924** are **partially damaged** in Regions VI, VII, VIII, IX, X, MIMAROPA, and CARAGA.

v. A total of **720.9K USD** worth of assistance was provided to the affected families; of which, **450K USD** from the DSWD, **250K USD** was provided by the Local Government Units (LGUs), and **20.9K** from Non-Government Organizations (NGOs).

![Photo of TC RAI-battered areas in the towns of Cebu and Bohol on 19 Dec - Presidential photo (left) and The Philippine Coast Guard Aviation Force takes an aerial shot of Negros Occidental on 18 Dec (right). (Philippines News Agency).](image)

c. **Standby Funds** and **Prepositioned Relief Stockpile** have been prepared as follows:

i. **1.14M USD** worth of Quick Response Fund (QRF) at the DSWD-Central Office; **723.2K USD** available at DSWD-FO V, VI, VII, VIII, IX, and XI; and **581.9K USD** in other DSWD-FOs which may support the relief needs of the displaced families due to Typhoon RAI through inter-FO augmentation.

ii. **74,190** FFPs available in Disaster Response Centers; of which, **66,892** FFPs are at the National Resource Operations Center (NROC), Pasay City and **7,298** FFPs are at the Visayas Disaster Response Center (VDRC), Cebu City; **154,551** FFPs available at DSWD-FO V, VI, VII, VIII, X, XI, MIMAROPA, and CARAGA; **127,190** FFPs in other DSWD-FOs which may support the relief needs of the displaced families due to Typhoon RAI through inter-FO augmentation.

iii. **12.6M USD** worth of food and non-food items (FNIs) at NROC, VDRC and DSWD-FO warehouses countrywide.
Daily Average Rainfall from 12 - 18 December 2021, as processed by the ASEAN Specialised Meteorological Centre (ASMC), showed high average rainfall in The Philippines and South China Sea.

**Anticipated Risks**

a. As of 22 Dec, 0100 HRS (UTC+7), there’s a tropical disturbance being referred to as **INVEST 98W** which is located approximately 644 km east of Palau. According to the [JTWC](https://www.jtwc.noaa.gov), satellite imagery depicts flaring convection over a broad low level circulation. Environmental analysis depicts generally favorable conditions for development with robust equatorward outflow, low (5-10 knot) vertical wind shear, and warm sea surface temperatures. Global models indicate that 98W will track west-northwestward, and are split on development, with the GFS continuing to be the most aggressive. Maximum sustained surface winds are estimated at 35-45 km/h (18 to 23 knots). The potential for the development of a significant tropical cyclone within the next 24 hours is *Low* ([PDC Weather Wall](https://pdc.tamu.edu)). The details of INVEST 98W have been summarized as follows:

- **LOCATION:** An area of convection (INVEST 98W) previously located near 6.4N 140.7E is now located near 1,080 km east of Surigao del Sur, Philippines.
- **STRENGTH:** Surface winds are around 35-45 km/h. Minimum sea-level pressure is near 1007 mb.
- **FORECAST:** Forecast models show that INVEST 98W will move west-northwestward, and are split on development, with the GFS showing some consolidation and deepening. According to the windy animated forecast, GFS model, INVEST 98W is expected to develop into a significant tropical cyclone and make landfall in Surigao del Sur (Philippines) on Thursday 30 Dec.
- **POTENTIAL IMPACTS:** Considering the strength, intensity, and forecast, INVEST 98W potentially exacerbated the situations in the Philippines which is previously impacted by Typhoon “RAI”.
- INVEST 98W has a **LOW** chance of developing into a tropical cyclone in the next 24 hours.
**SITUATION UPDATE**

**JTWC Tropical Warnings & GFS Model track for INVEST 98W**
Source: [JTWC](https://www.jtwc.noaa.gov/) & [PDC Weather Wall](https://www.pacificregion.noaa.gov/)

**INVEST 98W Snapshot**
Source: [PDC Weather Wall](https://www.pacificregion.noaa.gov/)

**GFS forecast for Thursday, 30 Dec early morning**
Source: [Windy](https://www.windy.com/)

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**98W INVEST - Model Track Guidance**

[Map showing model guidance for INVEST 98W]

[Map showing INVEST 98W snapshot with a low chance of developing]
Humanitarian Needs

a. The NDRRMC-OCD has identified emergency relief needs from the DELSA Satellite Warehouse in Camp Aguinaldo, Philippines as follows:

i. 541 bags shelter repair kits
ii. 275 family tents
iii. 5,000 boxes family kit
iv. 1,000 rolls of tarpaulin (4x60 meter)
v. 5,000 boxes personal hygiene kit
vi. 1,000 boxes kitchen set

4. ACTIONS TAKEN AND RESOURCES MOBILISED

Response by the Government of The Philippines

NDRRMC Response Cluster

<table>
<thead>
<tr>
<th>A. FOOD AND NON-FOOD ITEMS (F/NFIS)</th>
</tr>
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<tbody>
<tr>
<td>Standby Resources Summary</td>
</tr>
<tr>
<td>1.14M USD worth of Quick Response Fund (QRF) at the DSWD-Central Office; 723.2K USD available at DSWD-FO V, VI, VII, VIII, IX, and XI; and 581.9K USD in other DSWD-FOs which may support the relief needs of the displaced families due to Typhoon RAI through inter-FO augmentation.</td>
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</tr>
<tr>
<td>12.6M USD worth of food and non-food items (FNIs) at NROC, VDRC and DSWD-FO warehouses countrywide.</td>
</tr>
</tbody>
</table>

Cost of Assistance Summary

A total of 720.9K USD worth of assistance was provided to the affected families; of which, 450K USD from the DSWD, 250K USD was provided by the Local Government Units (LGUs), and 20.9K from Non-Government Organizations (NGOs).

<table>
<thead>
<tr>
<th>B. CAMP COORDINATION AND CAMP MANAGEMENT and INTERNALLY DISPLACED PERSON PROTECTION (CCCM and IDPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camp Management Summary</td>
</tr>
<tr>
<td>-- There are 103,271 families or 413,744 persons taking temporary shelter in 2,302 evacuation centers in Regions MIMAROPA, VI, VIII, X, XI, and CARAGA.</td>
</tr>
<tr>
<td>-- There are 13,156 families or 50,314 persons temporarily staying with their relatives and/or friends in Regions MIMAROPA, VI, VII and CARAGA.</td>
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</tbody>
</table>

C. SEARCH, RESCUE, AND RETRIEVAL (SRR)

- 582 teams from the AFP, PCG, BFP and PNP were deployed to perform search and rescue in the affected areas. While, a total of 4,377 teams are still available and ready to be deployed.
  - With this, 112 land assets, 6 sea assets, and 1 air asset were also deployed. While a total of 3,066 (land), 484 (sea), and 17 (air) assets are available for deployment.
  - With the SAR operations, a total of 10,842 individuals were rescued while 22 cadavers were retrieved.

D. LOGISTICS

- 250 land assets, 5 sea assets, and 12 air assets are deployed. While a total of 1,692 (land), 13 (sea), and 37 (air) assets are available and on standby.

E. EMERGENCY TELECOMMUNICATIONS

- A total of 37 emergency telecommunications equipments are deployed from DICT and OCD while 573 emergency telecommunications equipment are available and ready for deployment from DICT and OCD.

F. EDUCATION

- A total of 796 schools or 4,740 classrooms are used as evacuation centers in Regions, MIMAROPA, V, VI, VII, VIII, IX, X, XI and CARAGA.

G. HEALTH

- There is total of 236.5K USD Prepositioned Logistics in DOH Regional Offices. While 5.5M USD worth of logistics is also available in various DOH regional warehouses.
  - A total of 1.34M USD worth of logistics is available in DOH Central Office
Other Response by Ministries and Organisations

<table>
<thead>
<tr>
<th>Ministries</th>
<th>Actions Taken as of 21 December, 18:00 (UTC+7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAGASA</td>
<td>▪ Presented the weather updates during the Weather Updating and PDRA Meetings.</td>
</tr>
<tr>
<td></td>
<td>▪ Continuous weather monitoring and provision of weather updates to all stakeholders.</td>
</tr>
<tr>
<td>PHILIPPINE COAST GUARD</td>
<td>Deployed assets to assist in rescue and relief operations</td>
</tr>
<tr>
<td>MARINA</td>
<td>▪ Directed shipowners to prioritize the delivery of relief items.</td>
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<td></td>
<td>▪ Lifted the suspension of the travel of vessels on 18 December 2021, after TC Odette exited PAR.</td>
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<td></td>
<td>▪ Directed safety engineers to conduct the appropriate maintenance check of sea vessels before departing.</td>
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<tr>
<td>PPA</td>
<td>Provided the needs of stranded passengers.</td>
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<td>CAAP</td>
<td>▪ Restored airport operations to prevent congestion.</td>
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<td></td>
<td>▪ Deployed inspection teams to deliver communication equipment to be delivered to damaged airports.</td>
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<tr>
<td>DENR - MGB</td>
<td>Provides a list of cities and municipalities susceptible to landslide and flood to all concerned offices for information, reference, and redundancy of information.</td>
</tr>
<tr>
<td>Philippine Disaster Resilience Foundation</td>
<td>▪ Placed SAR teams in Dumaguete, Negros Oriental on standby for deployment.</td>
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<tr>
<td></td>
<td>▪ Prepared 5000 packs of hot meals for deployment to affected areas.</td>
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<tr>
<td></td>
<td>▪ Provided free spaces with charging stations in private facilities for customers to await the safe passing of the storm.</td>
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<tr>
<td></td>
<td>▪ Placed static tanks and water tankers on standby.</td>
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<td></td>
<td>▪ Prepared evacuation areas and food provisions.</td>
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<tr>
<td></td>
<td>▪ Pledged medicines, monetary support, drinking water, and flights for the air transport of goods to the affected regions.</td>
</tr>
</tbody>
</table>

Response by the AHA Centre

a. On 18 December 2021, the AHA Centre conducted an Emergency Response Organisation Briefing, also attended by the ASEAN Secretariat, to discuss the latest situations in the Philippines and the possibility of support that ASEAN can provide.

b. On 18 December 2021, a Letter of Sympathy with the Offer of Assistance was sent to NDRRMC-OCD.

c. On 21 December 2021, the Government of the Philippines through the NDRRMC-OCD accepted AHA Centre’s offer of assistance. Consequently, the AHA Centre raised its Emergency Operations Centre’s Alert Level to RED (Active Response).

d. In coordination with NDRRMC-OCD, the AHA Centre facilitated the mobilisation of the relief items from the DELSA Satellite Warehouse in Camp Aguinaldo, Quezon City, Philippines:

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Donor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shelter Repair Kit</td>
<td>541</td>
<td>Bag</td>
<td>Direct Relief</td>
</tr>
<tr>
<td>2</td>
<td>Family Tent</td>
<td>275</td>
<td>Tent</td>
<td>Direct Relief</td>
</tr>
<tr>
<td>3</td>
<td>Family Kit</td>
<td>300</td>
<td>Box</td>
<td>Direct Relief</td>
</tr>
<tr>
<td></td>
<td>Family Kit</td>
<td>4,700</td>
<td>Box</td>
<td>JAIF</td>
</tr>
<tr>
<td>4</td>
<td>Tarpaulin</td>
<td>1,000</td>
<td>Roll</td>
<td>JAIF</td>
</tr>
<tr>
<td>5</td>
<td>Personal Hygiene Kit</td>
<td>5,000</td>
<td>Box</td>
<td>Direct Relief</td>
</tr>
<tr>
<td>6</td>
<td>Kitchen Set</td>
<td>1,000</td>
<td>Box</td>
<td>Direct Relief</td>
</tr>
</tbody>
</table>
Figure 3. Coordination and handing over ceremony for the relief items from DELSA Satellite Warehouse in Camp Aguinaldo, Philippines between NDRRMC-OCD (Bernardo Rafaelito, Director III, Operation Service, OCD) and the AHA Centre (Jommel Merano, the AHA Centre's National Logistic Officer) on 21 Dec.

e. On 21 December 2021, the AHA Centre has dispatched 166 shelter repair kits, 55 family indoor tent, and 323 rolls of tarpaulin from the DELSA Satellite Warehouse in Camp Aguinaldo, Quezon City, Philippines.

Figure 4. Relief items distributions from DELSA Satellite Warehouse in Camp Aguinaldo, Philippines on 21 Dec.

Response by Other Humanitarian and Operational Partners

a. PDC has issued the first Warning on 13 December 2021 0300 UTC, with the name Tropical Depression “Twenty eight” originating from JTWC, then at 1500 UTC developed into Tropical Storm "RAI". On the 9th Warning, the PDC declared that the TS had transformed into Typhoon 28W or Typhoon "RAI". Until 20 Dec, 2100 UTC PDC has issued 32 Warnings related to Typhoon "RAI" that have been distributed through DisasterAWARE products and their derivatives (DMRS, PhilAWARE, etc.)
b. **PDC, WFP and OCHA** have released the **Joint Analysis of Disaster Exposure (JADE)** product on 15 December 0300 UTC which displays breakdown impact estimates based on population, vulnerable groups, key needs, hospitals exposed, school exposed, and cost to rebuild in worst affected areas. The product have been distributed through email lists of relevant stakeholders, DMRS, DisasterAWARE, PhilAWARE, ThaiAWARE, EMOPS, as well as WFP and UNOCHA’s ReliefWeb websites.

c. **UNOSAT/UNITAR** has released Tropical Cyclone RAI-21 **Preliminary Satellite-Derived Standing Waters Analysis** as follows:

   (i) On December 17th, for **Region VIII (Eastern Visayas) and Region XIII (CARAGA)** of the Philippines, with Summary of Findings:

   - No major floods observed in Libjo Municipality, Dinagat Island, Region XIII (CARAGA) as of 17 December 2021.
   - Increase of standing waters level in Southern Part of Dinagat Island, Region XIII (CARAGA) observed as of 17 December 2021.
• Large inundated areas in Siargao Island, Region XIII (CARAGA) observed as of 17 December 2021.
• Standing waters in urban areas and affected agricultural area in Surigao City, Surigao Del Norte Province Region XIII (CARAGA) observed as of 17 December 2021.
• Standing waters near Claver municipality, Surigao Del Norte Province, Region XIII (CARAGA) observed as of 17 December 2021.
• No major floods observed in Hinunangan Municipality, Southern Leyte Province, Region VIII (Eastern Visayas) as of 17 December 2021.
• No major floods observed in San Francisco Municipality, Southern Leyte Province, Region VIII (Eastern Visayas) of 17 December 2021.

(ii) On December 20th, for Region IV-B (Mimaropa) and Region VII (Central Visayas) of the Philippines, with Summary of Findings:
• Increased standing waters observed in the northern parts of Bohol Island as of 17 December 2021
• Standing waters observed in Carcar’s agricultural area, Cebu Island as of 20 December 2021
• No major floods observed in Mandaue city, Cebu island as of 20 December 2021
• No major floods observed in the vicinity of La Libertad city, Negros Island as of 20 December 2021
• Inundated agricultural area observed in Roxasand Dumaran Municipalities, Palawan Island as of 18 December 2021

(iii) On December 20th, for Dinagat Island, Siargao Island, and Southern Leyte province, Region XIII (CARAGA) of the Philippines, with Summary of Findings:
• Potentially damaged structures in Cuarinta Village, Dinagat Island, Region XIII (CARAGA) as of 18 Dec 2021.
• No visible damage in Cagdianao village, Dinagat Island, Region XIII (CARAGA) as of 19 Dec 2021.
• Severely damaged structures and affected areas along the coastal areas of Surigao Del Norte Province, Region XIII (CARAGA) Region XIII (CARAGA) observed as of 18 and 19 December 2021.
• Decreasing waters observed in several areas in Siargao Island, Region XIII (CARAGA) observed as of 19 and 20 December 2021.
• Damaged structures in Burgostown, Surigao Del Norte Province, Region XIII (CARAGA) observed as of 20 Dec 2021.
• Potentially damaged structures in Rizal village and Del Carmen town Surigao Del Norte Province, Region XIII (CARAGA) observed as of 19 Dec 2021.
• Potentially damaged structures in Dapatown, Siargao Island, Region XIII (CARAGA) observed as of 18 December 2021.
• Affected structures by standing waters in Twin-twin, Santa Fe, Libertad, Santa Lnes, and Catangnan villages and General Luna town, Siargao Island, Region XIII (CARAGA) observed as of 18 December 2021.
• Potentially damaged structures and affected area al in Pinut-an Village and Liloan town, Southern Leyte province, Region XIII (CARAGA) as of 18 Dec 2021.

d. Changi RHCC’s has released SPOT Report 01/21 for Typhoon “RAI” (“ODETTE”) on Dec 16, 1600 (UTC+8).

e. WFP has released 9 times the ADAM (Automated Disaster and Mapping) product since December 15, 03:39:07 UTC which estimates Population Exposure from Typhoon ”RAI".
f. As reported on UNOCHA’s FLASH UPDATE No.2 and No. 3, Philippines: Typhoon Rai/Odette, as of 17 & 20 December 2021, 8 p.m. local time, consist of following highlight:

- The United Nations Resident and Humanitarian Coordinator Gustavo Gonzalez extended Humanitarian Country Team's (HCT) coordinated support to augment government's relief efforts. OCHA is coordinating with the Office of Civil Defense and regional partners and has already activated UNOSAT Charter for satellite image analysis of the initial landfall areas.

- Over the weekend, several humanitarian partners will support a conduct of rapid needs assessment to analyze the extent of damage.

- UN agencies, NGO partners, the Philippine Red Cross and the private sector CBi network PDRF are on red alert and many commenced conducting situation analysis reports and supporting evacuation operations.

- Humanitarian partners coordinated with the authorities to temporarily lift COVID-19 testing requirements on some islands for fully vaccinated humanitarian workers.

- The Emergency Telecommunications Cluster, through the Department of Information and Communications Technology (DICT), in collaboration with WFP, has 2 MOVE Sets currently stationed in Surigao City and Ormoc City to facilitate access to electricity and internet to the government and partners. IOM is ready to deploy assessment teams and about 2,000 USAID-funded tarpaulins alongside DSWD in various locations.

- In Cagayan de Oro City, CARE and ACCORD assisted affected families in urban poor areas to locate possible evacuation centers as the primary evacuation centers are already at full capacity. NGO partners have food prepositioned and are activating procurement of other in-kind assistance through the ECHO-funded Rapid Response Mechanism of the REACH Project.

- On 19 December, the Government of the Philippines accepted the offer of the HCT to provide coordinated humanitarian assistance. Humanitarian partners have started providing support to local authorities through national line agencies with immediate relief and logistics support. However, some mobilization of humanitarian assistance was hampered by prevailing COVID-19 related precautionary measures and travel restrictions.

- On 20 December, ad hoc HCT and ICGG meetings were organized to discuss strategic and operational priorities separately. A diplomatic briefing was also held on the same day to share priority needs identified based on rapid assessments done by the MHT and ICCG members. The RC/HC together with several Ambassadors will conduct a high-level mission to Dinagat Islands on 22 December to visit some of the most affected areas and discuss the situation with the authorities.

g. International Federation of Red Cross and Red Crescent Societies (IFRC) has issued an Emergency Appeal related to Typhoon Rai on December 18, with Appeal numbered MDRPH045 aims to support the Philippine Red Cross in response to Typhoon Rai. The operation aims to meet the immediate and early recovery needs of 81,000 of the most vulnerable affected households (405,000 people) in 15 chapters in Regions V, VI, VII, VIII, X, XI, CARAGA, and MIMAROPA within 24 months. The strategy focuses on the following sectors:

- Health & Care including Water, Sanitation and Hygiene (WASH) including Mental Health and psychosocial support / Community Health / Medical Services.

- Integrated assistance (Livelihoods, Multi-purpose Cash, Shelter, Housing and Settlements)
• Protection and Prevention (Risk Reduction, Climate adaptation and Recovery, Protection, Gender and Inclusion (PGI), Migration, Environmental Sustainability)

h. On December 19, UNOCHA has published Typhoon Rai (Odette) Operational Presence (Preparedness) Map as of Dec 19. The map shows humanitarian partners scattered throughout the Philippines to provide humanitarian response and assistance.

i. On December 20, DG ECHO has published Tropical Cyclone RAI (Odette) – DG ECHO Daily Map.

j. On December 20, the Humanitarian Country Team (HCT) and the Mindanao Humanitarian Team (MHT) has published Consolidated Rapid Assessment Report for Super Typhoon Rai (Odette). The Report builds on the Joint Analysis for Disaster Exposure (JADE) developed by the Pacific Disaster Centre (PDC), WFP and OCHA on 15 December and updated on 16 December, modeling the potential disaster impact on communities and the economy ahead of Super Typhoon Rai’s landfall. The Assessment & Analysis Cell (A&A Cell) was also activated and provided remote support. The report consists of Impact Assessment and Priority Needs including Education; Emergency Shelters; Camp Coordination and Camp Management; Emergency Telecommunications; Food Security and Agriculture, Nutrition; Health, Sexual Reproductive Health and Mental Health and Psychosocial Services; Logistics; Protection, including Child Protection and Gender-Based Violence; Water, Sanitation and Hygiene; Early Recovery and Livelihoods; and Coordination and Community Engagement. The report also described the existing Operational Constraints and Information Gaps. The report also mentioned that as of 19 December, at least 8 UN agencies - including DSS, IOM, OCHA, UNHCR, UNICEF, UNFPA, WHO, WFP - as well as at least 16 international and local NGOs and foundations - including AAH, ACCORD, ADRA, Americares, Bidlisiw Foundation, CARE, Caritas Germany, CFSI, CRS, Handicap International, Oxfam, RAFI, Relief International, ShelterBox, Save the Children, Sumpay Mindanao, World Vision - participated in the rapid needs assessment exercise. In addition, authorities in Dinagat Province submitted an assessment form. Overall, partners shared 33 assessment forms with data from Regions VII, VIII, IX, X, BARMM, and CARAGA.

k. On December 20, in response to the recent climate emergencies in Malaysia and the Philippines (TC “RAI”), the Singapore Red Cross (SRC) is pledging US$100,000 in humanitarian aid (US$50,000 respectively) to the Malaysian Red Crescent and the Philippine Red Cross, in support of their ongoing relief efforts. The homegrown humanitarian organisation is also launching public appeals, where funds raised would go towards the relief and recovery of affected communities, with a focus on emergency healthcare, first aid assistance and distribution of hygiene kits, shelter tool kits, tarpaulins, hot meals, clothes, mats, blankets, surgical masks to evacuation centres. In the Philippines, Singapore Red Cross will also support a local organisation to distribute relief items including water, rice, groceries to 1,000 households across six communities in need of support. Psychological first aid is also provided in evacuation centres to affected persons.

l. On December 20, upon the request of the Government of the Republic of the Philippines, the Government of Japan has decided to provide emergency relief goods (generators, portable jerry cans, tents, sleeping pads, and plastic sheets) through the Japan International Cooperation Agency (JICA) to the Philippines in response to the damages caused by Typhoon Odette. In light of the humanitarian perspective and the close relations between Japan and the Republic of the
Philippines, Japan has decided to provide emergency assistance to the Philippines in support of survivors of the typhoon disaster.

On December 21, UNICEF sends supplies to Typhoon "RAI" areas in response to the needs of children and families in affected areas based on initial assessments which around 845,000 children need urgent assistance. UNICEF staff is on the ground conducting assessments and is leading the Water, Sanitation and Hygiene (WASH), Nutrition, Education and Child Protection clusters together with the Philippine Government and partners. UNICEF’s emergency supplies are ready to be dispatched to respond to people’s needs for safe drinking water, sanitation, hygiene, nutrition, education, and child protection.

As reported on Philippines News Agency, 21 Dec, 4:28pm, Canada, Hungary, the United Kingdom, and New Zealand have pledged to provide over PHP187.9 million to assist provinces hit hard by the onslaught of Typhoon Odette. Several countries like China, the United States, Japan, Israel, and Australia allocated in-kind goods for immediate deployment to the affected families.

Response by Other Partners

a. On December 17, the Manila Observatory (MO) has made an emergency observation request and acquired available data and maps from the Data Analysis Nodes (DAN) (Asian Institute of Technology and Earth Observatory of Singapore) of the Asian Disaster Reduction Center (ADRC) through the Sentinel Asia OPTEMIS Dashboard.

5. RECOMMENDATIONS AND PLAN OF ACTIONS

The AHA Centre’s Plan

a. The AHA Centre stands ready to support and provide additional assistance, if and when requested by NDRRMC.

b. The AHA Centre will continue its close coordination with NDRRMC-OCD and will issue necessary updates accordingly.

Prepared by:
The AHA Centre - Emergency Operations Centre (EOC)

ABOUT THE AHA CENTRE

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

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ANNEXES: Information Products from Partners

Pacific Disaster Center (PDC), WFP and OCHA

Joint Analysis of Disaster Exposure (JADE) for Typhoon Rai - The Philippines
https://reliefweb.int/sites/reliefweb.int/files/resources/PDC_Typhoon_Rai_Philippines_U NOCHA_WFP_JADE_15DEC0300UTC.pdf

United Nations Institute for Training and Research - Operational Satellite Applications Programme (UNITAR-UNOSAT)

Preliminary Satellite-Derived Standing Waters Analysis for:

Earth Observatory Singapore – Flood Proxy Map