



ONE ASEAN
ONE RESPONSE

SITUATION UPDATE

TROPICAL CYCLONE MOCHA Myanmar

No. **9**

Tuesday, 30 May 2023, 2000 HRS (UTC+7)

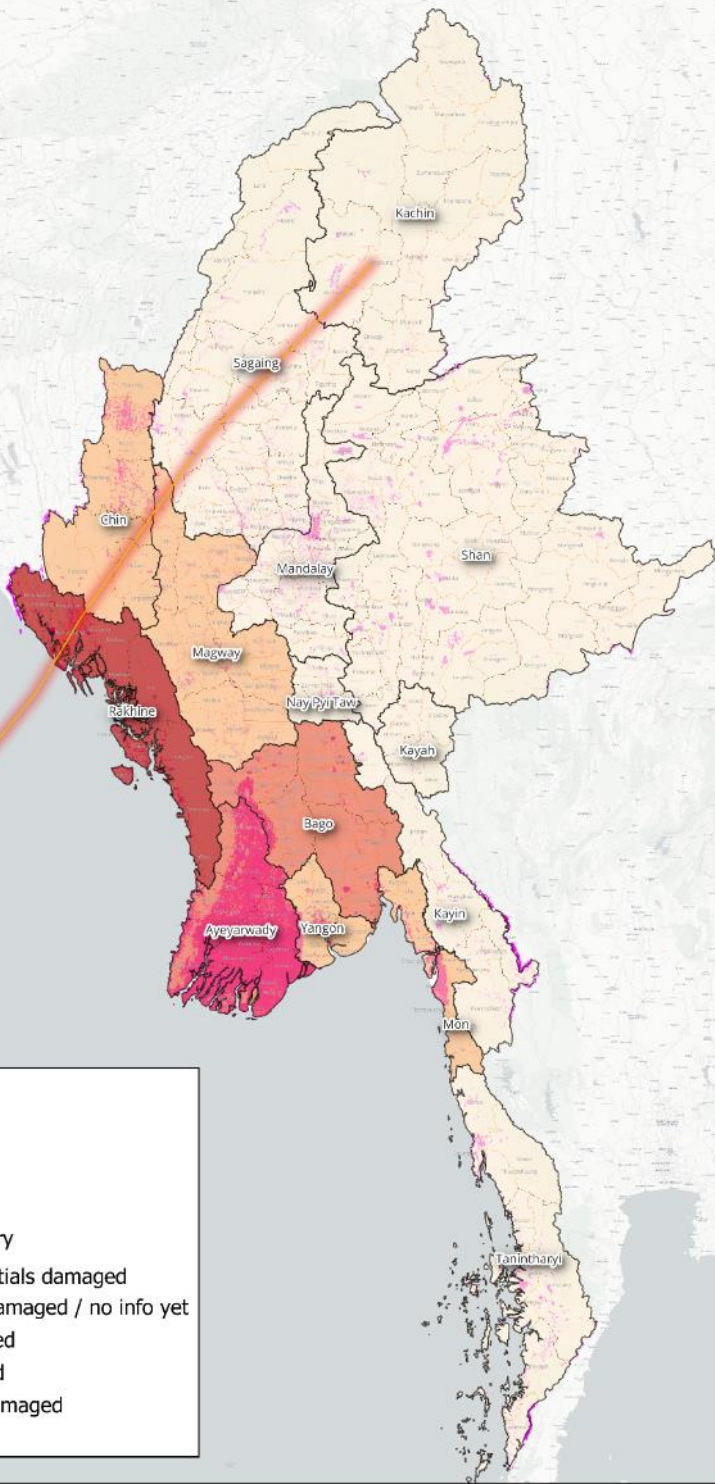
This Situation Update is provided by the AHA Centre for use of the ASEAN Member States and relevant stakeholders. The information presented is collected from various sources, including but not limited to ASEAN Member States' Government Agencies, UN, IFRC, NGOs, Humanitarian and Dialogue Partners, and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

Tropical Cyclone MOCHA

Disclaimer: Information as of 30 May 2023



Sources:
Numbers of houses / buildings damaged: DDM Myanmar
TC MOCHA track: JTWC
Administratives boundary: MIMU
Buildings / residential: OpenStreetMap



Legend

- Track of TC MOCHA
- Township Boundary
- District Boundary
- State or Region Boundary

Numbers of houses / residential damaged

- Less than 100 houses damaged / no info yet
- 100-500 houses damaged
- 500-1K houses damaged
- More than 1K houses damaged
- Buildings / residential

- 912K**
PERSONS EVACUATED TO SAFER PLACES
- 148**
LIVES LOST
- 131**
INJURED PERSONS
- 384.4K**
LIVESTOCK LOST
- 276.7K**
BUILDINGS DAMAGED
- 4.2K**
SEARCH & RESCUE TEAMS RESPONDING
- 1.2K**
SEARCH & RESCUE VEHICLES (LAND & WATER)
- 28.5K**
HOUSEHOLDS CAN BE CATERED WITH STOCKPILED RELIEF ITEMS
- 283**
TOTAL RAPID RESPONSE AND MEDICAL RESPONSE PERSONNEL DEPLOYED
- 1.5M USD**
ESTIMATED TOTAL COST OF DAMAGE TO BUILDINGS, ROADS, BRIDGES



Note: Information contained in this document are additional information since the AHA Centre Situation Update #8 (26 May 2023) and until today (30 May 2023 at 1800 HRS UTC+7). You may refer to Situation Updates [#1](#), [#2](#), [#3](#), [#4](#), [#5](#), [#6](#), [#7](#), and [#8](#) for the previous information.

1. SUMMARY

UPDATED SITUATIONS. Weeks after Tropical cyclone MOCHA impacted Myanmar, the actual condition of the affected areas has become clearer. According to the analysis of earth observation satellite images as well as ongoing rapid assessments on the ground, damages are confirmed to be 80-90% of buildings in the affected areas, especially in Sittwe and Rathedaung in Rakhine State, Myanmar. On-the-ground assessments conducted between 22 to 25 May 2023 by ASEAN-ERAT validated some of the damages that have been identified in Rakhine State, Myanmar (Annex 1, 2, 3, and 4). In agreement, data from the National Disaster Management Committee (NDMC) show an increase in confirmed structural damages as well as livestock lost due to the cyclone. According to the latest information from Disaster Management Centre (DMC) as of 29 May 2023, there have been improvements in the overall condition particularly in Rakhine such as reconstruction for the education sector is at 51% and the health sector is 36%. The telecommunication network coverage in Rakhine also has regained 91%. However, particularly on education sectors and health sectors, reconstruction for the damaged school and other health facilities are still needed. Some of the problems also still exists in the affected areas such as access to power, water, and usual food sources, as utility lines remain damaged, and access to usual food sources is limited. Lastly, according to the information from DMC, there are no more people in the shelters who were evacuated in Rakhine State, all the evacuees due to TC MOCHA had already returned to their places.

PREPAREDNESS AND RESPONSE:

- a. On 28 May, the ASEAN-ERAT held a meeting to present the results of the ASEAN-ERAT rapid assessment to Myanmar Authorities. During the meeting, ASEAN-ERAT also presented the findings and recommendations of the assessment in the affected areas by Tropical Cyclone MOCHA. On 29 May, the ASEAN-ERAT departed for Yangon, Myanmar and further demobilised and departed for their home countries on 30 May through Yangon International Airport.
- b. The AHA Centre mobilised Disaster Emergency Logistics System for ASEAN (DELSA) relief items in response to Tropical Cyclone MOCHA in Myanmar since 21 May. A total of 221K USD worth of relief items in the form of jerry cans, shelter repair kits, toolkit shelters, tarpaulins, family tents, and kitchen sets have arrived in Yangon, Myanmar for further distribution to the affected community. The AHA Centre is working on mobilising additional items from the DELSA Warehouse in Subang, Malaysia.
- c. A total of 17 townships in Rakhine State and 4 townships in Chin State have been declared by the Myanmar Authorities as Natural Disaster-affected areas due to Tropical Cyclone MOCHA.

2. ASSESSMENT OF IMPACTS AND HUMANITARIAN NEEDS

Impacts in Myanmar

- a. According to the information from NDMC, as of 29 May 2023 (numbers are expected to rise as data collection continues and as communication lines are restored):
 - i. An estimated 1.23M persons (262.5K families) affected*
 - ii. 148 lives lost and 131 injured persons.
 - iii. 276,709 buildings damaged of which, 262,488 are residential houses, 1,815 are schools, 3,533 are religious buildings, 476 are hospitals/clinics, and 9,968 others.
 - iv. 384,358 livestock lost.
 - v. 912,277 were evacuated to safe places 233K of which are currently in 454 evacuation centres.



- vi. 3,110.374M MMK (1.5M USD) estimated cost of damages** to roads, bridges, and buildings.
**Data collection on the damages are still ongoing, numbers are expected to rise as data collection continues
- vii. 70% of whole Rakhine State sustained damages and 90% of houses have been unroofed.

*Note: Data collection are still on-going. *Estimation of the numbers of persons affected based on the proxy from the report of the houses damaged multiplied by the number of average households size – 4.7 (MIMU, 2020)*

Anticipated Risks. According to the ASEAN Specialised Meteorological Centre (ASMC), wetter conditions are predicted over much of southern Mainland Southeast Asia in the period of 29 May – 4 June, and warmer than usual temperature is predicted over much of the southern ASEAN region and over the northern half of Mainland Southeast Asia in the period of 29 May – 4 June (Annex 5).

Myanmar’s Department of Meteorology and Hydrology (DMH) forecasts that southwest monsoon has set in Southern Myanmar areas and Deltaic Myanmar. For the Central Myanmar, DMH forecasts that southwest monsoon is likely areas from 29 May - 4 June. DMH also forecasted that there is a possibility of isolated rain showers in Sittwe with maximum day temperature that may reach 35 degree Celsius for 32 May – 2 June.

Urgent Needs. DDM Myanmar reported that the most prioritised humanitarian relief items according to urgency of need on the ground are tarpaulins, family tents, shelter repair kits and toolkits, and jerry cans followed by family kits, kitchen sets, mosquito nets, and personal hygiene kits.

Humanitarian Needs. According to the findings from the ASEAN-ERAT assessments in Myanmar on May 2023, three priority needs by sectors are identified in the assessment area which are Food, Shelter and Non-food items, and Water and Sanitation Hygiene (WASH). Immediate needs for these three sectors as well as other sectors have been identified as follows:

- a. Food: (i) Immediate distribution of assorted food supplies to the rural areas and hard-to-reach localities; and (ii) Immediate distributions of rice sacks per family.
- b. Shelter and Non-food items: (i) Distribution of shelter repair kits; (ii) Distribution of roofing materials such as tarpaulins, GI/zinc sheets; and (iii) Provision of lumber, bamboo, and other construction materials.
- c. Water and Sanitation Hygiene (WASH): (i) Dredging of ponds and water reservoirs to better collect rainwater; (ii) Pump out contaminated water deposits and replace with fresh water; (iii) Immediate distribution of drinking water to communities; (iv) Repair or construction of community toilets; (v) Immediate deployment of water purification tablets and/or water filtration machines/ trucks; and (vi) Provision of hygiene kits and portable toilets.
- d. Health: (i) Health services are intact but quick fixes in the facilities' structures must be fast-tracked; (ii) Strengthen delivery of essential health services such as public health emergencies for the management of infectious disease prevention and control, vaccine preventable illness and COVID-19, mental health and psychosocial support interventions’, and deployment of emergency medical teams; and (iii) Ensure adequate supply of medicines, vaccines and health commodities at all levels, considering possible disease given the existing conditions.
- e. Livelihood: Seeds, agriculture and fishing equipment/ materials and cash assistance to start up their livelihood.
- f. Education: (i) Repair damages sustained by the schools; and (ii) Temporary alternative school location or explore blended learning set-up.
- g. Public Works and Infrastructure: (i) Provision of electric generator (and fuel assistance) for schools, health centre, hospitals, and government buildings; and (ii) In the areas where bridges were damaged, provision of temporary bridges or river crossing boat/ferry can be an option for people and commodities mobilities.



Estimated Cost. According to the findings from the ASEAN-ERAT assessments for the cost of identified immediate needs for the THREE (3) priority sectors (Food, Shelter and NFI, and WASH) are estimated around **22.8M USD for around 478K affected persons** in the most impacted area by Tropical Cyclone MOCHA in Sittwe, Rathedaung, Ponnagyun, and Kyauktaw.

3. ACTIONS TAKEN AND RESOURCES MOBILISED

Response by Myanmar Authorities

- a. **Search and Rescue.** Currently, a total of 4,159 Search and Rescue (SAR) teams in Rakhine (3,214) and Chin (945) are deployed according to the NDMC. The NDMC currently has 1,009 land and 212 water SAR vehicles deployed which are being utilised in Rakhine (203 and 109), Chin (84 and 15), Sagaing (395 and 77), and Magway (327 and 11). Stockpiled rescue items can cater to a current total of 28,571 households (HH) in Rakhine (8,974 HH), Chin (2,507 HH), Ayeyarwaddy (5,367 HH), Sagaing (4,519 HH), Magway (3,804 HH), and 6 DMC township offices (3,400 HH).
- b. **Assessment.** According to the NDMC, a total of 19 initial field survey teams have been deployed in Rakhine (17), Ayeyarwaddy (1), and Magway (1).
- c. **Evacuation.** According to the NDMC, as of 26 May, there are no more people in the evacuation shelters in Rakhine State.
- d. **Food.** As of 29 May, NDMC has delivered 60,000 rice bags, which is approximately equivalent to 3000 tonnes, to Rakhine State.
- e. **Health.** According to the NDMC, 283 Rapid Response Team personnel have been deployed in Rakhine (113), Chin (7), Sagaing (6), and Ayeyarwaddy (157). A total of 1,320,492 units of healthcare items such as oral rehydration packs (272,500), water purification tablets (3,936,000), emergency lights (1,000), chlorine powder boxes (644), disaster medical kits (946), interagency emergency health kits (IEHK) (162), and toilet bowls (3,000) have been delivered. NDMC has further deployed 72 Medical Treatment Team personnel in Rakhine (41), Chin (7), Sagaing (3) and Ayeyarwaddy (21).
- f. **Non-Food Items (NFIs).** According to the NDMC, the current NFI distributions of stockpiles are as follows:
 - i. 2,740 tarpaulin rolls in Rakhine (2,732), Chin (3), Ayeyarwaddy (1) and Sagaing (4)
 - ii. 1,947 tents in Rakhine (1,109), Ayeyarwaddy (209), Sagaing (526), and Magway (103)
 - iii. 293,350 roofing sheets in Rakhine (285,091), Ayeyarwaddy (7,269), and Magway (990)
 - iv. 9,911 life jackets in Rakhine (7,250), Chin (42), and Ayeyarwaddy (2,619)
 - v. Iron nails in Rakhine (22 visses / 37 kg)
 - vi. Nails in Rakhine (8350 visses / 14,028 kg)
 - vii. Timber logs in Rakhine (1,641.5 tonnes)
 - viii. Chain saws in Rakhine (44 units)
- g. **Water, Sanitation and Hygiene (WASH).** According to DMC, as of 29 May, a total 160 sets of LifeStraw Community Water Purifiers have been distributed in Rakhine State for water purification. Furthermore, a total of 17 fiberglass tanks have been delivered for water collection and distribution.
- h. **Transportation.** According to NDMC, 1,492 units for transportation support are deployed. 173 of which, are passenger vehicles deployed in Rakhine (89), Chin (42), and Sagaing (42); 655 of which, are cargo vehicles deployed in Rakhine (141), Chin (257), and Sagaing (257); 451 of which, are watercrafts deployed in Rakhine (447), Chin (2), and Sagaing (2); and 183 others, are ambulances deployed in Rakhine (128), Chin (10), and Sagaing (45).
- i. **Stockpile of Relief Items.** According to the NDMC, relief items have already been deployed. Current refilled stockpile of relief items is enough for 26,597 households, with details as follows: Rakhine



(6,790), Chin (1,308), Ayeyarwaddy (5,536), Sagaing (5,248), Magway (4,165) and in GAD township offices and DMC offices (3,550).

- j. **Recovery.** 1,682 members of the police force and 1,144 members of the fire brigade are clearing debris in the affected areas. According to the DMC, the reconstruction for the education sector is at 51% and the health sector is at 36%.
- k. The status of mobile communication availability in Rakhine is at 91%.
- l. Data collection on the impacts and damages is ongoing by relevant authorities.

Response by the AHA Centre

- a. The AHA Centre EOC remains on **Alert Level RED (Active Response)**.
- b. On 28 May, the ASEAN-ERAT held a meeting to present the results of the ASEAN-ERAT rapid assessment to Myanmar Authorities. During the meeting, which was attended by representatives of the Ministry of Social Welfare, Relief, and Resettlement, Department of Disaster Management (DDM) Myanmar, and the AHA Centre, ASEAN-ERAT presented the findings and recommendations of the assessment in the affected areas by Tropical Cyclone MOCHA.
- c. The AHA Centre mobilised Disaster Emergency Logistics System for ASEAN (DELSA) relief items in response to Tropical Cyclone MOCHA in Myanmar since 21 May 2023. A total of 221K USD worth of relief items in the form of jerry cans, shelter repair kits, toolkit shelters, tarpaulins, family tents, and kitchen sets have arrived in Myanmar for further distribution to the affected community. An additional DELSA relief items consisting of toolkit shelters, tarpaulins, family tents, and automatic and manual water filtration is planned to be mobilised using one (1) commercial charter aircraft from the DELSA Regional Warehouse in Subang, Malaysia to Myanmar on Thursday, 1 June 2023.
- d. The AHA Centre also continue to provide support to DDM Myanmar in the development of joint situation updates/reports and other matters as necessary.

Response by Other Humanitarian Partners

Disclaimer: To identify potential gaps and needs and to avoid duplication of humanitarian efforts, below are some of the actions taken by other humanitarian actors in response to the impacts of TC MOCHA in Myanmar.

- a. UNOCHA has released [Situation Update #1](#) on 27 May 2023. Some updates include: (1) Shelter and other relief items are being distributed; (2) Distribution of drinking water and hygiene kits has also continued; (3) Immediate assistance is needed to provide food to vulnerable population; (4) Distributions have also been underway in the Northwest. The agriculture and fishery sectors have been badly hit, causing a severe loss of assets crucial for livelihoods and posing a longer-term threat to food security; and (5) Health services are being provided, but damaged infrastructure poses challenges. Many township hospital buildings, IDP camp clinics, and rural health centers have been impacted.
- b. UNICEF has released [Situation Report #8](#) on 26 May 2023. Some updates include: (1) Rehabilitation and cleaning up debris from schools and learning centers is a high priority to ensure readiness for school re-opening, planned for early June, as it is reported that 1,380 basic education schools across 17 townships of Rakhine have been affected; (2) Cyclone Mocha badly damaged Rakhine markets, resulting in significant increases in the price of essential food, non-food items, and services; (3) UNICEF and partners reached 31,725 affected population through distribution of family hygiene kits, soaps, buckets, jerry cans, and water purification sachets and water trucking for most affected villages in Rakhine; (4) The catastrophic Cyclone Mocha had a devastating impact in Chin State, affecting 1813 households, 18 religious' structures, and 9 educational institutions in Matupi, Hakha, Kanpalet, Palettwa, Mindat, Falam, Thantlang and Tedim; (5) In the Northwest, UNICEF is working with implementing partners on the distribution of essential learning package kits (5,440 sets) and short-term home-based learning materials (2,472 sets) to IDP camps affected by the cyclone and armed conflicts.



- c. WFP has released [Situation Report #7](#) on 26 May 2023. Some updates include: (1) In Myanmar, WFP has reached 115,900 people in the first ten days of its cyclone response across Rakhine State with emergency food and cash; (2) In Bangladesh, WFP reached over 14,100 Rohingya refugees with hot meals and biscuits from 13 to 20 May; (3) WFP is providing common services to other United Nations (UN) agencies by transporting relief cargo and providing warehousing support.
- d. The Myanmar Red Cross Society response team went to Palinpyin village in Sittwe on 28 May to provide emergency relief items to 482 households that were affected by Cyclone Mocha.

4. PLAN OF ACTIONS

The AHA Centre's Plan

- a. On 30 May, the ICLT and ASEAN-ERAT demobilised and departed for their home countries.
- b. The AHA Centre is currently working on mobilising the remaining DELSA relief items from the DELSA regional stockpile in Subang, Malaysia via air and sea.
- c. The AHA Centre team will continue to support Myanmar's response effort under close coordination with DDM Myanmar.
- d. **This will be the last Situation Report for Tropical Cyclone MOCHA** in Myanmar unless there is any significant development. The AHA Centre will continue to monitor the impacts of Tropical Cyclone MOCHA and issue updates as necessary. Updated impacts figures will be through the ASEAN Disaster Information Network (ADINet) with AHA Disaster ID (AHADID): [AHA-TC-2023-000504-MMR](#) | GLIDE Number: TC-2023-000069-MMR.



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ABOUT THE AHA CENTRE

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

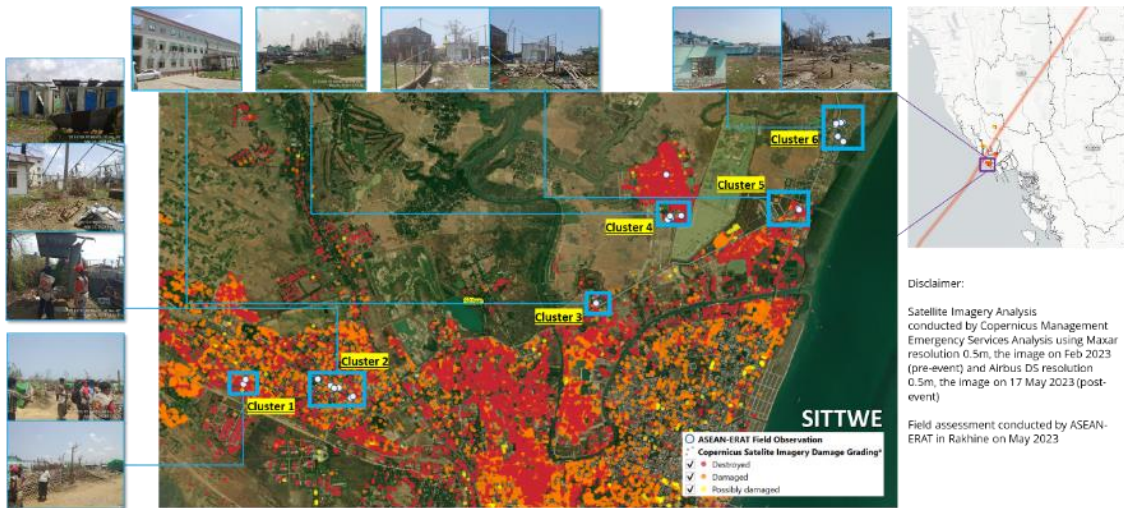
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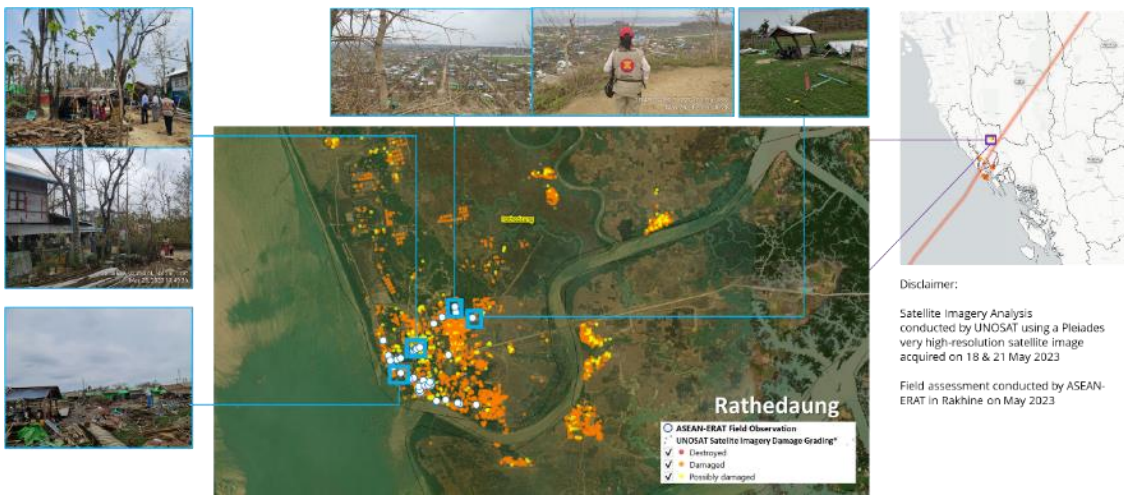
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Annex 1. Excerpt of the assessment / validation areas by the ASEAN-ERAT in Sitwe, Rakhine



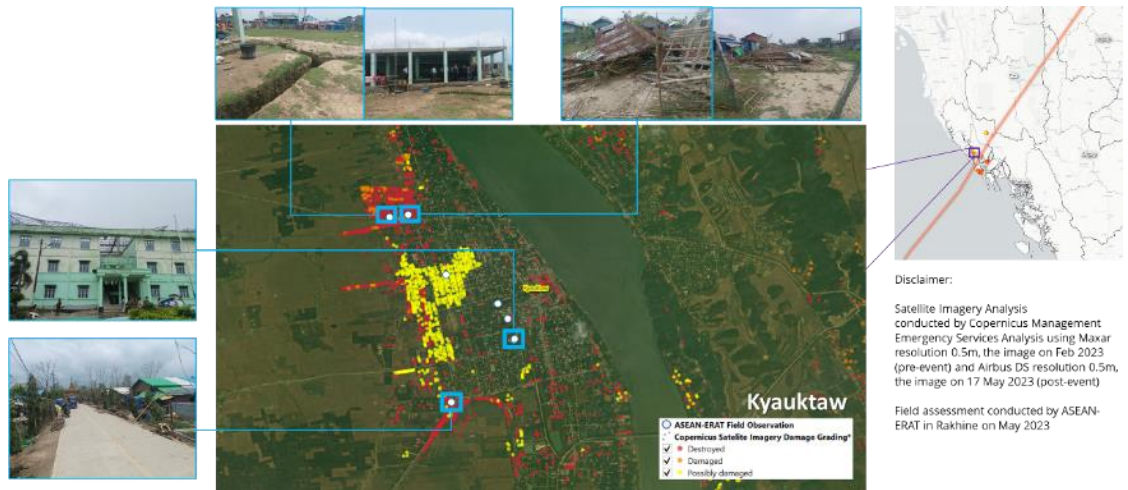
Annex 2. Excerpt of the assessment / validation areas by the ASEAN-ERAT in Rathedaung, Rakhine



Annex 3. Excerpt of the assessment / validation areas by the ASEAN-ERAT in Ponnagyun, Rakhine



Annex 4. Excerpt of the assessment / validation areas by the ASEAN-ERAT in Kyauktaw, Rakhine



Annex 5. ASMC Sub-seasonal Forecast for 29 May- 11 June 2023

