

MEMBER REPORT

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**ESCAP/WMO Typhoon Committee
19th Integrated Workshop
Shanghai, China
19 - 22 November 2024**

CONTENTS

I. Overview of tropical cyclones which have affected/impacted Member's area since the last Committee Session

1. Meteorological Assessment (highlighting forecasting issues/impacts)
2. Hydrological Assessment (highlighting water-related issues/impact)
3. Socio-Economic Assessment (highlighting socio-economic and DRR issues/impacts)
4. Regional Cooperation (highlighting regional cooperation and related activities)

II. Summary of Progress in Priorities supporting Key Result Areas

1.
2.
3.

[The total number of items for each Member **should not exceed 15**. Please also kindly confine inputs to those relevant to tropical cyclone and Typhoon Committee issues.]

I. Overview of tropical cyclones which have affected/impacted Member's area since the last Committee Session

1. Meteorological Assessment (highlighting forecasting issues/impacts)

2. Hydrological Assessment (highlighting water-related issues/impact)

1. In 2024, Philippine was directly affected by sixteen (16) Tropical Cyclones that entered the Philippine Area of Responsibility (PAR) in the months:
 - a. May (Typhoon Ewiniar),
 - b. July (Tropical Depression PRAPIRDON, Super Typhoon GAEMI)
 - c. August (Tropical Storm JONGDARI),
 - d. September (Severe Tropical Storm YAGI, Tropical Storm BEBINCA, Tropical Depression SOULIK, Tropical Storm PULASAN, Tropical Depression 17W, Super Typhoon KRATHON)
 - e. October (Severe Tropical Storm TRAMI, Super Typhoon KONGREY)
 - f. November (Typhoon YINXING, Typhoon TORAJI, Super Typhoon USAGI, Super Typhoon MANYI)Flooding were experienced in different parts of the country during the passages of these events.

Six (6) regions were affected by flooding in several locations of varying magnitude and were reported in May during the passage of:

Typhoon Ewiniar- highest recorded 24hr. rainfall was 196.9 mm in Region 4A, CALABARZON, Luzon. These event started in May 24, 2024 and lasted until May 29, 2024. General Flood Advisories/Flood Information/Bulletins were issued for these regions.

Sixteen (16) regions were affected by flooding in several locations of varying magnitude and were reported in July during the passage of the ff:

Tropical Depression PRAPIRDON- highest recorded 24hr. rainfall was 81mm in Baler, Aurora, Region 3, Luzon.

Super Typhoon GAEMI- highest 24hr rainfall recorded was 323.9mm. at Science garden, Quezon city, Metro Manila, Luzon) These events started on July 19, 2024 and lasted until July 25, 2024. General Flood Advisories/ Flood Information/Bulletins were issued for these regions.

No regions reported flooding occurrences in August during the passage of:

Tropical Storm JONGDARI- highest recorded 24hr. rainfall was 63.0mm. in Region 10, Mindanao, It entered the area PAR on August 18, 2024 and immediately exited on August 19, 2024 with no significant effects in the country.

Sixteen (16) regions were affected by flooding in several locations of varying magnitude and were reported in September-October during the passages of the ff:

Severe Tropical Storm YAGI- highest recorded 24hr. rainfall was 258.90mm in Region 5, Luzon, Tropical Storm BEBINCA- highest recorded 24hr. rainfall was 178.60mm in Region 4B, MIMAROPA, Luzon,

Tropical Depression SOULIK- highest recorded 24hr. rainfall was 89.0mm in Region 2, Cagayan, Luzon , Tropical Storm PULASAN- highest recorded 24hr. rainfall was 99.0mm in Region 1, Luzon, Tropical Depression 17W- highest recorded 24hr. rainfall was 174.0mm in Region 3, Luzon, Super Typhoon KRATHON- highest recorded 24hr. rainfall was 207.0mm in Region 1, Luzon .

General Flood Advisories/ Flood Information/Bulletins were issued for these regions.

Six (6) regions were affected by flooding in several locations of varying magnitudes and were reported in October during the passages of the ff:

Severe Tropical Storm TRAMI- highest recorded 24hr.- Daet: 528.5mm.,Luzon.

Super Typhoon KONG REY- highest recorded 24hr. rainfall was - Itbayat: 224.2mm.Luzon.

General Flood Advisories/ Flood Information/Bulletins were issued for these regions.

Six (6) regions were affected by flooding in several locations of varying magnitudes and were reported in November during the passages of the ff:

Typhoon YINXING- highest recorded 24hr. rainfall was Calayan: 242.6mm., Luzon.

Typhoon TORAJI- highest recorded 24hr. rainfall (Nov 9 - 12) Maximum rainfall - Calayan: 103.1mm., Luzon

Super Typhoon USAGI (Nov 12 - 15) Maximum rainfall - Basco: 149.5mm.,Luzon.

Super Typhoon MANYI – highest recorded 24hr rainfall was 217mm. in Virac, Catanduanes, Luzon.

These events started in May, 2024 and lasted until November 18, 2024. General Flood Advisories/Flood Information/Bulletins were issued for these regions.

A total of 3,681 combined Flood bulletins/Advisories/Information were issued during these events (May-November2024).

2. Major Dams and Reservoirs Monitoring:

January to November 2024:

These events has also activated the Flood Forecasting and Warning System for Dam Operations (FFWSDO) in coordination with the four (4) major dams operators in Luzon. A total of 327 combined flood bulletin/information for dam releases were issued during these events.

a. Ipo Dam has opened its spillway gates on July 24-26, Sept. 02-10, Sept. 19-21, Oct. 2-26.

- b. Binga Dam has opened its spillway gates on July 24-30, Sept.02- 03, Sept.05-10, Sept 16-24, Oct 22-28, Oct 30-Nov 3, Nov 5-8, Nov 10- present.
- c. Magat Dam has opened its spillway gates on Sept. 12-23, Oct 22 - Nov. 1, Nov 11-present.
- d. Ambuklao Dam has opened its spillway gates on July 25-29, Sept. 08-10, Sept. 16-23, Oct 23- 28., Oct 29 – present.
- e. SanRoque Oct. 23-26, Nov. 11-12, Nov. 16-18

3. Socio-Economic Assessment (highlighting socio-economic and DRR issues/impacts)

4. Regional Cooperation (highlighting regional cooperation and related activities)

II. Summary of Progress in Priorities supporting Key Result Areas

[The total number of items for each Member **should not exceed 15**. Please also kindly confine inputs to those relevant to tropical cyclone and Typhoon Committee issues.]

1. [Activity or title of project (in bold lettering)]

Main text:

[Main text describing the project/activity (preferably within 1-2 pages, including photos, diagrams, URLs, references, etc.)]

Identified opportunities/challenges, if any, for further development or collaboration:

[Describe relevant opportunities and challenges arising from this project/activity, if any]

Priority Areas Addressed:

[This part should indicate which “Priority” of different Working Groups (namely, Integrated, Meteorology, Hydrology and DRR) in the KRAs Table of the TC Strategic Plan 2022-2026 (http://www.typhooncommittee.org/docs/SP2022_FINAL.pdf, or Appendix I at the end of this document) are addressed in this project/activity. Please see the example of this template for the suggested presentation format for the “Priorities” of different “Working Groups”. The number of priorities for each project/activity is preferably no more than five]

Key Pillars of UN’s Early Warnings for All (EW4All) Initiative Addressed:

Key Pillars of EW4All	Please ✓ the related pillar(s)
Disaster risk knowledge and management	
Detection, observation, monitoring, analysis, and forecasting	
Warning dissemination and communication	
Preparedness and response capabilities	

[This part should indicate which “Pillars” of EW4All initiative are addressed in this project/activity. Please see the example of this template. Member can select more than one pillar if appropriate. Details of the four pillars are available from the link below:
<https://public.wmo.int/en/earlywarningsforall>]

Contact Information:

Member: [Member]

Name of contact for this item: [Point of Contact]

Telephone: [Telephone Number]

Email: [Email Address]

2. [Activity or title of project (in bold lettering)]

Main text:

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EXAMPLE of reporting format for project/activity in Part II

1. Continuous development of the website of the Severe Weather Information Centre (SWIC 2.0) for Disaster Risk Reduction

Main Text:

In response to the WMO's initiative of the implementation of Global Multi-hazard Alert System (GMAS) framework as stipulated in Resolution 13 (Cg-18) to enhance disaster risk reduction in the global scale, HKO enhanced the WMO website of SWIC using technology of Geographical Information System (GIS) and adopting the latest WMO map. As in Sep 2020, 78 official data feeds of warnings and alerts from WMO Members in the format of Common Alerting Protocol (CAP) were incorporated into the SWIC 2.0 website, an increase of more than 20% from 2019. In addition, it also displays the tropical cyclone advisories and warnings from Regional Specialized Meteorological Centres, Tropical Cyclone Warning Centres, and National Meteorological Centres in the Typhoon Committee region in both map view and table view.

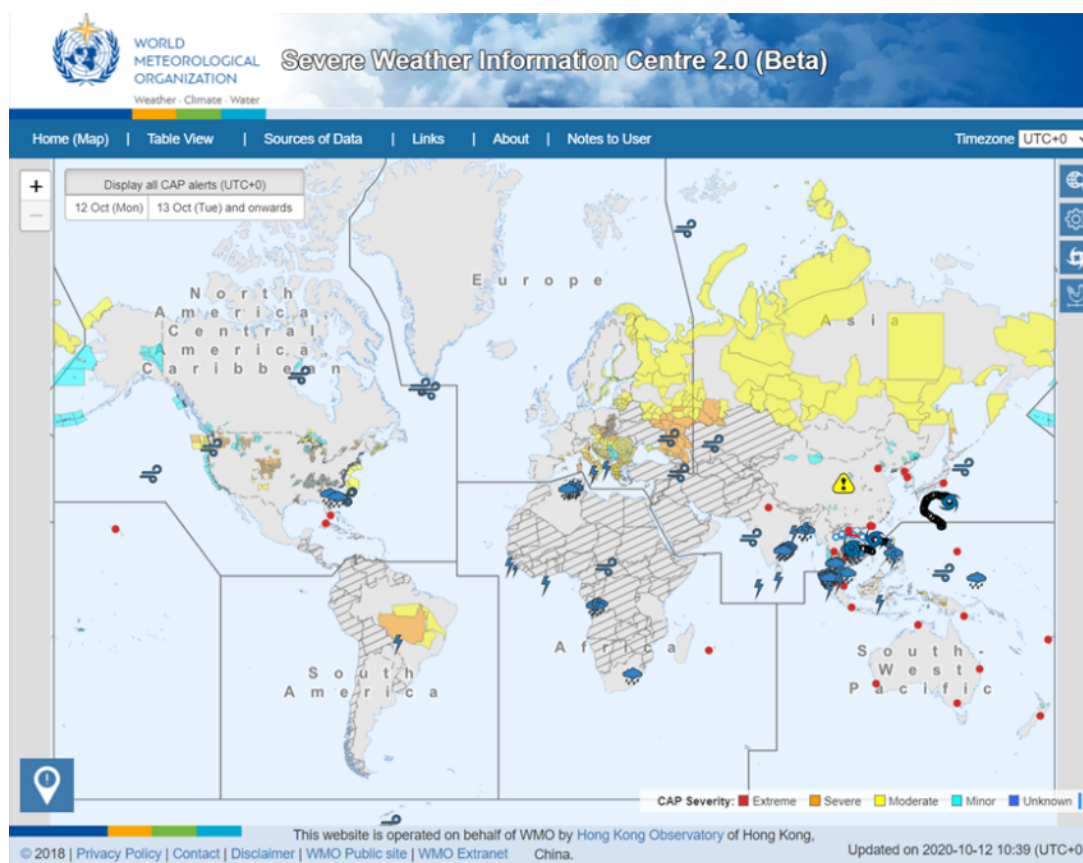


Figure XX – SWIC 2.0 website

Identified opportunities/challenges, if any, for further development or collaboration:

1. Tropical cyclone advisories and warnings should be made available in machine readable format, e.g. XML, JSON, etc., to facilitate the use of official forecast and warnings by websites and online media.
2. The use of CAP format in dissemination of weather warnings and alerts from WMO Members should be further promoted.

Priority Areas Addressed:

[Note: please indicate BOTH the “working group” and “priorities” here, preferably no more than five priorities for each project/activity]

Integrated

- Strengthen the cooperation between TRCG, WGM, WGH, and WGDRR to develop impact-based forecasts, decision-support and risk-based warning.
- Enhance collaborative activities with other regional/international frameworks/organizations, including technical cooperation between TC/AP-TCRC and TC/PTC cooperation mechanism.

Meteorology

- Promote communication among typhoon operational forecast and research communities in Typhoon Committee region.
- Enhance RSMC capacity to provide regional guidance including storm surge, responding to Member’s needs.

DRR

- Promote international cooperation of DRR implementation project.

Key Pillars of UN’s Early Warnings for All (EW4All) Initiative Addressed:

Key Pillars of EW4All	Please ✓ the related pillar(s)
Disaster risk knowledge and management	
Detection, observation, monitoring, analysis, and forecasting	✓
Warning dissemination and communication	✓
Preparedness and response capabilities	

Contact Information:

Member: Hong Kong, China

Name of contact for this item: Dr/Mr/Ms XXXXXXXXX

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Email: XXXXXXXXXXXX

Appendix I - Priority Areas of Working Groups for the Strategic Plan 2022-2026

WG	Priorities
Integrated	1. Strengthen the cooperation between TRCG, WGM, WGH, and WGD RR to develop impact-based forecasts, decision-support and risk-based warning.
	2. Strengthen cross-cutting activities among working groups in the Committee.
	3. Enhance collaborative activities with other regional/international frameworks/organizations, including technical cooperation between TC/AP-TCRC and TC/PTC cooperation mechanism.
Meteorology	4. Enhance the capacity to monitor and forecast typhoon activities particularly in genesis, intensity and structure change.
	5. Develop and enhance typhoon analysis and forecast techniques from nowcast to medium-range, and seasonal to long-range prediction.
	6. Enhance and provide typhoon forecast guidance based on NWP including ensembles, weather radar and satellite related products, such as QPE/QPF.
	7. Promote communication among typhoon operational forecast and research communities in Typhoon Committee region.
	8. Enhance training activities with TRCG, WGH, and WGD RR in accordance with Typhoon Committee forecast competency, knowledge sharing, and exchange of latest development and new techniques.
	9. Enhance RSMC capacity to provide regional guidance including storm surge, in response to Member's needs.
Hydrology	10. Improve typhoon-related flood (including riverine flood, flash flood, urban flood, and coastal flood) monitoring, data collection and archiving, quality control, transmission, processing, and sharing framework.
	11. Enhance capacity in typhoon-related flood risk management (including land-use management, dam operation, etc.) and integrated water resources management and flood-water utilization.
	12. Strengthen capacity in effective flood forecasting and impact-based early warning, including hazard mapping and anticipated risk based on methodological and hydrological modelling, and operation system development.
	13. Develop capacity in projecting the impacts of climate change, urbanization and other human activities on typhoon-related flood disaster vulnerability and water resource availability.
	14. Increase capacity in utilization of advanced science and technology for typhoon-related flood forecasting, early warning, and management.
DRR	15. Provide reliable statistics of mortality and direct disaster economic loss caused by typhoon-related disasters for monitoring the targets of the Typhoon Committee.
	16. Enhance Members' disaster risk reduction techniques and management strategies.
	17. Evaluate socio-economic benefits of disaster risk reduction for typhoon-related disasters.
	18. Promote international cooperation of DRR implementation project.
	19. Share experience/knowhow of DRR activities including legal and policy framework, community-based DRR activities, methodology to collect disaster-related information.

