ESCAP/WMO Typhoon Committee Fifty-Sixth Session of Typhoon Committee 27 February to 1 March,2024 Conference Kuala Lumpur, Malaysia

## REPORT on Activities of Working Group on Disaster Risk Reduction (WGDRR) of TC in 2023

#### (Item 8 of Tentative Programme for TC 56th Session) (Submitted by WGDRR)

ACTION REQUIRED: The Working Group is invited to:

- A. Review the activities of TC WGDRR conducted in 2023
- B. Approve the recommendations and AOPs with the related budget of WGDRR in 2024

#### APPENDIX:

- I. Draft text for Inclusion at Session Report
- II. Progress Report on activities of Working Group on WGDRR in 2023

## ANNEX

- I. Implementation Status Success Indicators of WGDRR Annual Operating Plans in 2023
- II. Implementation Status Success Indicators of WGDRR Annual Operating Plans in 2024.

# APPENDIX

## I. Draft text for inclusion at Session Report

#### 1. Disaster Risk Reduction Component

During the 18th Integrated Working Group DRR parallel meeting on 30<sup>th</sup> November 2023, held in Bangkok, the Working Group reviewed its activities and its Annual Operating Plans (AOPs) for 2023. Please refer to Appendix II for details.

Dr. Woojung Choi Vice Chair of WGDRR welcomed all the members and delivered the opening remarks. Mr. Marcus Landon Aydlett Vice Chair of WGDRR moderator of the meeting welcomed all the members and representatives. Participants was invited to introduce themselves during the meeting and a group photo was taken.

Around 10 of 14 member countries (1 China 2. Hong Kong, China 3. Japan 4. Lao PDR 5. Macao, China 6. Malaysia 7. Republic of Korea 8. Thailand 9. USA(Guam) 10. Vietnam), TCS, ESCAP, WMO, and other related agencies participated in the meeting.

Dr. Chihun Lee, from NDMI introduced the work and activities of WGDRR 2023. The Working Group passed the following AOPs 2023 during the 18th Working Group DRR meeting in Ulsan, Republic of Korea on 13th -16th June,2023, the Working Group reviewed its activities and its Annual Operating Plans (AOPs) for 2023. Around 30 participants from members and representatives from ESCAP, WMO, Tohoku University, Republic of Korea, Japan, Thailand, Malaysia, Lao PDR, Vietnam, USA, China, Hong Kong China, and Macao China, and TCS.

#### I. Review of the 2023 AOPs & Budget Status

Components of the WGDRR

WGDRR Member (Focal points)

Chair	Dr. Jongseol Lee (Repulic of Korea) Retired on 1st December 2023
	Director General of NDMI New Chairman TBA -
Vice Chairs	Mr. Marcus Aydlett (USA)
	Dr. Woojung Choi (Republic of Korea )
Focal Points	National Committee for Disaster Management (Cambodia)
	Ms. Ms Dong LIN (China)
	Mr. CHOE Kyong Sik (DPR Korea)
	Mr. Choy Chun Wing (Hong Kong, China)
	Ms. KABUTO Shoko (Japan)
	Mr. ISHIGAMI Shogo (Japan)
	Ms. Akhom Thammalangsy (Lao PDR)
	Mr. Fan Ka Wa (Macao, China)

Ms. Che Siti Noor bint koh Poh Lee (Malaysia)
Mr. CESAR M. IDIO, CESO V. (Philippines)
Dr. Chihun Lee (Republic of Korea)
Mr. Cheong Wee Kiong (Singapore)
Mr. Saharat Wongsakulwiwat (Thailand)
Mrs. Nguyen Thi Xuan Hong (Vietnam)

### I. Review of the 2023 AOPs & Budget Status

- a. AOP1. Capacity Building / Knowledge Sharing (NDMI)
  - i. NDMI hosted the Knowledge Sharing program in the Philippines and Lao PDR on the 25<sup>th</sup> and 27<sup>th</sup> April 2023 respectively. 7 experts from NDMI including the Chairman and Vice Chairman of WGDRR attended the program and shared information and research results on DRR. It also promoted the signing of Memorandum of Agreement between NDMI PAGASA and Memorandum of Understanding between NDMI and DMH. NDMI also published a report named "Strengthening the capability of Disaster Risk Reduction in the Philippines" for the Philippines in 2023.
- b. AOP2. Setting up Early Warning and Alert System (NDMI)
  - i. Since 2023 NDMI has launched the project for strengthening capabilities of disaster risk reduction in the Philippines. In 2023 the project proceeded to Danao and Argao city after the pre-feasibility study. NDMI conducted the field survey in April 2023, installed Early Warning and Alert System and conduced educational program in September 2023.
- c. AOP3. WGDRR Annual Meeting
  - NDMI hosted the face-to-face WGDRR Annual Meeting in Ulsan, Republic of Korea on June 13 to 16, 2023. The meeting topic was Future of Disaster Risk Reduction: Leveraging Technology to Adapt Climate Change. Participants from members, and representatives from ESCAP, WMO, TCS, AWG, and Tohoku University participated in the meeting.
- d. AOP4. Benefit Evaluation of Typhoon Disaster Prevention and Preparedness (STI)
  - i. Ms Dong LIN, China Meteorological Administration presented "Benefit evaluation of typhoon disaster prevention and preparedness. It illustrated the first national risk census of natural disasters in China and the application of this risk census results.
  - ii. STI will continue to update the operational pre-assessment system of risk caused by Tropical Cyclones and to update the database of damage caused by TCs over WNP
  - iii. It is expected that the fellowship program will resume in 2024 and 1- 2 fellowships will come to work in STI which will need a budget of USD6,000.
- e. AOP5. Sharing Information related to DRR
  - i. WGDRR will continue to exchange information and experience related to DRR through the forum on the TC website. Members are welcome to upload all kinds of DRR information such as data, video clips to the TC website.
  - ii. Mr Gerry Potutan from Asian Disaster Reduction Center introduced GLobal unique disaster IDEntifer.
- f. AOP6. Making Education Videos related to DRR (HKO)
  - i. A video named "Multi-Hazard Combined Effect" was translated into English with voiceover and subtitles as the coming education video related to DRR. HKO shared the video during the meeting and no further comment was received from the members. The

video will be finalised and uploaded to the Typhoon Committee website for members to use on public education on DRR.

#### A. Conclusion of WGDRR

Based on the information provided by the Members, the reports presented by project coordinator/leader and findings of the parallel session on WGDRR, the following conclusions were reached:

- g. With the release of travel restrictions, all the face-to-face meetings were resumed such as the Knowledge Sharing program in the Philippines and Lao PDR, the installation of Early Warning Systems in Danao and Argao city in the Philippines. NDMI will continue to host projects which aims to exchange information and experience sharing related to DRR such as policies and technologies among the members.
- h. NDMI will proceed the 2024's Global DRR Project for the Philippines. Olongapo city in Zambales province and Municipality of La Paz in Abra province were decided as target areas for the project in 2024.
- i. STI will continue the Benefit Evaluation of typhoon disaster prevention and preparedness" project in 2024. STI fellowship program will resume and 1-2 fellowship is expected for a budget of USD6,000 to work in this project.
- j. The 18th WGDRR annual meeting was hosted by NDMI Korea on 13th June, 2023, to discuss the issues related to WGDRR activities. WG reviewed the AOPs implementation with the budget expenditure in 2023 and proposed the plans for 2024. Besides the TC DRR members, ADRC, WMO and ESCAP were also invited to the meeting to give informative and valuable comments for WG. As a result, participating members agreed to allocate USD3,000 to NDMI for hosting the meeting.
- k. WGDRR decided to continue conducting the projects which can improve capacities of disaster management among TC Members through the project of information exchange and sharing such as participation in the important DRR world conferences, organizing the expert team to selected member state and using effective platform to exchange DRR information, as well as holding the WGDRR annual meeting. Discussion for Member focal points and guidance for using Glide will be arranged and members are kindly invited to visit the <u>https://glidenumber.net</u> for further information.
- I. At the 18<sup>th</sup> WGDRR annual meeting, HKO expressed that they can continue contributing educational videos related to DRR for TC DRR public education use. The project will continue to be led by HKO.
- m. For implementation of the proposed projects in 2024, WGDRR proposed the request of USD 24,500 to be allocated TCTF for the following items:
  - i. To allocate USD 12,500 budget of TCTF in 2024 for Capacity Building/Knowledge Sharing in DRR .
  - ii. To allocate USD 3,000 budget of TCTF in 2024 to supporting the WGDRR Annual Meeting in 2024 in ROK.
  - iii. To allocate USD 6,000 budget of TCTF in 2024 for STI Benefit Evaluation of Typhoon Project
  - iv. To allocate USD 3,000 budget of TCTF in 2024 for Making Education Video related to DRR.

### B. Recommendations for Implementation in 2024

Based on the conclusion, the WGDRR made the following recommendations:

- 1) To request NDMI to organize the team to the selected member for the project of capacity building and knowledge sharing in DRR.
- 2) To request NDMI to continue supporting the development and improvement of the early warning and alert systems related to typhoon disaster in the participating members.
- 3) To request NDMI, to continue supporting and hosting the WGDRR Annual Meeting in 2024 in ROK.
- 4) To request STI, China to continue conducting the research of the project of benefit evaluation of typhoon disaster prevention and preparedness.
- 5) To encourage the Members to share information related to DRR on the established forum of TC Website.
- 6) To request the Hong Kong Observatory to continue providing WGDRR with a video related to typhoon disaster or severe weather and translate it into English version (voiceover and subtitle) for Members use on DRR public education.
- 7) To request the cooperation of the Synergized Standard Operating Procedures for Costal Multi-Hazard Early Warning System Phase 3 concept SSOP III with WGDRR.
- 8) To request the Typhoon Committee to approve the proposed projects and related budget in 2024.

#### II. Review of questionnaire

A. AOP Alignment with 4 pillars of the EW4All Initiative

4 Pillars of EW4All		Related AOP with pillar(s)								
	AOP 1	AOP 2	AOP 3	AOP 4	AOP 5	AOP6				
Disaster risk knowledge and management	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$				
Detection, observation, monitoring, analysis, and		$\checkmark$								
forecasting										
Warning dissemination and communication		$\checkmark$			$\checkmark$	$\checkmark$				
Preparedness and response capabilities		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$				

- AOP1: Capacity Building / Knowledge Sharing in DRR (NDMI)
- AOP2: Setting up Early Warning and Alert System (NDMI)
- AOP3: Hosting WGDRR Annual Meeting (NDMI)
- AOP4: Benefit evaluation of Typhoon Disaster Prevention and Preparedness(STI)
- AOP5: Sharing Information related to DRR (NDMI)
- AOP6: Making Education Videos related to DRR (HKO)

#### III. Review of 2023 Budget Status.

The expenditure for 2023 DRR will be AOP1 and AOP6 which incurred expenditure of USD12,194.68 and USD2,487.97 respectively. This made a balance of USD817.35

Project No	Name of Project	Proposed Budget (USD)	Expenditure (USD)		
AOP1	Capacity Building/Knowledge Sharing in DRR	\$12,500	\$12,194.68		
AOP2	Installation of Early Warning System related to typhoon disasters	Funded by NDMI			
AOP3	WGDRR Annual Meeting	Funded by NDMI			
AOP4	Benefit Evaluation of Typhoon Disaster Prevention and Preparedness	No need			
AOP5	Sharing Information related to DRR	No need			
AOP6	Making video related to DRR	\$3,000	\$2,487.97		
Subtotal		\$15,500	\$14,682.65		
Balance		USD817.35			

### IV. 2024 WGDRR AOPs & Budget Plan

Owing to the inflation of the airfares, meeting expenses and invitation of guests speakers, an extra budget of USD3,000 is recommended for hosting the WGDRR Annual Meeting in ROK.

KRA	No	Name of Project	Proposed Budget (USD)
KRA5 KRA7	AOP1	Capacity Building/Knowledge Sharing in DRR (NDMI)	\$12,500
KRA2 KRA3	AOP2	Installation of Early Warning System related to typhoon disasters (NDMI)	Funded by NDMI
KRA4 KRA5	AOP3	WGDRR Annual Meeting	\$3,000
KRA2 KRA4 KRA6	AOP4	Benefit Evaluation of Typhoon Disaster Prevention and Preparedness (STI)	\$6,000
KRA5 KRA7	AOP5	Sharing Information related to DRR	No need
KRA7	AOP6	Making video related to DRR (HKO)	\$3,000
Total			USD24,500

## V. Appointment of the Chair and Vice Chairs

A. Dr Jongseol Lee retired from his position on 1<sup>st</sup> December 2023. As the Chairmanship of the WGDRR will end on 31<sup>st</sup> December 2023. Malaysia, Thailand and Vietnam recommended NDMI to extend their Chairmanship for another term. The recommendation was passed as there were participating members supporting it. NDMI will select a new Director General by early 2024 to be the Chairman while Dr. Woojung Choi (ROK) and Mr. Marcus Landon Aydlett (USA) will extend their term as the Vice Chairs.

B. The participants extended their further appreciation to the Working Group Chairs, Dr. Jongseol Lee, Chair, Dr. Woojung Choi and Mr. Marcus Aydlett and Vice Chairs and NDMI on their contribution and effort in the past year.

## ANNEX

# I. Implementation for WGDRR AOPs in 2023 with the success indicators

SP's KRA and SG	NO	Objective	Action	Other WGs Involved	TCS Responsibility	Quarter Completed	Project leader/Other Organizations Involved	Success Indicators	Funding Required USD	Funding Sources	Completed YES/NO
KRA5 KRA7	1	Capacity Building /Knowledge Sharing	Publichad a ranort	Invite other WGs to join	Coordination and participation	Second	NDMI And participating members	Conducted the Mission in the selected member state		NDMI and TCTF	Yes
KRA1 KRA2 KAR3 KRA4 KRA5 KRA6 KRA7	2	systems related to	To develop and improve the installed EW and Alert Systems in the members' state in order to improve the capacities of resilience for typhoon related disaster		Coordination	Fourth	NDMI	NDMI assigned experts to Philippines to install and maintain the systems	Unspecified	NDMI	Yes

SP's KRA and SG	NO	Objective	Action	Other WGs Involved		Quarter Completed	Project leader/Other Organizations Involved	Success Indicators	Funding Required USD	Funding Sources	Completed YES/NO
KRA5 KRA6 KRA7	3	Annual Meeting	To organize the annual meeting to follow up on the working group's activities and information exchange		Coordination and participation	Second	NDMI and TC DRR Members	The meeting was held in ROK	Unspecified	NDMI	Yes
KRA2 KRA4 KRA6	4	of Typhoon Disaster Prevention	To promote the research concerning benefit evaluation of typhoon disaster prevention and preparedness.		Coordination and participation	Third/Fourt h	STI, China	Conducted a research fellowship for TC Member in STI, China	No need		Yes
KRA5 KRA7	5	Snaring information related to disaster risk managemen t	To share information such as policies or mechanism related to DRR among TC Members via the forum established on TC Website			Time to time	NDMI and TCS	Members shared the information on the forum			Yes
KRA7	6	Making educational	To produce a video related to DRR education for raising public awareness.		Coordination	Second	НКО			TCTF	Yes

- KRA 1: Enhance capacity to monitor mortality and direct economic loss caused by typhoon-related disasters.
- KRA 2: Enhance capacity to generate and provide accurate, timely and understandable information using multi-hazard impact-based forecasts and risk-based warnings.
- KRA 3: Improve typhoon-related flood control and integrated water resource management.
- KRA 4: Strengthen typhoon-related disaster risk reduction activities in various sectors, including increased community-based resiliency with better response, communication, and information sharing capability.
- KRA 5: Enhance Typhoon Committee's Regional and International collaboration mechanism.
- KRA 6: Create a framework for cooperative scientific research on tropical cyclone and related disciplines, particularly in relation to climate change, and include support for translating research outcomes to services by developing relevant experiments, research projects, conducting field surveys, and publishing and promoting research findings.
- KRA 7: Enhance the resilience of vulnerable communities, especially coastal communities, to tropical cyclone impacts.

## ANNEX

## II. WGDRR AOPs in 2024 with the success indicators

SP's KRA and SG	NO	Objective	Action	Other WGs Involved	TCS Responsibility	Quarter Completed	Project leader/Other Organizations Involved	Success Indicators	Funding Required	Funding Sources	Completed YES/NO
KRA5 KRA7		Capacity Building /Knowledge Sharing	To organize an expert team to Philippines and Laos for DRR information and capacity building exchange		Coordination and participation	Third		Conducted the Mission in the selected member state		NDMI and TCTF	
KRA1 KRA2 KAR3 KRA4 KRA5 KRA6 KRA7	2	Installation of warning systems related to typhoon disaster	To develop and improve the installed EW and Alert Systems in the members' state in order to improve the		Coordination	Fourth		NDMI assigned experts to Philippines to install and maintain the systems	Unspecified	NDMI	
KRA5 KRA6 KRA7	3	Organizing the WGDRR Annual Meeting		AWG Members	Coordination and participation	Second	NDMI and TC DRR Members	The meeting was held in ROK	USD3,000	NDMI and TCTF	

SP's KRA and SG	NO	Objective	Action	Other WGs Involved	TCS Responsibility	Quarter Completed	Project leader/Other Organizations Involved	Success Indicators	Funding Required	Funding Sources	Completed YES/NO
KRA2 KRA4 KRA6	4	Typhoon Disaster Prevention and Preparedn	To promote the research concerning benefit evaluation of typhoon disaster prevention and preparedness.		Coordination	Third	STI, China	Shared the research result with members	USD6,000	TCTF	
KRA5 KRA7	5	information related to disaster risk management	to DRR among TC		Establishment of the forum on TC website for facilitating the information sharing		NDMI and TCS	Members shared the information on the forum			
KRA7	6	educational	To produce a video related to DRR education for raising public awareness.		Coordination	Third/ Fourth	нко	Prepare a video with English subtitle and voiceover and shared with TC Members	USD3,000	TCTF	

- KRA 1: Enhance capacity to monitor mortality and direct economic loss caused by typhoon-related disasters.
- KRA 2: Enhance capacity to generate and provide accurate, timely and understandable information using multi-hazard impact-based forecasts and risk-based warnings.
- KRA 3: Improve typhoon-related flood control and integrated water resource management.
- KRA 4: Strengthen typhoon-related disaster risk reduction activities in various sectors, including increased community-based resiliency with better response, communication, and information sharing capability.
- KRA 5: Enhance Typhoon Committee's Regional and International collaboration mechanism.

- KRA 6: Create a framework for cooperative scientific research on tropical cyclone and related disciplines, particularly in relation to climate change, and include support for translating research outcomes to services by developing relevant experiments, research projects, conducting field surveys, and publishing and promoting research findings.
- KRA 7: Enhance the resilience of vulnerable communities, especially coastal communities, to tropical cyclone impacts.