

## **Report on Activities of Working Group on Disaster Risk Reduction (WGDRR) of TC in 2015**

(Item 8 of Tentative Program for TC 48<sup>th</sup> Session)

(Submitted by WGDRR)

### **ACTION REQUIRED:**

This Committee is invited to:

- a) Review the activities of TC WGDRR conducted in 2015
- b) Approve the recommendations and AOPs of WGDRR for 2015 and beyond

### **APPENDIXES:**

- I. DRAFT TEXT FOR INCLUSION AT SESSION REPORT
- II. Report on activities of Working Group on Hydrology (WGDRR) of TC in 2015

## APPENDIX I

### DRAFT TEXT FOR INCLUSION AT SESSION REPORT

#### 8.3. Disaster Risk Reduction Component

1. The Committee took note of the members' activities and major progress and issues in DRR Component in 2015 as reported by members at the 10<sup>th</sup> IWS.
2. The Committee reviewed the members' activities related to the implementation of the TC Strategic Plan and its AOP of WGDRR during the past year, details of which are presented in Appendix VIII.
3. The Committee noted that the 10<sup>th</sup> WGDRR annual workshop was successfully held from 19-20 May in Seoul, Korea with good result. Oman, the PTC member was invited to take part in the workshop to exchange the experience and information related the field of DRR with TC DRR members, as well as enhancing the cooperative mechanism between two regions.
4. Committee was informed that Dr. Shim Jaehyun had been selected as the president of NDMI so that he was appointed as the Chair of WGDRR by the DRR members at 10<sup>th</sup> DRR annual workshop that was held in Seoul, Republic of Korea in May and Mr. Oh, Keumho will be serve as Vice Chair of WGDRR for replacing of the vacancy from Dr. Shim Jaehyun
5. The Committee noted that the seminar that was planned to be conducted by WGDRR has been successfully competed with good result on behalf of TC in the 3<sup>rd</sup> United Nations Conference on DRR that was held in Sendai, Japan in March 2015.
6. The Committee noted with pleasure that; the video for raising the public awareness associated with typhoon danger, which was one of fruitful project of WGDRR had been presented to the participants in the 3<sup>rd</sup> UN World Conference.
7. The Committee was informed on the progress of AOPs 2015:
  - a. Extend the WEB GIS based Typhoon Committee Disaster Information System (WGTCDIS) for upgrading the search option for finding similar Typhoon and collecting disaster information from TC Members
  - b. Provide the training program for disaster prevention policies including WGTCDIS
  - c. Promote the international cooperation research by dispatching the experts of NDMI and TCS to Philippines for installing the Flash Flood Alert System (FFAS) and Automated Rainfall Alert System
  - d. Promote and extend the dissemination of warnings and alerts by Members through SWIC (Severe Weather Information Center)
  - e. Set up community weather stations for raising public awareness on climate change and extreme weather
  - f. Benefit Evaluation of Typhoon Disaster Prevention and Preparedness
  - g. The SSOP project related to disaster risk management
  - h. Participation in 3<sup>rd</sup> UNCDRR by hosting a public forum

## **Conclusions of WGDRR**

On the basis of the information provided by the Members and the respective coordinator of the action plans and based on the discussion during the meeting, the following conclusions were reached:

- a) In 2015, NDMI is working for expanding TCDIS to Lao PDR, Philippines, and Vietnam. If there is no good response about disaster damage data collection from member countries, NDMI had suggested discontinuing the work related to TCDIS. But, WGDRR recognized the necessity of continuous collection of disaster information from the member countries for the TCDIS. Encouragement to the members to collect and share disaster information will be continued in 2016 and NDMI will find the way to submit disaster damage data through TCDIS website.
- b) The expert mission was successfully conducted in Lao PDR and Vietnam in 2015 to provide updated information on the operation of TCDIS and exchange information regarding new technologies and policies related to field of DRR by NDMI. In November, NDMI will dispatch the experts to Oman, PTC member for the cooperation between TC and PTC. The expert mission will be conducted upon requests of the member countries in 2016. WGDRR agreed to collect the demands from the members on the expert mission.
- c) The project to promote the international cooperation for disaster risk management, which led by NDMI, will be continued in 2016 for Lao PDR and Vietnam. In 2015, The NDMI dispatched the experts of Republic of Korea to the Philippines for installing the Automated Weather Station (AWS) and Flash Flood Alert System (FFAS) in Cagayan de Oro, Mindanao Island in Philippine. The Northern Mindanao Project with NDMI and PAGASA will be finished in 2015 and the project will be conducted in Lao PDR and Vietnam in 2016.
- d) SWidget & ICOWIN project & Video

### **SWidget (AOP4)**

Hong Kong, China, leads a project "SWidget" which allows users anywhere on the globe to obtain local severe weather warnings issued by official weather services in real time. Weather warnings from seven meteorological services, viz. Hong Kong, China; Macao, China; Guam, USA; Republic of Korea; Singapore; Malaysia; and the Guangdong province of China in a near real-time manner.

### **iCowin (AOP6)**

The "Community Weather Information Network (Co-WIN)" in Hong Kong, China, was further expanded as more community weather stations were installed in schools and community organizations. The number of Co-WIN members has reached around 150.

Under a Typhoon Committee WGDRR initiative, Hong Kong, China, led a project to promote the setting up of community weather stations among Typhoon Committee Members for raising public awareness on climate change and extreme weather. Viet Nam and Lao PDR attended the training workshop organized at HKO during 5-7 November 2014. Vietnam has installed iCo-WIN weather station at An Hai Secondary School at Ly Son Island in 2015. Testing of data dissemination is on-going. Another training workshop was held in Hong Kong during 2-4 November 2015. DPR Korea and Thailand representatives attended the workshop.

### **Production of videos to enhance public awareness on tropical cyclone-related hazards (AOP9)- Project 2014**

Under a project of Typhoon Committee WGDRR and led by HKO, a short educational video on hazards from tropical cyclones was produced to raise the public awareness of the threats from tropical cyclones. Through real-life visual images from typhoons in recent years, including Morakot, Utor and Haiyan, the video introduces four major threats caused by tropical cyclones, namely, strong winds, rainstorms, huge waves and storm surge.

The videos received worldwide support and were publicized in the international arena. They were premiered at the Third UN World Conference on Disaster Risk Reduction held in Sendai, Japan in March 2015, and have since been uploaded to the World Meteorological Organization (WMO) and Typhoon Committee websites.

Typhoon Committee website:

<http://www.typhooncommittee.org/2015/03/19/tc-hazard-video/>

WMO website:

<https://www.youtube.com/watch?v=PV6cy1MXWxY>

#### **e) Benefit evaluation of Typhoon Disaster Prevention and Preparedness**

The project aims to evaluate benefit of typhoon disaster prevention and preparedness by analysis of the deference between potential damage and real damage in detail. The potential damage assessment based on daily rain and maximum gust data in 2015. The benefit from improving skill of typhoon track and intensity forecast will be evaluated in 2016. The project welcomes any members who are interested in joining the project or providing the data.

#### **f) SSOP project**

The SSOP Project Phrase I had been completed and the final report had been submitted to NESCAP with the audit assessment in May 2015 by TCS. The main outcome of this project is to have successfully elaborated the Manual on SSOP for coastal multi-hazards early warning system and TCS has distributed the said manual to TC members during the 10<sup>th</sup> IWS. For extending the outcome of the project according to the decision from 3<sup>rd</sup> TC and PTC Joint Session that was held in Bangkok, Thailand in February this year, the committee has submitted the proposal of the project phrase II to ESCAP, at the end of October. During the 10<sup>th</sup> IWS, TCS had introduced the content of this proposal and there were no comments from WGDRR.

#### **g) Regarding AOP 8, WGDRR held a seminar in the 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction in Sendai, Japan in March 2015. In this seminar, typhoon disaster preventions on TC's visions and objectives were discussed with the participants. Also, the video for making the information of Typhoon more understandable to the public produced by HKO was presented in the seminar.**

#### **h) Regarding 2016 WGDRR AOPs, sharing information (e.g. legal framework, policy framework through member countries) was suggested by NDMI. Member countries agreed to include this item as a 2016 new AOP and NDMI will provide the guidelines or a list of questions for members to submit the information. NDMI will collect the information and compile into a book.**

- i) It was suggested that members should share the information of outcome examples, difficulties on response to disaster, lessons learned from past disasters through presentation in the annual WGDRR Meeting.
- j) It was suggested to set up the exhibition booth in TC session. Each member will bring the materials related DRR including manuals, advocate materials etc. and those materials will be exhibited.
- k) Regarding TCDIS and the research of benefit evaluation of Typhoon Disaster Prevention and Preparedness, it was agreed to exchange the data of two projects.
- l) WGDRR recognized the needs of sharing information on the existing bilateral cooperation projects such as project between Korea and Philippines, China and Malaysia.
- m) It was suggested that TCS coordinate and provide information on the schedules for events within member countries such as international seminar or conference, training programs etc. through TCS website.

### **Recommendation of WGDRR**

On the basis of the information provided by the Members and deliberations, the WGDRR made the following recommendations:

- a) To allocate US\$ 22,000 budget of TCTF in 2016 for i) supporting the participation in the next TC Integrated Workshop; ii) supporting the community based weather station pilot project to provide a training workshop in HK or dispatch experts to interested members by HK to install the weather stations and to provide technical documentation on installation, maintenance and data processing and display; iii) supporting TCS participating in WGDRR expert mission.
- b) To encourage the TC members to collect and share the disaster information for extending TCDIS.
- c) To conduct the expert mission in China.
- d) To continue promotion of the international cooperation for Lao PDR and Viet Nam such as the Northern Mindanao Project by NDMI and PAGASA
- e) To continue the research of benefit evaluation of Typhoon Disaster Prevention and Preparedness and encourage the participation of member countries in the project. And find the possibility to exchange the data between TCDIS and this project.
- f) To provide a training workshop in Hong Kong Observatory regarding setting up the automatic weather stations for community in (May be Malaysia, Macau and China, yet to be confirmed) 2016.
- g) To encourage the TC members to share the information of legal framework or policy framework and compile the information into a book.
- h) To support Synergized Standard Operation Procedure (SSOP-II) project related to disaster risk management.

- i) To evaluate KRA 1&2 of TC strategy based on current data and proposed to remove the numerical targets.
- j) To encourage the TC members to share the information on the existing bilateral cooperation projects such as project between Korea and Philippines, China and Malaysia.
- k) To encourage TCS to coordinate and provide information on the schedules for events within member countries such as international seminar or conference, training programs etc. through TCS website.
- l) For the AOPs 2016, WGDRR suggested AOP 2015 item 1- 7 will be continued in 2016 and AOP3, 4 and 5 are combined into the AOP3- the project to promote the international cooperation. In the meantime, there is a suggestion to establish the new AOP in item 6 of “Sharing information with members e.g. legal and policy framework “. So there are six suggested AOPs of WGDRR in 2016.
- m) To confirm the appointment of Dr. Shim Jaehyun serving as the Chair of WGDRR and Dr. Oh, Keumho (ROK) Serving as Vice Chair of WGDRR for replacing of the vacancy from Dr. Shim Jaehyun, now the Director General of NDMI of Republic of Korea that had been selected as Chair from Vice Chair of WGDRR in May at WGDRR annual meeting.

## **APPENDIX II**

### **Report on activities of Working Group on Disaster Risk Reduction (WGDRR) of TC in 2015**

## Appendix 1. WGDRR AOP 2015 Implementation Status

SPs KRA and SGs	Objective Number	Objective	Action	Other WG's	TCS Responsibility	Expected Quarter Completed	Other Organi- zations Involved	Success Indicators	Funding Required	Funding Sources	Completed Yes or No
KRA1 KRA2 KRA4 SG1 SG2 SG3b SG 4b SG 4c	1	Extending the WGTCIDS	(i) Collect disaster information from TC Members (ii) Upgrade the search option for similar Typhoon in WGTCDIS	TCS	Assist in collecting disaster information from Members	Ongoing	NDMI	Upgrade the each option for finding similar Typhoon in WGTCDIS		NDMI, Korea	Yes
KRA1 KRA2 KRA 4 KRA 6 SG 4b SG 4c SG 5b	2	Provide the training program	Perform Expert Mission for training disaster prevention technologies and policies including WGTCDIS	TCS	Assist in planning and performing the expert mission	Second	NDMI	Sent expert team to Lao PDR, Vietnam and Oman	US \$ 6,000	NDMI, Korea and TCTF	Yes
KRA ALL SG ALL	3	Promote the international cooperation research	install the Flash Flood Alert System (FFAS) and AWS in Mindanao, the Philippines		Assist in planning and performing the international cooperation research	Third	NDMI PAGASA	NDMI had dispatched experts to install the system in Philippines from 30 August to 05 September by plan		NDMI, Korea	Yes
KRA 1 KRA2 KRA3 KRA5 4 SG 4b SG 4c KRA 5 SG 5b	4	Application of SWIdget to Member countries	Promote and extend the dissemination of warnings and alerts by Members through SWIC (Severe Weather Information Center)	-	Assist in liaising with focal points	Ongoing	HKO	Disseminate the warnings/alerts through SWIdget. (To continually encourage the members to join the project)		HKO, Hong Kong	Yes
KRA1 KRA2 KRA4 KRA5	5	Provide benefit evaluation of Typhoon disaster	Provide benefit evaluation of Typhoon disaster prevention and preparedness		Assist in planning and performing the international cooperation	Ongoing	CMA	Complete collecting response of government and departments,		China	yes



SG4b SG5a SG6b		prevention and preparedness			research			evaluation report finalized			
KRA 4 SG 4b SG 4c KRA 5 SG 5b	6	Setting up of community weather stations for raising public awareness on climate changes and extreme weather	(i) Liaise with Members on requirements and ways to take part in the project (ii) Offer training in Hong Kong, China for Viet Nam and Lao to implement the community weather stations	-	Assist in liaising with focal points and provide logistic support for the expert visits	Fourth	HKO	Totally four participants has attended the training workshop in HKO in November from DPR of Korea and Thailand according to the plan	US \$5,000	TCTF	Yes
KRA1 KRA2 KRA4 KRA6 SG4a SG5a SG5a SG5b SG6b	7	Support the Synergized Standard Operating Procedure (SSOP) project		WGM WGH TCS		Second		It had Invited Oman, PTC members to participate in the 10 WGDRR annual workshop in Seoul, Republic Korea in May in order to enhance the mechanism between TC and PTC' WGDRR.			Yes
KRA1 KRA2 KRA7 SG4c SG5a	8	Participating in 3 <sup>rd</sup> UNCDRR	To hold a forum by the topic of "learning from past disasters"			First	NDMI TCS	It was successfully held the seminar in the Conference on DRR in Sendai, Japan in March 2015.	\$7,000	TCTF	Yes

## Appendix 2. WGDRR AOP 2016

SPs KRA and SGs	Objective Number	Objective	Action	Other WG's	TCS Responsibility	Expected Quarter Completed	Other Organizations Involved	Success Indicators	Funding Required	Funding Sources	Completed Yes or No
KRA1 KRA2 KRA4 SG1 SG2 SG3b SG 4b SG 4c	1	TCDIS	To share the data from members for TCDIS data input	TCS	Assist in collecting disaster information from Members	Ongoing	NDMI	i) collect disaster information from Members		NDMI, Korea	
KRA1 KRA2 KRA 4 KRA 6 SG 4b SG 4c SG 5b	2	Provide the training program (Expert mission)	Perform Expert Mission for training disaster prevention technologies and policies including WGTCDIS	TCS	Assist in planning and performing the expert mission	Second Or Third	NDMI	Send expert team to the participating members countries	US \$ 5,000	TCTF and NDMI, Korea	
KRA ALL SG ALL	3	Promote the international cooperation research  (Including installing the Alert and early warning system in members' countries SWidget project and iCoWin Project)	install the Flash Flood Alert System (FFAS) and AWS in the participating members, invite members to join the SWidget and Set up community weather station for raising public awareness and Application of SWidget to members	TCS	Assist in planning and performing the international cooperation research	First	NDMI	Complete the last phase of the Northern Mindanao project	US \$ 7,000	TCTF NDMI, Korea	

KRA 1 KRA2 KRA3 KRA5 4 SG 4b SG 4c KRA 5 SG 5b	4	Provide benefit evaluation of Typhoon disaster prevention and preparedness	(i) survey and evaluate the response of government, department, company and person to typhoon disaster (ii) survey and evaluate the benefit of different response		Assist in planning and performing the international cooperation research	Ongoing	CMA	Complete collecting response of government and departments, evaluation report finalized		CMA	
KRA1 KRA2 KRA4 KRA6 SG4a SG5a SG5b SG6b	5	Support the Synergized Standard Operating Procedures (SSOP II) project	To support the training	WGM WGH WGDRR		Ongoing	TCS	Completed the training and workshop plan		ESCAP	Yes
KRA1 KRA2 KRA4 KRA6 KRA7 SG4b SG4c SG6b SG6c	6	Sharing information (legal and policy frameworks)	Hold a seminar on DRR in the WCDRR	TCS	Assist in planning and performing booth presentation in conference	Ongoing	NDMI	Completed the training and workshop plan		NDMI, Korea	Yes

SG1: To enhance cooperation among TC Members to reduce the number of deaths by typhoon-related disasters by half in the ten years of 2006 – 2015 (using the ten years of 1990 - 1999 as the base line).

SG2: To reduce the socio-economic impacts of typhoon-related disasters per GDP per capita by 20 per cent in the ten years of 2006- 2015 (using the ten years of 1990 - 1999 as the base line).

SG 3a: To identify and explore the beneficial use of resources such as rainfall brought by typhoon.

SG 3b: To study and promote the increasing use of typhoon-related beneficial effects among the Members.

SG 4a: To provide reliable typhoon-related disaster information for effective decision making in risk management in various sectors.

SG 4b: To strengthen capacity of the Members in typhoon-related disaster risk management in various sectors.  
SG 4c: To enhance international and regional cooperation and assistance in the field of disaster risk reduction.  
SG 5a: To promote and enhance culture of community-based disaster risk management among the Members.  
SG 5b: To promote education, training and public awareness of typhoon-related disasters among the Members.  
SG 6a: To facilitate RSMC capability to respond to the needs of the Members in forecasting and capacity building.  
SG 6b: To improve capacity of Members to provide timely and accurate user-oriented and friendly tropical cyclone products and information.  
SG 6c: To enhance capacity of Members' typhoon-related observation, monitoring, forecasting and warning.  
SG 7a: To strengthen the capacity of Typhoon Committee to effectively discharge its responsibilities and functions described in this Strategic Plan and completed its stated mission in accordance with the Typhoon Committee's Statute.  
SG 7b: To mobilize available resources and engage collaborators for the implementation of the strategic goals.

KRA 1: Reduced Loss of Life from Typhoon-related Disasters.  
KRA 2: Minimized Typhoon-related Social and Economic Impacts.  
KRA 3: Enhanced beneficial typhoon-related effects for the betterment of quality of life.  
KRA 4: Improved Typhoon-related Disaster Risk Management in Various Sectors.  
KRA 5: Strengthened Resilience of Communities to Typhoon-related Disaster.  
KRA 6: Improved capacity to generate and provide accurate, timely and understandable information on typhoon-related threats.  
KRA 7: Enhanced Typhoon Committee's Effectiveness, Efficiency and International Collaboration

## Appendix 1. WGDRR AOP 2015 Implementation Status

SPs KRA and SGs	Objective Number	Objective	Action	Other WG's	TCS Responsibility	Expected Quarter Completed	Other Organi- zations Involved	Success Indicators	Funding Required	Funding Sources	Completed Yes or No
KRA1 KRA2 KRA4 SG1 SG2 SG3b SG 4b SG 4c	1	Extending the WGTCIDS	(i) Collect disaster information from TC Members (ii) Upgrade the search option for similar Typhoon in WGTCDIS	TCS	Assist in collecting disaster information from Members	Ongoing	NDMI	Upgrade the each option for finding similar Typhoon in WGTCDIS		NDMI, Korea	Yes
KRA1 KRA2 KRA 4 KRA 6 SG 4b SG 4c SG 5b	2	Provide the training program	Perform Expert Mission for training disaster prevention technologies and policies including WGTCDIS	TCS	Assist in planning and performing the expert mission	Second	NDMI	Sent expert team to Lao PDR, Vietnam and Oman	US \$ 6,000	NDMI, Korea and TCTF	Yes
KRA ALL SG ALL	3	Promote the international cooperation research	install the Flash Flood Alert System (FFAS) and AWS in Mindanao, the Philippines		Assist in planning and performing the international cooperation research	Third	NDMI PAGASA	NDMI had dispatched experts to install the system in Philippines from 30 August to 05 September by plan		NDMI, Korea	Yes
KRA 1 KRA2 KRA3 KRA5 4 SG 4b SG 4c KRA 5 SG 5b	4	Application of SWIdget to Member countries	Promote and extend the dissemination of warnings and alerts by Members through SWIC (Severe Weather Information Center)	-	Assist in liaising with focal points	Ongoing	HKO	Disseminate the warnings/alerts through SWIdget. (To continually encourage the members to join the project)		HKO, Hong Kong	Yes
KRA1 KRA2 KRA4 KRA5	5	Provide benefit evaluation of Typhoon disaster	Provide benefit evaluation of Typhoon disaster prevention and preparedness		Assist in planning and performing the international cooperation	Ongoing	CMA	Complete collecting response of government and departments,		China	yes

SG4b SG5a SG6b		prevention and preparedness			research			evaluation report finalized			
KRA 4 SG 4b SG 4c KRA 5 SG 5b	6	Setting up of community weather stations for raising public awareness on climate changes and extreme weather	(i) Liaise with Members on requirements and ways to take part in the project (ii) Offer training in Hong Kong, China for Viet Nam and Lao to implement the community weather stations	-	Assist in liaising with focal points and provide logistic support for the expert visits	Fourth	HKO	Totally four participants has attended the training workshop in HKO in November from DPR of Korea and Thailand according to the plan	US \$5,000	TCTF	Yes
KRA1 KRA2 KRA4 KRA6 SG4a SG5a SG5a SG5b SG6b	7	Support the Synergized Standard Operating Procedure (SSOP) project		WGM WGH TCS		Second		It had Invited Oman, PTC members to participate in the 10 WGDRR annual workshop in Seoul, Republic Korea in May in order to enhance the mechanism between TC and PTC' WGDRR.			Yes
KRA1 KRA2 KRA7 SG4c SG5a	8	Participating in 3 <sup>rd</sup> UNCDRR	To hold a forum by the topic of "learning from past disasters"			First	NDMI TCS	It was successfully held the seminar in the Conference on DRR in Sendai, Japan in March 2015.	\$7,000	TCTF	Yes

## Appendix 2. WGDRR AOP 2016

SPs KRA and SGs	Objective Number	Objective	Action	Other WG's	TCS Responsibility	Expected Quarter Completed	Other Organizations Involved	Success Indicators	Funding Required	Funding Sources	Completed Yes or No
KRA1 KRA2 KRA4 SG1 SG2 SG3b SG 4b SG 4c	1	TCDIS	To share the data from members for TCDIS data input	TCS	Assist in collecting disaster information from Members	Ongoing	NDMI	i) collect disaster information from Members		NDMI, Korea	
KRA1 KRA2 KRA 4 KRA 6 SG 4b SG 4c SG 5b	2	Provide the training program (Expert mission)	Perform Expert Mission for training disaster prevention technologies and policies including WGTCDIS	TCS	Assist in planning and performing the expert mission	Second Or Third	NDMI	Send expert team to the participating members countries	US \$ 5,000	TCTF and NDMI, Korea	
KRA ALL SG ALL	3	Promote the international cooperation research  (Including installing the Alert and early warning system in members' countries SWidget project and iCoWin Project)	install the Flash Flood Alert System (FFAS) and AWS in the participating members, invite members to join the SWidget and Set up community weather station for raising public awareness and Application of SWidget to members	TCS	Assist in planning and performing the international cooperation research	First	NDMI	Complete the last phase of the Northern Mindanao project	US \$ 7,000	TCTF NDMI, Korea	

KRA 1 KRA2 KRA3 KRA5 4 SG 4b SG 4c KRA 5 SG 5b	4	Provide benefit evaluation of Typhoon disaster prevention and preparedness	(i) survey and evaluate the response of government, department, company and person to typhoon disaster (ii) survey and evaluate the benefit of different response		Assist in planning and performing the international cooperation research	Ongoing	CMA	Complete collecting response of government and departments, evaluation report finalized		CMA	
KRA1 KRA2 KRA4 KRA6 SG4a SG5a SG5b SG6b	5	Support the Synergized Standard Operating Procedures (SSOP II) project	To support the training	WGM WGH WGDRR		Ongoing	TCS	Completed the training and workshop plan		ESCAP	Yes
KRA1 KRA2 KRA4 KRA6 KRA7 SG4b SG4c SG6b SG6c	6	Sharing information (legal and policy frameworks)	Hold a seminar on DRR in the WCDRR	TCS	Assist in planning and performing booth presentation in conference	Ongoing	NDMI	Completed the training and workshop plan		NDMI, Korea	Yes

SG1: To enhance cooperation among TC Members to reduce the number of deaths by typhoon-related disasters by half in the ten years of 2006 – 2015 (using the ten years of 1990 - 1999 as the base line).

SG2: To reduce the socio-economic impacts of typhoon-related disasters per GDP per capita by 20 per cent in the ten years of 2006- 2015 (using the ten years of 1990 - 1999 as the base line).

SG 3a: To identify and explore the beneficial use of resources such as rainfall brought by typhoon.

SG 3b: To study and promote the increasing use of typhoon-related beneficial effects among the Members.

SG 4a: To provide reliable typhoon-related disaster information for effective decision making in risk management in various sectors.



SG 4b: To strengthen capacity of the Members in typhoon-related disaster risk management in various sectors.  
SG 4c: To enhance international and regional cooperation and assistance in the field of disaster risk reduction.  
SG 5a: To promote and enhance culture of community-based disaster risk management among the Members.  
SG 5b: To promote education, training and public awareness of typhoon-related disasters among the Members.  
SG 6a: To facilitate RSMC capability to respond to the needs of the Members in forecasting and capacity building.  
SG 6b: To improve capacity of Members to provide timely and accurate user-oriented and friendly tropical cyclone products and information.  
SG 6c: To enhance capacity of Members' typhoon-related observation, monitoring, forecasting and warning.  
SG 7a: To strengthen the capacity of Typhoon Committee to effectively discharge its responsibilities and functions described in this Strategic Plan and completed its stated mission in accordance with the Typhoon Committee's Statute.  
SG 7b: To mobilize available resources and engage collaborators for the implementation of the strategic goals.

KRA 1: Reduced Loss of Life from Typhoon-related Disasters.  
KRA 2: Minimized Typhoon-related Social and Economic Impacts.  
KRA 3: Enhanced beneficial typhoon-related effects for the betterment of quality of life.  
KRA 4: Improved Typhoon-related Disaster Risk Management in Various Sectors.  
KRA 5: Strengthened Resilience of Communities to Typhoon-related Disaster.  
KRA 6: Improved capacity to generate and provide accurate, timely and understandable information on typhoon-related threats.  
KRA 7: Enhanced Typhoon Committee's Effectiveness, Efficiency and International Collaboration