

Report of the WMO Workshop on Global Review of Regional Climate Outlook Forums (RCOF)

EASCOF-5, Tokyo, Japan, 10 November 2017

Yasushi MOCHIZUKI

Tokyo Climate Center

Japan Meteorological Agency

Outline of this presentation

- Overview of this workshop
- Reviews of RCOFs around the world and lessons learnt from those reviews

- What I highlighted about EASCOF in my presentation
- Finding strengths and good practices through analysis of this workshop

- Recommendations for the future RCOFs operation

Key phrases

- [GPC-LRF] objective approaches to RCOF products
- [RCC] capacity development, updates between RCOF session
- [NMHS] follow-up integration of outlooks into decision making process
- [User] engagement between provider and specific sectors and/or users
- [Products] expanding RCOFs products (adding climate monitoring, etc.)

Outline of this presentation

- **Overview of this workshop**

- Reviews of RCOFs around the world and lessons learnt from those reviews

- What I highlighted about EASCOF in my presentation
- Finding strengths and good practices through analysis of this workshop

- Recommendations for the future RCOFs operation

Key phrases

- [GPC-LRF] objective approaches to RCOF products
- [RCC] capacity development, updates between RCOF session
- [NMHS] follow-up integration of outlooks into decision making process
- [User] engagement between provider and specific sectors and/or users
- [Products] expanding RCOFs products (adding climate monitoring, etc.)

Overview of this workshop

- Date: 5-7 September 2017
- Place: the International Research Center
on El Niño (CIIFEN), Guayaquil, Ecuador



CIIFEN

- Goals:

- Identify the lessons learnt, and good practices in RCOFs
- Identify opportunities and innovative approaches for RCOFs
- Explore possibilities to enhance/improve the capacity development benefits of RCOFs
- Consider possible expansion of the RCOF product portfolio
- Propose ways to make more effective delivery and communication of climate products and services for decision making in a sustainable manner.

Participants from all around the world

- Representatives from all 19 RCOFs, all 11 RCCs, GPCs, LC-LRFMME and those engages RCOF activities are participated.

5

Mr K.H. Cho
(LC-LRFMME, KMA)

Mr S. Hirahara
(GPC Tokyo, JMA)

Mr Z. Gong
(BCC, CMA)

Mr R. Martinez
(CIIFEN)

Mr Y. Mochizuki
(TCC, JMA)



Global Review of Climate Outlook Forums, 05-07 September 2017, Guayaquil, Ecuador

Outline of this presentation

- Overview of this workshop
- **Reviews of RCOFs around the world and lessons learnt from those reviews**
 - **What I highlighted about EASCOF in my presentation**
 - **Finding strengths and good practices through analysis of this workshop**
- Recommendations for the future RCOFs operation

Key phrases

- [GPC-LRF] objective approaches to RCOF products
- [RCC] capacity development, updates between RCOF session
- [NMHS] follow-up integration of outlooks into decision making process
- [User] engagement between provider and specific sectors and/or users
- [Products] expanding RCOFs products (adding climate monitoring, etc.)

Preparation for a presentation

- Prior to the workshop, WMO conducted a survey on a current status of implementations and operations of each of RCOFs. The topics are as follows;

- Specific Climate features of concerned region
- The RCOF background and its process
- Capacity needs
- User involvement
- SWOT (Strength, Weakness, Opportunity, Threat) analysis
- Sustainability of RCOF and Way forward

- I prepared a draft for this survey and then finalized it in close consultation with experts of Member countries; Dr P. Zhang of CMA, Dr H. Lee of KMA and Dr O. Lamjav of NAMEM of Mongolia. Thank you for their dedicated cooperation.
- My presentation were prepared based on the survey.

Presentation on EASCOF operation

EASCOF background

The East Asia winter Climate Outlook Forum (EASCOF) aims to share recent understanding of phenomena related to seasonal prediction on **the East Asian winter monsoon** as well as discuss seasonal outlook of the coming winter.

- Participating countries and WMO global and regional centers



China (the China Meteorological Administration (CMA))

- GPC Beijing, RCC Beijing (Beijing Climate Center)



Japan (the Japan Meteorological Agency (JMA))

- GPC Tokyo, RCC Tokyo (Tokyo Climate Center)



Republic of Korea (the Korea Meteorological Administration (KMA))

- GPC Seoul, LC-LRFMME



Mongolia (National Agency for Meteorology and Environment Monitoring (NAMEM) of Mongolia)



What I highlighted in my presentation

- [1] Main aims of EASCOF are
- to **exchange information and expertize on analysis method and forecast technique** especially applied to monsoon activities in East Asia.
 - to discuss seasonal outlook of the coming winter.

- [2] Roles of RCCs in EASCOF are
- to contribute to the development of consensus outlook and exchange of expertise for climate outlook.
 - to **actively communicate with the research community** and to promote sharing of information on the state-of-the-art expertise and techniques for climate services in the forum.

- [3] A session with the aim to **share good practices for user engagement among NMHS** is newly allocated in this EASCOF-5 to promote utilizations of climate information.

Finding strengths and good practices of RCOFs

- Dr A. Tait of NIWA (New Zealand) summarized the principal strengths of RCOF based on survey reports.

PRINCIPAL STRENGTHS

Ranked based on the number of similar responses from the RCOF status reports

1. Capacity development and relationship building for NMHS staff and users
2. Sharing of experiences across the region
3. Interaction and collaboration with experts
4. Developing tailored products, which are used and valued by stakeholders
5. Coordinated linkages to regional (i.e. RCCs) and national (i.e. NCOF) activities and processes
6. Access to and sharing of GPC data, products and tools
7. Continuity of events over several years builds a community of learning

Outline of this presentation

- Overview of this workshop
- Reviews of RCOFs around the world and lessons learnt from those reviews

- What I highlighted about EASCOF in my presentation
- Finding strengths and good practices through analysis of this workshop

- **Recommendations for the future RCOFs operation**

Key phrases

- **[GPC-LRF] objective approaches to RCOF products**
- **[RCC] capacity development, updates between RCOF session**
- **[NMHS] follow-up integration of outlooks into decision making process**
- **[User] engagement between provider and specific sectors and/or users**
- **[Products] expanding RCOFs products (adding climate monitoring, etc.)**

Recommendations for the future RCOFs operation

The participants split into five groups to discuss the current status and opportunities to introduce innovative approaches and standardized operational practices for generating RCOF outputs. Topics are as follows;

[GPC-LRF]	Roles and operations of GPC-LRFs in support of RCOFs and in introducing objective approaches to RCOF products
[RCC]	Roles and operations of RCCs in support of RCOFs, including capacity development and updates between RCOF sessions
[NMHS]	Role of NMHSs in the follow-up integration of seasonal outlooks in decision making process at country level
[User]	User engagement in RCOFs
[Products]	Expanding RCOFs portfolio

[GPC-LRF] Roles and operations of GPC-LRFs

Promote greater access and utilization of WMO LC-LRFMME data to enable RCCs to produce objective forecast for RCOF operations/RCCs to optimize skills for the region of interest

Followings are some concrete recommendations.

- To improve access to GPCLRF data, mainly through the LC-LRFMME
- Encourage RCCs to take the lead in accessing these data and disseminating to members
- Expedite the technical guidance on operational seasonal predictions under development by the IPET-OPLSLS
- Encourage to extend the current verification procedures for individual GPCs to the MME forecasts produced by the LC-LRFMME, and to develop verification products for pre-defined RCOF regions

[RCC] Roles and operations of RCCs

RCCs to continue guiding RCOF process; including the responsibility to play a role in resource mobilization for RCOFs. Build mechanisms at RCOF sessions to propose improving RCC activities to address RCOFs needs.

Followings are some concrete recommendations.

- RCC should lead RCOFs and facilitate regular updates between RCOF sessions in close consultation with Members countries.
- RCCs pursue co-designing and co-producing communications packages – moving toward impacts based forecasts.
- Recommend that sub-seasonal forecast be a part of RCC and RCOF products along with necessary capacity building activities and trainings.

[NMHS] Role of NMHSs in the follow-up integration

- Establish/Implement regular NCOFs (and other similar mechanisms) at national levels, and where required at sub-national levels with the primary aim of sharing seasonal products and their updates on a regular basis to support sector-driven climate risk management
- National Frameworks for Climate Services (NFCS) linked to high-level cross-cutting objectives, will provide mechanisms for sustainability to the national climate forums

Followings are some concrete recommendations.

- Institutionalization into existing governmental structures
- Co-productions: demonstration projects to lead to final agreements

[User] **User engagement** in RCOFs

Ensure joint provider-user ownership of RCOF process, demonstrating the value of forecast and advocating with the governments the usability/value of RCOF/NCOF products

Followings are some concrete recommendations.

- RCOFs develop deliberate and targeted partnerships
- New approaches to feedback – mechanisms for continuous feedback, more creative ways to collect feedback involving social experts
- Technical recommendations: tailored products, reconsidering probabilities linking with confidence, data availability

[Products] Expanding RCOFs portfolio

RCOF should prioritize functions (training, networking, user engagement, climate information generation/dissemination).

Highest hanging fruit

Highest hanging fruit (but based on region)

- Climate change
- Annual to multi-decadal forecast

Medium hanging fruit

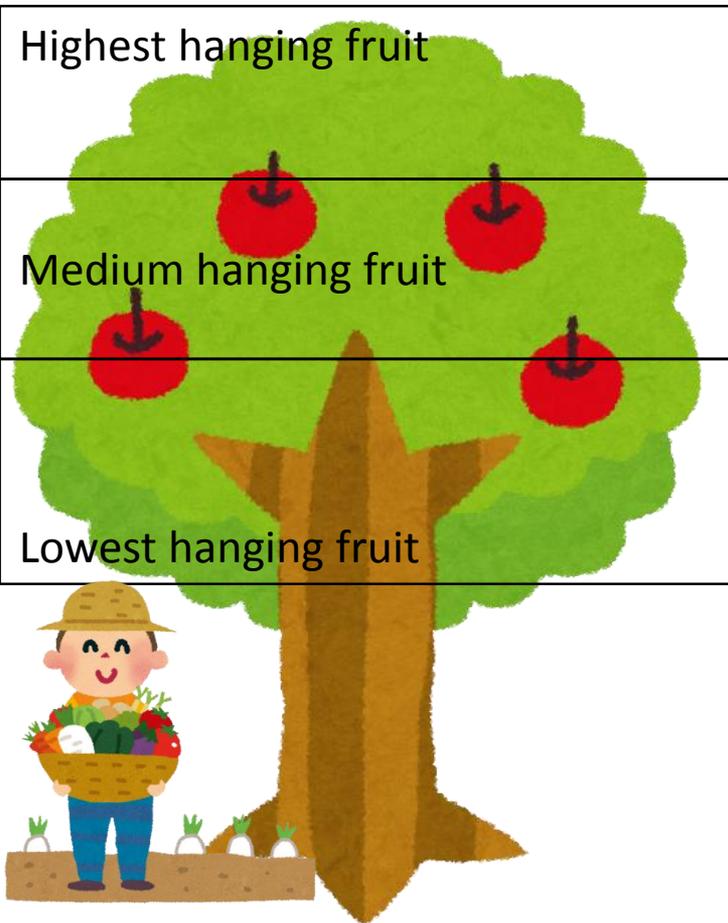
Medium hanging fruit

- Sub seasonal forecast
- Extension to other season

Lowest hanging fruit

Lowest hanging fruit

- Climate monitoring
- Verification
- Remote climate impact
- Training



Summary of this presentation

- Reviews of RCOFs around the world and lessons learnt from those reviews
- Recommendations for the future RCOFs operation

Key phrases

- [GPC-LRF] objective approaches to RCOF products
- [RCC] capacity development, updates between RCOF session
- [NMHS] follow-up integration of outlooks into decision making process
- [User] engagement between provider and specific sectors and/or users
- [Products] expanding RCOFs products (adding climate monitoring, etc.)

How will EASCOF respond to these recommendations?

Thank you for your attention.



@ Parque de las Iguanas, Guayaquil, Ecuador