



Sustainable Weather and Climate Services for a Resilient Pacific

Third Meeting of the Pacific Meteorological Council (PMC-3)

20-23 July 2015 Nuku'alofa The Kingdom of Tonga

Agenda Item 6.2 : Climate and Information Prediction Services Project

Purpose

- 1. To introduce the Republic of Korea-Pacific Island Climate Prediction Services project to PMC-3
- 2. To report on activities and achievements conducted under the auspices of project through APEC Climate Center (APCC) and SPREP

Background

3. The Republic of Korea-Pacific Island Climate Prediction Services project (ROK-PI CliPS) aims to provide nationally-tailored seasonal climate prediction information and builds the prediction capacity of Pacific Islands. It is funded by the Government of Korea through the Pacific Island Forum Secretariat (PIFS) and implemented by the APEC Climate center (APCC) and SPREP. The project will run for 3 years from 2014-2016. The Regional Project will benefit Cook Islands, FSM, Fiji, Kiribati, RMI, Nauru, Niue, Palau, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu

4. The main objective of the project is to strengthen the adaptive capacity of vulnerable communities to climate risks at the seasonal timescale. The project aims to build the adaptive capacity of vulnerable communities and users of climate information and services through the strengthening of NMHS capacity to contribute to community resiliency and national development planning. Tailored climate prediction information using a region-specific system will be developed.

5. This initiative will build on and work in partnership and complement previous and current relevant activities such as the Pacific Australia Adaptation to Climate Change Science and Adaptation Planning (PACCSAP), the Finnish-Pacific Reducing Vulnerability in the Pacific Island Communities Project (FINPAC), and the Climate, Oceans Support Programme for the Pacific (COSPPac), Island Climate Update (ICU) Outlook Forum, the PEAC Outlook Forums and the Integrated Climate Information Management (iCLIM) project.

6. The project will develop region-specific downscaling methodologies and establish a climate prediction system. The work will consider the unique geographic features of the Pacific and build upon the programmes named above, utilizing APCC's multi-model ensemble prediction system and support from the Pacific Met Desk Partnership. APCC will not only provide

information but also assist the PICT's NMHSs to self-operate the system after transferring the dynamical seasonal forecasting system to SPREP Pac Met Desk Partnership. This system will be connected to the climate prediction information system in APCC via the Internet. Then, APCC and the Pacific Met Desk Partnership will develop guidelines and train participating NMHS in order for them to effectively analyze the information and apply the prediction to support decision-making processes.

Update

7. Consistent with the project implementation agreement signed on 24th October 2014, the following activities have been carried out.

7.1 The ROK-PI CliPS Regional Training and Inception Workshop was conducted on 15-17 July 2015, and hosted by the Tonga Meteorological Services. The workshop was a success with all National Meteorological Services represented and actively participated in the deliberations. The workshop covered prediction methodologies, statistical downscaling, information communication technologies and the climate prediction system.

7.2 Every month, APCC produces 6 month climate outlook for the Pacific Islands. The outlook contains 6 month forecast information of sea surface temperature, seasonal mean surface air temperature, and precipitation around Pacific region. This outlook is circulated to 75 recipients in 14 countries in the Pacific. These recipients include national meteorological services, government officials in different ministries related with climate issue such as agriculture, natural resources and environment, health, foreign affairs, regional organizations and international partners.

7.3 The computing hardware as the basis of the "Climate Information Application System" has been installed at the Pacific Met Desk Partnership, SPREP on the 6th May 2015. The hardware will host the web-based forecast assistant tool which will be developed in the second half of 2015 based on the APCC's Climate Information Toolkit (CLIK) and be linked with APCC climate database.

7.4 The downscaled prediction prototype is under development based on the analysis of seasonal predictability at station level, large scale circulation variability causing precipitation variability of individual station and its reproduction in the climate forecast models, detailed downscaling method will be developed.

Recommendations

- 8. The Meeting is invited to:
- Note through ROKPI CliPS and its partners considerable progress has been made on the implementation of the project and complements the work of GFCS and implementation of the PIMCS.
- Recommend that additional resources will be needed for communication, capacity building and training of NMS and in-country stakeholders to ensure that the tools and products are taken up for decision making in sectors such as Agriculture, Health, Water and Disaster Risk Reduction and so on.

PMC-3/WP 6.2 Date Received: 8 July 2015

Attachments

NIL

8 July 2015