Concept Note

Regional Consultation on Climate Services for the Third Pole and other High Mountain Regions

9-11 March 2016, Jaipur, India

Introduction - Global Framework for Climate Services

The Global Framework for Climate Services (GFCS) was established in 2009 at the World Climate Conference-3 that was organized by the World Meteorological Organization (WMO), other United Nations (UN) agencies, Governments and partners to guide the development of climate services around the world. The GFCS initiative enables society to better manage the risks and opportunities arising from climate variability and change. In particular, GFCS supports those most vulnerable to climate variability and change. The GFCS aims to develop and incorporate science-based climate information and prediction into planning, policy and practice. The full benefit of GFCS will be realized incrementally through the delivery and use of a multitude of climate services at regional, national and local levels.

The GFCS addresses five priority areas in which climate information is critical for decision-making:

- agriculture and food security;
- water;
- health;
- disaster risk reduction; and
- energy.

To support decision making, the GFCS will strengthen the following five pillars that are critical for the production, management, delivery and application of climate information and services:

- ***User Interface Platform:*** structuring a means for users, climate researchers and climate information providers to interact at all levels;
- ***Climate Services Information System***: developing a mechanism through which information about climate (past, present and future) will be routinely collected, stored and processed to generate and deliver products and services that inform often complex decision-making across a wide range of climate-sensitive activities and enterprises;
- ***Observations and Monitoring***: ensuring that climate observations and other data, including metadata, required to meet the needs of end users are collected, managed, disseminated and assessed;
- ***Research, Modelling and Prediction***: fostering research that continually improves the scientific quality of climate information and services, providing an evidence base for the impacts of climate change and variability, and for the value of using climate information; and
- ***Coordination and Capacity Development***: addressing the mechanisms for coordination and the networks needed to link information providers and affected communities, and the needs for capacity development to enable the development, interpretation, translation and use of climate information to support decision making.

To develop the five GFCS pillars at the national, regional and global levels, consultations are being conducted with key stakeholders in the various regions so that existing practices, expertise and infrastructure can be effectively and efficiently built on. Consultations have been held for the North-Eurasian Countries (October 2015), South East Europe (November 2014), Latin America (July 2014), the Pacific Islands (April 2014), the Caribbean (May 2013) and the Least Developed Countries in Asia (October 2012).

With support from the *Programme for Implementing GFCS at Regional and National Scales* funded by the Government of Canada, a “Regional Consultation on Climate Services for the Third Pole and other High Mountain Regions” will be conducted in Jaipur, India, 9-11 March 2016.

Background – The Third Pole region

The Hindu Kush-Himalayan (HKH) region, also known as the Third Pole region, spans Afghanistan, Bangladesh, Bhutan, China, India, Kyrgyzstan, Mongolia, Myanmar, Nepal, Pakistan, Tajikistan, and Uzbekistan. The Third Pole region covers an area of more than 4.3 million square kilometers and hosts a large and culturally diverse human population. The Third Pole, which contains vast cryospheric zones, contains the world's largest store of snow and ice outside the polar region, is the source of ten major rivers, and is particularly sensitive to climate change.

The WMO Executive Council (EC) through its Panel of Experts on Polar and High Mountain Observations, Research and Services (EC-PHORS; renamed from EC-PORS by EC-67) noted the major impact of the Third Pole region on regional weather and climate, and on water availability, and the vulnerability of its natural environment. Indeed, the rate of warming in the Third Pole region has been higher than the global average. Significantly, changes to the cryosphere in high-altitude Asia will directly impact not only local and adjacent regions, but also produce socio-economic impacts on downstream regions.

Regional stakeholder consultation

The Regional Consultation on Climate Services for the Third Pole and other High Mountain Regions will bring together a large variety of stakeholders and decision-makers from the HKH encompassing representatives of relevant government ministries including the National Meteorological and Hydrological Services (NMHSs), UN bodies, IGOs, NGOs, private sector, academia, and other members of civil society.

The discussion will focus on the requirements of operational communities working in climate services as well the requirements of the various user communities of climate information. In particular, the consultation will address climate information requirements in the areas of agriculture, water, health, disaster risk reduction, and renewable energy.

Objectives of the Third Pole Regional Consultation

The objectives of the consultation are to:

- review the current status of climate services in the Third Pole and other high mountain regions;
- assess specific needs in the five GFCS priority areas (agriculture and food security; water; health; disaster risk reduction and renewable energy) at the regional, national and local levels;
- review and characterize the current status of interfacing mechanisms and interactions between climate services providers and users, identify major areas for improvement and recommend effective mechanisms and practices;
- articulate the capacity building needs for the region in order to address all five GFCS components (that is, a specification of the requisite institutional mandates as well as infrastructure and human resources requirements);
- identify enhancements that can be made to the management of national observation networks; and research and analysis of national and local climate issues including impact indicators; and recommend how to improve access to and the utility of climate data and predictions;
- identify concrete follow-up actions to enable the provision of climate services in the Third Pole and other high mountain regions; and
- identify partnerships among relevant stakeholders.

Expected outcomes of the consultation

The Regional Consultation on Climate Services for the Third Pole and other High Mountain Regions will bring together experts from the NMHSs and the key decision-makers and practitioners from the five priority areas of the GFCS. It will facilitate the identification of appropriate mechanisms and networks to improve and sustain the flow of climate information for high mountain communities and other key users of this information.

The Third Pole regional consultation aims to produce the following specific outcomes:

1. enhanced understanding of the needs for climate services in the following user sectors: agriculture and food security, water, health, disaster risk reduction and energy;
2. improved knowledge of the existing interface mechanisms and recommendations for improvements where needed;
3. clear understanding of capacity development needs to implement the GFCS at regional and national levels;
4. agreement on the necessary steps to develop a robust plan for the development of climate services for the Third Pole and other high mountain regions; and
5. strategic guidance on institutional arrangements, partnerships and processes required to operationalize the GFCS at the regional and national level.

Summary agenda of the consultation

Day 1

- Introduction/welcome to the consultation

- Presentation of the GFCS

- Provision and application of climate services in the Third Pole region: opportunities and challenges
  - Overview of current status of climate prediction and climate services in the region
    (20 min presentations by two or three regional institutes)

  - Country status: production, management, delivery and/or application of climate information and services (10 min presentation by each country: Afghanistan, Bangladesh, Bhutan, China, India, Kyrgyzstan, Mongolia, Myanmar, Nepal, Pakistan, Tajikistan, and Uzbekistan)

  - GFCS priority sectors (15 min presentation by expert on each sector: agriculture and food security; water; health; disaster risk reduction; renewable energy)

- Discussion of common priorities and regional cooperation for climate services improvement

Day 2

- The GFCS pillars: developing climate services at the national level (30 min presentation on each pillar):
  - User Interface Platform

- Climate Services Information System
- Observations and Monitoring
- Research, Modelling and Prediction
- Capacity Development

- The Cryosphere

  - Observation of the cryosphere and the Global Cryosphere Watch (GCW)
  - Impacts of changes in the cryosphere on agriculture and food security; water; health; disaster risk reduction; renewable energy
  - Applications of cryospheric data

Day 3

- Strengthening the interaction between the climate community of the Third Pole and other high mountain regions, and the climate information users communities

- Implementing GFCS in the Third Pole and other high mountain regions: the way forward

  - Developing climate services for the Third Pole and other high mountain regions
  - Operationalizing the GFCS at the regional and national level: definition of institutional arrangements, partnerships and processes