

RCOFs operate in many parts of the world, serving mainly developing countries. These are as follows:

GHACOF Greater Horn of Africa COF SARCOF Southern African Regional COF

PRESAO Prévision saisonnière en Afrique de l'Ouest

(Seasonal Prediction for West Africa)

PRESAC Prévision saisonnière en Afrique Centrale

(Seasonal Prediction for Central Africa)

FOCRAII Forum on Regional Climate Monitoring, Assessment and

Prediction for Regional Association II (Asia)

SSACOF South-east of South America COF
WCSACOF Western Coast of South America COF
FCCA Foro Regional del Clima de América Co

Foro Regional del Clima de América Central (Regional Climate Outlook Forum for Central America)

PICOF Pacific Islands COF

SEECOF South-eastern Europe COF

Regional climate change and RCOFs

RCOFs were originally conceived to focus on seasonal prediction, and have significantly contributed to adaptation to climate variability. The concept has the potential to be extended to develop our capacity to adapt to climate change. RCOFs can be effectively expanded to cater to the needs of developing and disseminating regional climate change information products. This concept is already being tested by some RCOFs, for example, GHACOF. Regional assessments of observed and projected climate change, including the development of downscaled climate change scenario products for impact

assessments, can be included in the RCOF product portfolio. This potential has been recognized by the United Nations Framework Convention on Climate Change Subsidiary Body for Scientific and Technological Advice, and constitutes a key element of the WMO contribution to the Nairobi Work Programme on impacts, vulnerability and adaptation to climate change.

WMO

The World Meteorological Organization is a specialized agency of the United Nations for weather, climate and water. WMO enables scientific understanding of climate variability and change through dedicated observations of the climate system; improvements in the analysis, monitoring and prediction capabilities and the development of climate applications and services; capacity-building in the application of meteorological and hydrological data, and dissemination of information in support of climate risk management and scientific research and assessments.

World Climate Conference-3

The overarching theme of the World Climate Conference-3 (WCC-3, Geneva, 31 August–4 September 2009), organized by WMO in cooperation with other United Nations agencies, governments and other institutions, is "Climate prediction and information for decision-making: focusing on scientific advances in seasonal to interannual timescales, taking into account multidecadal prediction". A key outcome expected of WCC-3 is the establishment of a Global Framework for Climate Services, which would link science-based climate predictions and information with climate risk management and adaptation to climate variability and change throughout the world. RCOFs are considered to constitute an integral component of this Framework.

Link to RCOF products

http://www.wmo.int/pages/prog/wcp/wcasp/clips/outlooks/climate_forecasts.html

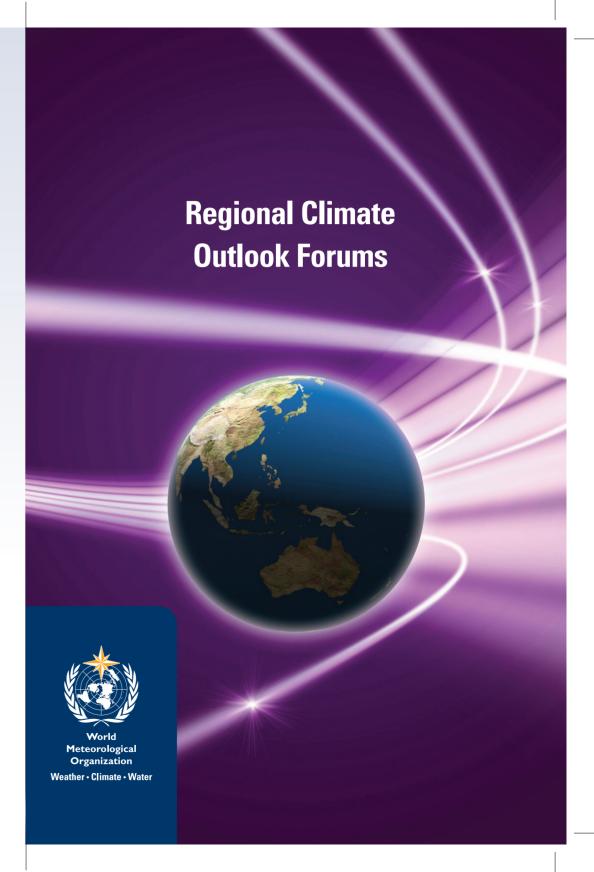
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Introduction

Climate is a natural resource that fulfils our basic needs for air, sunlight and water to sustain life. At the same time, it poses a variety of challenges in terms of extremes. Over the years human beings have developed some resilience to climate fluctuations. However, every now and then, our social and economic systems are deeply stressed by extreme climatic events. Better adaptive capacities are needed to meet this growing challenge, which is possible through a better scientific understanding of the climate system. As our understanding of the climate system grows, as society becomes more aware of the potential opportunities for this knowledge, and as greater risks are taken by a rapidly developing society, there is an increasing demand for new and better climate information, products and services.

In the late 1990s, an innovative process known as the Regional Climate Outlook Forum (RCOF) was initiated by the World Meteorological Organization (WMO), National Meteorological and Hydrological Services (NMHSs), regional institutions and other international organizations. An RCOF brings together experts from a climatologically homogeneous region and provides consensus-based climate prediction and information, usually for the season, which has critical socio-economic significance. This information has been applied to reducing climate-related risks and supporting sustainable development. Such forums have spread to many regions around the world.

Concept

These forums bring together national, regional and international climate experts, on an operational basis, to produce regional climate outlooks based on input from NMHSs, regional institutions, Regional Climate Centres and global producers of climate predictions. By bringing together countries having common climatological characteristics, the forums ensure consistency in the access to and interpretation of climate information. Through interaction with sectoral users, extension agencies and policymakers, RCOFs assess the likely implications of the outlooks on the most pertinent socio-economic sectors in a given region and explore the ways in which use could be made of these outlooks.

The core concept of all RCOFs remains the same: delivering consensus-based, user-relevant climate outlook products in real time through regional cooperation and partnership. However, since national and regional capacities are varied and, in some cases, are inadequate to face the task individually, the implementation mechanisms of RCOFs in different regions have been tailored to meet the local conditions.

Process

The RCOF process, pioneered in Africa, typically includes the following components:

- Meetings of regional and international climate experts to develop a consensus for the regional climate outlook, typically in a probabilistic form;
- The forum proper, which involves both climate scientists and representatives from the user sectors, for identification of impacts and implications, and the formulation of response strategies;
- A training workshop on seasonal climate prediction to strengthen the capacity of national and regional climate scientists;
- Special outreach sessions involving media experts to develop effective communication strategies.

RCOFs also review impediments to the use of climate information, experiences and successful lessons regarding applications of previous RCOF products, and enhance sector-specific applications. These RCOFs then lead to national forums to develop detailed national-scale climate outlooks and risk information, including warnings for communication to decision-makers and the public.

Benefits

RCOFs have facilitated regional cooperation and networking, and have effectively demonstrated the immense mutual benefits of sharing climate information and experience. Close interaction between the providers and users of climate information and predictions has enhanced feedback from the users to climate scientists, and has catalysed the development of many user-specific products.

RCOF users

In many regions, the users benefiting from RCOFs are true stakeholders, contributing to the organization and growth of the sessions, thus ensuring their sustainability and applicability to meeting user needs. Typically, RCOFs attract the participation of practitioners and decision-makers from various sectors, such as the following:

- Agriculture and food security
- Water resources
- Energy production and distribution
- Public health

- Disaster risk reduction and response
- Outreach and communication

Other sectors, such as tourism, transportation and urban planning, are increasingly involved.

Based on the needs of specific sectors, specialized, sector-oriented outlook forums, such as the Malaria Outlook Forums, are being held in conjunction with RCOFs in Africa.

RCOFs and water management

Some RCOFs predict river run-offs for the season, based on the seasonal temperature and rainfall predictions, and using the present soil moisture conditions. This information is very useful for water managers and helps them in making decisions on water allocations within various uses and hydropower generation planning.

RCOFs and food security outlooks

Regional agriculture and food security outlooks are now produced regularly in some regions, based on the climate outlooks after RCOFs. For example, the left panel below shows the climate outlook in the Greater Horn of Africa in the form of precipitation for March to May 2008. The right panel shows the Food Security Outlook for March to July 2008 prepared by the Famine Early Warning Systems Network on the basis of the climate outlook.

