



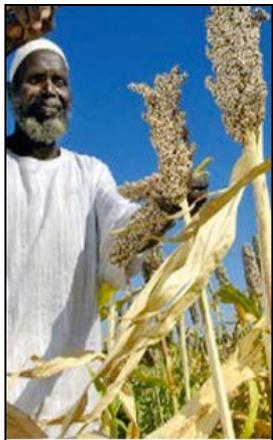
# The Global Framework for Climate Services (GFCS)

**Filipe Lúcio**  
**Director, GFCS Office**

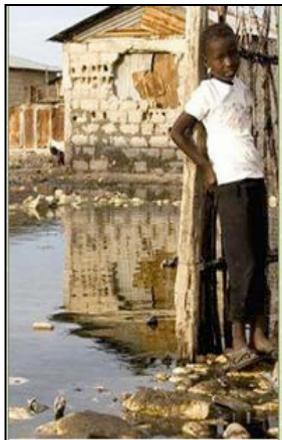
**[flucio@wmo.int](mailto:flucio@wmo.int)**

## Vision

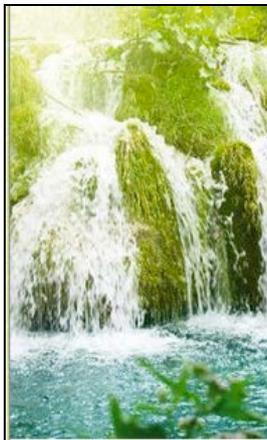
Enable better management of the risks of climate variability and change and adaptation to climate change, through the development and incorporation of science-based climate information and prediction into planning, policy and practice on the global, regional and national scale



**Agriculture and  
food security**



**Disaster risk  
reduction**



**Water**



**Health**



**Energy**

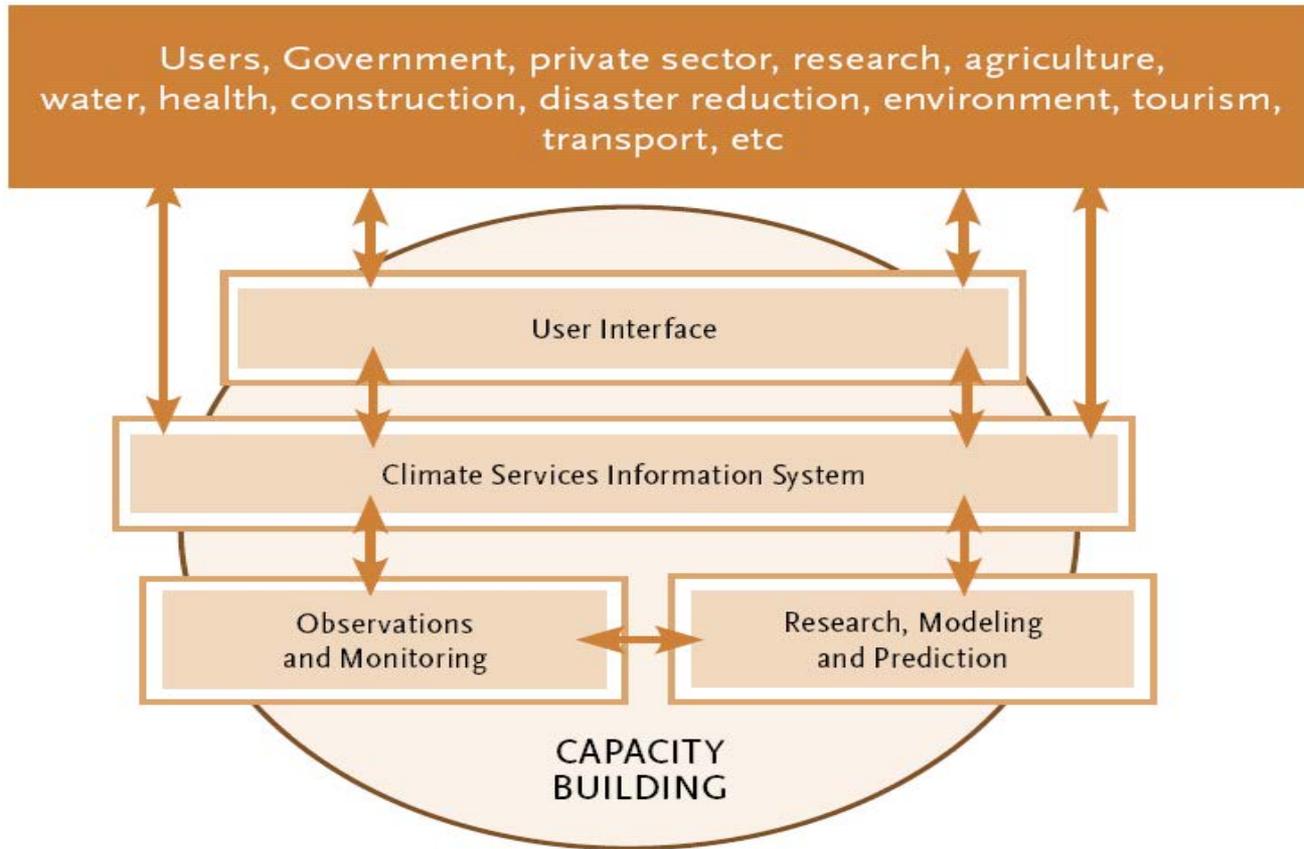
# PAC Membership



NORWEGIAN  
REFUGEE COUNCIL



# GFCS Pillars

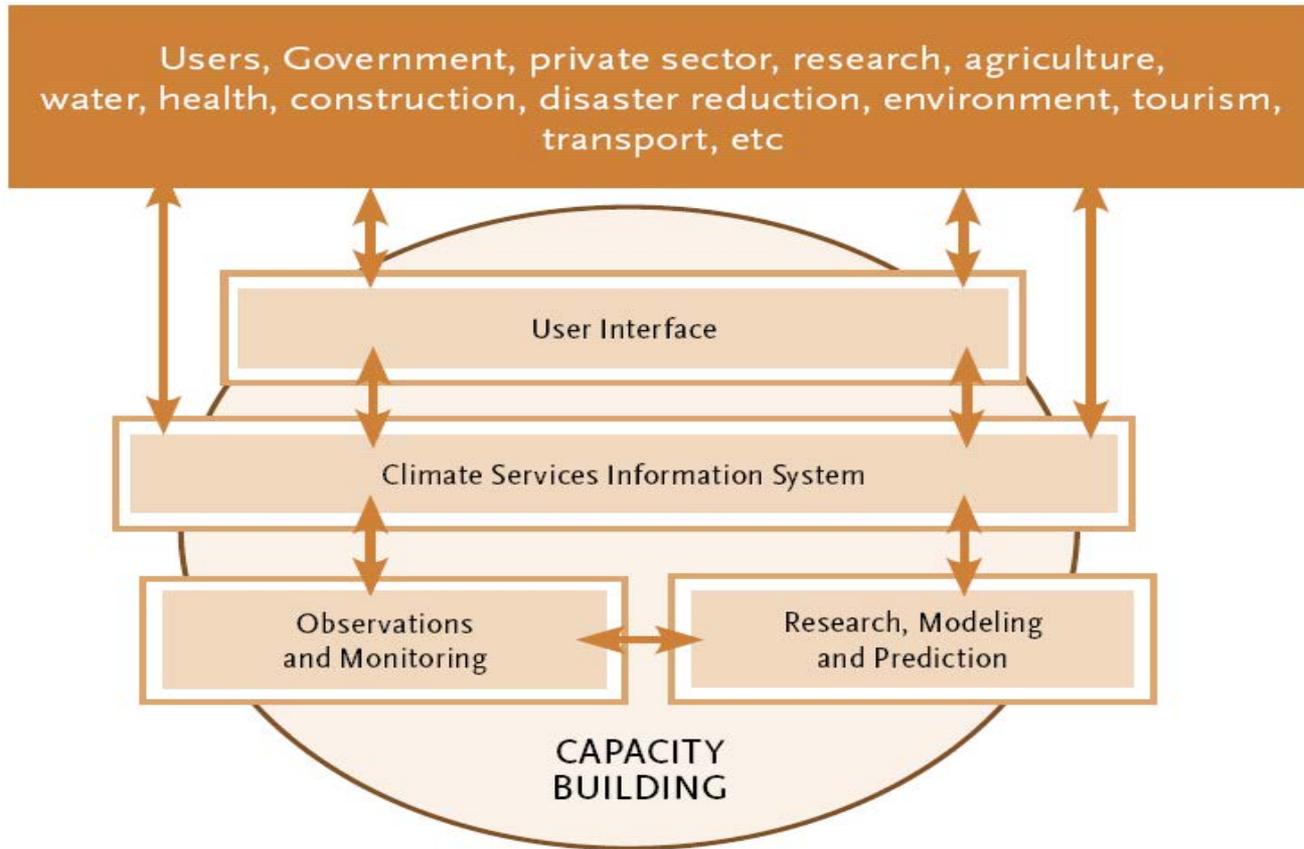


# Resolution 60 (Cg-17)

## WMO Policy for the Int. Exchange of Climate Data and Products to support the implementation of the GFCS

- Requested IBCS to
  - Consider GFCS relevant data and products that are needed under the auspices of the WMO to contribute to the GFCS and make recommendations in this respect to the Executive Council for its considerations
  - Encourage partners to adopt similar policies and practices concerning the free and unrestricted exchange of their relevant data and products in support of GFCS implementation
  - Consider and recommend to WMO Congress how third-party data and products could be treated in the context of the implementation of Resolution 60 (Cg-17)

# GFCS Pillars

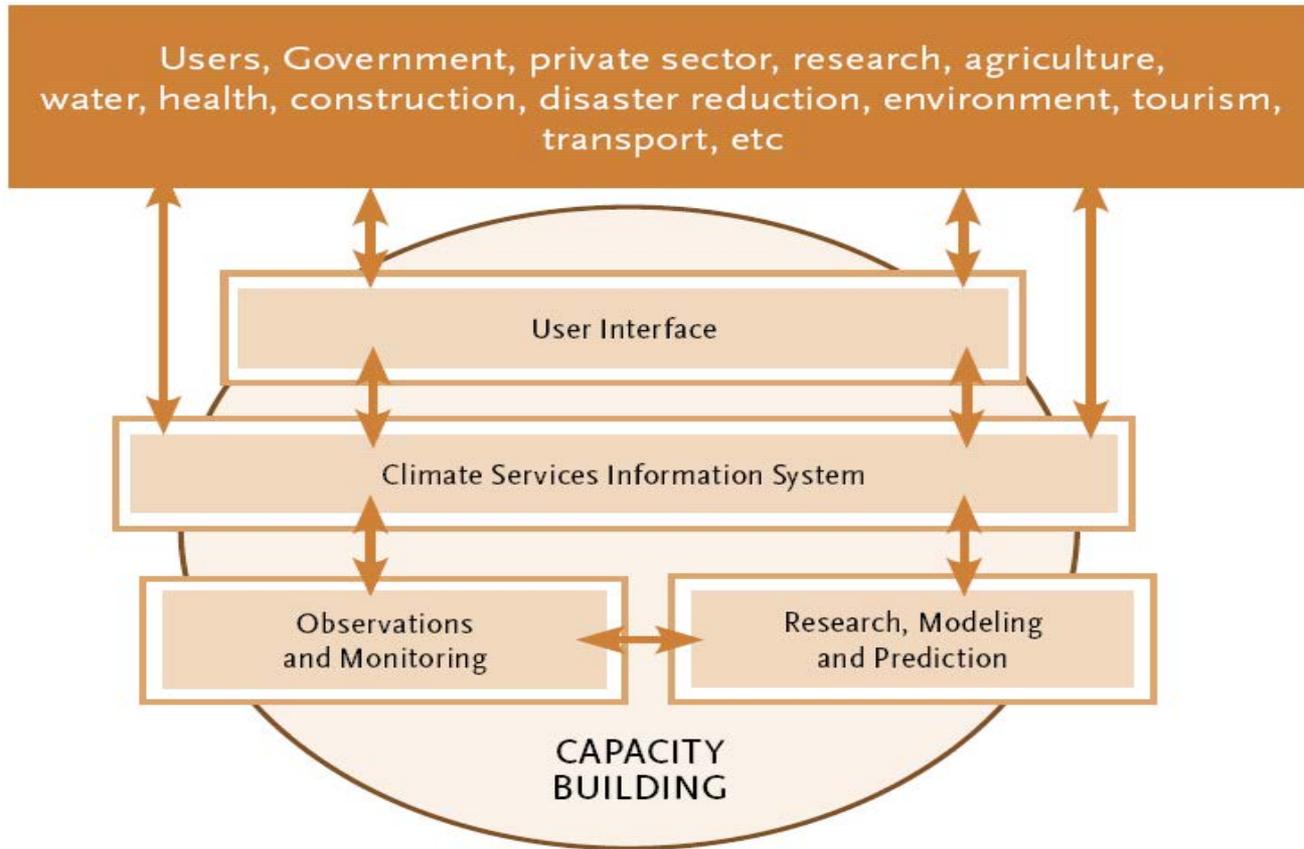


# Research, Modelling and Prediction

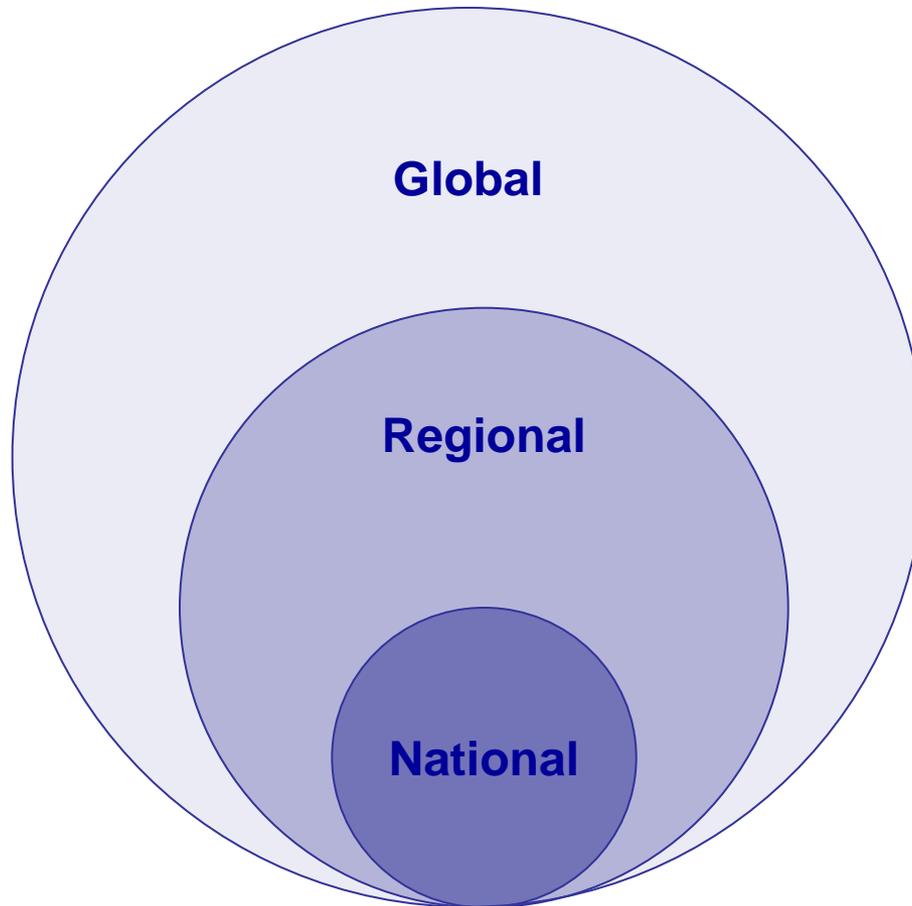
## WCRP Grand challenges

- Clouds, circulation & climate Sensitivity
- Melting Ice & Global Consequences
- Climate Extremes
- Regional Sea-Level change & Coastal Impacts
- Water Availability

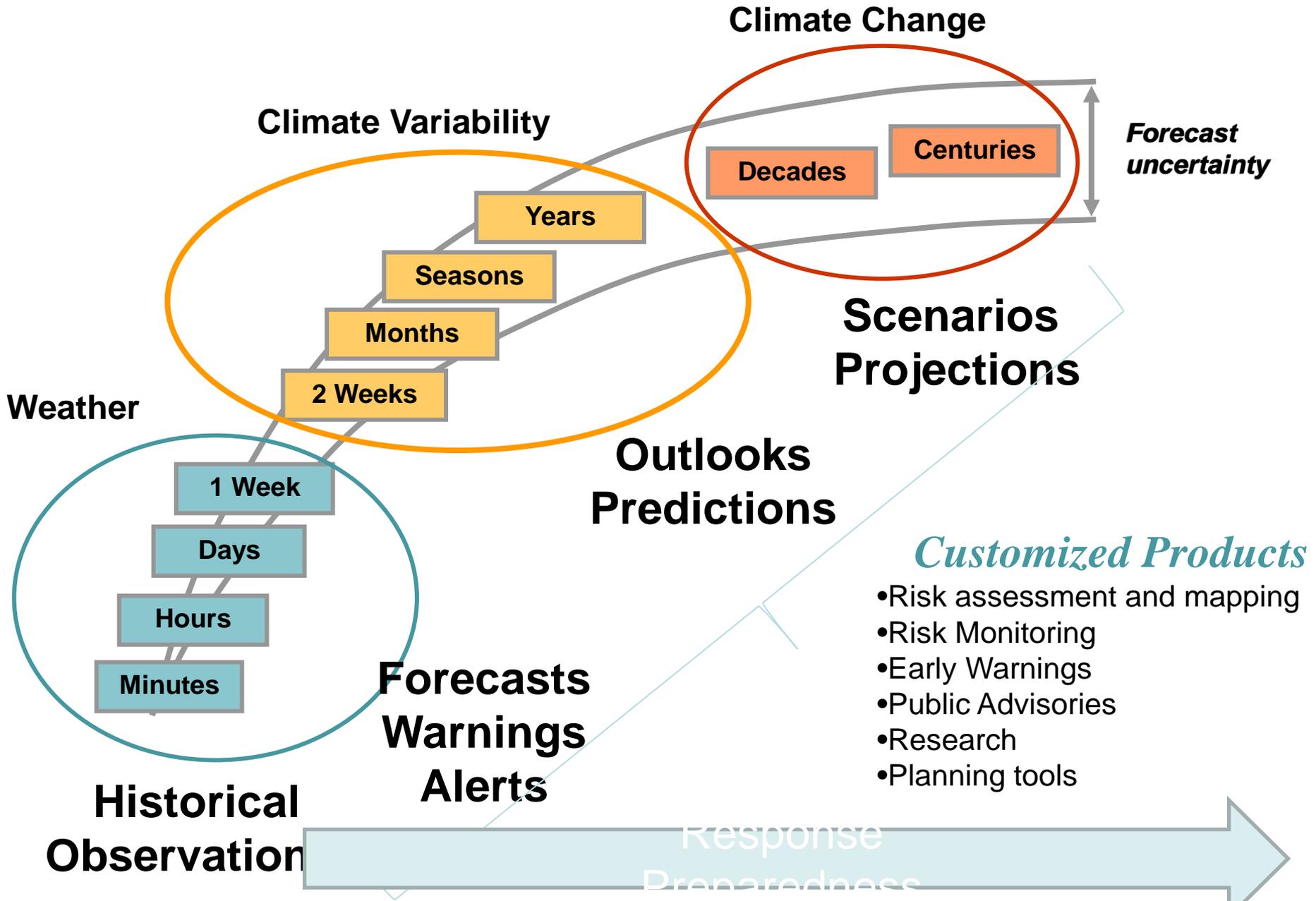
# GFCS Pillars



# Domains of operation of GFCS



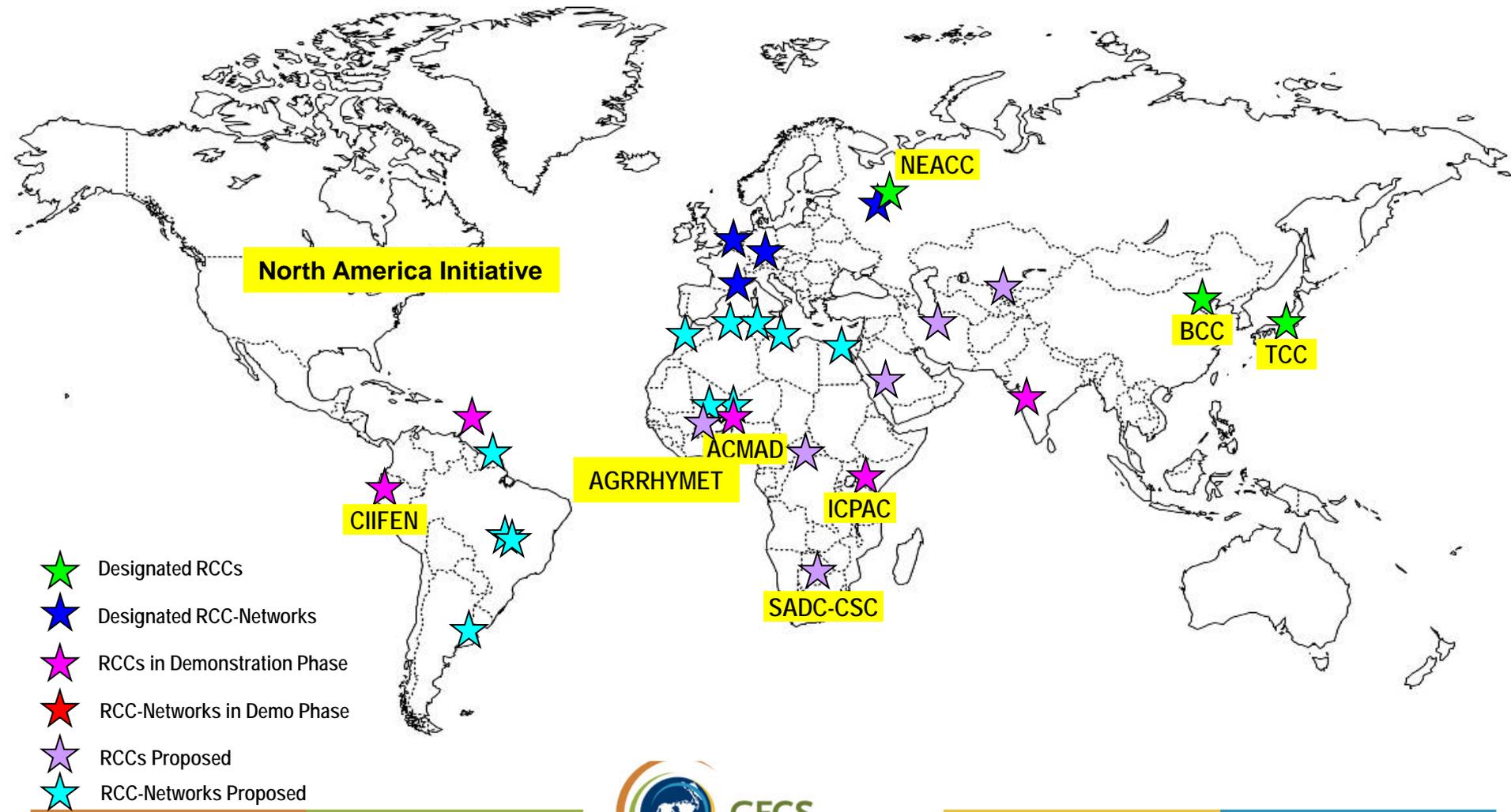
# Seamless hydrometeorological and climate services



# WMO GPC



# WMO RCC Status Worldwide



- ★ Designated RCCs
- ★ Designated RCC-Networks
- ★ RCCs in Demonstration Phase
- ★ RCC-Networks in Demo Phase
- ★ RCCs Proposed
- ★ RCC-Networks Proposed

# Potential National Mechanisms

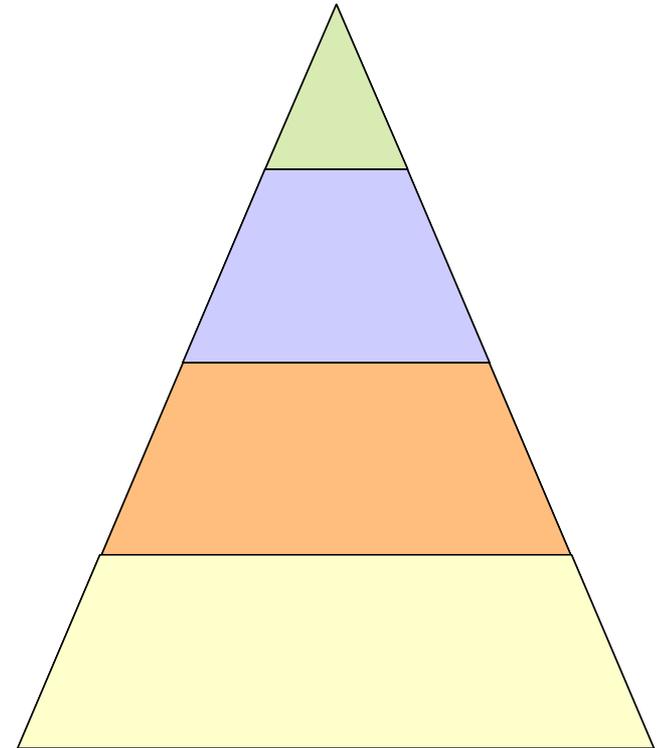
- Frameworks for Climate Services at the national level
  - Similar to other levels of GFCS but involves practicalities and specifics for delivery of climate services at the national level through well-coordinated arrangements between the key national institutions responsible for observations, research, tailored products and expert advice as well as the user sectors.
  - Some countries may establish coordination mechanisms appropriate to their national context, largely as integral components of the NMHSs, to support/facilitate GFCS implementation at the national level
- National Climate Outlook Forums (NCOFs)
  - Adapting the Large and Regional scale forecasts to the national context
  - Tailoring products and translating key messages for users (Multidisciplinary Working Groups)
  - Evaluating the impact of expected conditions (with existing vulnerabilities)

# Major needs

1. **Tailored** climate information products and advisory services (detailed and skilful forecasts + climate change projections + better prediction of extremes);
2. **Capacity development** of professionals and communities on production and effective application of climate services;
3. Improved, **standardized**, and quality controlled sector monitoring data that is compatible with environmental and climate information;
4. Monitoring and evaluation of the appropriate, **effective, and cost-effective use of climate information** for sector decisions;
5. **Research and prediction of sector impacts** associated with climate variability and climate change;
6. **Development and deployment of early warning systems** appropriate to the sector and user communities;
7. Sustainable **financial and technical** support;
8. **Better collaboration** with the climate community for interdisciplinary policy, practice and research.

# Pre-requisites for climate services

- **Available:** at time and space scales that the user needs,
- **Dependable:** delivered regularly and on time,
- **Usable:** presented in user specific formats so that the client can fully understand,
- **Credible:** for the user to confidently apply to decision-making
- **Authentic:** entitled to be accepted by stakeholders in the given decision contexts
- **Responsive and flexible:** to the evolving user needs, and
- **Sustainable:** affordable and consistent over time.





Thank you for your attention