

The Global Framework for Climate Services

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The GFCS

Goal

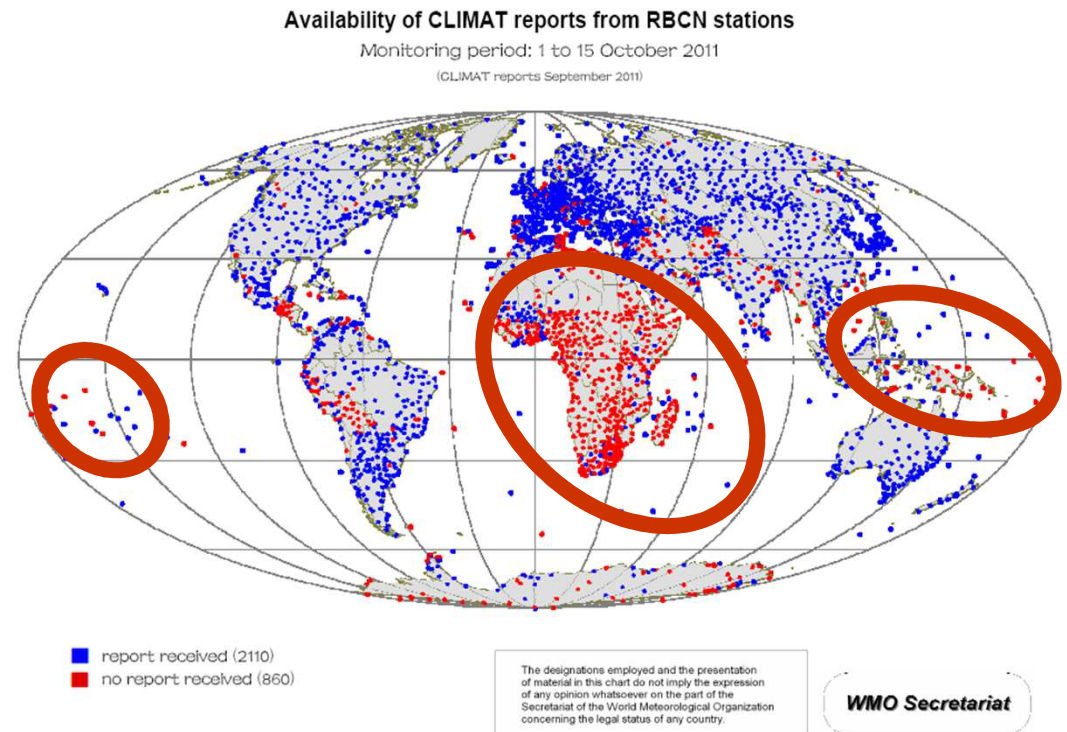
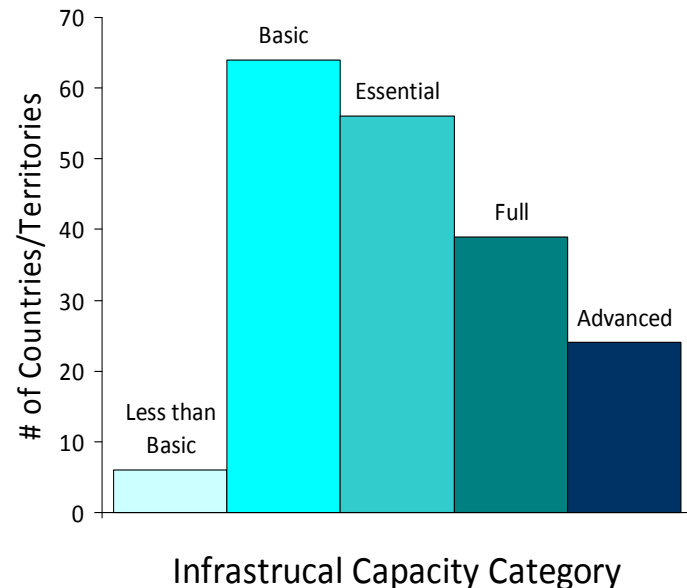
Enable better management of the risks of climate variability and change and adaptation to climate change, through the development and incorporation of science-based climate information and prediction into planning, policy and practice on the global, regional and national scale



Why a Framework for Climate Services?

Infrastructural Capacities of Countries as of Aug 2010 to provide Basic, Essential, Full and Advanced Climate Services.

- Many countries lack the infrastructural, technical, human and institutional capacities to provide high-quality climate services.

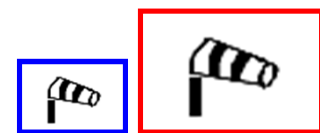


Why a Framework for Climate Services?

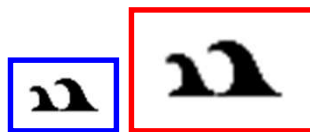
- It will enable greater integration and coordination across disciplines, actors and sectors in the climate services agenda for better use of existing infrastructure, technical capabilities (and resources...) for improved outcomes in climate-sensitive sectors

A Framework for Climate Services will build on existing capacities and leverage these through coordination to address shortcomings

Concern...



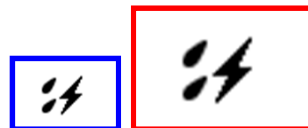
Strong Wind



Coastal Marine Hazards



Tropical Cyclones



Heavy rainfall / Flood



Heatwaves



Water Resource Management



Intensity

Hazards' intensity and frequency are increasing

Vulnerability and exposure on the rise !

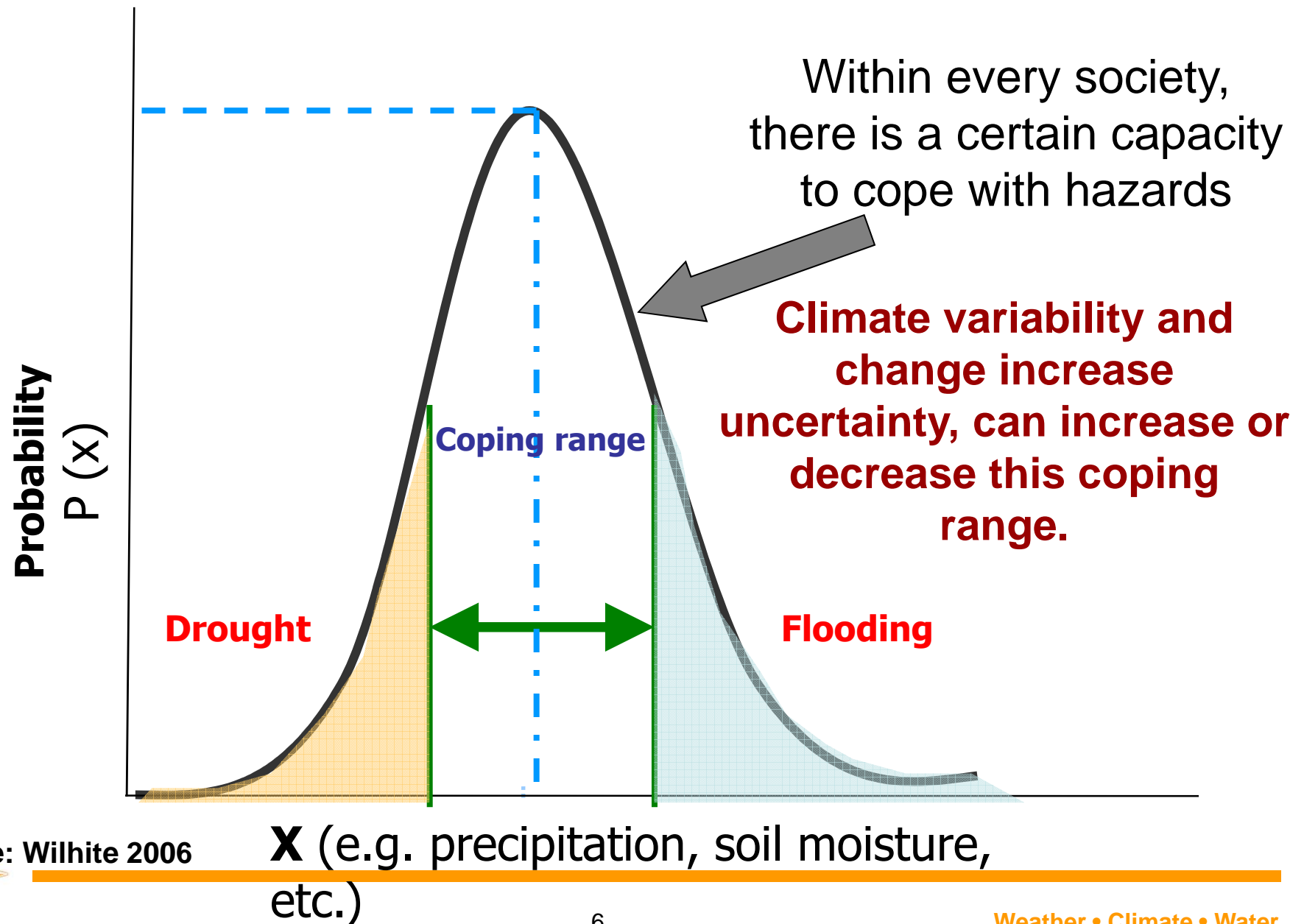


Need for > coping mechanisms

Weather • Climate • Water



What it used to be...

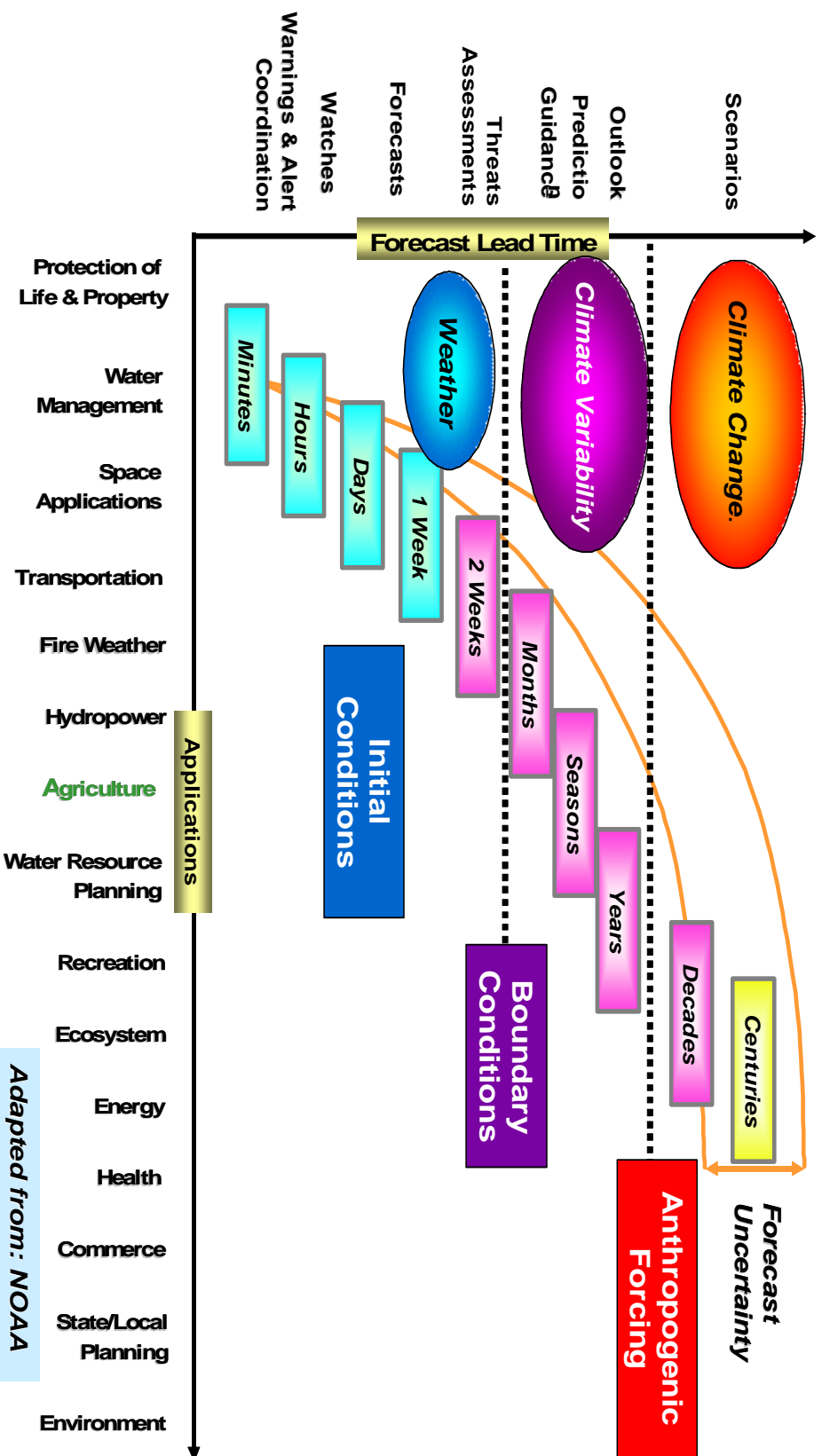


Source: Wilhite 2006



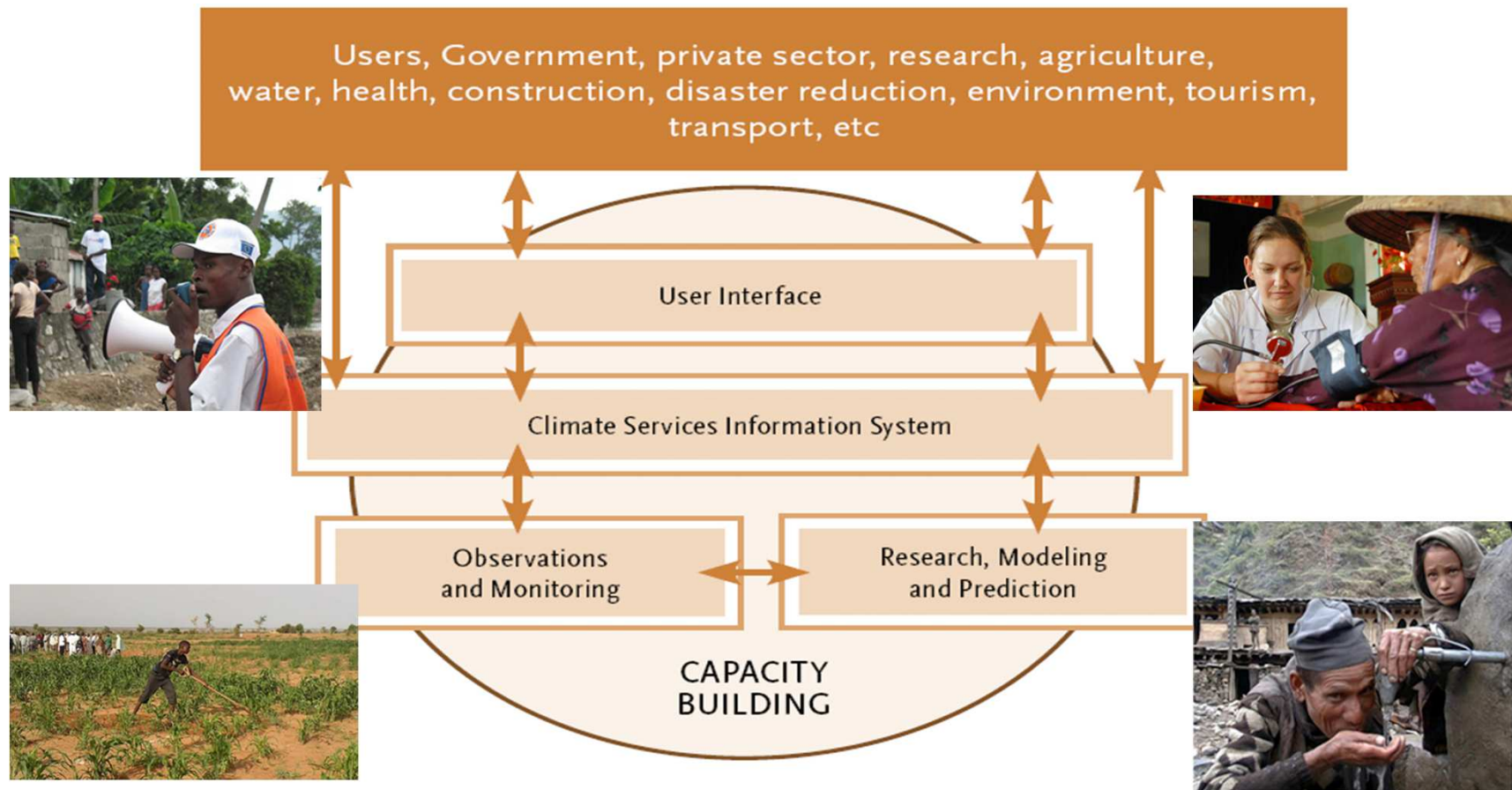
Seamless hydrometeorological and climate services

Climate Prediction Framework



Adapted from: NOAA

GFCS Pillars & Priority Areas



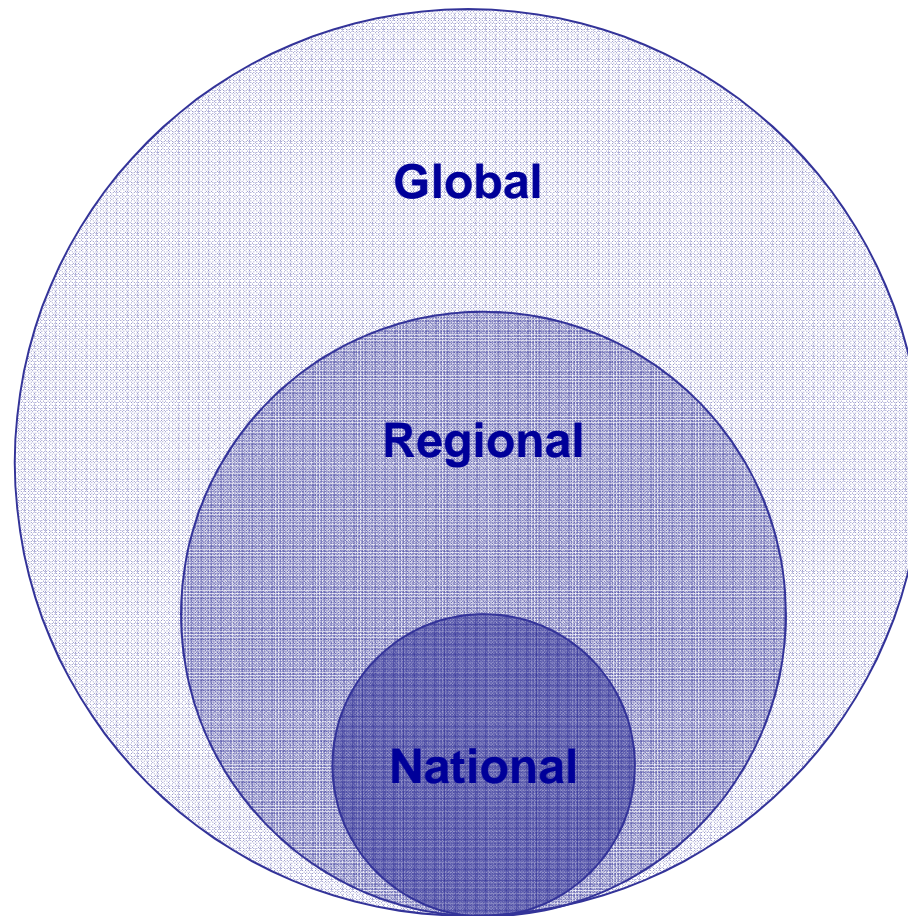
Major needs

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

GFCS implementation priorities

- **Capacity development:**
 - Linking climate service users and providers.
 - Developing national capacity in developing countries.
 - Strengthening regional climate capabilities.
- **High-profile projects** to address gaps across pillars and priority areas;
- **Observations and data recovery** in data sparse areas;
- **Partnerships** across sectors and disciplines for addressing gaps and priorities;
- **Governance**, leadership and management capacity to take the Framework forward.

Domains of operation of GFCS



Domains of operation of GFCS

Global Level (GPC)

- Produce global climate prediction products
- Coordinate and support data exchange, major capacity building initiatives
- Establish and maintain standards and protocols



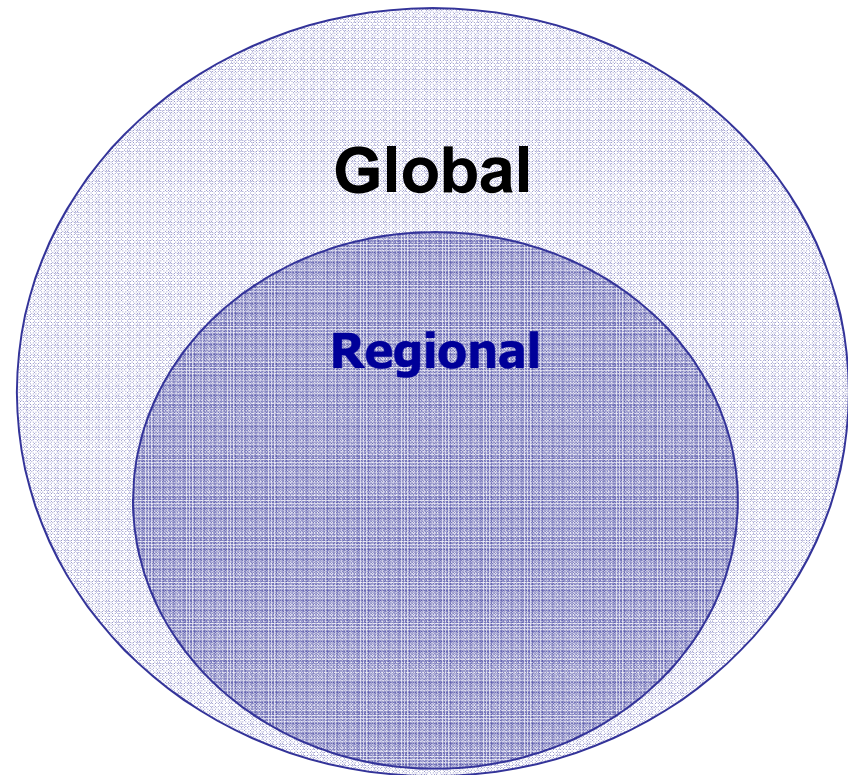
Domains of operation of GFCS



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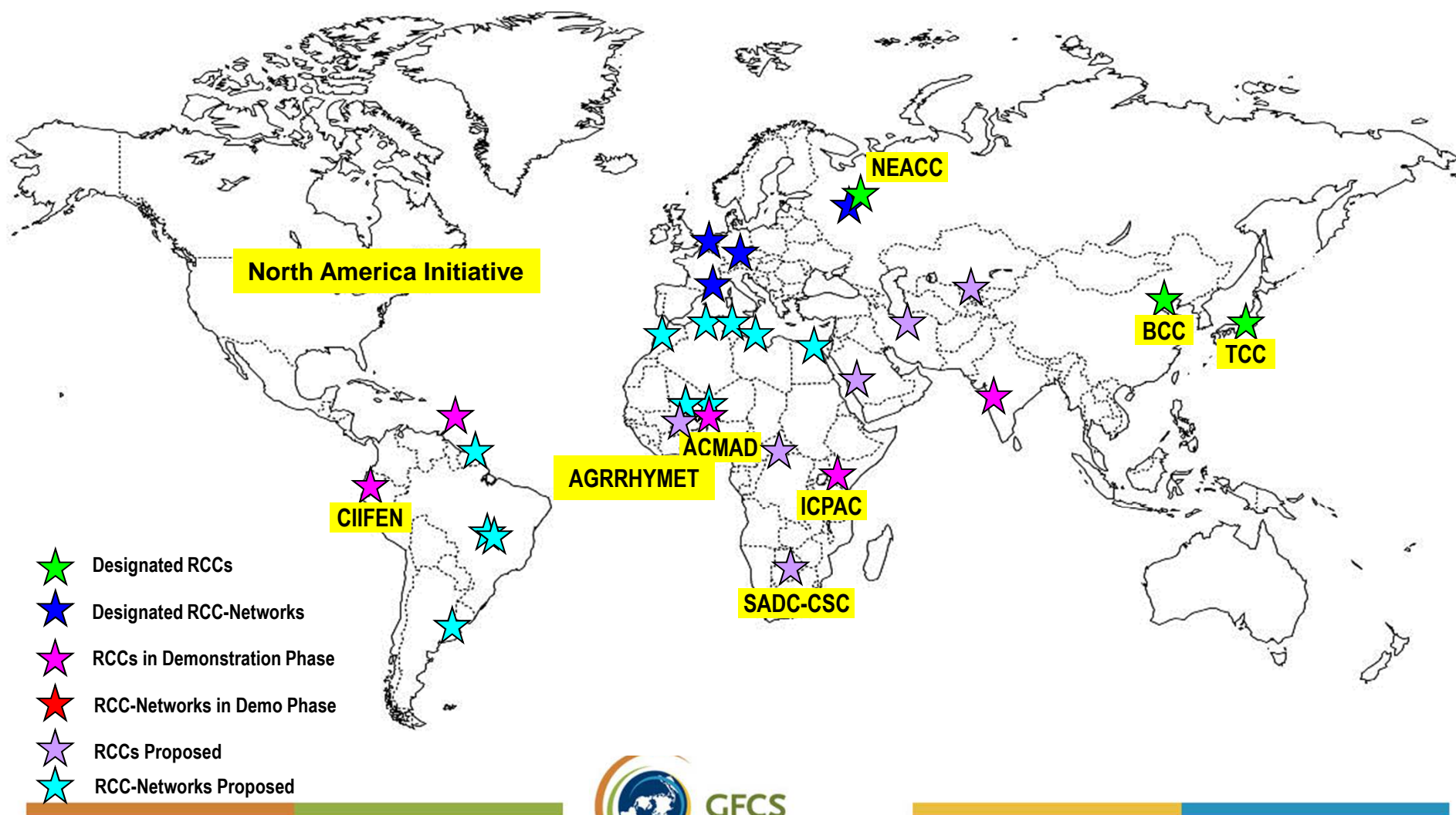
Regional Level (RCC)

- Support multilateral efforts to address regional needs
 - Regional policy, data exchange, infrastructure dev, research, training at service provision
 - AMCOMET
- RCOF
 - Improved regional research;
 - Coordinated regional training;
 - Support to regional policy



Critical for capacity building requiring resources beyond a single nation

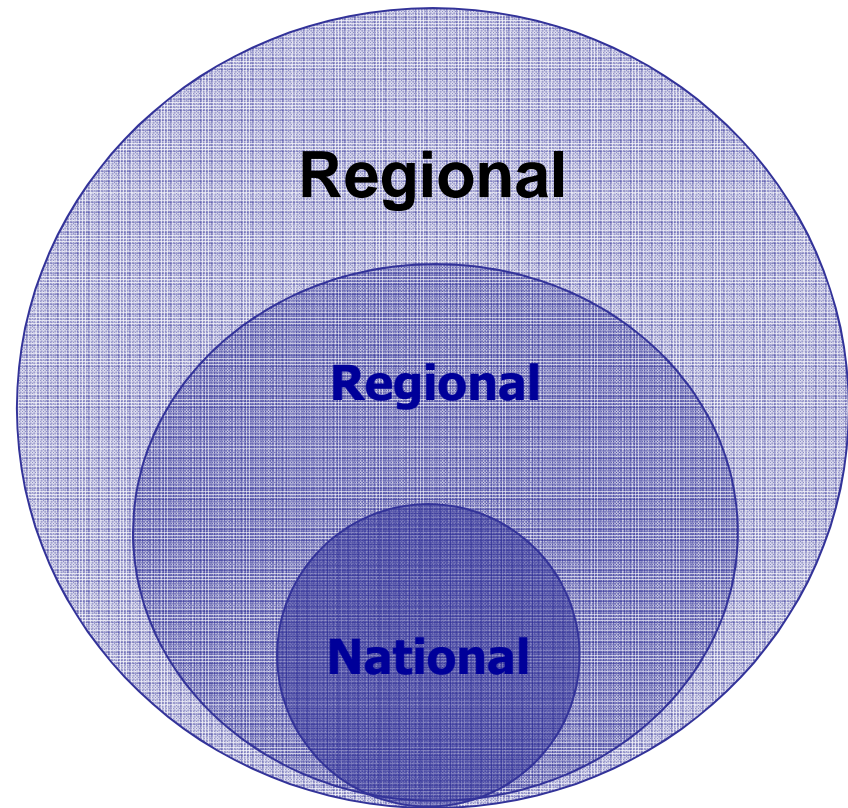
WMO RCC Status Worldwide



Domains of operation of GFCS

National Level (NCC)

- Ensure access to data and knowledge products
- Tailor information to user requirements
- Ensure effective routine use of information
- Develop sustainable capacities



Early implementation



Pilot projects in Burkina Faso, Chad, Mali, Niger, Senegal, South

Joint project offices

- WHO/WMO
- GWP/WMO
- WFP/WMO



Regional workshops for the most vulnerable countries

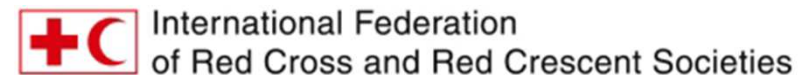
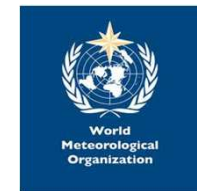
South East Asia, Caribbean, SWPI (Cook Islands, 31st Mar-4 April), SEE (TBD), Latin America (28 Jul – 1 Aug, Costa Rica)



GFCS Adaptation Programme in Africa

Focus Countries

- Tanzania and Malawi
- Programme runs for 3 years
- Total budget of USD 10m
- Funded by



Contribution Modalities

- Contribution to the GFCS for supporting projects and IBCS, including substructures;
- Selection of activities from the Implementation Plan and Compendium of GFCS Projects for Implementation;
- Designation of activities as contributing to the GFCS if they satisfy the set of criteria

Lessons learned from regional workshops and national consultations

Regional

- Importance of **research and science**
- Role of Regional Climate Outlook Forums
- Maximization of limited resources through regional approach
- Exploring gaps, capacity development, and strategies for engaging stakeholders

National

- Systematic dialogue with users
- Understanding in-country capabilities
- Identification of data and observation requirements
- **Identification of priority research questions**
- Building sector-specific capacities
- Leveraging enabling factors

10 Pre-requisites

1)	Provide a strong institutional anchorage for the Framework for Climate Services
2)	Meet the demand for tailored climate service provision in the priority climate-sensitive sectors in the country (Agriculture & Food security, Health, Disaster Risk Management, Construction/Infrastructure/ Transport sector, etc.)
3)	Build the capacity of the NHMS and other technical services to jointly elaborate salient climate products and services, building on pluri-disciplinary knowledge and expertise from each sector
4)	Improve the Communication / widespread distribution of Climate Services
5)	Diversify communication channels , use innovative channels to broadcast (aside from TV)
6)	Modernize and increase the density of the national hydro-meteorological observing network , improving capacity to meet end-user needs
7)	Improve collaborative climate research , towards more salient end-user driven climate research outputs
8)	Develop and strengthen the capacity of end-users to further appropriate and utilize climate services
9)	Sustain the newly defined Framework for Climate Services at the national level
10)	Engage all national stakeholders involved in the production, interpretation, communication and utilization of climate services in a national dialogue around climate service provision, to identify country needs and charter a course for the provision of user-tailored climate services at the national and sub-national levels.

Climate Services: a revolution in the application of climate science

- From mitigation to **mitigation** and **adaptation**
- From **few to many** customers/users/stakeholders
- Global century scenarios to **regional predictions, days to decades ahead**
- Climate change to **climate change and climate variability**
- Broad climate to **characteristics of weather including extremes and impacts**
- **Operational delivery** – regularly updated monitoring, forecasts, products & services

Benefits

- **Better **water** resources management**
 - as inputs to hydrological characterisation (e.g. precipitation, evaporation, etc)
 - in planning, design, development and operation of water supplies
 - in flood and floodplain management and control
 - design and operation of irrigation and drainage systems;
 - for studies associated with power generation, fisheries an conservation, navigation and recreation.
- **Improved **disaster risk management****
 - Planning and emergency preparedness and response to extreme events
 - Siting of critical infrastructure such as hospitals, schools, etc
- **Improved **support to planning and operations in the **health** sector****
 - Risk Assessment/health system risk management
 - Epidemiological Surveillance & environmental Monitoring
 - Health Services (heat health warning systems, malaria waning system, etc...)
- **Improved **agricultural** planning and management**
 - Better drought and flood management
 - Improved food security

Summing-up

✓ 3 closely-related issues:

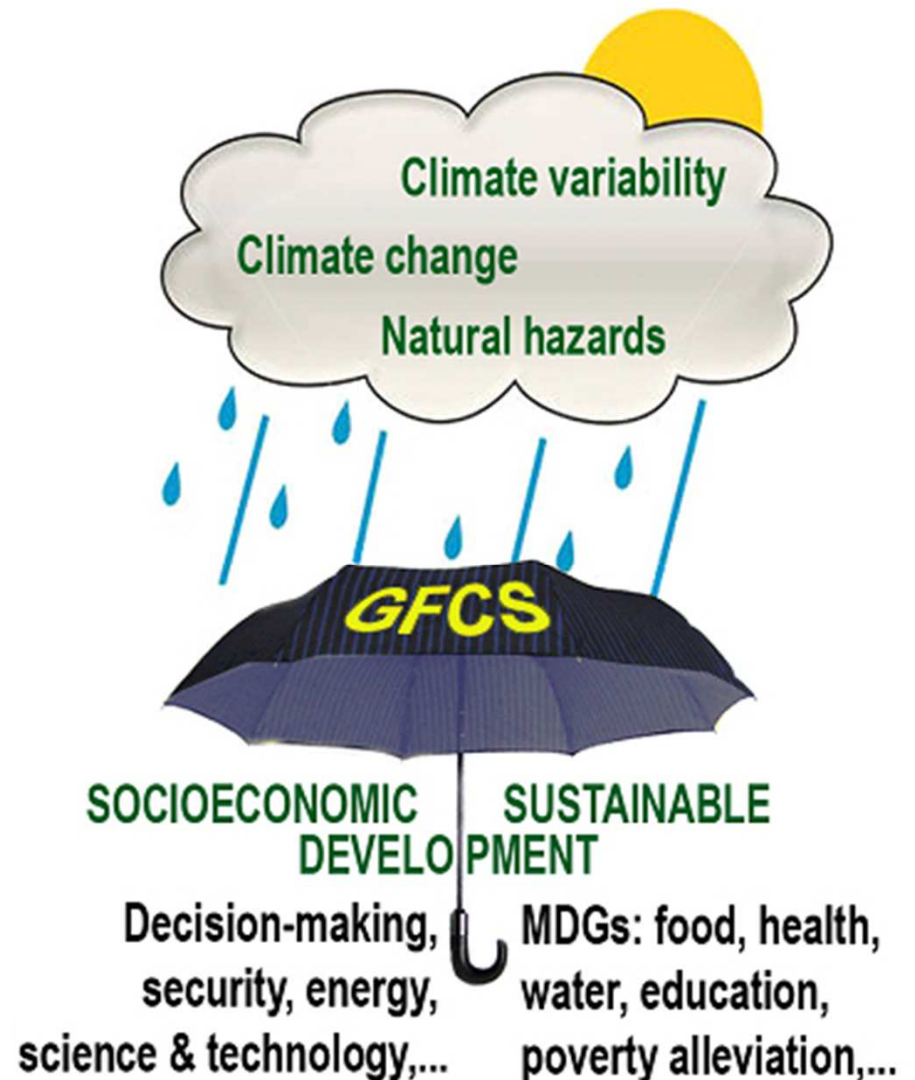
- *Adaptation to climate variability and change*
- *Disaster risk reduction*
- *Sustainable development & societal benefits*

✓ Requirements:

- *Reinforcing developing countries' adaptive capabilities*
- *Multidisciplinary partnerships across all sectors*
- *Capacity building to be seen as an investment, not an expenditure*

A key opportunity:

- **A Global Framework for Climate Services**



Important events

- Management Committee (15 and 17, 2014)
- IBCS-2 (10 – 14 Nov 2014)
 - Review of progress
 - Establishment of Technical Committee

GFCS Docs available at:

<http://gfcs.wmo.int/final-implementation-plan>





Thank you for your attention