

The Global Framework for Climate Services

www.gfcs-climate.org/

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 sciencebased 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 highquality 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



GFCS Pillars & Priority Areas

Users, Government, private sector, research, agriculture, water, health, construction, disaster reduction, environment, tourism, transport, etc User Interface **Climate Services Information System** Research, Modeling Observations and Prediction and Monitoring CAPACITY BUILDING



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 costeffective 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.



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.



Research, modelling and prediction

Objectives

- Improve understanding of Earth's Climate and assess impacts of climate variability and change on people, ecosystems and infrastructure
- Enhance interaction and cooperation between researchers and climate information users
- Target research towards developing and improving practical applications and information products in the four priority areas
 - Assessment of vulnerabilities
 - Assessment of impacts
 - Development of tools to transition research into applications
- Enhance science readiness level for production of climate projections, predictions and user-tailored climate information products



Research, modelling and prediction

Gaps

- Communication between communities of scientists and practitioners
- Last mile between science products and service-oriented climate information
- Lack of seamless suite of climate products for contiguous time scales from weather to centenial climate projections
- Limited or unknown predictability for a range of key time-space scales
- Lack of comprehensive approaches and experience in dealing with uncertainties



Research, modelling and prediction

Initial activities

- Strengthening planning and coordination of present and future research strategies and virtual forums supporting them, engaging sponsors
- Bridging communities producing experimental and regular climate information
- Research in support of core climate products including subseasonal to seasonal predictions, decadal and centenial predictions
- Research on climate observations, change detection, and development of climate data records



How can you contribute?

- Mapping Climate information needs of users and related Climate science knowledge gaps;
- Develop specific climate research agendas, e.g. Climate Research for Africa (CR4A)
- Propose Research Programs to Address User-Driven Priorities for Climate Research as identified in the GFCS implementation plan
 - Form consortia to address GFCS research gaps and needs



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



GFCS Docs available at:

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





Thank you for your attention

www.gfcs-climate.org/

The principles of the GFCS

- 1 Priority shall go to building the capacity of climate-vulnerable developing countries
- 2 Ensure greater availability of, access to, and use of climate services for all countries
- 3 Three geographic domains: global, regional and national
- 4 Operational climate services will be the core element of the Framework
- 5 Climate information is primarily an international public good provided by governments, which will have a central role in its management through the Framework
- 6 Promote free and open exchange of climate-relevant observational data while respecting national and international data policies
- 7 The role of the Framework will be to facilitate and strengthen, not to duplicate
- 8 Built on user needs through user provider partnerships that include all stakeholders

