



Global Framework for Climate Services (GFCS): Heat-Health Perspectives

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Why a Framework for Climate Services?

- It will enable greater integration and coordination across disciplines 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.
- Many countries lack the infrastructural, technical, human and institutional capacities to provide high-quality climate services.
- Climate services have not been able to reach the last mile to those who need them the most.

Quick GFCS Overview



GFCS is an inter-governmental initiative spearheaded by WMO to guide the development and application of science-based climate information and services in support of decision-making in climate sensitive sectors.

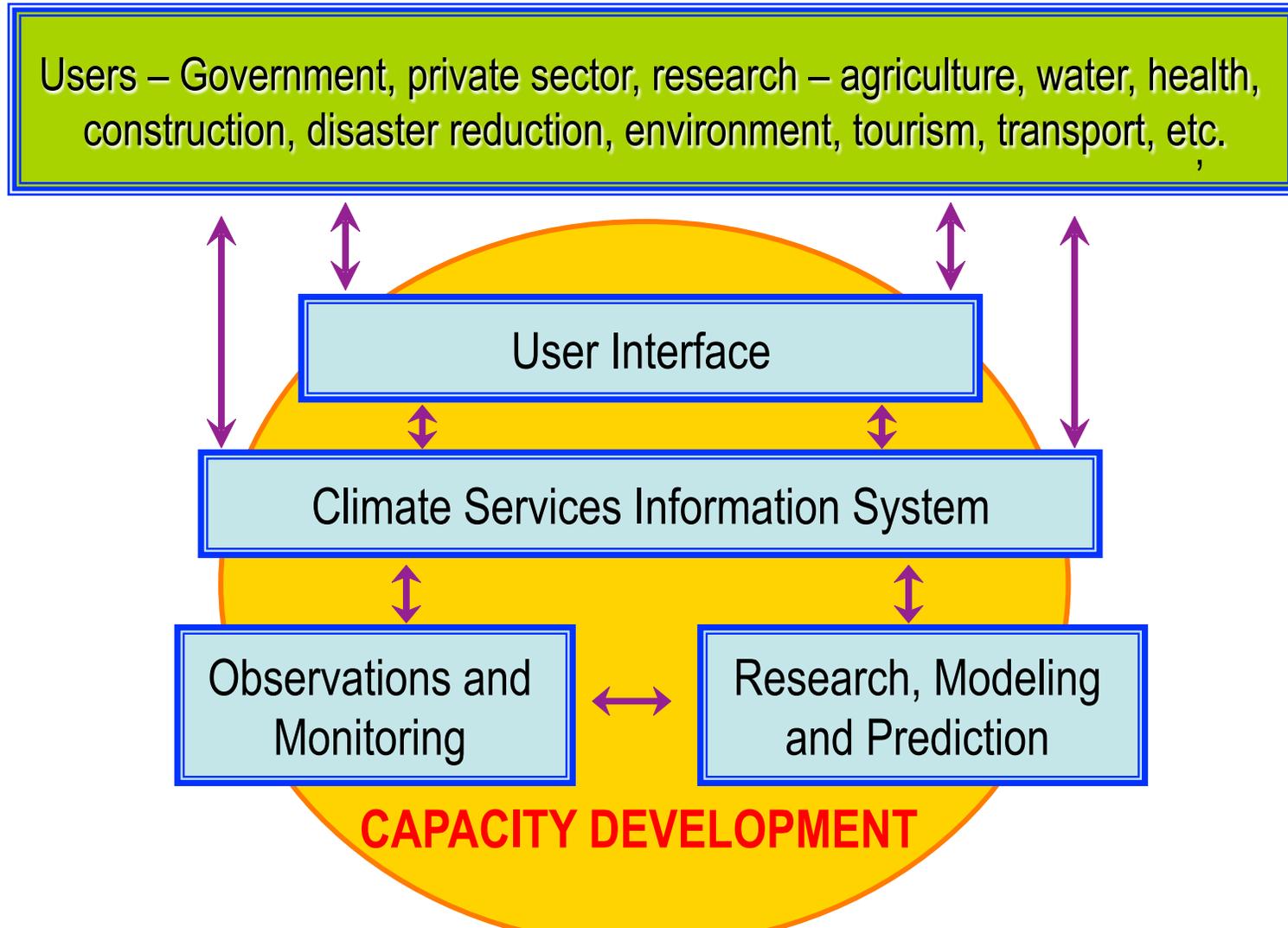
- **Process:** Intergovernmental, with engagement of UN and other international agencies
- **Established** at World Climate Conference-3 (WCC-3) in **2009**
- **Developed** through an intergovernmental High Level Taskforce in **2011**
- **Formalized** through WMO Congress in **2012**
- **Implementation Plan** developed through Intergovernmental Board in **2013**
- **Implementation commenced** in **2014** through a 10-yr initial programme



GFCS Governance

- Intergovernmental Board on Climate Services (IBCS)
 - All WMO Members represented
 - Reports to World Meteorological Congress
- IBCS-1: 1-5 July 2013, Geneva
 - Adopted the GFCS Implementation Plan
- IBCS-2: 10-14 November 2014, Geneva
- IBCS Management (Re-established in IBCS-2)
 - Chair: Dr Jens Sunde (Norway)
 - Co-Vice-Chairs: Dr L.S. Rathore (India) and Dr L. Makuleni (South Africa)
 - 28-Member Management Committee
- Partnership Advisory Committee
- GFCS Trust Fund
- GFCS Office (as part of WMO Secretariat)

Components of GFCS



GFCS Sectoral Priorities

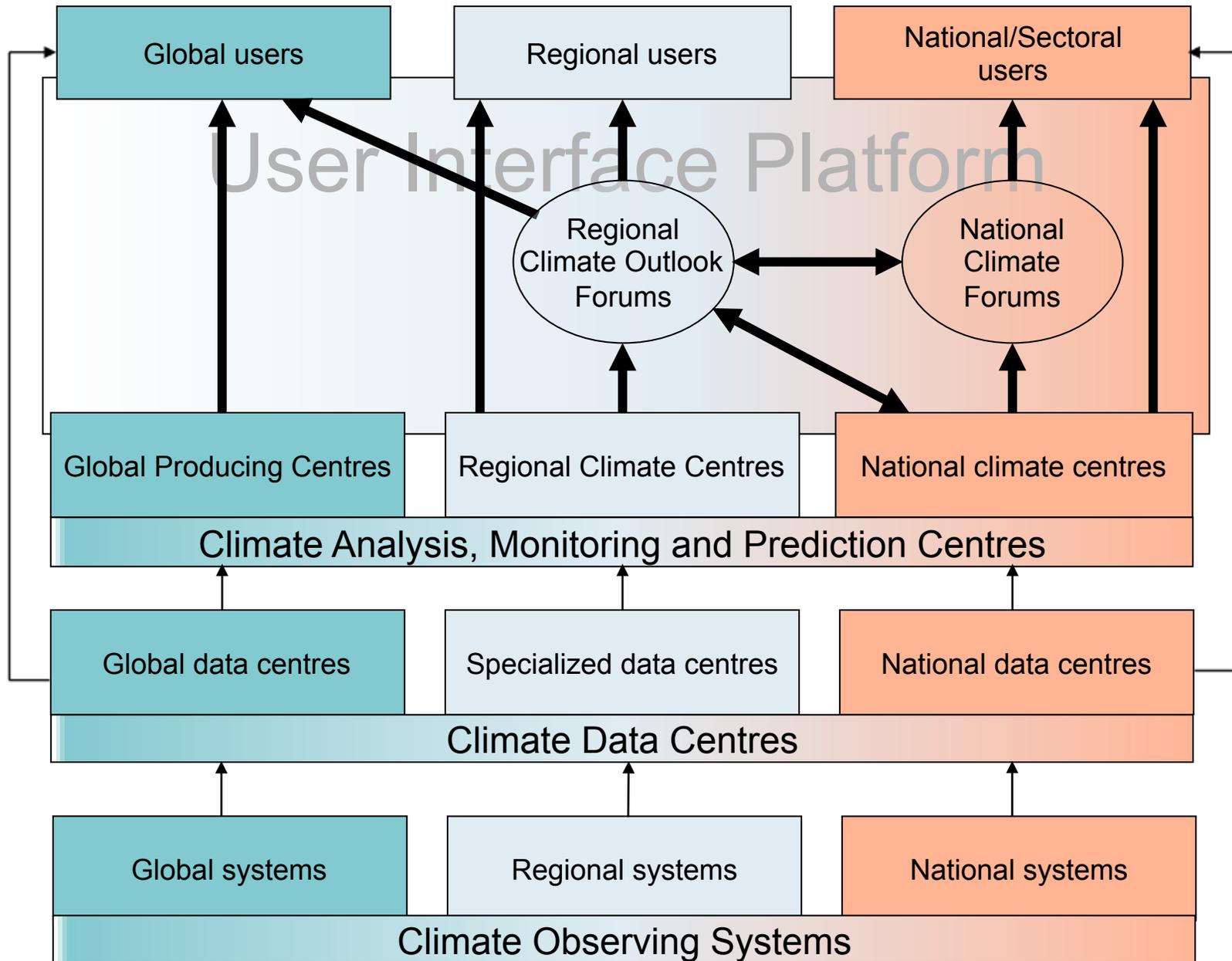
All sectors to be tackled but initial priority is given to the sectors:

- Agriculture and Food Security
- Disaster risk reduction
- Water
- Human Health
- **Energy***

**Endorsed by Congress-17 (2015)*



Operational CSIS Structure



Operational capabilities required

- Technical infrastructure
 - Requirements for the different components of the GFCS
 - Interoperability of databases
 - Climate Services Toolkit (including downscaling/tailoring tools)
 - Web platform for dissemination
- Global-Regional-National interaction
 - Networking capabilities (national access to as well as contribution to global and regional products)
- Best practices and standardized approaches
 - Quality management, best practices on methods, tools, etc.
 - Standardized approaches for regional/sub-regional synergy
- Linking operational products with the applications
 - Access to application models and decision support tools
 - User-accessible climate knowledgebase
 - Operational linkages with applications infrastructure

Early Implementation of GFCS

- National Consultations/Pilot Projects on frameworks for climate services at national level
 - Burkina Faso, Chad, Mali, Niger, Senegal, South Africa, Belize, Dominica, Trinidad & Tobago, Papua New Guinea, etc.
- Regional Consultations
 - LDCs in Asia, Bangkok, October 2012
 - SIDS Caribbean, Port of Spain, May 2013
 - SIDS Pacific, Cook Islands, 31 March-4 April 2014
 - Latin America, 28 July – 1 August 2014
 - Southeastern Europe, November 2014
- Establishment of joint project offices
 - WHO/WMO Climate and Health
 - GWP/WMO IDMP TSU
 - [WFP/WMO](#)
- Interagency Coordination Group with UN partners
 - FAO, WFP, UNESCO, UNDP, UNISDR, WB, WHO and WMO

What can GFCS mean for Health?



- Improved **availability** of useful climate information products and services in and about climate vulnerable countries
- Improved **capacity** to develop customized products and services for health risk management
- **Collaborative space** to define and communicate health sector needs for better climate knowledge
- Particularly at National Level, **new opportunity** for health to join a multi-sector process about risk management

WHO -WMO Joint Climate and Health Office

STRATEGIC

Advance WHO and WMO Policy on climate services for health

NETWORK

Enhance coordination and partnerships

OPERATIONS

Expand climate services and health programs and research

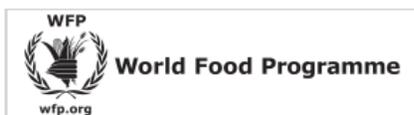
OUTREACH

Communicate, raise awareness, and build capacity



Adaptation Program in Africa

GFCS Flagship Project in Malawi and Tanzania



- Tanzania and Malawi
- Three years: Jan 2014 to Dec 2016
- Budget of USD 10m,
- Donor :Norwegian Ministry of Foreign Affairs
- Focus: Agriculture, Food Security, **Health** & DRR
- Builds on existing work implemented by partners
- Two tiered governance:
 - Global Programme Steering Committee
 - National Project Delivery Teams

Aims to be a “model” of how agencies can work together to implement climate services.



Programme for Implementing GFCS at Regional and National Scales



Focus Regions

- **Small Island Developing States**
 - Pacific Island Countries
 - Caribbean
- **South Asia**
 - Including Third Pole region
- **Polar Region (Arctic)**

Also supporting

- Global Action on Integrated Drought Management
- Capacity Development for Climate Sciences

Total budget - 6.2m USD

WMO Commission for Climatology

- Closely aligned to GFCS implementation
- Implementation Coordination Team on Climate Services Information System
- Five Open Panels:
 - Climate Data Management
 - Climate Monitoring and Assessment
 - Climate Prediction and Projection
 - User Interface for Climate Adaptation and Risk Management
 - Capacity Development
- Many heat-health applications integrated into the relevant activities (e.g., extremes, sector-specific indices, tailored products, climate watches, etc.)

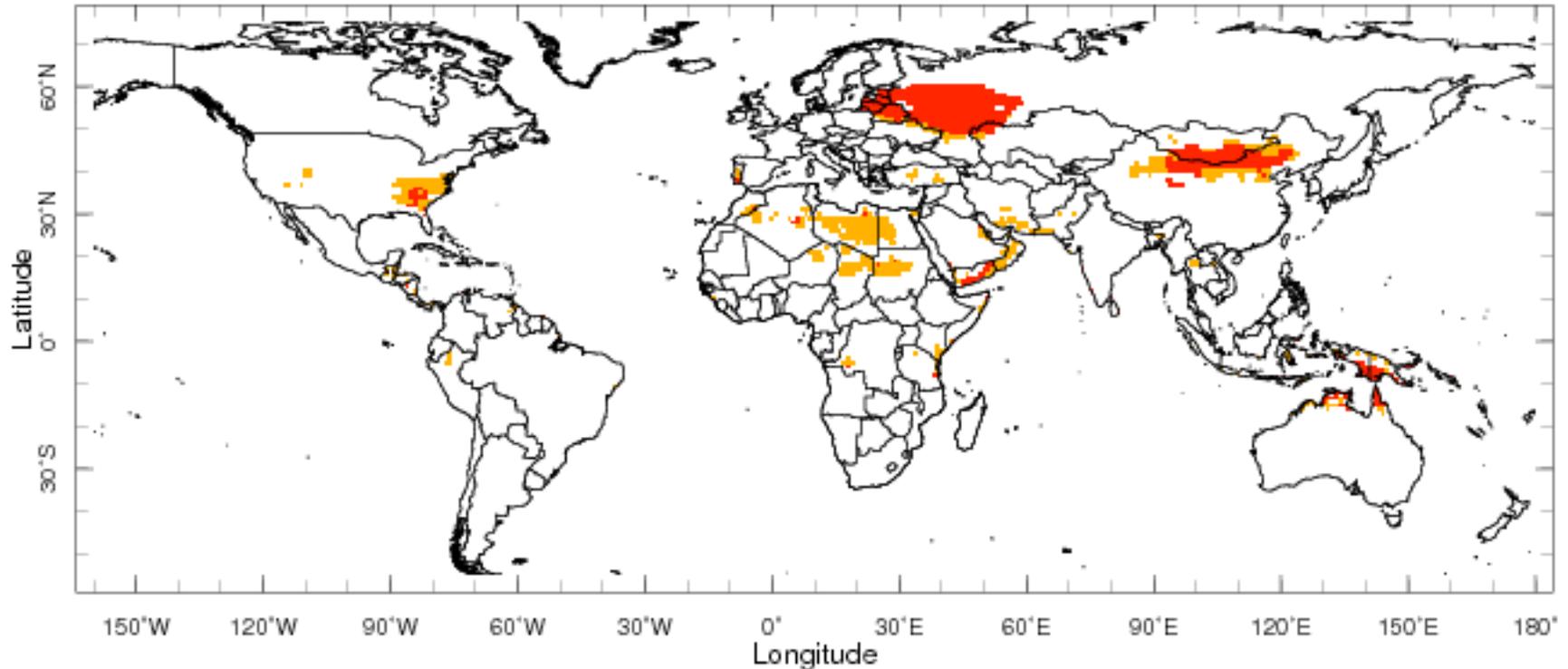
Sub-seasonal to Seasonal (S2S) Prediction Project

“Bridging the gap between weather and climate”

- To improve forecast skill and understanding on the sub-seasonal to seasonal timescale with special emphasis on high-impact weather events
- To promote the initiative’s uptake by operational centres and exploitation by the applications community
- To capitalize on the expertise of the weather and climate research communities to address issues of importance to the Global Framework for Climate Services

Implementation aspects include daily real-time forecasts, re-forecasts, 3-week lead time, etc.

GFS Global Forecast (1-week lead) of Heat Waves (red most intense) IC: 23 Jul 2010



0000 23 Jul 2010

Russian” heat wave was well forecast, also note heat wave in Mongolia/ Northern China associated with the same anomalous upper-level wave train...



Thank you for your attention