

GOVERNANCE SCHEME FOR GIAM UNDER GFCS IMPLEMENTATION STRATEGY BY CAGM

LE INIZIATIVE GLOBALI IN AGROMETEOROLOGIA

ALL'INTERNO DEL FRAMEKORK GLOBALE PER I SERVIZI CLIMATICI DA PARTE DELLA COMMISSIONE DI AGROMETEOROLOGIA DEL WMO

Byong-Lyo Lee¹, Federica Rossi², Raymond Motha³, Robert Stefanski⁴

¹ National Center for AgroMeteorology, CALS / Seoul National University, Seoul, 151-921 Korea

² Institute of Biometeorology, National Research Council, Bologna, 40129 Italy

³ George Mason University, College of Science, Fairfax, Virginia, USA

⁴ World Meteorological Organization, Geneva, Switzerland

The Global Framework on Climate Services (GFCS) will guide the development of climate services that link science-based climate information and predictions with climate-risk management and adaptation to climate change. GFCS structure is made up of 5 pillars; Observations/Monitoring (OBS), Research/ Modeling/Prediction (RES), Climate Services Information System (CSIS) and User Interface Platform (UIP) which are all supplemented with Capacity Development (CD).

Corresponding to each GFCS pillar, the Commission for Agricultural Meteorology (CAgM) has been proposing diverse Global Initiatives in AgroMeteorology (GIAM) in order to facilitate GFCS implementation scheme from the perspective of AgroMeteorology - Global AgroMeteorological Outlook System (GAMOS) for OBS, Global Agro Meteorological Pilot Projects (GAMPP) for RES, Global Federation of AgroMeteorological Society (GFAMS) for UIP/RES, WAMIS next phase for CSIS/UIP, and Global Centers of Research and Excellence in AgroMeteorology (GCREAM) for CD, through which next generation experts will be brought up as virtuous cycle for human resource procurements.

The World AgroMeteorological Information Service (WAMIS) is a dedicated web server in which agrometeorological bulletins and advisories from members are placed. CAgM is about to extend its service into a Grid portal

to share computer resources. WAMIS grid portal will become a gateway in sharing information and resources with user communities, dedicated to CAgM as a part of GFCS.

To facilitate ICT resources sharing, WAMIS grid portal will also be a partner of WIS (WMO Information System) umbrella, which is expected to play an essential role to meet future requirements in AgroMeteorology. A specialized or dedicated DCPC of WIS for WAMIS grid portal was requested by CAgM and is under implementation by KMA. WIGOS will be the basis for accurate, reliable and timely weather, climate, water and related environmental observations and products. Additional AgroMeteorological monitoring system will supplement WIGOS through CAgM members by establishing monitoring networks on plant phenology, soil moisture, and GHG fluxes to detect and evaluate climate variability and change.

Long-range NWP with high-resolution prediction of weather, and climate variations and change and their interaction with biogeochemical cycles requires Land Data Assimilation System as well. CAgM will provide land surface information to support LDAS (Land Data Assimilation System) of next generation Earth System as an information provider.

The International Society for Agricultural Meteorology (INSAM) is an Internet market place for agrometeorologists. Its vision is that agrometeorologists and others having work with agrometeorological components from different disciplines should communicate through INSAM on their activities and results. In an effort to strengthen INSAM as UIP for research community in AgroMeteorology, it was proposed by CAgM to establish Regional and Global Federation of AgroMeteorological Society (GFAMS).

CAgM will try to encourage the next generation agrometeorological experts through Global Center of Excellence in Research and Education in AgroMeteorology (GCREAM) including graduate programmes under the framework of GENRI as a governing hub of Global Initiatives in AgroMeteorology (GIAM of CAgM), but also attracting/mobilizing more scientists from diverse disciplines into the field of agrometeorology through global federation of agrometeorological societies (GFAMS) that will be associated with TECO during CAgM sessions.

KMA showed its willingness to provide secretariat supports to these global initiatives through a form of international project coordination office (TIGERS), especially as a way of its contribution to successful GFCS implementations at initial

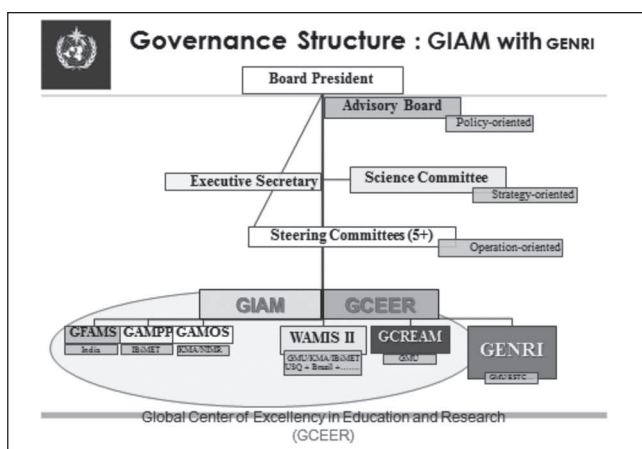


Fig. 1 - Governance Structure: GIAM with GENRI.

Fig. 1 - Struttura di governo: GIAM con GENRI.

stage. It would be coordinated under the framework of GENRI through TIGERS as a governing hub for all global initiatives such as GFAMS, GAMPP, GAPON including WAMIS II, primarily targeting on GFCS implementations.

- * WIGOS : WMO Integrated Global Observing System
- * WIS : WMO Information System - DCPC(Data Center & Production Center), GISC (Global Information Service Center)

- * WAMIS : World Agricultural Meteorological Information Service of WMO
- * KMA : Korea Meteorological Administration
- * GENRI : Global Environment and Natural Resource Institute, George Mason Univ. USA
- * TECO : Technical Conference / convened prior to or in parallel with Technical Commission sessions of WMO
- * TIGERS : Trans-disciplinary Implementation Governance for Environment and Resource Sustainability