

Group 2:

Consideration on how to
improve international
reporting of data

What are the national data gaps to support climate services?

Data gaps:

- low spatial distribution of met stations;
- data missing in the time series;
- existing data on paper;
- less number of observed variables?
- Data quality control (capacity of data processing);
- Lack of hourly data and irregular data reporting;
- Lack of gridded (and other formats) data;
- lack of good number of upper-air stations;
- lack of optimum national/regional observational network;
- inadequate of marine/inland lake/sea observations network;
- Lack of lightning data in the region/national level

ii) What mix of national observations and reanalysis products best meets the national needs?

- data assimilation;
- filling the gaps (compensate the lack of observations...);
- Reanalysis is used for
- downscaling and also for climate prediction

iii) Why is less data reported than is needed?

- Current data sharing regulations!!!
- Mode of operation of stations (e.g 12hr obs)
- Configuration of Telecom systems;
- Some stations not operating;
- Delays in reporting;
- Comms breakdown (e.g Internet),
- Power breakdown,
- (lack of) instrument maintenance -> impacts on the contents and quality of reports
- Insufficient/shortage of consumables (e.g. sondes, instruments, paper charts, etc)
- Security and vandalism

iv) What are the opportunities for rescuing data?

- Availability of data to be rescued/digitized
- - upper-air, rainfall, temperature, pressure,
- Can be used to: improve reanalysis, enhance climate services.

v) How can these observational issues be addressed?

Solutions to observational issues:

- increase the number of (operating) stations
- observational network design (OND principles)
- shall and should observations requirements must be met (hor. resol. and reporting according to GBON)
- data rescue archived
- capacity building in data management
- Regional WIGOS Centres
- awareness of flexibility of WIS...
- enhance capacity for maintenance/repair and calibration (of human resources)
- establish maintenance and calibration programmes (policy)
- define specifications for new instruments to guide maintenance and calibration
- sustain budget for observational consumables and establish procurement plan
- enhance communications?! -> data collection

vi) Are there conflicts between national and wider needs?

- common understanding on instructions in data reporting
- confusion on instructions

vii) Are new sites needed?

- Reference to GBON and WIGOS Regional Centre (Redesign Observation Network)

viii) How can observations be made sustainable?

- capacity building in instrument maintenance and calibration
- an alternative would be to recruit extra staff specialized in that;
- implementation of calibration and maintenance programmes
- WIGOS implementation plan and national observing strategy (competence framework)
- regular programme in capacity building of observations contributors (support stakeholders)
- develop national observations manual (with update of existing rules)
- life cycle management of observing system (updating software)
- implement QMS
- sustain observations metadata management
- prioritization of observing systems as part of observations strategy, into Network management

ix) Identify regional funding opportunities

- national governments
- development partners (donors)
- Regional bodies (EAC, ECOWAS, SADC, IGAD)
- UN organizations (WMO, GCOS, UNDP, UNFCCC)
- bilateral cooperations
- international organizations (WB, IMF,)