PEACE, PROSPERITY AND
REGIONAL INTEGRATION

DATA SHARING EXPRIENCES & PRACTICES IN GHA REGION

BY

ISMAEL LUTTA MULAMA

email address: ilutta@icpac.net

CLIMATE DATA MANAGEMENT ASST.

ICPAC P.O. BOX 10304, 00100

NAIROBI

OUTLINE

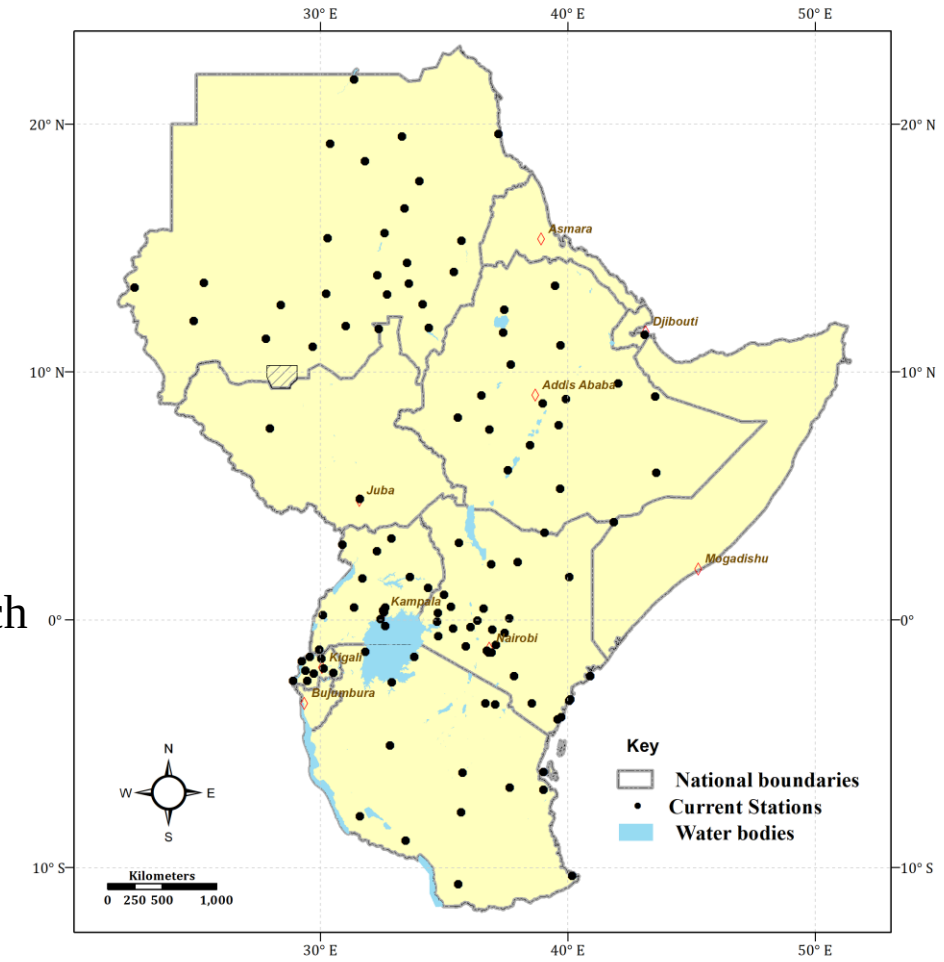
- Background
- Current ICPAC station Observation network-APRIL 2018
- Regional Datasets Available at ICPAC
- Climate products & Services from ICPAC
- **Data sharing practices in GHA Region**
- **Challenges of Data sharing in the GHA Region**

BACKGROUND

- IGAD Climate Prediction and Application Centre (ICPAC) is a specialized institution of IGAD
- ICPAC's mandate includes provision of climate diagnostics, monitoring, prediction and applications of climate information in various socio-economic sectors including climate change.
- produces and utilizes several knowledge/information products, including climate variability/change, Geospatial data sharing, climate applications and capacity building.
- It was established as a drought monitoring Centre in 1989, in response to the devastating drought that occurred in eastern Africa in the 1980s.
- The Centre received WMO designated RCC status 2016.

CURRENT ICPAC STATION OBSERVATION NETWORK-APRIL 2018

- Station data from NMHS – Rainfall, Minimum and Maximum temperature (Tmax &Tmin)
  - Data formats- excel, text, .csv files
  - Data reception - through e-mails
- Open source satellite data(chirps) from UCSB
  - Data format - gridded raster files
    ftp://ftp.chg.ucsb.edu/pub/org/chg/products/CHIRPS-2.0
  - e-station
  - Model projections- for climate change research
- Currently ICPAC receives 132 station dataset (**R/Fall, TMAX &TMIN**) from member states
- Out these, 97 are GTS stations



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REGIONAL DATASETS AVAILABLE AT ICPAC

Regional station observation datasets

- ICPAC has a **regional dataset** from NMHSs station observation network from approximately 132 station
- These comprises **monthly** rainfall and temperature raging from 1961 to current

Regional merged gridded datasets

ICPAC in collaboration with, PREPARED-USAID EAC, NMHSs and Partners developed a regional gridded dataset

- The data for GHA comprises of **monthly and dekadal R/F(1981-2017)** for which 116 observation stations were merged with satellite (chirps)
- While EAC data comprises of **monthly R/F(1981-2013)** for which 346 observation stations were merged with chirps
- Gridded data is used in the **Data Library**-online repository and **maproom**-collection of maps, diagrams etc. that links the users to specific climate products for their needs
- The user can get climate information for a specific location for e.g. **max, min temperatures or rainfall** without interacting with the actual data

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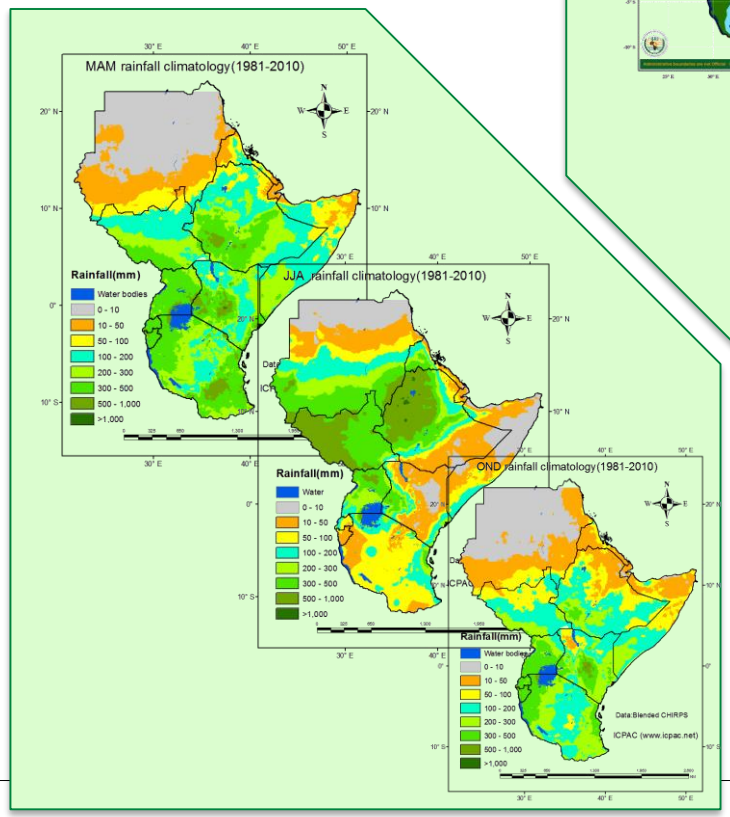
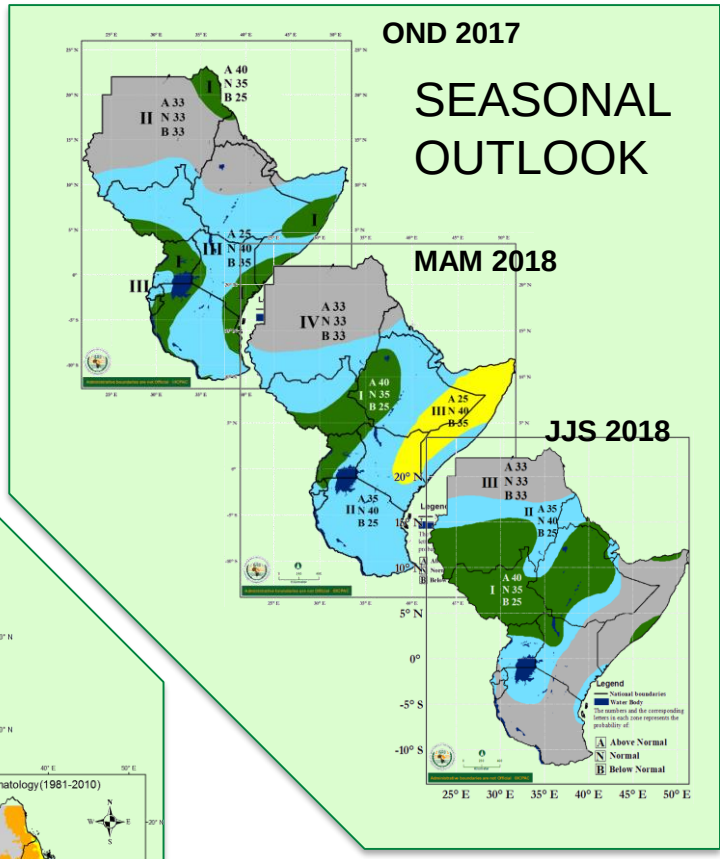
CLIMATE PRODUCTS & SERVICES FROM ICPAC

- Climate Monitoring, Data Management & Climatology Forecast
  - Seasonal, monthly (RCOFSs)
  - Climate Data services
  - Rainfall Baselines (1981/2010)
  - Rainfall trends
  - Rainfall variability
  - Long-term changes in rainfall averages/patterns
- Climate Diagnostic prediction & Early warning
  - Frequency of extreme rainfall events (SPI)
  - Significant rainfall thresholds contouring
- Climate Applications

  Provided climate information required for sector specific applications
- Capacity Building

  Regional &National trainings





DATA SHARING PRACTICES IN GHA REGION

- At the establishment of DMC heads of NMHSs agreed to share their station data to enable product generation and service delivery.
- No written document on **data sharing**
  - Agreed upon guidelines include:- **no sharing of station data** given to ICPAC to **third party**
  - ICPAC shares **freely** open source data
  - ICPAC products are free to access and use
- NMHSs share data **freely** with their counterparts through GTS for a **some selected stations** to assist in forecasting activities as guided by the WMO Resolution 40 (Cg-XII) and 25(Cg. XIII) requirements
- During RCOFs Countries share tools, methodologies and data products to develop climate information consensus on the coming rainfall onset & secession
- Regional database is populated from relevant NMHSs which is quality controlled further. Further processing is done to generate tools &products which include spatial grid point datasets

CHALLENGES OF DATA SHARING IN THE GHA REGION

- From the recent data sharing framework Task Force meeting held in Nairobi, 10-12 June, 2018 - the following
- Challenges and opportunities were identified

Challenges	Opportunities
• Staffing • Station network • Data in hard copy • Inconsistence for data records (missing data) • Meta data • Storage devices / Servers – CDMS • Calibration of AWS / installation of more AWS • Connection to GTS / communication systems • Policy on data • Source of revenue • Fewer stations for re-blending and validating CHIRPS	• Existence of long series (before 1900) • Willingness to pay – Uganda • Increasing users • Support from projects and donors • Funding from Government • Blended and gridded data • Data Library and Maprooms • Data Rescue, digitize data • Capacity building on data management • Policies on data sharing • Volunteer organizations (observers)

- five priority needs were indentified;
  - **Station network**
  - **Capacity to manage data**
  - **Digitization of data in hard copy**
  - **Policy on data sharing**
  - **Storage devices / Servers – CDMS**
  - Calibration of AWS / installation of more AWS
  - Connection to GTS / communication systems
  - Inconsistence of data records (missing data)
  - Meta data

THANK YOU VERY MUCH!