DATA SHARING EXPERIENCES & PRACTICES IN GHA REGION

BY

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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.
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
   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
REGIONAL DATASETS AVAILABLE AT ICPAC

Regional station observation datasets

- ICPAC has a regional dataset from NMHSs station observation network from approximately 132 stations.
- 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.
CLIMATE PRODUCTS & SERVICES FROM ICPAC

• Climate Monitoring, Data Management & Climatology Forecast
  – Seasonal, monthly (RCOFSSs)
  – Climate Data services
  – 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

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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 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

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