Weather Data Sharing: A chance for Foresight

HOW CAN CITIZENS BE BETTER PREPARED FOR CHANGES IN THE CLIMATE

METEOROLOGICAL SERVICES DEPARTMENT (ZIMBABWE)

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CLIMATE and WEATHER SERVICES

ALL USE CLIMATE INFO TO DO JOB EFFECTIVELY !!!

ECONOMIST

FARMER

CITY PLANNER
SYNOPTIC DATA

• Collected hourly
• Collected using observational stations and AWS
• Originally sent by telephone, now migrating to CLIMSOFT
• Sent every 3 hours to PCCs and entered into CLIMSOFT
• Hourly data collected monthly and entered into Climsoft and by DPU
• So far all PCCs and NCCs were upgraded to CLIMSOFT
• Latest installation being done in Victoria Falls and Bulawayo on 10-15 June 2018
SYNOPTIC DATA

OPPORTUNITIES

• Expansion of CLIMSOFT to observational weather stations (workstations)
• Integrating the various AWS software to CLIMSOFT for ease of data transfer and collection.
• Improving internet connectivity between observational stations and PCCs
• Upgrading Communication systems (e.g. Messir Com) at PCC and NCCs
• Staff training on CLIMSOFT and Messire Com

• Collected hourly
• Sent to Provincial CC

• PCCs check for quality
• PCCs send to NCC

• NCC check for quality
• NCC send to RCC
METARS, SPECI & TAF

• Collected and sent according to ICAO/WMO standards
• Collected using AWOS, last upgrade was at the Victoria Falls airport when Airport was refurbished.

OPPORTUNITIES

• Sent Using Messire Aero, though upgrade of system is required
• Cost is recovered from Airlines, though some challenges have been faced
• Training of technicians in maintenance of all equipment,
• Having resident engineers at all major airports
RESEARCH & PROJECTS

- Close collaboration with Universities.
  - Collaborative Research
  - Data for individual research
  - Attachment for students
  - Part-time teaching opportunities for lecturers at Training School
  - Guided tour for universities, colleges and schools

- Commercial Projects
  - Require more area specific data
  - Data is provided at a cost recovery charge (Temperatures, lightning, precipitation etc)
WARNINGS DISSEMINATION

**Communication Channels**
- Direct Telephones of the Authority
- Email/Website/Social Media
- MSD Station Net-work
- Common Alert Protocol (CAP platform were all life threatening hazards are broadcast)
- Annual Meetings with DCP (e.g. Long-term forecast-able events)

**FORECASTER**
(Met Service Dept)

**DISASTER MGT**
(Dept of Civil Protection)
- Early Warning Systems
  - Through organizational structure to District level.
  - Response Teams and Air Force
  - Disaster Response

**GENERAL PUBLIC**
- Inform them through:
  - Individual mobile phones
  - Community Weather Radios (latest distribution May 2018, Masvingo Province)
  - Telephone Community Leaders
  - Radio/Television
  - Community Outreach
Southern African Regional Climate Outlook Forum (SARCOF)

- Attend and share data and expertise with 13 other countries
- Hosted by different countries enables

OPPORTUNITIES

- Downscaling to Provincial and districts
- Farmers need more information on intra-seasonal anomalies

Seasonal Forecast (OND)
### Building a Sustainable Way

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<th>Form Strategic Partnership</th>
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<td>• Closer inter-agency partnership between NMSs within the region in various projects to improve data sharing</td>
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<td>• Use available communication channels to solve national, regional and continental challenges</td>
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<td>• Leverage PPPs for strengthened products and services</td>
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<th>Share Business Models from Regional/International Agencies</th>
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<td>• Share best practice (e.g. Sector Specific Products and Services;)</td>
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<td>• Recently embarked on Monthly Weather Overview Report which has added to products in PWS</td>
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<th>Take Advantage of Existing Electronic Platforms (Commercial Impact)</th>
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<td>• Generator income through mobile applications, blogs, you-tube, wesite hits etc.</td>
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# Conclusion

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<tr>
<th>DATA</th>
<th>INFORMATION</th>
<th>KNOWLEDGE</th>
<th>WISDOM</th>
<th>FORESIGHT</th>
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<tr>
<td>Raw, unprocessed Weather and Climatic data Obtained from measurement instruments</td>
<td>Processed , structured Weather and Climatic data with context and increased meaning</td>
<td>Ability to use Weather and Climatic information tactically and strategically for set objectives</td>
<td>Ability to select objectives that are consistent with &amp; support a general set of value</td>
<td>Ability to accurately predict outcomes of one’s proposed decisions</td>
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WE CANNOT SOLVE OUR PROBLEMS WITH THE SAME THINKING WE USED WHEN WE CREATED THEM

- Albert Einstein
THANK YOU,
ASANTE SANA,
MERCI BOUCOUP

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