



## Regional Stakeholder Consultation on Climate Services for the Third Pole Region

Jaipur, India  
9-11 March 2016

### *Myanmar:*

National capabilities for production,  
management, delivery and application of  
climate services

# Myanmar:

## Capacities for provision of climate services (slide 1/3)

- **Meteorological Observation Networks**

- *Meteorological Stations – 64 (50 WMO registered (3) hourly observation Station)*
- *Agro-meteorological Stations – 17*
- *Upper Air Observation Stations - 1*
- *Aviation Weather Stations – 8*

- **Hydrological Station**

- *Water Level Observation Stations – 27 (6 Major Rivers)*

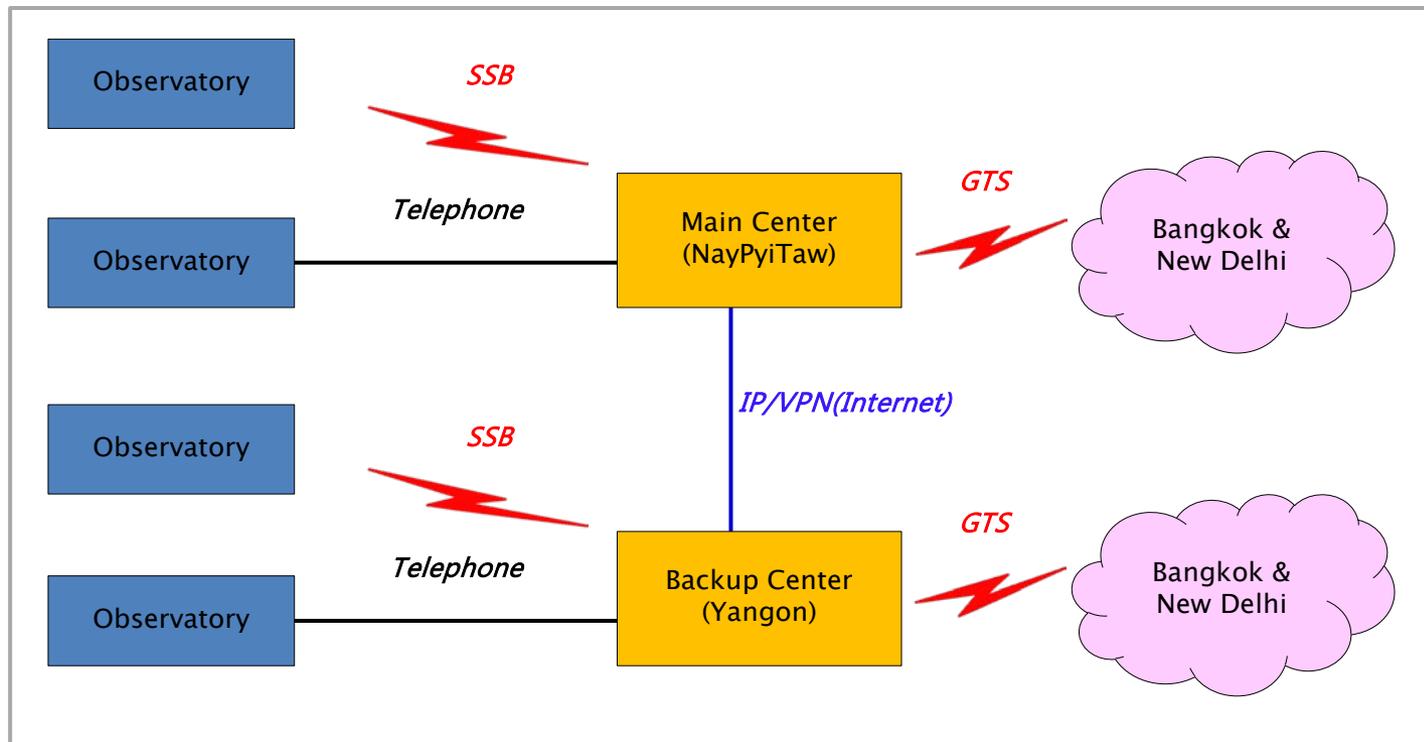
- **Climate Forecast Products**

- *CPT, WRF (generated by DMH), WMO-LC LRF, TCC, IMD, ECMWF*

# Myanmar:

## Capacities for provision of climate services (slide 2/3)

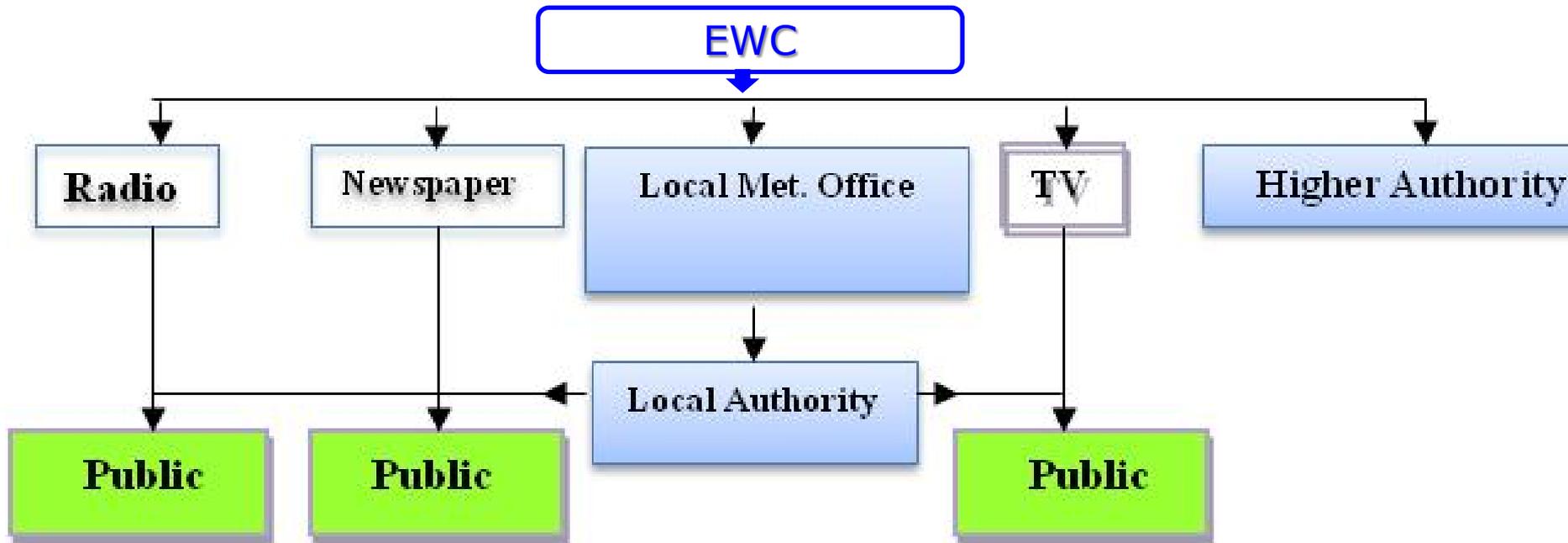
- Communication System for Data collection



# Myanmar:

## Capacities for provision of climate services (slide 3/3)

- Forecast Dissemination System of DMH



## Myanmar:

Current status of provision of climate services to sectors and existing user interface mechanisms (e.g. NCOF/NCF) (slide 1/3)

- **Climate Services for the Agriculture Sector**

- *Monthly and Decadal Forecast (Bay of Bengal Condition, Rainfall Condition and Rainy day, Max. & Min. Temperature, Fog Condition and Water Level)*
- *Agro-meteorological Bulletin (Decadal)*
- *Monsoon Season Outlook (Pre-Monsoon, Mid-Monsoon and Late Monsoon)*
- *Seasonal Forecast*

- **Climate Services for the Water Sector**

- *Rainfall Anomaly Forecast, Heavy Rainfall Warning, Timing of Monsoon onset and Withdrawal, Water Level of the Major Rivers*

## Myanmar:

Current status of provision of climate services to sectors and existing user interface mechanisms (e.g. NCOF/NCF)  
(slide 2/3)

- **Climate Services for the Health Sector**
  - *Heat wave, cold wave, Temperature (ENSO Outlook)*
- **Climate Services for the Disaster Risk Reduction Sector**
  - *Extreme Climate Outlook, Record , Expected Cyclone formation, Flood Warning/Bulletin, Heavy Rainfall Warning and ENSO Outlook*
- **Climate Services for the other sectors**
  - *Research purpose, Recreation, Construction, Renewable energy, infrastructure development, Project Development,....*

## Myanmar:

Current status of provision of climate services to sectors and existing user interface mechanisms (e.g. NCOF/NCF) (slide 3/3)

- **National Monsoon Forum**
  - National Monsoon Forum held in (2) times in a Year. Users commented or suggested their needs.
  - 15<sup>th</sup> Monsoon Forum already held in 22 – 23 October 2015.
- **El-Nino Outlook Forum**
  - *1<sup>st</sup> time of El-Nino Outlook Forum held in January 2016.*
- **CBOX in our Website, Facebook's comment for Meteorology and Hydrology News.**
- **Climate Data Portal (established in 2015)**

## Myanmar:

# Gaps and challenges (slide 1/2)

- **Gaps**

- *Capacity gaps-qualified human resources,*
- *Advanced monitoring network and instruments,*
- *Standard operating procedure,*
- *Calibration method, ICT development, Management and Planning,*
- *Knowledge and skill on advanced technique :*
  - *The Common Alerting Protocol (CAP)*
  - *Mobile devices weather application (App)*
  - *Short Message Services*

## Myanmar:

# Gaps and challenges (slide 2/2)

- **Challenges**

- Problems concerning the seasonal forecasting service include, forecast reliability, incomprehensible technical term.
- Understanding of the users to know and use the long range forecast information for many sectors.
- End to End implementation of Climate Information
- Limitation of infrastructural, technical human and institutional capacities to provide high quality climate services

## Myanmar:

# Future perspectives for improved climate services (slide 1/2)

- *Instruments and monitoring networks (need to upgrade Manual Observation to AWS)*
- *Establishment of BUFR conversion system for CLIMAT data of DMH.*
- *Develop a Climate Zoning Map.*
- *Long and short term training,*
- *Regional Model for seasonal forecasting and application techniques*
- *Need to promote understanding in Aviation, Hydro, Met, AgroMet, Radar, satellite, NWP & Climate change modelling,*
- *Instrument calibration*
- *ICT development program*
- *Climate Data Management and Planning*

## Myanmar:

# Future perspectives for improved climate services (slide 1/2)

- *PWS training in all sectors i.e. communication skills with users & media and TV weather presentation.*
- *Improvement of Agro-meteorological forecast (seasonal) and early warning for agriculture and food security.*
- *Area and time specific storm surge (coastal inundation) forecast*
- *Capability to provide 3 days forecasts for agriculture and food security.*
- *Establishment of research activities on weather and climate change.*
- *Increase computing power to run NWP models.*



Thank you