

# SECOND SAHF EXECUTIVE COUNCIL MEETING

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## Highlights of SAHF Observational Networks Working Paper

Asif Hussain  
SAHF WG Co-chair for Observational  
Networks, PMD, Pakistan



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# Critical Gaps and Challenges in Surface and Upper air Observational Network

- ▶ *While basic surface observational network exist in all the SAHF Countries, critical gaps remain such as:*
  - Surface snowfall and precipitation measurement remain a huge challenge in the mountain areas of the SAHF region (Bhutan, Nepal & Pakistan)
  - Limited coverage of rain gauge in the region
  - Surface-based upper air measuring network in the region is too sparse (Even in the countries having radiosonde networks the number of stations are declining due to maintenance and procurement issues)
  - Limited RADAR or extreme weather monitoring and countries like Afghanistan and Bhutan have none

# Critical Gaps and Challenges in Surface and Upper air Observational Network contd.

- NHMSs with RADAR network has limited skills to operate, maintain, analyze and use RADAR data
- Density of ocean and marine observing system networks is low and very limited capacities exist at coastal NMHSs of the SAHF countries.
- Most of the NMHSs have inadequate funds and capacity to support the operation and maintenance of the AWS network
- No information with NMHS on the non-synoptic stations operated by third parties/other agencies

## Gaps in Data Exchange

- Availability of GTS connectivity to countries and bandwidth limitations restrict the amount of station network data being shared from the countries.
- No established mechanism to share/exchange data in the region

# Strengthening Observing System Network

- Continue to modernize, expand and enhance the surface observational networks, particularly in the mountain areas of Bhutan, Nepal, Pakistan, Afghanistan and India.
- Design and fit for purpose project/investment in observational network
- Augment the network by combining non-synoptic stations managed by third parties to improve the capability for identifying and monitoring severe weather events.
- Establishment of operating national polarimetric DWR networks along with synchronization of DWR scanning strategy across the SAHF countries is the most essential target for the transboundary severe weather hydro-met events with a mosaic of DWR products generated through regional coordinated efforts

# Strengthening Observing System Network

- Provisioning integrated remotely sensed observations from satellites
- Enhance/establish ocean and marine observing network-severe weather monitoring by sharing transboundary RADAR observations
- Allocate appropriate budget for operation and maintenance (O&M)
- Ensure continued HR training

# Enhance Data Sharing Mechanisms

- Countries should make efforts to connect more stations to GTS.
- Formulate and enhance mechanisms to improve data sharing in the region for operational utilization.
- Use the Data Exchange platform within the SAHF Knowledge Hub to facilitate data sharing in the region.

Being a Co-Chair of WG Observation Network, I would like to appreciate Rimes and its associated teams. In fact a great work so far, they have done for developing a forum such as SAHF and getting all its achievements.

Let's work together to enhance the observation network to facilitate the forecasters in order to mitigate a critical weather disaster.





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