



**SOUTH ASIA**  
**HYDROMET FORUM**

## **TERMS OF REFERENCE (TOR) FOR SAHF HYDROLOGY WORKING GROUP**

### **RATIONALE:**

Hydrology has profound implications on various sectors including agriculture, health, infrastructure, disaster management. Thus, hydrology was identified as one of the thematic areas for SAHF and it was decided to have a dedicated Working Group (WG) for Hydrology within the SAHF framework. SAHF Executive Council (EC) during its meeting in November 2023, endorsed the inclusion of Hydrology WG. EC also emphasized that focused effort on hydrological processes is essential for addressing water-related challenges effectively. With the complexity of water resource management and the growing impacts of climate change, there is a pressing need to consolidate expertise, foster collaboration, and develop strategic initiatives specifically tailored to hydrology in the SA region.

### **ROLES AND RESPONSIBILITIES:**

- Conduct a comprehensive review of existing capacity, gaps and needs of Hydrological Services in the country through consultations and desk research.
- Stocktaking of existing initiatives in the country by national and international partners for enhancing the capacity of hydrological services and identifying areas for further improvement.
- Engage with sectoral agencies, stakeholders, and emergency response groups to identify opportunities for strengthening service delivery.
- Collaborate with relevant projects, including potential twinning arrangements, to support the integration of hydrological insights into impact-based decision-making processes.
- Develop a robust strategy and action plan to empower hydrological agencies in leveraging latest data, tools, and models effectively.
- Provide strategic recommendations to the SAHF EC on prioritizing regional efforts in hydrology, aligning with national initiatives.
- Advocate for sustainable development programs aimed at enhancing hydrological services and resilience across the region.
- Foster close collaboration with the SAHF EC, WMO Regional Association II (RA II), technical experts from regional institutions, and development partners to develop and implement coordinated strategies, including initiatives such as the Global Hydrological Status and Outlook Systems (HydroSOS), WMO Hydrological Observing Systems (WHOS), Flood Forecasting Initiative (FFI) and others in the region
- Align activities with regional priorities and ongoing efforts such as the WMO Plan of Action for Hydrology and the WMO RA II Operating Plan to maximize impact and avoid duplication of efforts.
- Offer technical expertise: (i) for the design and development of hydrology-specific training modules tailored to the needs of NMHSs in SA and (ii) to represent relevant

WMO technical bodies at global and regional levels, and regularly report key developments and progress back to the SAHF EC .

- Ensure that training materials meet global standards and are enriched with relevant case studies pertinent to the region.
- Draw on WMO-designated Regional Centres to strengthen capacities in hydrology and water resources management across the SAHF region.
- Integrate scientific research findings, data analytics, and modeling outputs to formulate actionable recommendations.
- Leveraging advanced modeling techniques and scientific expertise, the WG will contribute to policy formulation, infrastructure planning, and disaster risk reduction efforts, enhancing resilience to water-related hazards.
- Offer guidance on addressing water-related challenges, mitigating climate change impacts, and promoting sustainable water resource management practices to support decision-makers in formulating effective strategies to address pressing hydrological issues.
- Utilise collective expertise and resources to advance SAHF's objectives and contribute to achieving sustainable development goals related to water security and resilience.