WISER
Weather and Climate Information Services

In collaboration with:
Maldives Meteorological Service

Supported by:
UK International Development
Partnership | Progress | Prosperity

Met Office

CLIMATE SERVICES USER FORUM (CSUF)

29-30 April 2026 | Malé, Maldives

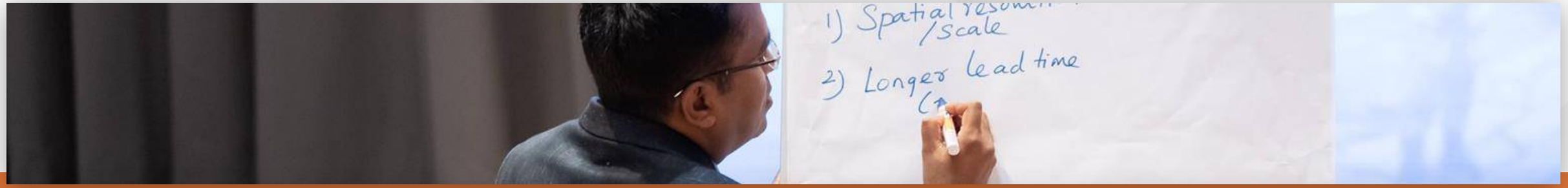
Join our Communities of Practice!
Scan the QR code or go to https://knowledgehub.sahf.info/

CLIMATE SERVICES USER FORUM

REGIONAL STATUS OF CLIMATE SERVICES IN SOUTH ASIA

DR. ANSHUL AGARWAL
SAHF Team Lead
RIMES

SAHF Climate Services Working Group



Regional Initiatives on Climate Services in South Asia

SAHF Planning Workshop on IBF & CS

24 January 2025 – Conducted a series of interactive sessions to explore the current landscape and future priorities for a regional Climate Services WG.

SAHF Executive Council Meeting

06 May 2025 – Endorsed the formation of a SAHF Climate Services Working Group (CS WG) and approved its Terms of Reference; Requested the development of a CS work plan and roadmap aligned with national policy and IBF strategy.

SAHF Climate Services Workshop

24-26 June 2025 – The inaugural meeting of the CS WG wherein it established its governance structure and drafted the CS work plan document.

SAHF Climate Services Working Group Implementation Plan Project

Aims to **build a coherent, inclusive, and sustainable climate services in South Asia** that strengthens the resilience of vulnerable communities and supports climate-sensitive sectors in making informed decisions

Assessment of the Status of Climate Services in South Asia

- Regional and National-Level Status Reports

Facilitation of CS WG and Stakeholder Meeting

- Review and verify emerging findings of the assessment activities

Support to SASCOF and CSUF Activities

- Development of a Training Plan
- Conduct of SASCOF-CSUF Week with the ff activities:
  - Pre-COF Training for Forecasters
  - CS WG Meeting
  - SASCOF
  - Training for Users and CSUF

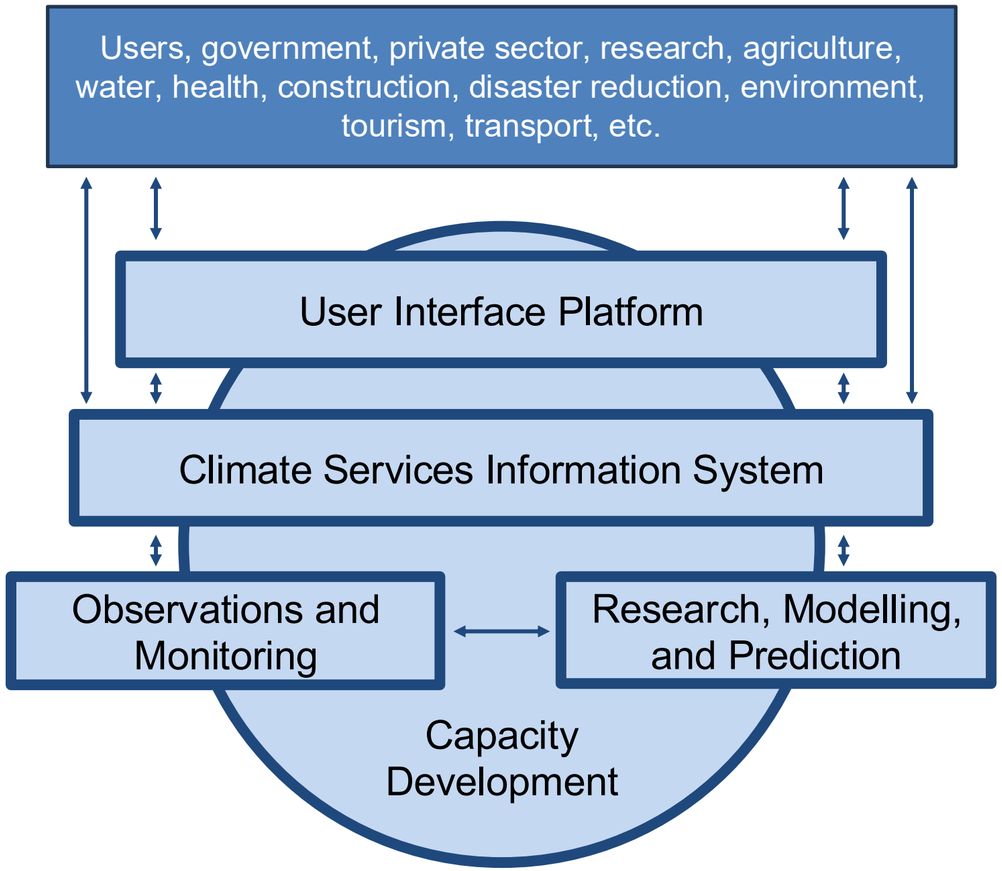
DSS Mapping and Proposal to improve FOCUS

- Develop and publish a catalogue of CS-related DSSs
- Develop a proposal to improve the FOCUS tool

MEL and Reporting

- Track project activities, outcomes, and impacts

Synthesis: Regional Status of Climate Services



GFCS Components/Pillars

GFCS Component	South Asia Alignment (Summary)
User Interface Platform	Strong seasonal engagement via SASCOF and CSUF; however, feedback loops, impact tracking, and co-production across timescales remain limited
Climate Services Information System (CSIS)	Well-established seasonal system (RCC → SASCOF → NMHSs); but fragmented across timescales with weak interoperability between platforms
Observations & Monitoring	Multi-source data systems and regional platforms support monitoring; constrained by uneven coverage, limited real-time exchange, and inconsistent standards
Research, Modelling & Prediction	Strong seasonal forecasting capacity; limited coordination for multi-timescale modelling and reliance on global centres for advanced products
Capacity Development	Active but project-based training initiatives; institutional embedding and long-term frameworks remain underdeveloped

Synthesis: National Status of Climate Services

Adopted 5-Category Climate Services Framework for South Asia

- Based on WMO Categorization: Basic Essential Full Advanced
- 5-Category system is **tailored to South Asian context** reflecting progressive maturity of CS systems

Category	Description	Country Classification
Category 1: Basic Services	Foundational systems	Afghanistan, Maldives
Category 2: Emerging Services	Developing, not institutionalized	Bhutan, Nepal, Myanmar, Sri Lanka
Category 3: Essential Services	Operational climate services	Bangladesh, Pakistan
Category 4: Full Services	Integrated, sector-driven services	India
Category 5: Advanced Services	Leading, innovation-driven	

Key Systemic Gaps

Data & Observations
- Uneven station coverage; gaps in remote areas
- Data quality, digitization, and interoperability issues

Technical Capacity
- Limited modelling, downscaling, S2S forecasting
- Heavy reliance on global/regional products

Service Delivery Gap
- Weak transition from information → impact-based services
- Limited sector-specific decision-support tools

Institutional & Coordination
- Fragmented governance; incomplete NFCS
- Weak cross-timescale integration

User Engagement & MEL
- Co-production not institutionalized
- Limited feedback loops and impact tracking

GEDSI Consideration
- Limited integration of user diversity considerations in service design
- Climate information not consistently tailored to different user groups
- Feedback mechanisms do not always capture diverse user needs

Sustainability
- Project-based financing; weak long-term funding

Strategic Opportunities

1) **Build on Existing Foundations** i.e. SASCOF, CSUF, RCCs, NMHS systems to:
   - Broaden user representation
   - Improve accessibility of climate information
   - Gradually incorporate user-specific needs into service delivery

2) **Strengthen NFCS & Coordination** to formalize national and regional frameworks

2) **Enhance Data & Technology**
   - Expand observation networks
   - Improve interoperability (WIS 2.0 alignment)

3) **Advance Services**
   - Impact-based forecasting
   - Sector-specific decision-support systems

4) **Leverage Regional Strengths** – Peer learning and country-to-country transfer

4) **Strengthen Platforms** – SAHF, CS Working Group as coordination hub

Key Recommendations

NATIONAL PRIORITIES

- Operationalize NFCS frameworks
- Strengthen data systems & observation networks
- Enhance modelling, forecasting, and verification
- Develop impact-based and sector-specific services
- Improve communication and dissemination
- Establish MEL systems
- Integrate basic user differentiation in services (e.g., sector, livelihood groups)
- Improve accessibility and clarity of communication formats
- Include diverse stakeholders in consultation processes where feasible

REGIONAL PRIORITIES

- Adopt NFCS strengthening as core workstream
- Develop regional NFCS support package
- Establish peer learning / buddying mechanisms
- Standardize capacity development programmes
- Strengthen user engagement platforms (SASCOF, CSUF)
- Promote sector pilots and demonstrations
- Support financing and institutionalization

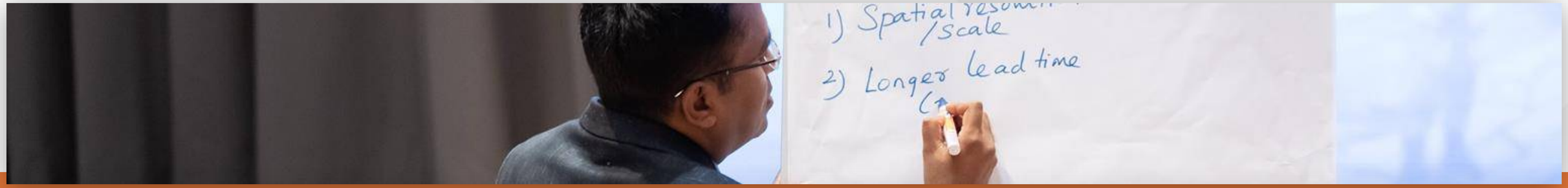
Way Forward

- Strategic Direction: Fragmented, project-based → Integrated, sustained systems

- **Role of SAHF CS Working Group**
  - Lead regional coordination and RFCS development
  - Translate assessments into regional roadmap
  - Support country-level NFCS implementation

- **Priority Actions**
  - Establish regional workstreams (data, modelling, co-production, IBF)
  - Deliver targeted capacity development programmes
  - Strengthen peer learning and knowledge exchange
  - Pilot sector-focused demonstration projects
  - Develop regional MEL framework
  - Mobilize resources and partnerships
  - Promote practical inclusion through existing mechanisms
  - Encourage incremental improvements in accessibility and participation
  - Align GEDSI efforts with ongoing user engagement and co-production activities

Training Needs Assessment and Training Plan



Key Finding

Climate information is available – but not fully usable or actionable.

Technical Gaps • Translation Gaps • Institutional Gaps

Training Framework

Key Design Features
Progressive delivery | Blended delivery |
ToT approach | Linkage to SASCOF and CSUF

0-6 months → 6-12 months → 12-18 months → 12-24 months

Phase I: Foundations to Advanced Climate Analysis

- Identification of the most representative global and regional climate products
- Orientation on data sources and platforms
- Interpretation of probabilistic forecasts, anomalies, and climate drivers
- Forecast verification and performance assessment
- Country-level exercises to assess relevance and applicability of products

Phase II: Sectoral Impact Assessments and Guidance for Early Action

- Conducting sectoral impact assessments, including identification of exposure, vulnerability, and risk pathways
- Linking forecast outputs to sector-specific thresholds, triggers, and decision points
- Development of early action guidance and contingency measures
- Support preparedness planning and operational decision-making
- Develop end-to-end workflows, connecting climate hazards to impacts and corresponding actions

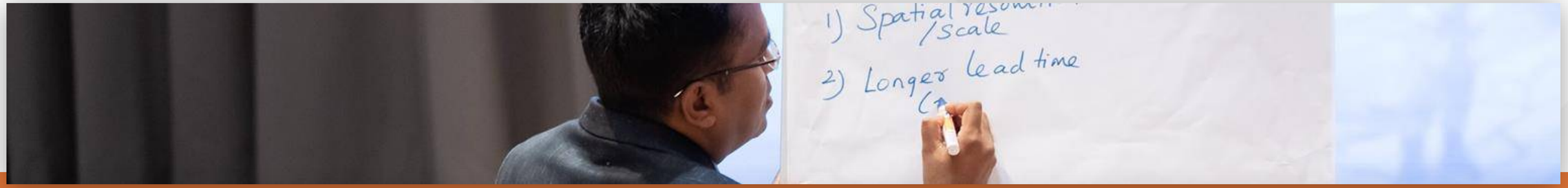
Phase III: Communication and Co-Production

- Communication of forecast uncertainty to stakeholders
- Co-production of climate services with user sectors
- Development of sector-specific climate outlooks and advisories
- Stakeholder engagement approaches, including role-based simulations and facilitated dialogues

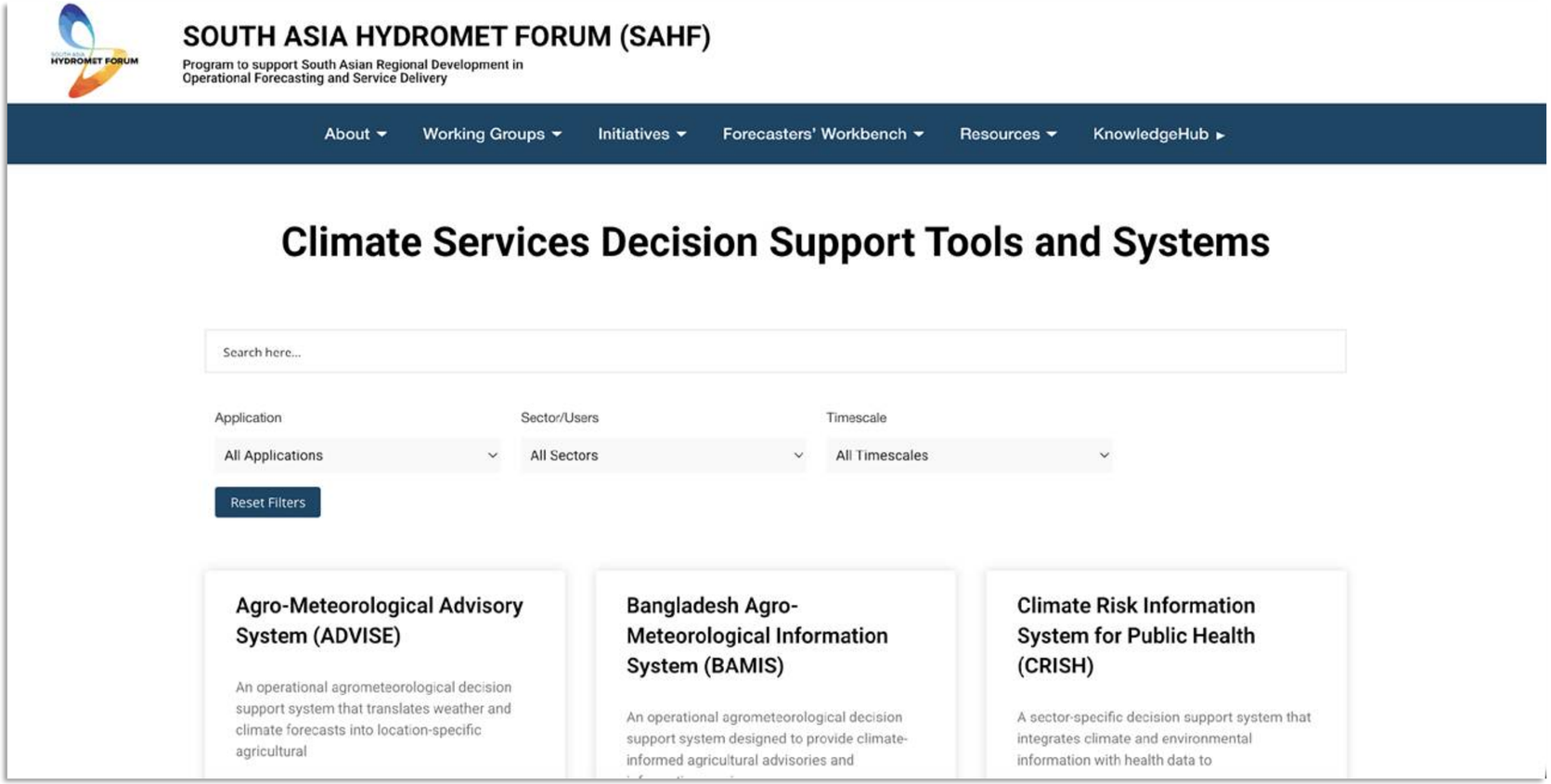
Phase IV: Institutionalization and Sustainability

- Development and application of SOPs
- Integration of climate information into DSSs
- Alignment with NFCS and RFCS
- Monitoring and evaluation of climate service effectiveness
- Introduction to climate finance and sustainability planning
- Implementation of ToT cascading mechanisms at national and sub-national levels

DSS Catalogue and COP Discussion Board



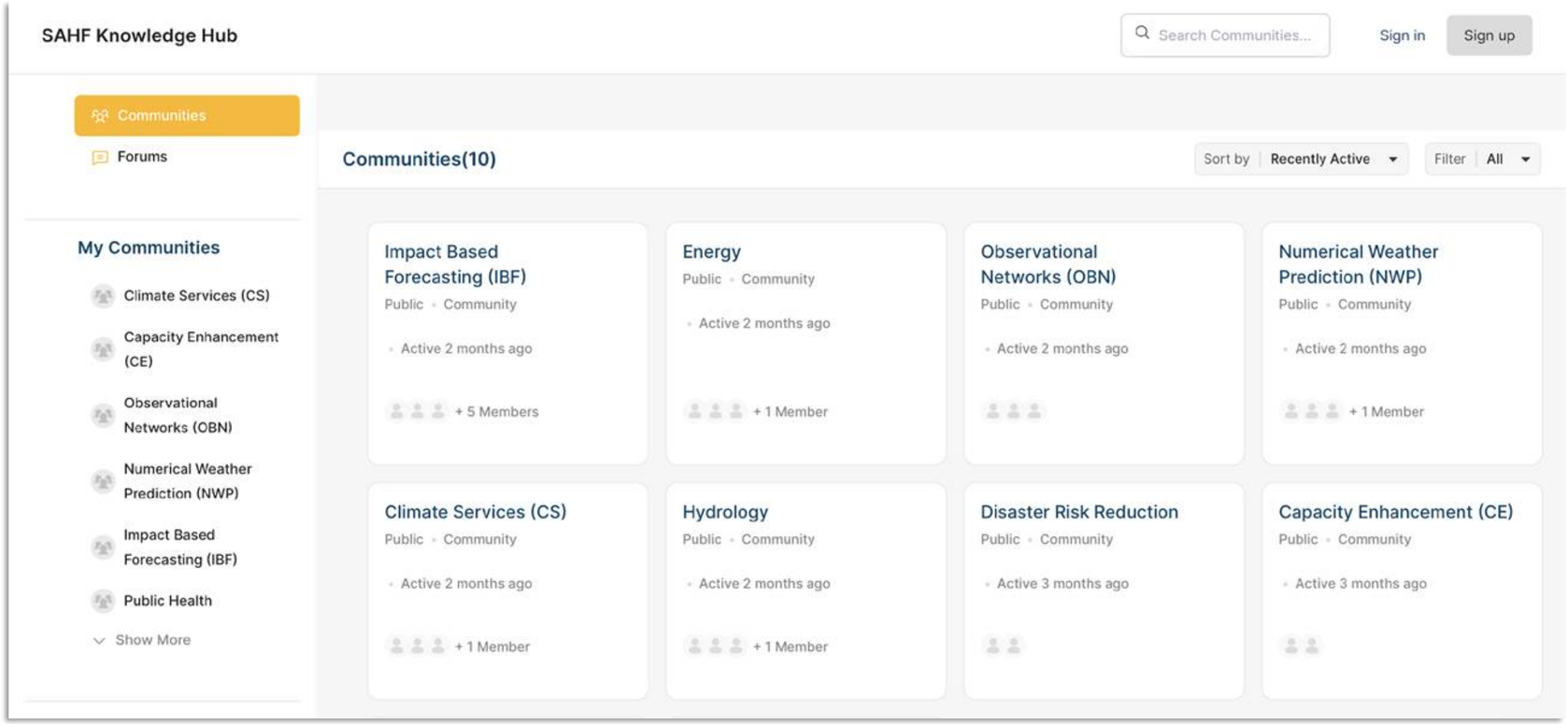
Climate Services-related DSS Catalogue



Scan the QR Code to visit the DSS Catalogue

https://www.sahf.info/climate-services-decision-support-tools-and-systems/

SKHUB COP Discussion Board



Scan the QR Code to visit the SKHub COP Discussion Board

https://knowledgehub.sahf.info/communities/

CLIMATE SERVICES USER FORUM

REGIONAL STATUS OF CLIMATE SERVICES IN SOUTH ASIA

DR. ANSHUL AGARWAL

SAHF Team Lead

RIMES