



CAMP Meeting

28/05

Takeaway Points from last meeting:

- The SAC meeting is proposed to be held on 1st and 2nd August 2025, with the Conclave scheduled on Day 1 (1st August) and the SAC meeting on Day 2 (2nd August).
- Prof. Praveen (IISc) will coordinate with Mr. Pradeep Agarwal (NRCD) to finalize the meeting dates.

Agenda:

- Key topics/deliverables to highlight in the presentations.
- Potential topics/deliverables for posters (max 5-6 per basin).
- Points to develop a common template for presentation and posters (dimension and size).
- Assigning responsibilities for creating posters, presentation slides (theme wise).
- Update on river Atlas work.

Consolidated Key Points from All Centres

1. River at a glance and Atlas overview

- Introduction to river basins with geographical, ecological, and socio-economic context.
- Preparation of “River at a Glance” summaries for each basin.
- River Atlas development with spatial and thematic data integration.

2. Demography and Socio-economic Profile

- Population density, age-sex structure, working population, and social composition.
- Land-to-people ratio based on land revenue classifications.
- Religious, cultural, and economic significance of riverine settlements.

3. Lithological, Geological, and Geomorphological Profile

- Mapping and classification of major aquifer types.
- Geological and mineral resource assessment for water retention and economic activities.
- Geomorphological mapping for landscape and erosion understanding.
- Evaluation of disturbed and sensitive areas using aerial and drone surveys.

Consolidated Key Points from All Centres

4. Hydrological and Hydraulic Status

- Hydraulic and hydrological data visualization and analysis.
- Assessment of existing hydraulic structures (dams, weirs, recharge structures).

5. Nirmal Dhara - Water Quality and Pollution Assessment

- Water quality monitoring and status reporting.
- Pollution source identification and spatial mapping.
- Integration of biological indicators and ecological status.

6. Infrastructure and Planning

- Current infrastructure planning and development status.

7. Agricultural and Land Use Profile

- Land use categorization (forest, agriculture, built-up, etc.)
- Agricultural profiles and land utilization trends.

8. Challenges in data acquisition and Analysis

9. Future work and timeline for project deliverables.

10. Recommendations

cMahanadi

- Lithological & Geological Status of the Basin:
 - Data Visualization: Mapping and classification of major aquifer types in the basin with current water availability and recharge potential.
 - Evaluation of how geological formations and mineral resources contribute to regional development, water retention, and economic activities like agriculture, construction, and mining.
 - Recommendation:
 - Recommend a systematic review and performance audit of existing artificial recharge structures to ensure optimal functionality and sustainability.
 - Sand mining quantification using modern geospatial and remote sensing techniques to curb illegal mining and reduce environmental degradation.
- Pollution Mapping
- Biological Profile of the Basin
- Water Quality Monitoring

cMahanadi

- Geomorphological mapping
- Hydraulic and Hydrological Data Overview
 - Inventory of Monitoring Stations
 - Data Visualization and Trend Analysis
 - Assessment of Hydraulic Structures
 - Recommendations:
 - Conduct a systematic evaluation of the current gauging station network, including both hydraulic (e.g., water level, flow velocity) and hydrological (e.g., rainfall, discharge) monitoring points.
 - Use GIS-based spatial analysis to determine coverage gaps, particularly in areas with diverse topography, land use, or rainfall patterns.
 - Prioritize additional station installation in these areas to enhance the spatial resolution of collected data.
 - Identify and map departments and agencies with overlapping roles, responsibilities, and aligned objectives to facilitate coordination, avoid duplication of efforts, and ensure efficient implementation of hydrological monitoring and data management strategies.

cNarmada

- River Basin Overview (Key findings from the "River at a Glance" report)
- From Demographic Characteristics Report (Key demographic characteristics (such as population density, social composition, age and sex structure, working population); Distribution of economic activities (Nighttime lights as proxy variable for the economic activity) From Revenue Map Report
- Land Revenue Categories (Area under water bodies, forest, flooded vegetation, agricultural land, built-up land, bare ground)
- Land-to-people ratio (Different land revenue categories and its ratio to the people) • Key Findings from the River Atlas
- Nirmal Dhara (Current status of river water quality)
- General Concerns and Tentative Recommendations (Preliminary suggestions based on learnings from Indian and international river basins)
- From River Monitoring Protocol Report (Approaches to monitoring and evaluation; Relevant data sources; Relevant Stakeholders for Monitoring and Evaluation; Potential outcomes for the Narmada River Basin)

cGodavari

- Introduction to the Godavari Basin
- Geographical coverage, significance, and ecological context.
- Theme 1: Hydroclimatic Extremes and Water Infrastructure
 - Spatial mapping of water infrastructure.
 - Analysis of hydroclimatic extremes in the basin.
- Theme 2: People and Places: Living Along the Godavari
 - Socio-demographic profile and population distribution.
 - Economic Performance
 - Religious and mythological significance.
 - Sustainable water conservation.
- Theme 3: Comparative Basin Insights
 - Comparative analysis with global river basins like Murray Darling and Amazon.
 - Key indicators: water pollution, climate change impact, Integrated Water Resource Management (IWRM).
 - Lessons and policy implications for the Godavari basin.

cKrishna

- Overview of Krishna River Basin Studies Project.
- Progress update on condition assessment and river basin management planning.
- Krishna River at a Glance
- Krishna Basin Demography
- Geology and Geomorphological of Krishna Basin
- Lithological Profile
- Hydraulics and Hydrology of Krishna Basin
- River Atlas of Krishna
- Nirmal Dhara
- Ongoing data collection and analysis (groundwater, surface water, geomorphology, and land use).
- Coordination and collaborative efforts with NITW and NIT Surathkal.
- Challenges and constraints in data acquisition and analysis.
- Future work and timeline for project deliverables.

cCauvery

- River at a Glance
- Mapping of Disturbed Areas
- Basin Demography
- Lithological Profile
- Geomorphological Mapping
- River Atlas
- Hydraulic Data
- Hydrologic Data
- Infrastructure and Planning

cPeriyar

- River at a Glance
- Basin demography
- Aerial & Drone Survey
- Lithological Profile
- Hydrologic & Hydraulic Data
- Infrastructure & Planning
- Geomorphological Mapping
- River Atlas
- Geological Profile
- Agricultural Profile

Topics for posters for SAC Meeting

Topics for posters	cMahanadi	cNarmada	cGodavari	cKrishna	cCauvery	cPeriyar
Salient features of basin (River at a Glance)	✓	✓		✓	✓	✓
River atlas	✓	✓		✓		✓
Importance of Tasks, and their Interdependence	✓					
Demography of basin	✓	✓	✓	✓	✓	
Geomorphology	✓	✓		✓		✓
Lithological & Geological profile of basin	✓					✓
Climatological & Meteorological condition with future predictions		✓				
Basin in global context (learnings from Indian and international basins)			✓			
Infrastructure and Planning Report			✓			✓
Hydraulics and Hydrology of Basin				✓		
Land Revenue Categories with Land-to-People Ratio		✓				
Nirmal Dhara	✓			✓		

Themes for posters:

Poster 1: "River at a Glance + River Atlas"

Deliverables:

- River at a Glance
- River Atlas

Highlights:

- Present summary statistics of each basin.
- Showcase mapped river networks, sub-basins, line diagrams, and key landforms

Poster 2: "People & the Basin: Demography and Land"

Deliverables:

- Demography of Basin
- Economic Activities
- Land Revenue with Land-to-People Ratio

Highlights:

- Population distribution and density maps
- Major occupations and sectors: agriculture, fisheries, industry
- Analysis of land ownership and use patterns

Themes for posters:

Poster 3: "Climate, Weather, and the Future of Water"

Deliverables:

- Climatological and Meteorological of basin with Future Projections
- Hydraulics and Hydrology of Basin
- Basin in the Global Context (learnings from international and national basins)

Highlights:

- Historical climate trends and rainfall variability
- Future projections under climate change scenarios
- Global learnings on managing climate-resilient basins

Poster 4: "Geology, Geomorphology, and Lithology"

Deliverables:

- Geomorphological Mapping
- Lithological & Geological Status of the Basin

Highlights:

- Valley forms, meander patterns, and sediment transport zones
- Impacts of sand mining, erosion
- Geological structures influencing river behavior

Themes for posters:

Poster 5: "Towards Nirmal Dhara: Infrastructure, Planning, and Clean Water "

Deliverables:

- Nirmal Dhara
- Infrastructure and Planning Report
- River Pollution Indicators

Highlights:

- River Pollution Indicators
- Current sanitation and sewage infrastructure
- Water quality data and trends
- Proposed interventions and planning recommendations

cMahanadi

- Comprehensive Poster Overview: Highlighting the Relative Importance and Hierarchical Structure of All Tasks, Emphasizing Their Interdependence
- River at a Glance + River Atlas + Demographical Trend
- Geomorphology Mapping of River
- Lithological & Geological Status of the Basin (Including Sand Mining)
- Nirmal Dhara

cKrishna

- Krishna River at a Glance
- Krishna Basin Demography
- Geology and Geomorphological of Krishna Basin
- Hydraulics and Hydrology of Krishna Basin
- River Atlas of Krishna
- Nirmal Dhara

cNarmada

- River at a Glance
- River Atlas
- Sub-basin wise Demographic Characteristics
- Sub-basin wise Economic Activities
- Land Revenue Categories with Land-to-People Ratio
- Climatological and Meteorological Conditions with Future Projections
- Geomorphological Mapping

cCauvery

- Salient features of the basin
- Cauvery basin demography

cGodavari

- Basin Demography + Approaches and activities to river-people connect
- Infrastructure and Planning Report
- Basin in the Global Context: Learnings from the work done in other Indian basins + Learnings from the work done in other International basins

cPeriyar

- River at a Glance
- River Atlas
- Geomorphological Mapping
- Infrastructure & Planning
- Lithological & Geological Profile

Takeaway points

- All centres are requested to review the key points proposed for the presentation and themes for posters. If any points are missing or needs correction, kindly share within one week (June 3).
- All centres are requested to prepare a sample presentation based on the consolidated points and submit the first draft by 7th June 2025.
- The slides for agriculture, biological profile will be compiled by cGanga.
- All centres are requested to prepare sample posters or contents for posters and submit by 11 June 2025.
- All basin centres are requested to keep separate meetings with JS, NRCD to discuss on the progress, successes and challenges in data acquisition.
- Limited feedbacks were received on centre websites. Kindly review and share feedback on websites and share any required corrections or updates.
- Weekly meetings will be held exclusively for website development and progress tracking.
- All coordinators are requested to circulate the report shared by Dr. Tare, review its contents, and share any comments or suggested modifications with Dr. Tare by 2nd June 2025.