Proceedings of the First JRC Meeting - Condition Assessment and Management Plan for the Periyar River

Date: 15.05.2024 Time: 9 AM - 12 NOON Venue: Board Room, NIT Calicut

Attendees (Offline):

- 1. Shri P K Agrawal, Joint Secretary, National River Conservation Directorate (NRCD), Ministry of Jal Shakthi, Govt. of India
- 2 Prof. Prasad Krishna, Director, NIT Calicut
- 3 Shri. Anup Kumar Srivastava, Executive Director (Technical), National Mission for Clean Ganga (NMCG), Ministry of Jal Shakthi, Govt. of India
- 4 Prof. Vinod Tare, Professor & Founding Head, cGanga, IIT Kanpur
- 5 Prof. A. Seshadri Sekhar, Director, IIT Palakkad
- 6 Shri. Nelapatla Ashok Babu, Director, NRCD, Ministry of Jal Shakthi, Govt. of India
- 7 Shri. S K Srivastava, Scientist F, NRCD, Ministry of Jal Shakthi, Govt. of India
- 8 Dr. Deepak Jaiswal, Assistant Professor, IIT Palakkad
- 9 Dr. Praveena Gangadharan, Assistant Professor, IIT Palakkad
- 10 Dr. Subhasis Mitra, Assistant Professor, IIT Palakkad
- 11 Dr. N Sandhyarani, Dean (Research & Consultancy), NIT Calicut
- 12 Dr. T M Madhavan Pillai, Professor & Head, Dept. of Civil Engineering, NIT Calicut
- 13 Smt. Sudha M S, Superintending Engineer, Hydrology Circle, Dept. of Irrigation, Govt. of Kerala
- 14 Smt. Jijy M O, Executive Engineer, Hydrology Division, Dept. of Irrigation, Govt. of Kerala
- 15 Dr. Ganaraj K, Assistant Professor, Dept. of Civil Engineering, NIT Calicut
- 16 Dr. Aswathy E V, Assistant Professor, Dept. of Civil Engineering, NIT Calicut
- 17 Dr. Chithra N R, Associate Professor, Dept. of Civil Engineering, NIT Calicut
- 18 Dr. Sathish Kumar D, Associate Professor, Dept. of Civil Engineering, NIT Calicut
- 19 Dr. Pramada S K, Assistant Professor, Dept. of Civil Engineering, NIT Calicut
- 20 Dr. Santosh G Thampi, Professor (HAG), Dept. of Civil Engineering, NIT Calicut

Attendees (Online):

- 21 Shri Priyesh R, Chief Engineer (IDRB & ISW), Dept. of Irrigation, Govt. of Kerala
- 22 Dr. Samir Bajpai, Professor, Dept. of Civil Engineering, NIT Raipur

- 23 Dr. Mani Kant Verma, Assistant Professor, Dept. of Civil Engineering, NIT Raipur
- 24 Dr. Tanveer Ahmed, Project Co-ordinator, Wildlife Institute of India, Dehradun
- 25 Shri. Rahul Ramachandran, Project Engineer, Centre for Ganga River Basin Management & Studies (cGanga), IIT Kanpur
- 26 Shri. Rajith K, Project Associate, Centre for Ganga River Basin Management & Studies (cGanga), IIT Kanpur

The meeting started at 9 AM with a silent prayer. Prof. Prasad Krishna, Director, NIT Calicut welcomed the members and gave a brief introduction about the Institute. This was followed by self introduction by the participants.

In his opening address, Shri P. K. Agrawal, Joint Secretary, National River Conservation Directorate (NRCD), Ministry of Jal Shakthi, Govt. of India, talked briefly about the National River Conservation Directorate and its activities. He explained in detail about the expectations of NRCD (and that of the Govt. of India) from the CAMP Project. He stressed the need for timely preparation of basin management plans giving utmost importance to pollution abatement, and involvement of and consultation with the stakeholders so that the plans and programs chalked out are realistic and implementable. He also stated that the deliverables need not necessarily be limited to those listed based on the experiences and inferences drawn from the Project on the Ganga River.

Shri N Ashok Babu, Director, NRCD, Ministry of Jal Shakthi, Govt. of India, made a presentation on the Healthy River Program being implemented by the Department of Water Resources, Ministry of Jal Shakti and the Ministry of Housing and Urban Affairs, Govt. of India. In his talk, he dwelt on various aspects related to rivers in India, including pollution assessment and abatement activities, river conservation initiatives such as the Ganga Action Plan- I & II, Yamuna Action Plans, river specific action plans for various rivers etc. He briefed about NRCP and its various initiatives such as pollution abatement works, Ecological Assessment of Seven Rivers including the Periyar and the Pamba in Kerala, Condition Assessment And Management Plan for Six Rivers including the Periyar, River Cities Alliance, Urban River Management Plans etc. He stated that the Healthy River Program is being implemented with financial assistance from the World Bank. He

talked about the objectives, salient features, methodology and preliminary results of some projects taken up under the various programs mentioned above.

Dr. Tanveer Ahmed, Project Co-ordinator, Wildlife Institute of India, Dehradun, made a presentation on the preliminary results and findings of the Project "Assessment of the Ecological Status of Some Peninsular Rivers for Conservation Planning" being funded by NRCD, MoJS, GoI. This study is being performed on seven rivers, viz., Barak, Mahanadi, Narmada, Godavari, Cauvery, Periyar, and Pamba. Interim results of the study on the Periyar River were presented. These include the status of vegetation, fishes, turtles, invertebrates, birds, aquatic mammals etc. Statistics pertaining to the carbon stock sustained by the Periyar river basin, and threatened, endangered, and endemic species were presented. He stressed the importance of awareness activities for the public.

This was followed by a presentation on the institutional framework for the Centres & CAMP. In his introductory remarks, Prof. Vinod Tare, Professor & Founding Head, cGanga, IIT Kanpur, stressed the importance of and need for proper co-ordination between the Faculty of the Lead (IIT Palakkad) and Fellow (NIT Calicut) Institutes in various activities under the Project starting from the collection of data. He noted that one Faculty each had been identified by the Lead and the Fellow Institutes as the person in charge of each of the missions and each of the tasks under these missions. He said the Faculty i/c assigned for each of the tasks shall work independently on all aspects of the work. There should be a mechanism to oversee/ monitor the overall expenditure under various heads so that the process of preparation of utilization certificates etc becomes streamlined and smooth. He highlighted the necessity for periodic meetings between the team members in both the Institutes as well as between the teams of both the Institutes to ensure that smooth progress of the work and achievement of targets within the timeframes set. He also suggested that a database of all stake holders and agencies related to the Periyar River shall be prepared with their contact details. Meetings with the stake holders shall be conducted as this can help in making the outcomes from the Project realistic and implementable. He suggested creation of subject specific groups in/ among the different Institutes.

Following this Dr. Subhasis Mitra from IIT Palakkad, and Dr. Santosh G Thampi from NIT Calicut made brief presentations on the institutional framework for the Centres for CAMP of the Periyar River in their respective Institutions. They informed the meeting that both Institutes had attended a stakeholder meeting on the State Specific Action Plan for the Water Sector in Kerala being prepared by the Irrigation Design and Research Board (IDRB), Dept. of Irrigation, Govt. of Kerala under the National Water Mission at Thiruvananthapuram. Team members from IIT Palakkad and NIT Calicut met the representatives from various related Govt. Departments and organisations including the CWC, IDRB, Departments of Soil Conservation, and Groundwater, Kerala State Pollution Control Board, Kerala Water Authority, Kerala State Disaster Management Authority etc. During this meeting, an opportunity was provided to the Team to present a brief outline of the Project CAMP of the Periyar River. The Team requested the Departments and organisations present in the meeting to share and provide the data for which requests are put up by them during the implementation of the Project. They also informed the meeting that the teams from IIT Palakkad and NIT Calicut have been meeting frequently online and some decisions have already been taken including fixing the study area of each of the Institutes. IIT Palakkad will perform data collection for the upstream segment and NIT Calicut for the downstream segment of the river basin. Also, hydrological modelling will be performed by IIT Palakkad and hydraulic modelling will be done by NIT Calicut. The overall progress made in the preparation of river at a glance was also presented. Dr. Subhasis Mitra briefed the meeting on the activities taken up/proposed to be taken up at IIT Palakkad including recruitment of project staff, conduct of stake holder meeting in June, and site visits and data collection. Further, Prof. Santosh G Thampi presented details of members responsible for each of the tasks under various missions, activities performed such as conduct of interviews for the selection of project staff, procurement, progress made on the preparation of River Atlas etc. Shri. A. K. Srivastava, Executive Director (Technical), NMCG, asked for some details pertaining to the State Specific Action Plan for the Water Sector. Shri. Priyesh R, Chief Engineer (IDRB & ISW), Dept. of Iriigation, Govt. of Kerala, clarified the issues raised. Shri. P K Agrawal, Joint Secretary, NRCD, requested Mr. Priyesh to share the report with the Project Team as soon as it is finalised.

Smt Sudha M S and Smt. Jijy M O from the Department of Irrigation, Govt of Kerala, raised the issue of inclusion of Chalakudy river basin also in the study as the Chalakudy

River is draining into the Periyar before its outfall. Prof. Santosh G Thampi from NITC pointed out that the study being conducted by the Wildlife Institute of India has also considered the Chalakudy River along with Periyar in their study and it appears quite logical to consider this river basin also as part of the present study. This was followed by discussions among those present and it was decided to include Chalakudy river basin also in the present study.

Prof Vinod Tare, Professor & Founding Head, cGanga, IIT Kanpur, made a presentation on Water Vision @ 2047, challenges and way ahead, and river basin action plan. Some key points of the presentation included performing human activities in such a way as to facilitate retaining the capabilities of rivers to carry out their functions and processes to deliver ecosystem services for generations to come, converting brown and black water to blue water, rural and urban river management, closing the water loop at appropriate scale, converting rapid flow to sluggish flow at times of need, and planning infrastructure for drainage. Details related to Urban River Management Plan (URMP) – concerns, framework, vision, objectives etc - were also presented. In his presentation, he also dwelt on the River City Plan for Kanpur City and Arth Ganga data collection update.

This was followed by closing remarks from Shri. P K Agrawal, Joint Secretary, NRCD, Prof. A Seshadri Sekhar, Director, IIT Palakkad, and Prof. Prasad Krishna, Director, NITC. Shri. Agrawal in his remarks touched upon issues such as maintenance of environmental flows, flood plain zoning, reuse of treated wastewater, sand mining etc. He stressed the need for formulating water management plans giving priority to pollution abatement. He requested the Govt. of Kerala to appoint a nodal officer for this Project to facilitate smooth availability of the data required for the Project. He assured full support from the NRCD to the Institutes. Prof. Seshadri Sekhar, Director, IIT Palakkad, and Dr. Prasad Krishna, Director, NIT Calicut, thanked NRCD, MoJs, GoI, for the opportunity provided to their respective Institutions and assured that their Institutes will live upto the expectations of the NRCD.

The meeting came to an end at 12.15 PM.