

FOREWORD

The Cauvery (Kattalai) - Vaigai - Gundar link project is an integral part of the Mahanadi - Godavari - Krishna - Pennar - Cauvery - Vaigai - Gundar, a major nine link system under Peninsular river development component of National Perspective Plan (NPP) formulated by Government of India. This link has been planned based on the proposed storages at Manibhadra on river Mahanadi & at Inchampalli on river Godavari. However, there are reluctance on the part of state Governments in taking up these two dams in view of large submergence and R&R issues. Moreover, the proposed supplementation from Himalayan component to Mahanadi basin is yet to be finalized. The alternate planning of Mahanadi - Godavari link is under progress in consultation with Govt. of Odisha.

In the above background, the proposed Mahanadi – Vaigai link system has been planned in two phases.

- a) Phase I: Identifying surplus waters available in Godavari basin and transferring these waters upto Cauvery through Godavari - Krishna - Pennar - Palar- Cauvery link system
- b) Phase II: Linking Brahmaputra - Ganga - Subernarekha – Mahanadi - Godavari rivers and furthering supplementing the Phase I with remaining links from Krishna and Cauvery to transfer water as per National Perspective Plan.

The present draft DPR deals with the Cauvery (Kattalai) - Vaigai - Gundar link project which is a part of Phase II planning and will depend upon water transfer from Himalayan and Mahanadi river waters.

The Cauvery (Kattalai) - Vaigai - Gundar link project envisages diversion of about 2252 MCM of water from Kattalai barrage on Cauvery in partial exchange out of 3855 MCM of surplus waters received in Cauvery basin through upper components of the link system. This link project shall provide annual irrigation of 4.48 lakh ha of irrigation utilizing 1931 MCM of water irrigation and domestic water supply to an extent of 79 MCM serving population of about 28 lakh by 2050 AD and industrial water supply to an extent of 139 MCM in Karur, Tiruchirappalli, Pudukkottai, Sivaganga, Ramanathapuram, Virudhunagar, Thoothukudi districts of Tamil Nadu state. The broad parameters proposed in DPR like quantum of water to be transferred, planning of distribution system, areas proposed to be benefited, benefits and cost of the project etc would be applicable and viable only when water transfers take place as per National Perspective Plan.

The draft DPR of the project has been prepared as per the "*Guidelines for Preparation of Detailed Project Report of Irrigation and Multipurpose Projects of Ministry of Water Resources (2010)*". The DPR contains the details of various surveys and investigations such as topographical surveys, geotechnical and construction material surveys, geological investigations etc.


Detailed surveys and investigations such as topographical surveys, geological, geophysical & geotechnical investigations including foundation investigations, Geotechnical investigations (soil) including borrow area surveys; Command area surveys were undertaken departmentally as well as through various specialized organizations during the feasibility studies of the link project and the same have been considered in this report. The further investigations required if any, will be carried out in pre-construction stage.

The co-operation and assistance received from the Tamil Nadu in preparation of the DPR is thankfully acknowledged. My thanks are due to various outside organizations, viz Central Water Commission (CWC), Central Soil & Material Research Station (CSMRS), Geological Survey of India (GSI), National Institute of Technology, Tiruchirappalli, Department of Geology, College of Engineering (COEP), Pune, Geology Department of Pune Institute of Engineering and Technology (PIET), Engineering Geology Division, GSI, Chennai who were closely associated with various investigations and studies at FR level of the component link projects, which have been incorporated suitably in this DPR.

I convey my thanks to the concerned officers of NWDA, especially the Chief Engineer (HQ), Chief Engineer (South), Hyderabad, Superintending Engineer, Investigation Circle, Hyderabad, Shri NSRK Reddy, Dy Director, Shri K S Naidu, AE, Hyderabad, Shri R Chandrasekaran, Executive Engineer, Shri James, AE, Shri Mahendran, JE, Chennai, and their teams including the team of draughtsman and other officials of Investigation Division, Chennai for their sincerity, devotion and hard work in completing this task within the assigned time period.

It is hoped that the State Government would offer their valuable suggestions on the draft DPR for its refinement and finalization of the DPR. I am hopeful that phase-II of nine links system shall be finalized soon and implementation of Cauvery-Vaigai - Gundar link project shall be taken up soon so that the envisaged benefits can be derived from the link project in the right earnest.

August, 2020
New Delhi


(Bhopal Singh)
Director General, NWDA