

Chapter – 3

Interstate Aspects

3.0 General

As already mentioned, the proposed Ponnaiyar (Nedungal) - Palar intra state link project envisages diversion of 86 Mm³ of spills of flood water available in Ponnaiyar river at Krishnagiri dam to the water-short Vaniyambadi taluka of Vellore district in Palar basin. Both the rivers viz., Ponnaiyar and Palar are inter-state rivers draining areas in more than one state. The present chapter deals with interstate aspects in respect of Ponnaiyar (Nedungal) - Palar intra-state link project.

3.1 States Traversed by the Rivers

The Ponnaiyar River:

The Ponnaiyar or the Dakshina Pinakini river rises near Hongashenhalli village at an elevation of about 900 m above MSL at North latitude 13° 25' and East longitude 77° 58' (near Nandidurg) in the Kolar district of Karnataka state. From its origin, the river Ponnaiyar generally flows in the Southern direction for a length of 79 km through Kolar and Bangalore districts of Karnataka before entering the Krishnagiri district of Tamil Nadu. The river flows another 247 km generally in the South-Easterly direction in the districts of Krishnagiri, Vellore, Tiruvannamalai, Cuddalore and Villupuram. The river then flows in Easterly direction below the Tirukoyilur anicut for another 70 km before finding its way into Bay of Bengal. The river Ponnaiyar branches into two rivers viz., the Gadilam and the Ponnaiyar, below the Tirukoyilur anicut. The Gadilam joins the Bay of Bengal near Cuddalore and the Ponnaiyar near the Union Territory of Pondicherry.

The Palar River:

The river Palar rises beyond Talagvare village in the Kolar district of Karnataka State at an elevation of about 900 m above MSL, to the west of Ambojidurga and Rahamankhar peaks. The total length of this East flowing river from its origin to its outfall into the Bay of Bengal is about 348 km. The flow is generally in the South-Easterly direction for the first 93 km. Then it flows through the Kolar district of Karnataka, before entering the Chittoor district of Andhra Pradesh, through which it flows for another 33 km. After passing through the States of Karnataka and Andhra Pradesh the river enters the Vellore district of Tamil Nadu. After traversing for another 222 km in Vellore and Kanchipuram districts in

Tamil Nadu, the river Palar finally discharges into Bay of Bengal near Kuvattur. On its way, the river Palar receives two important tributaries namely, the Poini on the left bank and the Cheyyar on the right bank. These two important tributaries i.e., the Poini and the Cheyyar, together account for nearly 25 percent of the total catchment area of the Palar basin. The Poini rises in the Chittoor district of Andhra Pradesh at an elevation of 1050 m and flows generally in the Easterly and South-Easterly direction before joining the Palar on its left bank near Ranipet. The Cheyyar, another major tributary rises in the Jawadu hills in the Chengam taluka of Tiruvannamalai district of Tamil Nadu and flows generally in the North-Easterly direction before confluencing with the Palar near Gurumancheri.

3.2 Distribution of catchment in State and yields from the catchment of the State concerned

The state-wise break-up of the catchment area of river basins of Ponnaiyar (Nedungal) – Palar link project is given in **Table 3.1**.

Table 3.1
State-wise Break-up of the Catchment Area of the Basins

Sl. No.	Basin / State	Catchment area (km ²)	Percent to total area (%)
	Ponnaiyar Basin		
1.	Karnataka	3545	22.61
2.	Andhra Pradesh	133	0.85
3.	Tamil Nadu	11961	76.29
4.	Union Territory of Puducherry	40	0.25
	Total	15679	100.00
	Palar Basin		
1.	Karnataka	2813	15.75
2.	Andhra Pradesh	5018	28.08
3.	Tamil Nadu	10040	56.17
	Total	17871	100.00

Water Availability:

The state-wise distribution of 75% dependable annual yields on the basis of catchment area are given in **Table-3.2**.

Table 3.2**Basin wise / State wise Yields from the Catchment Areas of the Basins**

Sl. No.	State	Yield in Mm ³	
		Ponnaiyar	Palar
1.	Karnataka	169.12	180.65
2.	Andhra Pradesh	6.36	322.08
3.	Tamil Nadu	570.65	644.27
4.	Union Territory of Puducherry	1.87	-
	Total	748.00	1147.00

3.3 (a) Effect on Project and of the Project on the Interstate Agreement on Sharing of Waters, Sharing the Benefits and Costs, Acceptance of Submergence in the Upstream State etc. if any

The preparation of Detailed Project Report of the link project had been taken up with the concurrence of Government of Tamil Nadu during the year 2013. Though the river Ponnaiyar is an interstate river by nature, the present intra state link project envisages diversion of flood waters available at existing Krishnagiri dam across Ponnaiyar river, which otherwise go to sea without being put to optimum use. Therefore, the proposal will not have any impact on the water use of any of the riparian state. As such there is no effect on Interstate Agreement on Sharing of Waters, Sharing the Benefits and Costs, Also, no new head works / storage structures are proposed in the project, it will not have any new submergence area. The entire cost of the project will be borne by the Govt. of Tamil Nadu, so also the benefits.

3.3 (b) Effect on Project and of the Project on the Interstate Adjudication, if Any

No Interstate adjudication exists as of now on sharing the waters of Ponnaiyar and Pala river basins.

3.3 (c) Effect on Project and of the Project on the Interstate Aspect of Territory, Property, etc. Coming under Submergence, Project Affected People, Rehabilitation, Compensation, etc

As the Krishnagiri dam and the Nedungal Anicut are the existing projects / head works, no new areas are coming under the submergence of this project. However for project affected people due to canal alignment, suitable rehabilitation, compensation, etc. will be provided, the details are furnished under Chapters "Environment Impact Assessment and Environment Management Plan" and "Socio-Economic Aspects".

3.3 (d) Effect on Project and of the Project on the Existing and Sanctioned Projects

No change in the water needs of any of the existing and contemplated projects as the link project envisages the diversion of flood waters during monsoon months. As such, the link project may not be effected by any of the existing / sanctioned projects and the link project may not affect existing / sanctioned projects.

3.3 (e) Any Other Aspect of the Project Involving Interstate Problems

The Ponnaiyar and Palar rivers are interstate by nature. Though this proposal uses only the flood waters during monsoon months, the issues raised by Karnataka State shall be addressed.

The Ponnaiyar (Nedungal) – Palar link project envisages diversion of flood waters spilling down to existing Krishnagiri dam across Ponnaiyar river, as such the project may not have inter-state issues.

3.4 Interstate Agreement/Legal Instruments

As per the legal instruments / agreements on inter-state rives in India (Vol-III), Central Water Commission, March, 1995 there was an agreement between the Governments of Mysore and Madras regarding 'New Irrigation Works' in Mysore State vide G.O No.162-1 dated 18th February, 1892, issued by Govt. of Madras, (Public Works Department) Irrigation. Based on the Annexure to the above G.O No.162-1, certain rules were defined while signing the agreement viz.,

I:

1. 'New Irrigation Reservoirs' shall mean and include such irrigation reservoirs or tanks as have not before existed or have been abandoned and been in disuse for more than 30 years past.

2. A 'New Irrigation Reservoir' fed by an Anicut across a stream shall be regarded as a 'New Irrigation Reservoir across' that stream.
3. 'Repair of Irrigation Reservoir' shall include,
 - (a) Increase of the level of waste weirs and other improvements of existing irrigation reservoirs or tanks, provided that either the quantity of water to be impounded or the area to be irrigated is not more than the quantity previously impounded or the area previously irrigated by them
 - (b) The substitution of a new irrigation reservoir for and in supersession of an existing irrigation reservoir, but in a different situation or for and in supersession of a group of existing irrigation reservoirs and
4. Any increase of capacity other than what falls under 'Repair of Irrigation Reservoirs' as defined above shall be regarded as a 'New Irrigation Reservoir'

II. Also defined as a rule in the Agreement that the Mysore Government shall not without the previous consent of the Madras Government build any 'New Irrigation Reservoir' across the river Pennar or South Pinakini (known as Ponnaiyar in Tamil Nadu) as per the schedule 'A' vide SI No.9.

III. The above rules shall apply as far the Madras Government as regards streams flowing through British territory in Mysore.

One more Agreement had been reached between the Governments of Mysore and Madras at Bengaluru on 4th-5th September 1933. As per this agreement, vide G.o . No. 2796-I dated 28th December, 1933, it was reiterated that intimation will as far as possible be given by Mysore in future before the work is commenced with details of what is proposed to be done.

Also, the Madras Government will as far as possible, give similar information/intimation to Mysore Government in respect of similar works in the Madras presidency which may affect the prescribed rights for which protection may be claimed under the rules in the Agreement of 1892.

Also, it was stated in the Agreement that if the difference of opinion arises between the Madras and Mysore Governments in any case, the same shall be referred for the final decision either to arbitrators appointed by both Governments or to the Government of India.

3.5 Impact of Water Diversion on Interstate Water Sharing Agreement

Though the river Ponnaiyar is an interstate river by nature, the present intra state link proposal envisages diversion of flood waters available at existing Krishnagiri dam across Ponnaiyar river, which otherwise go waste to sea without being put to optimum use. As such the proposal will not have any impact on the water use of any of the riparian state. However, the Prefeasibility Report of the project which was prepared as a prelude to preparation of DPR of the project, has been circulated to the state of Karnataka and the replies to the comments/observations have been sent to the Karnataka state. The same are furnished as **Annexure 3.1**.