GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 2406

ANSWERED ON 13.03.2025

RIVER-LINKING PROJECTS AND THEIR ENVIRONMENTAL IMPACT

2406. SHRI BALRAM NAIK PORIKA

Will the Minister of **JAL SHAKTI** be pleased to state:

(a) the measures taken/being taken by the Government to address groundwater depletion and water conservation; and

(b) the status of major river-linking projects and their environmental impact assessments?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Water being a State subject, the planning, funding, and execution of water resources projects are primarily a responsibility of the State Governments, based on their resources and priorities. The role of the Government of India is largely catalytic, providing technical support and, in some cases, partial financial assistance under the existing schemes of the Government of India.

To address groundwater depletion and promote water conservation, the Government of India has launched initiatives such as the Jal Shakti Abhiyan (JSA) and Jal Sanchay Jan Bhagidari (JSJB). Bureau of Water Use Efficiency (BWUE) has also been established to promote efficient water use across various sectors. Apart from this, the Government of India has successfully completed the National Aquifer Mapping (NAQUIM) Project across the entire mappable area of about 25 lakh square kilometer in the country and aquifer maps and management plans, incorporating various water conservation measures through recharge structures, have been accordingly developed and shared with the respective State agencies for implementation.

Furthermore, a Master Plan for Artificial Recharge to Groundwater-2020 has been prepared in consultation with the States and the Union Territories. This macro-level plan outlines suitable recharge structures based on different terrain conditions across the country and envisages construction of about 1.42 crore rainwater harvesting and artificial recharge structures to harness about 185 Billion Cubic Meters (BCM) of monsoon rainfall. Apart from this, under the Ground Water Management & Regulation (GWM&R) scheme, the Government of India has also implemented several successful demonstrative artificial recharge projects aimed at rejuvenating groundwater levels.

Additionally, the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), launched by the Government of India in 2015, *inter alia*, also focuses on promoting sustainable water conservation practices.

(b) Under the National Perspective Plan (NPP), formulated by the Government of India in 1980, for transfer of water from the water-surplus basins to the water-deficit basins/ regions across the country, 30 Inter-Linking of Rivers (ILR) projects have been identified - 16 projects under the Peninsular component and 14 projects under the Himalayan component. The latest Status of these ILR projects is given at **Annexure**.

Further, for every ILR project, a detailed Environmental Impact Assessment (EIA) study is done during the preparation of Feasibility Reports (FRs) and Detailed Project Reports (DPRs). EIA study aims at identifying the positive and negative impacts of the project on the physical, biological, and socio-economic environment. A detailed study is done on soil type, climate type, groundwater quality, biological environment, floral diversity, Forests and Wildlife, Groundwater Recharge, Change of hydrological regime of the river, Public health aspects, Employment Potential generated, Project Affected Families, Submergence area, etc. and other socio-economic characteristics at the stage of preparation of DPRs and the Environment Management Plan to mitigate the assessed impacts.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2406 TO BE ANSWERED IN LOK SABHA ON 13.03.2025 REGARDING "RIVER-LINKING PROJECTS AND THEIR ENVIRONMENTAL IMPACT".

Details and Current Status of ILR Projects under the NPP

Peninsular Component

Sl. No	Name	States benefited	Status
1	a. Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link	Andhra Pradesh (AP) & Odisha	FR completed
	b. Alternate Mahanadi (Barmul) – Rushikulya – Godavari (Dowlaiswaram) link	AP& Odisha	FR completed
2	Godavari (Polavaram) - Krishna (Vijayawada) link @	AP	FR completed
3	a. Godavari (Inchampalli) - Krishna (Nagarjunasagar) link	Telangana	FR completed
	b. Alternate Godavari (Inchampalli) - Krishna (Nagarjunasagar) link *	Telangana	DPR completed
4	Godavari (Inchampalli/ SSMPP) - Krishna (Pulichintala) link	Telangana & AP	DPR completed
5	a. Krishna (Nagarjunasagar) - Pennar (Somasila) link	AP	FR completed
	b. Alternate Krishna (Nagarjunasagar) - Pennar (Somasila) link *	AP	DPR completed
6	Krishna (Srisailam) – Pennar link	AP	Draft DPR completed
7	Krishna (Almatti) – Pennar link	AP & Karnataka	Draft DPR completed
8	a. Pennar (Somasila) - Cauvery (Grand Anicut) link	AP, Tamil Nadu & Puducherry	FR completed
	b. Alternate Pennar (Somasila) - Cauvery (Grand Anicut) link *	AP, Tamil Nadu & Puducherry	DPR completed
9	Cauvery (Kattalai) - Vaigai -Gundar link	Tamil Nadu	DPR completed
10	a. Parbati –Kalisindh - Chambal link	Madhya Pradesh (MP) & Rajasthan	FR completed
	b. Modified Parbati – Kalisindh-Chambal link (duly integrated with ERCP)	MP & Rajasthan	Draft PFR completed
11	Damanganga - Pinjal link	Maharashtra	DPR completed
12	Par-Tapi-Narmada link	Gujarat & Maharashtra	DPR completed
13	Ken-Betwa link	Uttar Pradesh (UP) & MP	DPR completed & project is under implementation
14	Pamba - Achankovil - Vaippar link	Tamil Nadu & Kerala	FR completed
15	Bedti - Varda link @@	Karnataka	DPR completed
16	Netravati – Hemavati link**	Karnataka	PFR completed

* Due to pending consensus on Manibhadra and Inchampalli dams, an Alternate study to divert unutilized waters of the Godavari river was carried out and DPR of Godavari (Inchampalli/ Janampet) – Krishna (Nagarjunasagar) - Pennar (Somasila) – Cauvery (Grand Anicut) link projects was completed. Godavari-Cauvery (Grand Anicut) link project has been prepared comprising of Godavari (Inchampalli / Janampet) - Krishna (Nagarjunasagar), Krishna (Nagarjunasagar) - Pennar (Somasila) and Pennar(Somasila)-Cauvery(Grand Anicut) link projects.

** Further studies have not been taken up since after the implementation of the Yettinahole project by Govt. of Karnataka, no surplus water is available in the Netravati basin for diversion through this link.

@ Godavari (Polavaram) – Krishna (Vijayawada) link – The project has been taken up by the Government of Andhra Pradesh.

@@ Bedti – Varda link – DPR was prepared directly after the preparation of its PFR, no FR was prepared.

Himalayan Component

Sl. No	Name	States / Countries benefited	Status
1.	Kosi-Mechi link	Bihar & Nepal	PFR completed
2.	Kosi-Ghaghra link	Bihar, UP & Nepal	FR completed
3.	Gandak - Ganga link	UP & Nepal	FR completed
4.	Ghaghra - Yamuna link	UP & Nepal	Draft FR completed
5.	Sarda - Yamuna link	UP & Uttarakhand	FR completed
6.	Yamuna-Rajasthan link	Haryana & Rajasthan	FR completed
7.	Rajasthan-Sabarmati link	Rajasthan & Gujarat	FR completed
8.	Chunar-Sone Barrage link	Bihar & UP	Draft FR completed
9.	Sone Dam - Southern Tributaries of Ganga link	Bihar & Jharkhand	Draft FR completed
10.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Assam, West Bengal (WB) & Bihar	FR completed
11.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	Assam, WB & Bihar	PFR completed (The proposal has been dropped)
12.	Farakka-Sundarbans link	WB	FR completed
13.	Ganga(Farakka) - Damodar-Subarnarekha link	WB, Odisha & Jharkhand	FR completed
14.	Subarnarekha-Mahanadi link	WB & Odisha	FR completed

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