

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA

STARRED QUESTION NO. *157

ANSWERED ON 01.08.2024

INTER-LINKING OF RIVERS

*157. DR. AMOL RAMSING KOLHE SHRI BHASKAR MURLIDHAR BHAGARE

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the inter-linking of rivers programme under National Perspective Plan has achieved its objectives, if so, the details thereof and if not, the reasons therefor;
- (b) whether the Government is contemplating any special scheme to inter-link rivers of the country, particularly in Maharashtra;
- (c) if so, the details along with the current status thereof;
- (d) the details of timeline fixed for completion of inter-linking of rivers;
- (e) the other steps taken by the Government for inter-linking of river projects in the country, river-wise; and
- (f) the details of the benefits in respect of irrigation, drinking water supply and hydro power generation through these projects along with the estimated cost thereof?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI C R PAATIL)

(a) to (f) : A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF STARRED QUESTION NO. *157 TO BE ANSWERED ON 01.08.2024 IN LOK SABHA REGARDING “INTER-LINKING OF RIVERS”

(a) to (e) Under the National Perspective Plan (NPP), prepared in the year 1980 for inter-basin water transfer, the National Water Development Agency (NWDA) has identified 30 links (16 under Peninsular Component & 14 under Himalayan Component) for preparation of Feasibility Reports. Out of 30 identified link projects, Pre - Feasibility Reports (PFRs) of all the 30 links, Feasibility Reports (FRs) of 24 links and Detailed Project Reports (DPRs) of 11 links have been completed. The details of the ILR projects under the Peninsular component of NPP and their current status, are furnished at **Annexure-I**. This list also includes those links which are *inter-alia* going to benefit State of Maharashtra.

NWDA has also carried out studies in respect of intra-State river linking projects on the request of States. Under the intra-State link project, NWDA has received 49 link proposals from 10 States out of which PFRs of 39 link projects and DPRs of 6 link projects have been completed and submitted to the concerned States. Latest status of intra-State link projects is furnished at **Annexure-II**.

The ILR programme has been accorded top priority and it is being pursued by the Government of India in a consultative manner. Government of India has made concerted efforts for bringing the party States to reach a consensus. To streamline the decision making process in respect of the ILR projects, a “Special Committee on Interlinking of Rivers (SCILR)” has been constituted by the Government of India in September, 2014, 21 meetings of which has already been held. Further, a Task Force for Interlinking of Rivers (TFILR) has also been constituted in April, 2015 for expediting the ILR programme and the Task Force has also held 19 meetings.

The Ken-Betwa Link Project (KBLP) is the first and the only ILR project, which is under implementation on the ground. Subsequent to the signing of a tripartite Memorandum of Agreement amongst the States of Madhya Pradesh and Uttar Pradesh and Government of India, the project was approved by the Government of India, in December, 2021, for implementation at an estimated cost of Rs. 44,605 crore (at year 2020-21 price level), including a central support of Rs. 39,317 crore. Before the construction work starts, at present the focus is on accomplishing all preparatory activities including land acquisition, R&R, obtaining statutory clearances etc. The KBLP is scheduled to be completed by March, 2030.

Stipulation of time for completion of the other ILR projects comes into picture only after the party States arrive at a consensus for their implementation. It is for the party States to arrive at a consensus for implementation of these link projects.

(f) Overall, the ILR projects under NPP would provide additional benefits of 35 million hectares of irrigation and 34,000 MW of hydro-power generation apart from incidental benefits like augmenting Domestic & Industrial Water Supply, etc. The total estimated cost for the ILR projects under the NPP is Rs. 8.44 lakh crore at 2015-16 price level. The details of benefits in respect of irrigation, drinking water supply and hydro power generation through these ILR projects is, *inter alia*, furnished at **Annexure-I**. With respect to the Ken-Betwa Link Project, this project would provide annual irrigation of 10.62 lakh hectares, domestic water supply for 62 lakh population and would also generate 103 MW of Hydro power and 27 MW of Solar power.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) TO (e) OF LOK SABHA STARRED QUESTION NO. *157 TO BE ANSWERED ON 01.08.2024 REGARDING “INTER-LINKING OF RIVERS”.

Details of ILR projects under the NPP and their Current Status**Peninsular Component**

Sl. No	Name	States benefited	Annual Irrigation (Lakh ha)	Domestic & Industrial (Mm ³)	Hydro power (MW)	Status
1	a. Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link	AP& Odisha	4.43	802	445	FR completed
	b. Alternate Mahanadi (Barmul) - Rushikulya – Godavari (Dowlaiswaram) link	AP& Odisha	6.25 (0.91 + 3.52 + 1.82**)	700 +125**	210 + 240**	FR completed
2	Godavari (Polavaram) - Krishna (Vijayawada) link	AP	2.1	162	--	FR completed
3	a.) Godavari (Inchampalli) - Krishna (Nagarjunasagar) link	Telangana	2.87	237	975+70= 1045	FR completed
	b.) Alternate Godavari (Inchampalli) - Krishna (Nagarjunasagar) link *	Telangana	3.67	140	70	DPR completed
4	Godavari (Inchampalli/ SSMPP) - Krishna (Pulichintala) link	Telangana & AP	4.74 (0.36 + 4.38)	346	90	DPR completed
5	a.) Krishna (Nagarjunasagar) - Pennar (Somasila) link	AP	5.81	124	90	FR completed
	b.) Alternate Krishna (Nagarjunasagar) - Pennar (Somasila) link *	AP	2.94	218	120	DPR completed
6	Krishna (Srisaillam) – Pennar link	AP	1.78	58	--	Draft DPR completed
7	Krishna (Almatti) – Pennar link	AP & Karnataka	2.58 (1.9+0.68)	56	13.5	Draft DPR completed
8	a.) Pennar (Somasila) - Cauvery (Grand Anicut) link	AP, Tamil Nadu & Puducherry	4.91 (0.49+ 4.36 +0.06)	1105	--	FR completed
	b.) Alternate Pennar (Somasila) - Cauvery (Grand Anicut) link *	AP, Tamil Nadu & Puducherry	2.83 (0.51+ 2.32)	1098 (62+ 1036)		DPR completed
9	Cauvery (Kattalai) - Vaigai - Gundar link	Tamil Nadu	4.48	218	--	DPR completed
10	a. Parbati –Kalisindh - Chambal link	MP & Rajasthan	2.30	- 13.2	--	FR completed
	b) Modified Parbati – Kalisindh-Chambal link (duly integrated with ERCP)	MP & Rajasthan	3.38(as per draft PFR)	36 (as per draft PFR)	-	Draft PFR completed

11	Damanganga - Pinjal link	Maharashtra (only water supply to Mumbai)	--	895	5	DPR completed
12	Par-Tapi-Narmada link	Gujarat & Maharashtra	2.32 (2.28+0.04)	126	21	DPR completed
13	Ken-Betwa link	Uttar Pradesh & Madhya Pradesh	10.62 (2.51+8.11)	194	103 MW (Hydro) & 27MW (Solar)	DPR completed & project is under implementation
14	Pamba - Achankovil - Vaipparlink	Tamil Nadu & Kerala	0.91 ---	--	--- 508	FR completed
15	Bedti - Varda link	Karnataka	1.05	38	----	DPR completed
16	Netravati – Hemavati link***	Karnataka	0.34	--	--	PFR completed

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

**Benefit from Six Projects of Govt. of Odisha

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

Himalayan Component

Sl.No	Name	States / Countries benefited	Annual Irrigation (Lakh ha)	Domestic & Industrial (Mm ³)	Hydro power (MW)	Status
1.	Kosi-Mechi link	Bihar & Nepal	4.74 (2.99+1.75)	24	3180	PFR completed
2.	Kosi-Ghaghra link	Bihar, U.P & Nepal	8.35 (6.05+1.20+1.10)	0	--	FR completed
3.	Gandak - Ganga link	U.P & Nepal	34.58 (28.80+5.78)	700	4375 (Dam PH) & 180 (Canal PH)	FR completed (Indian portion)
4.	Ghaghra - Yamuna link	U.P & Nepal	27.84 (25.30 + 2.54)	1391	10884	draft FR completed (Indian portion)
5.	Sarda - Yamuna link	U.P & Uttarakhand	2.95 (2.65 + 0.30)	3054	6620 (5600+1020)	FR completed
6.	Yamuna-Rajasthan link	Haryana & Rajasthan	2.51 (0.11+ 2.40)	30	--	FR completed

7.	Rajasthan-Sabarmati link	Rajasthan & Gujarat	11.53 (11.21+0.32)	102	--	FR completed
8.	Chunar-Sone Barrage link	Bihar & U.P	0.67 (0.13 + 0.54)	--	--	PFR completed
9.	Sone Dam -Southern Tributaries of Ganga link	Bihar & Jharkhand	3.07 (2.39 + 0.68)	360	95(90 Dam PH) &5 (Canal PH)	PFR completed
10.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Assam, W.B & Bihar	3.41 (2.05 + 1.00 + 0.36)	--	--	FR completed
11.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	Assam, W.B & Bihar	3.559 (0.975+ 1.564+ 1.02)	265	360	PFR completed (The proposal has been dropped)
12.	Farakka-Sundarbans link	W.B	1.50	184	--	FR completed
13.	Ganga(Farakka) -Damodar-Subarnarekha link	W.B., Odisha& Jharkhand	12.30 (11.18+ 0.39+ 0.73)	432	--	FR completed
14.	Subarnarekha-Mahanadi link	W.B. &Odisha	2.16 (0.18+ 1.98)	198	20	FR completed

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Status of Intra-State Link Proposals of State Governments

S.No.	Name of Intra-State Link	Rivers	Present status of PFR /DPR
MAHARASHTRA			
1	Wainganga (Goshikurd) – Nalganga (Purna Tapi)	Wainganga &Nalganga	DPR completed
2	Wainganga–Manjra Valley	Wainganga & Manjra	PFR completed (Not found feasible)
3	Upper Krishna – Bhima (system of Six links)	Krishna & Bhima	PFR completed
4	Damanganga (Ekdare)-Godavari Valley	Damanganga &Godavari	DPR completed
5(i)	Upper Vaitarna-Godavari valley	Vaitarna & Godavari	PFR completed.
5(ii)	Damanganga-Vaitarna-Godavari (Kadva/Dev)Valley	Damanganga, Vaitarna & Godavari	DPR completed
6	North Konkan–GodavariValley	Patalganga & Godavari	PFR completed (Not found feasible)
7	Koyna– Mumbai city	Koyna	PFR completed
8	Sriram SagarProject (Godavari) – Purna–Manjira	Godavari, Purna & Manjira	PFR completed
9	Wainganga (Gosikhurd)–Godavari (SRSP)	Wainganga & Godavari	Withdrawn by Govt. of Maharashtra
10	Middle Konkan–Bhima Valley	Savitri, Kundalika, Amba & Bhima	PFR completed (Not found feasible)
11	Koyna–Nira	Koyna & Nira	PFR completed
12	Mulsi–Bhima	Mulsi & Bhima	PFR completed
13	Savithri–Bhima	Savithri & Bhima	PFR completed
14	Kolhapur–Sangli–Sangola	Krishna & Bhima	PFR completed
15	River linking projects of Tapi basin and Jalgaon District	Tapi	PFR completed
16	Nar–Par–Girna valley	Nar, Par & Girna	PFR completed (Not found feasible)
17	Narmada–Tapi	Narmada & Tapi	PFR completed
18	Khariagutta–Navatha Satpura foothills	Dropped	Groundwater recharge schemes to be studied by CGWB, as such not accepted by NWDA for PFR studies.
19	Kharia Ghuti Ghat–Tapi	Dropped	
20	Jigaon–Tapi–Godavari Valley	Tapi & Godavari	PFR completed (Not found feasible)

GUJARAT

21	Damanganga – Sabarmati – Chorwad	Damanganga, Sabarmati&Chorwad	PFR completed
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22	Mahanadi–Brahmani	Mahanadi & Brahmani	PFR completed (Not found feasible)
23	Mahanadi–Rushikulya (Barmul Project)	Mahanadi & Rushikulya	PFR completed. (All benefits are taken over by M-G link)
24	Vamsadhara–Rushikulya (Nandini Nalla project)	Vamsadhara & Rushikulya	PFR completed
25	Nagavalli- Vamsadhara -Rushikulya	Nagavalli, Rushikulya & Vamsadhara	PFR completed (Not found feasible)

JHARKHAND

26	SouthKoel–Subernarekha	South Koel&Subernarekha	PFR completed
27	Sankh–SouthKoel	Sankh&SouthKoel	PFR completed
28	Barakar–Damodar–Subernarekha	Barkar,Damodar&Subernarekha	PFR completed

BIHAR

29	Kosi–Mechi[entirely lie in India]	Kosi & Mechi	DPR completed.
30	Barh–Nawada	Ganga & Kiul	PFR completed (Not found feasible)
31	Kohra – Chandravat (Kohra-Lalbegi)	Kohra & Chandravat	PFR completed (Not found feasible)
32	Burhi Gandak– Noon– Baya-Ganga	Burhi Gandak ,Noon, Baya & Ganga	DPR completed, CWC opined that the project may be considered as Flood Moderation project. Informed to Govt. of Bihar.
33	Burhi Gandak – Bagmati [Belwadhar]	Burhi Gandak & Bagmati	PFR completed (Not found feasible)
34	Kosi–Ganga	Kosi&Ganga	PFR completed
35	Development of Bagmati Irrigation & Drainage Project-Phase-II (Barrage near Kataunjha in Muzaffarpur District) and Adhwara Multipurpose Project with Kosi-Adhwara-Bagmati Link	Kosi, Adhwara & Bagmati	PFR completed (Not found feasible)
36	Transfer of Ganga water to South Bihar through pump Canal Scheme at Buxer	Ganga	Initially, NWDA consented to take up the studies but after receiving the details from Govt. of Bihar, it
37	Development of Badua-Chandan Basin	Badua & Chandan	

			was found that these are not intra-state links and therefore not taken up the studies.
38	Sone-Falgu link	Sone&Falgu	Preliminary Study was taken up (Not found feasible)
RAJASTHAN			
39	Mahi-Luni link	Mahi&Luni	PFR completed (Not found feasible)
40	Wakal-Sabarmati-Sei-West Banas-Kamerilink	Wakal, Sabarmati, Sei, West Banas & Kameri	PFR completed (Not found feasible)
TAMIL NADU			
41	Ponnaiyar-Palar link	Ponnaiyar & Palar	PFR and DPR completed
KARNATAKA			
42	Almatti (Bagalkot)-Malaprabha Sub-basin	Almatti&Malaprabha	Prima Facie Not found feasible
43	Malaprabha-Tungabhadra Sub-basin	Malaprabha & Tungabhadra	Prima Facie Not found feasible
44	Bedti-Dharma-Varada link	Bedti,Dharma&Varada	PFR completed
45	Bhadra-Vedavathi (Vani Vilasa Sagar) link	Bhadra & Vedavathi	Government of Karnataka withdrew the proposal during 11 th meeting of Special Committee for ILR.
46	Diversion of west flowing rivers schemes (Barapole-upper Cauvery link)	Barapole & upper Cauvery	
47	Diversion from Bedti & Aghanashini to Varada	Aghanashini&Varada	PFR completed
CHATTISGARH			
48	Paury-Mahanadi link	Paury& Mahanadi	PFR completed
UTTAR PRADESH			
49	Sharda-Gomti link	Sharda & Gomti	PFR completed
