

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI,  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**STARRED QUESTION NO. \*63**  
ANSWERED ON 21.11.2019

**WATER SCARCITY IN MAJOR CITIES**

\*63. SHRI BALUBHAU ALIAS SURESH NARAYAN DHANORKAR  
SHRI K. NAVASKANI

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Government is aware that 21 major cities will face water scarcity due to ground water depletion in 2020 and if so, the names of such cities, State-wise;
- (b) whether the Government is going to take measures to resolve this issue through inter-linking of river waters or desalination of sea water; and
- (c) if so, the details thereof?

**ANSWER**

THE MINISTER OF JAL SHAKTI

(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) to (c) A Statement is laid on the Table of the House.

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**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO. \*63 TO BE ANSWERED IN LOK SABHA ON 21.11.2019 REGARDING “WATER SCARCITY IN MAJOR CITIES” ASKED BY SHRI BALUBHAU ALIAS SURESH NARAYAN DHANORKAR & SHRI K. NAVASKANI, M.P.s**

(a) NITI Aayog, in its report titled “Composite Water Management Index” published in June 2018, has mentioned that 21 major cities are expected to run out of groundwater by 2020. This is based on the estimates of annual groundwater replenishment and its extraction. However, it does not take into account the groundwater availability in the deeper aquifers. Names of such cities as intimated by NITI Aayog are given at **Annexure - I**.

(b) & (c) Practices for efficient and sustainable management of water resources such as conjunctive use of surface water and ground water resources, participatory ground water practices, increasing water use efficiency amongst others need to be promoted on a large scale by involving all the stakeholders to deal with future water demand challenges. Water being a State subject, efforts to initiate suitable demand side and supply side interventions including conservation and management of water resources is primarily States’ responsibility. However, steps taken by the Central Government in this regard are at the following URL:

[http://mowr.gov.in/sites/default/files/Steps\\_to\\_control\\_water\\_depletion\\_Jun2019.pdf](http://mowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Jun2019.pdf).

Government of India is actively considering the ‘Interlinking of Rivers’ (ILR) programme as one of the interventions for sustainable management of water resources in the country. Under the National Perspective Plan (NPP), for water transfer from water surplus basins to water-deficit basins, the National Water Development Agency (NWDA) has identified 30 links (16 under Peninsular Component and 14 under Himalayan Component) for preparation of Feasibility Reports (FRs). The details of above river linking projects viz., rivers, States concerned, present status are given at **Annexure-II**.

The implementation of NPP is likely to raise the ultimate irrigation potential through surface and ground water resources from 140 million Ha to 175 million Ha, generation of 34 million KW of power, apart from the incidental benefits of water supply, flood control, drought mitigation, navigation, fisheries, salinity and pollution control etc.

As per information received from Department of Science and Technology, use of seawater in coastal States could be a sustainable solution for availability of drinking water; however, the available technologies are relatively expensive.

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**ANNEXURE-I**

**Annexure referred to in reply to parts (a) of Starred Question No. \*63 to be answered in Lok Sabha on 21.11.2019 regarding “Water Scarcity in Major Cities”**

**Cities likely to face water scarcity as per NITI Aayog report**

<b>S.No</b>	<b>State</b>	<b>City</b>
1.	Delhi	Delhi
2.	Gujrat	Gandhinagar
	Haryana	Gurgaon, Yamunanagar
3.	Karnataka	Bangalore
4.	Madhya Pradesh	Indore, Ratlam
5.	Punjab	Amritsar, Jalandhar, Ludhiana, Mohali, Patiala
6.	Rajasthan	Ajmer, Bikaner, Jaipur, Jodhpur
7.	Tamilnadu	Chennai, Vellore
8.	Andhra Pradesh	Hyderabad
9.	Uttar Pradesh	Agra, Ghaziabad

**Annexure referred to in reply to parts (b) & (c) of Starred Question No. \*63 to be answered in Lok Sabha on 21.11.2019 regarding “Water Scarcity in Major Cities”**

**Present status of Inter Basin Water Transfer Links, the States involved, name of rivers and status of Feasibility Reports/Detailed Project Report**

Sl. No	Name	Rivers	Country/States concerned	Present Status	Status of clearances
<b>Himalayan Component</b>					
1.	Kosi-Mechi link	Kosi & Mechi	Bihar , West Bengal & Nepal	PFR completed Entirely lies in Nepal	-
2.	Kosi-Ghaghra link	Kosi & Ghaghra	Bihar , Uttar Pradesh & Nepal	PFR completed	-
3.	Gandak-Ganga link	Gandak & Ganga	-do-	Draft FR completed (Indian portion)	-
4.	Ghaghra-Yamuna link	Ghaghra & Yamuna	-do-	FR completed (Indian portion)	-
5.	Sarda-Yamuna link	Sarda & Yamuna	Bihar, Uttar Pradesh, Haryana, Rajasthan, Uttarakhand & Nepal	FR completed (Indian portion)	-
6.	Yamuna-Rajasthan link	Yamuna & Sukri	Uttar Pradesh, Gujarat, Haryana & Rajasthan	Draft FR completed	-
7.	Rajasthan-Sabarmati link	Sabarmati	-do-	Draft FR completed	-
8.	Chunar-Sone Barrage link	Ganga & Sone	Bihar & Uttar Pradesh	Draft FR completed	-
9.	Sone Dam – Southern Tributaries of Ganga link	Sone & Badua	Bihar & Jharkhand	PFR completed	-
10.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Manas-Sankosh-Tista-Ganga	Assam, West Bengal, Bihar & Bhutan	PFR completed.	-
11.	Jogighopa-Tista-Farakka link (Alternative to M-S-T-G)	Manas, Tista & Ganga	-do-	(Alternative to M-S-T-G Link) dropped	-
12.	Ganga (Farakka)-Sunderbans link	Ganga & Ichhamati	West Bengal	Draft FR completed	-
13.	Ganga(Farakka)-Damodar-Subernarekha link	Ganga, Damodar & Subernarekha	West Bengal, Odisha & Jharkhand	Draft FR completed	-
14.	Subernarekha-Mahanadi link	Subernarekha & Mahanadi	West Bengal & Odisha	Draft FR Completed	-
<b>Peninsular Component</b>					
15	Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link	Mahanadi & Godavari	Odisha, Madhya Pradesh, Maharashtra, Andhra Pradesh, Karnataka, Telangana & Chhattisgarh	FR Completed	-
16	Godavari (Inchampalli) - Krishna (Nagarjunasagar) link	Godavari & Krishna	-do-	FR Completed	-
17	Godavari (Inchampalli) - Krishna (Pulichintala) link	Godavari & Krishna	-do-	FR Completed	-
18	Godavari (Polavaram) - Krishna (Vijayawada) link	Godavari & Krishna	-do-	FR Completed	-
19	Krishna (Almatti) – Pennar link	Krishna & Pennar	Maharashtra, Andhra Pradesh, Karnataka, Telangana	FR Completed	-
20	Krishna (Srisailem) – Pennar link	Krishna & Pennar	-do-	FR Completed	-
21	Krishna (Nagarjunasagar) - Pennar (Somasila) link	Krishna & Pennar	-do-	FR Completed	-
22	Pennar (Somasila) – Palar-Cauvery (Grand Anicut) link	Pennar & Cauvery	Andhra Pradesh, Karnataka, Tamil Nadu, Kerala & Puducherry	FR Completed	-
23	Cauvery (Kattalai)- Vaigai - Gundar link	Cauvery, Vaigai & Gundar	Karnataka, Tamil Nadu, Kerala & Puducherry	FR Completed	-

Sl. No	Name	Rivers	Country/States concerned	Present Status	Status of clearances
24	Ken-Betwa link	Ken & Betwa	Uttar Pradesh & Madhya Pradesh	FR & DPR (Phase-I&II) Completed Comprehensive DPR sent to Govt. of MP & UP.	<b>Phase-I</b> All statutory clearances (except Stage-II forest clearance and clearance from CEC of Hon'ble Supreme Court) and Techno-economic clearance (July 2016) completed for Phase-I components.  <b>Phase-II</b> Stage-I Forest clearance, MoTA clearance for Lower Orr dam, Environmental & Forest clearances for Bina complex projects accorded.
25	Parbati -Kalisindh- Chambal link	Parbati, Kalisindh & Chambal	Madhya Pradesh, Rajasthan & Uttar Pradesh (UP requested to be consulted during consensus building)	FR Completed	-
26	Par-Tapi-Narmada link	Par, Tapi & Narmada	Maharashtra & Gujarat	FR & DPR Completed.	Technical appraisal is under progress in CWC.
27	Damanganga - Pinjal link	Damanganga & Pinjal	Maharashtra & Gujarat	FR & DPR Completed	Techno-economic clearance accorded. (July 2016)
28	Bedti - Varda link	Bedti & Varda	Maharashtra, Andhra Pradesh & Karnataka	PFR Completed	-
29	Netravati – Hemavati link	Netravati & Hemavati	Karnataka, Tamil Nadu & Kerala	PFR Completed	-
30	Pamba - Achankovil - Vaippar link	Pamba, Achankovil & Vaippar	Kerala & Tamil Nadu,	FR Completed	-

\*\* PFR- Pre -Feasibility Report, FR- Feasibility Report, DPR- Detailed Project Report

Note: NWDA has completed the draft DPR of alternate study of Godavari (Inchampalli/Janampet)-Cauvery (Grand Anicut) link project consists of 3 links viz., Godavari (Inchampalli/Janampet)-Krishna (Nagarjunasagar), Krishna (Nagarjunasagar)-Pennar (Somasila) and Pennar (Somasila)-Cauvery(Grand Anicut) link projects.

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