

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 4139
ANSWERED ON 18.07.2019

WATER STRESS

4139. SHRI MANOJ KOTAK

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the Composite Water Management Index (CWMI) by the NITI Aayog has indicated that nearly 600 million people face high to extreme water stress in the country, especially in Maharashtra;
- (b) if so, the details thereof;
- (c) whether the Government has formulated a National Perspective Plan (NPP) for Water Resources Development;
- (d) if so, the details thereof; and
- (e) the details of steps being taken or proposed to be taken by the Government to tackle water crisis in the country?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI & SOCIAL JUSTICE AND EMPOWERMENT

(SHRI RATTAN LAL KATARIA)

(a) & (b) The NITI Aayog in its Composite Water Management Index (CWMI) indicated that nearly 600 million people in India are facing acute water shortages by quoting the report of the World Resources Institute (WRI) which estimated that 54 percent of India's total area, including parts of Maharashtra, are facing high to extremely high water stressed, thereby affecting nearly 600 million people.

(c) & (d) A National Perspective Plan (NPP) for Water Resources Development was formulated in August 1980 by the erstwhile Ministry of Irrigation. The NPP comprises of two components, namely (i) Peninsular Rivers Development and (ii) Himalayan Rivers Development. The Plan identified 30 links (16 under Peninsular Component and 14 under Himalayan Component) for preparation of Feasibility Reports (FRs). The Pre-Feasibility Report (PFR) of all the 30 links have been prepared and circulated to the concerned State Governments by the NWDA. After survey and investigations, the Feasibility

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Reports of 14 links under Peninsular Component and Feasibility Reports of 2 links and draft Feasibility Reports of 7 links under Himalayan Component have been completed.

Four priority links under the Peninsular River Component have been identified for preparation of Detailed Project Report (DPR) namely, Ken - Betwa link project (KBLP) Phase – I & II, Damanganga - Pinjal link project, Par – Tapi - Narmada link project and Godavari - Cauvery link project (consisting of three links viz; Godavari (Inchampalli/ Janampet) - Krishna (Nagarjunasagar), Krishna (Nagarjunasagar) – Pennar (Somasila), Pennar (Somasila) - Cauvery (Grand Anicut) link projects).

The details of river linking projects viz., rivers, States concerned are given at **Annexure**.

(e) The Central Government supplements the efforts of the State Governments by providing technical and financial assistance through various schemes and programmes. Central Government has been taking various steps to improve the water availability in the country.

Ministry of Jal Shakti has been created by the Government of India, by integrating two Ministries viz; Water Resources, River Development and Ganga Rejuvenation and Drinking Water and Sanitation, with an aim to integrate the management of water resources under one umbrella in a holistic manner. Recognising the importance of involvement at the grassroots level, the Hon'ble PM has personally addressed letters to all Sarpanches in the country motivating them to take up water conservation activities.

Ministry of Jal Shakti has launched Jal Shakti Abhiyan (JSA) - a campaign for water conservation and water security. During the campaign; officers, groundwater experts and scientists from the Government of India will work together with State and district officials in India's most water-stressed districts for water conservation and water resource management.

Central Government has formulated National Water Policy (NWP), 2012 which inter-alia recommends conservation, promotion and protection of water and highlights the need for augmenting the availability of water through rain water harvesting, direct use of rainfall and other management measures. The NWP, 2012 has been sent to all States/ Union Territories and the concerned Central Ministries for appropriate action.

Some initiatives/measures taken by Central Government to control water depletion and promote rain water harvesting / conservation are available at the URL:

http://mowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Jun2019.pdf

The water supply component of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) of the Ministry of Housing and Urban Affairs, includes water conservation, rejuvenation of water bodies and recharging of ground water. Rain water harvesting and other water conservation measures are incorporated in the guidelines for Urban Regional Development Plan Formulation and Implementation (URDPFI) and Model Building Bye-Laws (MBBL) for the Urban Local Bodies (ULBs) and Urban Development Authorities (UDAs). Till date, 33 States/UTs out of 36 States/UTs have amended their Building Bye Laws (BBLs) or issued guidelines in this regard, in compliance with MBBL. To promote circular economy of water, National Urban Sanitation Policy 2008 mandates reuse of at least 20 percent of treated waste water. Dual piping system in certain types of buildings have been mandated under MBBL to promote usage of treated waste water for non-potable purposes, including toilet flushing, horticulture, agriculture, fire hydrants etc.

ANNEXURE

Annexure referred to in reply to part (c) & (d) of Unstarred Question No. 4139 to be answered in Lok Sabha on 18.07.2019 regarding “Water Stress”

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 |
|----------------------------|---|-------------------------------|---|--|----------------------|
| Himalayan Component | | | | | |
| 1. | Kosi-Mechi link | Kosi & Mechi | Nepal and Bihar , West Bengal | PFR completed Entirely lies in Nepal | - |
| 2. | Kosi-Ghaghra link | Kosi & Ghaghra | Nepal and Bihar , Uttar Pradesh | 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 | - |

| Sl. No | Name | Rivers | Country/States concerned | Present Status | Status of clearances |
|-----------------------------|--|--------------------------|---|--|--|
| Peninsular Component | | | | | |
| 15 | Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link | Mahanadi & Godavari | Odisha, Maharashtra, Andhra Pradesh, Karnataka, & Chattisgarh | FR Completed | - |
| 16 | Godavari (Inchampalli) - Krishna (Nagarjunasagar) link | Godavari & Krishna | Odisha, Maharashtra, Madhya Pradesh, Andhra Pradesh, Karnataka & Chattisgarh, | FR Completed | - |
| 17 | Godavari (Inchampalli) - Krishna (Pulichintala) link | Godavari & Krishna | -do- | FR Completed | - |
| 18 | Godavari (Polavaram) - Krishna (Vijayawada) link | Godavari & Krishna | Odisha, Maharashtra, Andhra Pradesh, Karnataka, & Chattisgarh | FR Completed | - |
| 19 | Krishna (Almatti) – Pennar link | Krishna & Pennar | -do- | FR Completed | - |
| 20 | Krishna (Srisailem) – Pennar link | Krishna & Pennar | -do- | FR Completed | - |
| 21 | Krishna (Nagarjunasagar) - Pennar (Somasila) link | Krishna & Pennar | Maharashtra, Andhra Pradesh & Karnataka, | 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 | - |
| 24 | Ken-Betwa link | Ken & Betwa | Uttar Pradesh & Madhya Pradesh | FR & DPR (Phase-I, II & Comprehensive DPR) Completed . | <u>Phase-I</u> 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. |

| Sl. No | Name | Rivers | Country/States concerned | Present Status | Status of clearances |
|--------|-----------------------------------|------------------------------|--|---------------------|---|
| | | | | | <u>Phase-II</u> 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 completed the draft DPR of alternate study of Godavari (Inchampalli/Janampet) - Cauvery (Grand Anicut) link project consists of Godavari (Inchampalli/Janampet) – Krishna (Nagarjunasagar), Krishna (Nagarjunasagar) – Pennar (Somasila) and Pennar (Somasila)-Cauvery (Grand Anicut) link projects.
