

ILR in Parliament

Here, the ILR issues raised and were discussed in both the houses of Parliament during the winter session of the Parliament held from 25.11.2024 to 20.12.2024 and projected on the Parliament of India website (Lok Sabha and Rajya Sabha) are incorporated for information to our readers/stakeholders.

Lok Sabha

1.1 The names of the States among which a Memorandum of Understanding (MoU) has been signed for the Eastern Rajasthan Canal Project (ERCP) in Rajasthan along with the date and the current status thereof; the contribution of the State Governments and the Union Government in the said project; the estimated amount likely to be utilised in the entire project along with Detail Project Report (DPR) being proposed in this regard; the date of commencement of the said project along with the time by which it is likely to be completed; and the details and the names of the rivers included in the said project and the districts to which water is proposed to be provided under the said project?

Memorandum of Understanding (MoU) has been signed by the States of Rajasthan and Madhya Pradesh with the Ministry of Jal Shakti, Government of India on 28.01.2024, for preparation of the Detailed Project Reports (DPRs) and on broad planning of the Modified Parbati-Kalisindh-Chambal (MPKC) link project, duly integrated with the Eastern Rajasthan Canal Project (ERCP), which is a part of the National Perspective Plan (NPP) for inter-linking of Rivers. Further, the Ministry of Jal Shakti has made concerted efforts at various levels with both the States for resolution of their apprehensions regarding water sharing and expeditious completion of the DPRs of various components of this link project, by the respective two States. Assessment of the estimated cost of the project and consideration on cost sharing pattern can be made only after the finalization of the DPRs of all the components of the link project by the two States.

The date of commencement of the project and the time by which it is likely to be completed, would depend upon the two States completing the DPRs of their respective components, obtaining the necessary statutory clearances and fulfilling other preparatory requirements for the project's implementation.

The MPKC link project, inter alia, involves major rivers, viz; Chambal and its tributaries like Parbati, Kalisindh, Kuno, Banas, Banganga, Rupa rail, Gambhiri, and Mej. The project is envisaged to provide water to the 21 newly constituted districts of Jhalawar, Baran, Kota, Bundi, Tonk, Sawai Madhopur, Gangapur, Dausa, Karauli, Dholpur, Bharatpur, Deeg, Alwar, Khairthal-Tijara, Kotputali - Behror, Jaipur urban, Jaipur rural, Dudu, Ajmer, Beawar and Kekri and en-route towns, tanks and villages in Rajasthan, and to the districts of Guna, Shivpuri, Sheopur, Sehore, Shajapur, Dewas, Rajgarh, Ujjain, Mandsaur, Bhind, Morena, Agar Malwa, Ratlam, Gwalior and Dhar, in Madhya Pradesh, for various purposes, such as, drinking water supply, irrigation and to meet industrial water demands.

1.2 Whether the Government has any scheme or proposal to interlink River Ganga with River Cauvery; and if so, the details thereof along with the target date set for its commencement and completion?

The Government of India formulated a National Perspective Plan (NPP) for the Interlinking of Rivers for transferring water from surplus basins to deficit basins/areas in 1980. The National Water Development Agency (NWDA) has been entrusted with the work of the Interlinking of Rivers (ILR) under the NPP.

Under the NPP, 30 ILR projects have been identified, which, inter alia, includes proposals for linking of rivers Manas, Sankosh, Tista, Ganga, Damodar, Subernarekha, Mahanadi, Godavari, Krishna, Pennar, Cauvery, Vaigai and Gundar. The Manas-Sankosh-Tista-Ganga-Damodar-Subernarekha-Mahanadi linkage system envisages to provide water to Mahanadi and thereafter, the Mahanadi-Godavari-Krishna-Pennar-Cauvery-Vaigai-Gundar linkage system to provide water to the river Cauvery and further down South. Details and status of the ILR Projects under the NPP is given in the **Annexure-I**

Pending consensus on the Mahandi-Godavari link and the upper links, about 4189 Million Cubic Meters (MCM) of unutilised waters of the Indravati sub-basin of Chhattisgarh State has been envisaged to be diverted through the Godavari (Inchampalli)-Cauvery link, for providing irrigation benefits to about 5.74 lakh ha area in Telangana, Andhra Pradesh and Tamil Nadu States including supplementation of existing commands. The enroute demands of domestic & industrial needs of these three States including the domestic and industrial needs of the Malaprabha sub-basin in Karnataka and Puducherry have also been considered in the project. The Detailed Project Report for the link project has been prepared and circulated in January, 2024. Based upon the requests received from the party States in various consultation meetings held to bring them to consensus, the proposal for transfer of 4189 MCM from Godavari basin has been combined with the proposal for a supplementation in the Krishna basin through Bedti-Varda link. Concerted efforts have been made by the Government of India in consultation with the Party States to bring them to consensus. It is, however, for the party States to reach a consensus for implementation of the river linking project.

Commencement of works of the ILR projects and their completion depend upon the party States reaching a consensus on issues like water sharing, routing of the interlink etc. and signing the project specific Memorandum of Agreement (MoA) for implementation of the respective ILR projects.

Annexure-I

Details and status of the ILR Projects under the NPP Peninsular Component

| Sl. No | Name | States benefited | Status |
|---------------|--|-------------------------|---------------|
| 1 | a) Mahanadi (Manibhadra) – Godavari (Dowlaiswaram) link | Andhra Pradesh & Odisha | FR completed |
| | b) Alternate Mahanadi (Barmul) - Rushikulya – Godavari (Dowlaiswaram) link | Andhra Pradesh & Odisha | FR completed |
| 2 | Godavari (Polavaram) - Krishna (Vijayawada) link | Andhra Pradesh | 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 & Andhra Pradesh | DPR completed |
| 5 | a) Krishna (Nagarjunasagar) –Pennar (Somasila) link | Andhra Pradesh | FR completed |
| | b) Alternate Krishna (Nagarjunasagar) - Pennar (Somasila) link * | Andhra Pradesh | DPR completed |
| 6 | Krishna (Srisaillam) – Pennar link | Andhra Pradesh | Draft DPR completed |
| 7 | Krishna (Almatti) – Pennar link | Andhra Pradesh & Karnataka | Draft DPR completed |
| 8 | a) Pennar (Somasila) - Cauvery (Grand Anicut) link | Andhra Pradesh, Tamil Nadu & Puducherry | FR completed |
| | b) Alternate Pennar (Somasila) – Cauvery (Grand Anicut) link * | Andhra Pradesh, Tamil Nadu & Puducherry | DPR completed |
| 9 | Cauvery (Kattalai) - Vaigai -Gundar link | Tamil Nadu | DPR completed |
| 10 | a) Parbati –Kalisindh - Chambal link | Madhya Pradesh & Rajasthan | FR completed |
| | b) Modified Parbati – Kalisindh-Chambal link (duly integrated with ERCP) | Madhya Pradesh & Rajasthan | Draft PFR completed |
| 11 | Damanganga - Pinjal link | Maharashtra | DPR completed |
| 12 | Par-Tapi-Narmada link (As per DPR) | Gujarat & Maharashtra | DPR completed |
| 13 | Ken-Betwa link | Uttar Pradesh & Madhya Pradesh | 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, 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 was completed. Godavari-Cauvery (Grand Anicut) Link Project has been prepared, comprising of Godavari (Inchampalli) - Krishna (Nagarjunasagar), Krishna (Nagarjunasagar)-Pennar (Somasila) and Pennar(Somasila)-Cauvery (Grand Anicut) Link Projects.

** Godavari (Polavaram) Krishna (Vijayawada) Link-The project has been taken up by Govt. of Andhra Pradesh.

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

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

Himalayan Component

| Sl. No. | Name of the Link | Country/ States benefited | Status |
|---------|---|---------------------------------|---|
| 1. | Kosi-Mechi link | Bihar & Nepal | PFR completed |
| 2. | Kosi-Ghaghra link | Bihar & Uttar Pradesh & Nepal | FR completed |
| 3. | Gandak - Ganga link | Uttar Pradesh & Nepal | FR completed |
| 4. | Ghaghra - Yamuna link | Uttar Pradesh & Nepal | Draft FR completed |
| 5. | Sarda - Yamuna link | Uttar Pradesh & 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 & Uttar Pradesh | 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 & Bihar | FR completed |
| 11. | Jogighopa-Tista-Farakka link (Alternative to M-S-T-G) | Assam, West Bengal & Bihar | PFR completed (The Proposal has been dropped) |
| 12. | Farakka-Sundarbans link | West Bengal | FR completed |
| 13. | Ganga (Farakka) - Damodar-Subarnarekha link | West Bengal, Odisha & Jharkhand | FR completed |
| 14. | Subarnarekha-Mahanadi link | West Bengal & Odisha | FR completed |

DPR – Detailed Project Report
PFR- Pre Feasibility Report
FR- Feasibility Report

1.3 Whether it is a fact that the new embankments built on both sides of the Koshi river in Bihar are adversely affecting the stability of the river even though its capacity to carry nine lakh cusecs of water and if so, the details thereof; whether the release of excess water in Koshi river from Nepal causes devastating flood in the coastal areas of Koshi and in Madhepura, Saharsa and Khagaria districts and if so, the details thereof; whether it is a fact that river bed of Koshi river is getting overflowed due to the high amount of sand and silt in the water released from Nepal during rainy season which is the main cause of floods; and if so, whether the Government contemplates any scheme for desilting the river bed of Koshi to remove the recently deposited silt and if so, the details thereof?

The Kosi River barrage, along with its associated structures and levees/embankments, was originally designed to handle a peak discharge of 9.5 lakh cusecs. The construction of embankment on both sides of the Kosi river in Bihar are not adversely affecting the stability of the river.

Heavy rainfall in the upper catchment areas of Kosi river, which mainly lie in Nepal, causes increased discharge in the river and is one of the main

reason for floods in Supaul, Madhepura, Saharsa, Katihar and Khagaria districts of the State of Bihar. Each year, this region faces flooding in varying degrees.

Erosion and deposition of sediment in a river are natural regulating functions of a river. Rivers tend to maintain a balance between the silt load carried and silt load deposited, maintaining a river regime. Dredging/desilting of rivers is not considered techno-economic feasible solution to mitigate floods as it can provide benefits marginally and is effective only for a short period. Selective dredging in specific reaches such as tidal rivers, confluence points with narrow constrictions, etc., sometimes may have to be undertaken based upon local site conditions. However, the same should be backed by proper scientific model study.

The desilting measures including dredging in specific reaches of rivers for removal of drainage congestion, channel capacity improvement and navigation purpose are formulated and implemented by concerned States/agencies as per requirement. As of date, no proposal for cleaning of silt has been received from the State Govt.

For the comprehensive and holistic management of sediments in a holistic manner, the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, in extensive consultations with Central Government Ministries/ Departments/ State Governments/UTs have prepared the "National Framework for Sediment Management" (NFSM). Its emphasis is on reducing silt generation rather than silt removal and promote technological innovations & best practices. The framework lays emphasis on sediment management through integrated river basin management plan giving due consideration to environment and ecology.

1.4 Whether the Government has any proposal for interlinking the major rivers, viz, Brahmaputra, Ganga, Godavari, Krishna and Cauvery; if so, the details thereof; the time by which the project works are expected to be commenced in this regard; whether the Government proposes to include this project in the PM Gati Shakti Master Plan; and if so, the details thereof?

The Government of India formulated a National Perspective Plan (NPP) for the Interlinking of Rivers for transferring water from surplus basins to deficit basins/areas in 1980. The National Water Development Agency (NWDA) has been entrusted with the work of the Interlinking of Rivers (ILR) under the NPP. Under the NPP, 30 ILR projects have been identified, which, inter alia, includes proposals for linking of rivers Manas (a sub basin of Brahmaputra basin), Sankosh, Tista, Ganga, Damodar, Subernarekha, Mahanadi, Godavari, Krishna, Pennar, Cauvery, Vaigai and Gundar. The Manas-Sankosh-Tista-Ganga-Damodar-Subernarekha-Mahanadi linkage system envisages to provide water to Mahanadi and thereafter, the Mahanadi-Godavari-Krishna-Pennar-Cauvery-Vaigai-Gundar linkage system system to provide water to the down South. Detailed status of ILR Projects under the NPP are enclosed in the **Annexure-I**. (which is attached in Lok Sabha Question No.1.2)

Pending consensus on the Mahandi-Godavari link and the upper links, about 4189 Million Cubic Meters (MCM) of unutilised waters of the Indravati sub-

basin of Chhattisgarh State has been envisaged to be diverted through the Godavari (Inchampalli)-Cauvery link, for providing irrigation benefits to about 5.74 lakh ha area in Telangana, Andhra Pradesh and Tamil Nadu States including supplementation of existing commands. The enroute demands of domestic & industrial needs of these three States including the domestic and industrial needs of the Malaprabha sub-basin in Karnataka and Puducherry have also been considered in the project. The Detailed Project Report for the link project has been prepared and circulated in January, 2024. Based upon the requests received from the party States in various consultation meetings held to bring them to consensus, the proposal for transfer of 4189 MCM from Godavari basin has been combined with the proposal for supplementation in the Krishna basin through Bedti-Varda link. Concerted efforts have been made by the Government of India in consultation with the Party States to bring them to consensus. It is, however, for the party States to reach a consensus for implementation of the link project.

The time by which works of the above ILR projects are expected to be commenced depends upon the party States to reach a consensus for implementation of the respective projects.

There is no such proposal.

Rajya Sabha

1.1 Whether Government has formulated any comprehensive plan for the interlinking of rivers in the country as part of the National Perspective Plan (NPP) to address issues related to water scarcity, flood control, and irrigation; if so, the details of the key interlinking projects currently under implementation, including the rivers involved, progress made so far, and the estimated timeline for their completion; and the expected benefits of river interlinking projects, particularly in terms of improving agricultural productivity, ensuring drinking water supply, and mitigating floods in various regions?

The Government of India formulated a National Perspective Plan (NPP) in 1980 for providing storages and transfer of surplus waters from the water-surplus basins to the water-deficit regions to minimize the miseries brought by droughts and also to mitigate the ravages of annually recurring floods. The National Water Development Agency (NWDA) has been entrusted with work of Interlinking of Rivers (ILR) under the NPP. Under the NPP, 30 ILR projects have been identified, out of which, Detailed Project Reports (DPRs) of 11 link projects, Feasibility Reports (FRs) of 26 link projects and Pre-Feasibility Reports (PFRs) of all the 30 link projects have been completed. The Government of India has accorded top priority to the ILR Programme. Five ILR projects have been identified as the Priority link projects, viz; Ken Betwa Link Project (KBLP), Godavari-Cauvery link project {comprising 3 link projects - Godavari (Inchampalli)- Krishna (Nagarjunasagar) link, Krishna (Nagarjunasagar)-Pennar (Somasila) link and Pennar (Somasila)-Cauvery link} and Modified Parbati-Kalisindh-Chambal link (MPKC) Link project.

The Ken-Betwa Link Project (KBLP) is the first ILR project under the NPP, implementation of which has started. The project was approved by the Government of India in December, 2021, for implementation, with an estimated cost of Rs. 44,605 crore (at price level 2020-21) with a Central Support of at Rs. 39,317 crore. The

major rivers involved in the project include the rivers Ken, Betwa, Orr, Bina, etc. The project is scheduled to be completed by March, 2030. Progress made till date in respect of the project is enclosed at **Annexure-II**.

The details of benefits as planned from the ILR projects under the NPP are given at **Annexure-III**.

Annexure-II

Details of progress made for Ken-Betwa link project (KBLP)

- **Approval by Cabinet:** This is the first link of NPP. The Govt. of India has approved the implementation of KBLP in December, 2021 with an estimated cost of Rs 44605 crore (year 2020-21 price level) with central support of Rs 39317 crore through a Special Purpose Vehicle viz; Ken Betwa Link Project Authority (KBLPA). Initial focus is on land acquisition, R & R and EMP of the project.
- **Benefits:** This project is envisaged to provide annual irrigation of 10.62 lakh ha. in Madhya Pradesh and Uttar Pradesh (mostly in Bundelkhand region) and drinking water supply to approximately 62 lakh people in both the States. The initial focus is land acquisition, R&R of affected people and meeting conditions of environment and forest clearances.
- **Tender of Daudhan Dam:** The tender for Daudhan dam and appurtenant structures has been awarded and the Letter of Acceptance (LOA) was issued by KBLPA on 28.11.2024.
- **Status of Land Acquisition:** Regarding compliance with forest clearance requirements, 6,017 ha of non-forest land have been transferred and notified by the Forest Department of Madhya Pradesh (MP). For submergence areas under the Daudhan Dam, 1,454.33 ha of private land and 1,604.429 ha of Government land were mutated in favour of Water Resources Department (WRD), MP. Land acquisition for the Ken-Betwa Link Canal affected 99 villages in MP, and notifications under Section 11(1) of the RFCTLARR Act, 2013, have been published.
- **Status of Resettlement and Rehabilitation:** For resettlement and rehabilitation (R&R), a special R&R package was approved by the Government of MP in 2023. The matter is regularly reviewed in the meetings of the National Monitoring Committee.

Annexure-III

Details of benefits planned from the ILR Projects

Peninsular component

| Sl. No | Name | States benefited | Annual Irrigation (Lakh hectare) | Domestic & Industrial (Million Cubic Metre) | Hydropower (Megawatt) |
|--------|---|--------------------------------|----------------------------------|---|-----------------------|
| 1. | a. Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link | Andhra Pradesh (AP) and Odisha | 4.43 | 802 | 445 |

| | | | | | |
|-----|---|---|--|---|----------------------------|
| | b. Alternate Mahanadi (Barmul) - Rushikulya - Godavari (Dowlaiswaram) link | AP and Odisha | 6.25 (0.91 + 3.52 + 1.82**) | 700 +125** | 210 + 240** |
| 2 | Godavari (Polavaram) - Krishna (Vijayawada) link @ | AP | 2.1 | 162 | --- |
| 3. | a. Godavari (Inchampalli) - Krishna (Nagarjunasagar) link | Telangana | 2.87 | 237 | 1045 |
| | b. Alternate Godavari (Inchampalli) - Krishna (Nagarjunasagar) link * | Telangana | 2.38 | 232 | 26 |
| 4. | Godavari (Inchampalli/SSMPP) - Krishna (Pulichintala) link | Telangana and AP | 4.74 (0.36+4.38) | 346 | 90 |
| 5. | a. Krishna (Nagarjunasagar)-Pennar (Somasila) link | AP | 5.81 | 124 | 90 |
| | b. Alternate Krishna (Nagarjunasagar) - Pennar (Somasila) link * | AP | 1.71 | 236 | 40 |
| 6. | Krishna (Srisailam) - Pennar link | AP | 1.79 | 58 | 11 |
| 7. | Krishna (Almatti) - Pennar link | Karnataka | 0.69 | 467 | ---- |
| | | AP | 1.57 | 29.83 | |
| 8. | a. Pennar (Somasila) - Cauvery (Grand Anicut) lin | AP, Tamil Nadu and Puducherry | 4.91 (0.49+4.36+0.06) | 1105 | --- |
| | b. Alternate Pennar (Somasila) - Cauvery (Grand Anicut)link* | AP | 0.51 | 43 | --- |
| | | Tamil Nadu | 1.14 | 618 | |
| | | Puducherry | --- | 62 | |
| 9. | Cauvery (Kattalai) - VaigaiGundar link | Tamil Nadu | 4.48 | 218 | --- |
| 10. | a. Parbati - Kalisindh - Chambal link | Madhya Pradesh (MP) & Rajasthan | Alt. I = 2.30 Alt.II = 2.20 | --- 13.2 | --- |
| | b) Modified Parbati-Kalisindh-Chambal link (duly integrated with Eastern Rajasthan Canal Project) | MP and Rajasthan | 3.38 (as per draft PFR) MP - 2.58 Rajasthan- | Rajasthan Domestic-1723 Industrial-286 MP-Domestic 36 | --- |
| 11. | Damanganga - Pinjal link | Maharashtra (only water supply to Mumbai) | --- | 895 | 5 |
| 12. | Par-Tapi-Narmada link | Gujarat | 2.28 | 76 | 21 |
| | | Maharashtra | 0.04 | --- | --- |
| 13. | Ken-Betwa link | Uttar Pradesh (UP) and MP | 10.62 (2.51 +8.11) | 194 | 103 (Hydro) and 27 (Solar) |

| | | | | | |
|-----|--------------------------------|------------|------|-----|-------|
| 14. | Pamba- Achankovil Vaippar link | Tamil Nadu | 0.91 | --- | 3.87 |
| | | Kerala | --- | | 504.5 |
| 15. | Bedti - Varda link@@ | Karnataka | 1.05 | 38 | --- |
| 16 | Netravati – Hemavati link*** | Karnataka | 0.34 | --- | --- |

**Benefit to Odisha from Six Projects of Government of Odisha.

For PKC links at Serial no.10 (a): Alt I- Linking with Gandhisagar Dam, Alt. II- Linking with Rana Pratap Sagar Dam.

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

@ 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.

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

Himalayan Component

| Sl. No | Name | States/ Countries benefited | Annual Irrigation (Lakh hectare) | Domestic & Industrial (Million Cubic Metre) | Hydro power (Megawatt) |
|--------|------------------------------------|-----------------------------|----------------------------------|---|--|
| 1. | Kosi-Mechi link (Inter-State Link) | Bihar and Nepal | 4.74 (2.99+1.75) | 24 | 3180 |
| 2. | Kosi-Ghaghra link | Bihar, UP and Nepal | 8.35 (6.05+1.20 +1.10) | 0 | -- |
| 3. | Gandak - Ganga link | UP and Nepal | 34.58 (28.80+5.78) | 700 | 4375 [Dam Power House (PH)] and 180 (Canal PH) |
| 4. | Ghaghra - Yamuna link | UP and Nepal | 27.84 (25.30 + 2.54) | 1391 | 10884 |
| 5. | Sarda - Yamuna link | UP and Uttarakhand | 2.95 (2.65 + 0.30) | 3054 | 6620 |

| | | | | | |
|-----|---|--|-------------------------------|-----|------------------------------|
| 6. | Yamuna-Rajasthan link | Haryana and Rajasthan | 2.51 (0.11+ 2.40) | 30 | -- |
| 7. | Rajasthan-Sabarmati link | Rajasthan and Gujarat | 11.53 (11.21+0.32) | 102 | -- |
| 8. | Chunar-Sone Barrage link | Bihar and UP | 0.67 (0.13 + 0.54) | -- | -- |
| 9. | Sone Dam - Southern | Bihar and Jharkhand | 3.07 (2.39 + 0.68) | 360 | 95(90 Dam PH) & 5 (Canal PH) |
| 10. | Manas-Sankosh-Tista- Ganga (M-S-T-G) link | Assam, West Bengal (WB) and Bihar | 3.41 (2.05 + 1.00 + 0.36) | -- | -- |
| 11. | Jogighopa-Tista-Farakka link (Alternative to M-S-T-G) | Assam, WB and Bihar | 3.559 (0.975+ 1.564+ 1.02) | 265 | 360 |
| 12. | Farakka-Sundarbans link | WB | 1.50 | 184 | -- |
| 13. | Ganga(Farakka)-Damodar-Subarnarekha - Damodar-Subarnarekha link | WB, Odisha and Jharkhand and Jharkhand | 12.30 (11.18+ 0.39+ 0.73) | 432 | -- |
| 14. | Subarnarekha-Mahanadi link | WB and Odisha | 2.16 (0.18+ 1.98) | 198 | 20 |

1.2 Whether Government is considering or working on any specific scheme for interlinking of rivers in the State of Bihar, if so, the details thereof and the current status, particularly the Kosi-Mechi Link; the timeframe set for completion of interlinking of rivers; the other steps taken by Government for interlinking of rivers in the country, river-wise ; and the details of the benefits occurred in respect of irrigation, drinking water supply and hydropower generation through these projects and their estimated cost?

A National Perspective Plan (NPP) was formulated by the Government of India in 1980, to provide for water transfer from the water-surplus basins to the water-deficit regions. 30 Interlinking of Rivers (ILR) Projects have been identified under NPP. The National Water Development Agency (NWDA) has been entrusted with the work of the ILR Programme under the NPP. There are 6 ILR projects under the NPP, which have been envisaged to, inter alia, benefit the State of Bihar. The status of these ILR Projects is given in **Annexure-IV**.

Apart from the above, the NWDA received ten proposals for intra-state link projects from the Government of Bihar. Out of these ten, three intra-state link proposals were found technically feasible, viz; the Kosi-Mechi intra-State Link Project, the BurhiGandak-None-Baya-Ganga intra-State Link Project and the Kosi-Ganga intra-State link Project.

The Kosi-Mechi intra-State Link Project envisages the diversion of a part of the surplus water of the Kosi River for extending irrigation to un-irrigated areas of the Mahananda river basin lying in Bihar, by way of extending the existing Eastern Kosi

Main Canal (EKMC), so that the rivers Kosi and Mechi, which flow through Bihar, could be linked together within the State. The Link Project will provide additional irrigation facilities in the Kharif season to an area of 2,10,516 hectare (ha) in the new command route of the link in the Mahananda basin, between the rivers Parman and Mechi, covering the districts of Araria, Purnea, Kishanganj and Katihar in the State. The updation of Detailed Project Report (DPR) of the Kosi- Mechi intra-State link project was completed by the NWDA in December, 2022 and subsequently, the project has been accorded techno-economic clearance by the Technical Advisory Committee of the Department of Water Resources, River Development and Ganga Rejuvenation (DoWR,RD&GR), Ministry of Jal Shakti in its 155th meeting held in March 2024, at an estimated cost of Rs. 6282.32 crores at 2022-23 Price Level. Further, the project has also been accorded Investment Clearance by the Investment Clearance Committee of DoWR,RD&GR in its 22nd meeting held in April 2024. Subsequently, the Screening Committee of DoWR,RD&GR has recommended the inclusion of this project under the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) - Accelerated Irrigation Benefit Programme (AIBP).

For ILR projects, the timeframe for their completion would depend upon the respective party States arriving at a consensus and signing the link-specific Memorandum of Agreement (MoA) for the implementation of respective ILR projects.

The Government of India has given top priority to the ILR program and is pursuing with all the linked party states to reach a consensus for its implementation. A Special Committee on Interlinking of Rivers (SCILR) was constituted in September, 2014 for the implementation of the ILR program. 21 meetings of the SCILR have been held so far. Further, a Task Force for Interlinking of Rivers (TFILR) was constituted in April 2015 and 20 meetings of the same have been held so far. States have wide representation and participation in these meetings, wherein concerted efforts are made for consensus building amongst the party States and for setting out road maps for implementation of the ILR projects. It is, however, for the party States to reach a consensus for implementation of an ILR project.

Details of the benefits related to irrigation, drinking water supply, and hydropower generation through the ILR projects are enclosed in **Annexure-V**. The estimated Cost for the ILR projects (30 links) under the NPP is Rs. 8.44 lakh crore at the 2015-16 price level.

ANNEXURE-IV

Status of Inter-Linking of Rivers Projects under the NPP, Benefitting the State of Bihar

| Sl. No. | Name of link project | States / Countries benefitted | Annual Irrigation (Lakh ha) | Domestic & Industrial (MCM) | Hydropower (MW) | Status |
|----------------|------------------------------------|--------------------------------------|------------------------------------|--|------------------------|--|
| 1. | Kosi-Mechi link (Inter-State link) | Bihar and Nepal | 4.74 (2.99+1.75) | 24 | 3180 | Pre-Feasibility Report (PFR) completed |
| 2. | Kosi - Ghaghra link | Bihar, Uttar Pradesh (UP) and Nepal | 8.35 (6.05+1.20+1.10) | 0 | -- | Feasibility Report (FR) completed |

| | | | | | | |
|----|---|-----------------------------------|-------------------------------|-----|-----|--|
| 3. | Chunar-Sone Barrage link | Bihar and UP | 0.67 (0.13 + 0.54) | -- | -- | Draft FR completed |
| 4. | Sone Dam - Southern Tributaries | Bihar and Jharkhand | 3.07 (2.39 + 0.68) | 360 | 95 | Draft FR completed |
| 5. | Manas-Sankosh-Tista-Ganga (M-S-T-G) link | Assam, West Bengal (WB) and Bihar | 3.41 (2.05 + 1.00 + 0.36) | -- | -- | FR completed |
| 6. | Jogighopa-Tista-Farakka link (Alternative to M-S-T-G) | Assam, WB and Bihar | 3.559 (0.975+ 1.564+ 1.02) | 265 | 360 | PFR completed (The proposal has been dropped) |

Annexure-V

DETAILS OF BENEFITS FROM ILR PROJECTS UNDER THE NPP Peninsular Component

| Sl. No | Name of the link | States benefited | Annual Irrigation (Lakh ha) | Domestic & Industrial (Mm3) | Hydro power (MW) | Status |
|--------|---|------------------------------|-----------------------------|-----------------------------|------------------|---------------|
| 1 | a) Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link | Andhra Pradesh (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= 1,045 | FR completed |
| | b.) Alternate Godavari (Inchampalli)- Krishna (Nagarjunasagar) link* | Telangana | 2.38 | 23 L | 26 | DPR completed |

| | | | | | | |
|----|---|---|---|---|----|---------------------|
| 4 | Godavari (Inchampalli/SSHPP)-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 | 1.71 | 236 | 40 | DPR completed |
| 6 | Krishna (Srisailem)-Pennarlink | -- | 1.79 | 58 | 11 | Draft DPR completed |
| 7 | Krishna (Almatti)-Pennar link | Karnataka | 0.69 | 467 | -- | Draft DPR completed |
| | | AP | 1.57 | 29.83 | | |
| 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 (GrandAnicut) link* | AP | 0.51 | 43 | | DPR completed |
| | | Tamil Nadu | 1.14 | 618 | | |
| | | Puducherry | -- | 62 | | |
| 9 | Cauvery (Kattalai)-Vaigai-Gundar link | TamilNadu | 4.48 | 218 | -- | DPR completed |
| 10 | a) Parbati-Kalisindh-Chambal link | Madhya Pradesh (MP) & Rajasthan | Alt.I=2.30 Alt.II =2.20 | - 13.2 | -- | FR completed |
| | b) Modified Parbati – Kalisindh-Chambal link (duly intergrated with ERCP) | MP & Rajasthan | 3.38 (as per draft PFR) MP-2.58 Rajasthan-0.8 | Rajasthan- Domestic-1723 MCM Industrial-286 MCM MP-Domestic-36 MCM | | Draft PFR completed |
| 11 | Damanganga - Pinjal link(As per DPR) | Maharashtra (only water supply to Mumbai) | -- | 895 | 5 | DPR completed |
| 12 | Par-Tapi-Narmada link | Gujarat | 2.28 | 76 | 21 | DPR completed |
| | | Maharashtra | 0.04 | -- | -- | |

| | | | | | | |
|----|-------------------------------|--------------------------------|----------------------|-----|-------------------------------------|--|
| 13 | Ken-Betwa link | Uttar Pradesh & Madhya Pradesh | 10.62 (2.51+8.11) | 194 | 103 (Hydro) & 27MW (Solar) | DPR completed & implementation initiated |
| 14 | Pamba-Achankovil-Vaippar link | Tamil Nadu | 0.91 | -- | 3.87 | FR completed |
| | | Kerala | | | 504.5 | |
| 15 | Bedti-Varda link* | Karnataka | 1.05 | 38 | ---- | DPR completed |
| 16 | Netravati-Hemavati link*** | Karnataka | 0.34 | -- | -- | PFR completed |

**Benefit from six projects of Govt. of Odisha.

For PKC links at Serial no. 10 (a) :Alt I- Linking with Gandhisagar Dam;Alt. II- Linking with Rana Pratapsagar Dam

* 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 completed. Godavari-Cauvery(Grand Anicut)link project has been prepared comprising Godavari(Inchampalli/Janampet)-Krishna (Nagarjunasagar), Krishna(Nagarjunasagar)-Pennar (Somasila)and Pennar (Somasila)-Cauvery(Grand Anicut)link projects. The report was further updated terminating the link canal at Manimukhta Nadi, a tributary of the Vellar River flowing adjacent to the Cauvery basin.

* Bedti-Varda Link-DPR was prepared directly after the preparation of its PFR, no FR was prepared.

** Godavari (Polavaram)-Krishna (Vijayawad) Link- the project has been taken up by Govt. of Andhra Pradesh.

*** Further studies have 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 of the Link | 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 | 3,180 | PFR completed |
| 2. | Kosi-Ghaghra link | Bihar, Uttar Pradesh (UP) & Nepal | 8.35 (6.05+1.20+1.10) | 0 | -- | FR completed |
| 3. | Gandak-Ganga link | UP & Nepal | 34.58 (28.80+5.78) | 700 | 4,375(Dam PH) & 180 (Canal PH) | FR Completed and circulated |

| | | | | | | |
|-----|---|-------------------------------|-----------------------------|------|--------|---|
| 4. | Ghaghra – Yamuna link | UP & Nepal | 27.84 (25.30+2.54) | 1391 | 10,884 | Draft FR Completed |
| 5. | Sarda-Yamuna link | UP & Uttarakhand | 2.95 (2.65+0.30) | 3054 | 6620 | FR completed |
| 6. | Yamuna-Rajasthan link | Haryana & Rajasthan | 2.51 (0.11+2.40) | 30 | -- | FR completed |
| 7. | Rajasthan-Sabarmatilink | Rajasthan & Gujarat | 11.53 (11.21+0.32) | 102 | -- | FR completed |
| 8. | Chunar-Sone Barragelink | Bihar & UP | 0.67 (0.30+0.37) | -- | -- | Draft FR completed |
| 9. | Sone Dam -Southern Tributaries of Ganga link | Bihar & Jharkhand | 3.07 (2.99+0.08) | 360 | 95 | PFR completed |
| 10. | Manas-Sankosh-Tista-Ganga (M-S-T-G) link | Assam, West Bengal(WB)& Bihar | 3.41 (2.05+1.00+0.36) | -- | -- | FR completed |
| 11. | Jogighopa-Tista-Farakka link (Alternative to M-S-T-G) | Assam, WB & Bihar | 3.559 (0.975+1.564+1.02) | 265 | 360 | PFR Completed (The proposal has been dropped) |
| 12. | Farakka-Sundarbans link | WB | 1.50 | 184 | -- | FR completed |
| 13. | Ganga(Farakka)-Damodar-Subarnarekha link | WB,Odisha & Jharkhand | 12.30 (11.18+0.39+0.73) | 432 | -- | FR completed |
| 14. | Subarnarekha - Mahanadi link | WB & Odisha | 2.16 (0.18+1.98) | 198 | 20 | FR completed |

1.3 The potential benefits of the Wainganga-Nalganga river linking project, and whether it will impact the water availability in the Buldhana district; whether the potential synergies and trade-offs between interlinking of rivers and other water management strategies, such as water storage, conservation, and efficiency measures; and (whether the construction of 426.52 km of link canals will affect the local ecosystem and wildlife habitats and the potential social implications of the project, including the impact on local communities and their access to water?

The Wainganga (Gosikhurd) - Nalganga (Purna Tapi) intra-State link project takes off from the right flank of the Gosikhurd dam and traverses a length of about 427 Kilometre (km) through six districts of Maharashtra. As per the Detailed Project Report (DPR), the link project envisages diversion of 1772 Million Cubic Meters (MCM) of water from the Gosikhurd (Indira Sagar) project on Wainganga river in

Pranhita sub-basin of Godavari basin for extending irrigation, domestic and industrial water supply benefits in six districts of Vidarbha region of Maharashtra, viz; Nagpur, Wardha, Amravati, Yeotmal, Akola and Buldhana, before outfalling into Nalganga project on Nalganga river in Tapi basin.

The link canal envisages to provide irrigation benefits to about 371277 hectare (ha) of new command area, utilising 1286 MCM of water. Out of this, 38214 ha area lies in Shegaon and Motala tehsils of Buldhana district utilising 140 MCM. 32 MCM of water is envisaged to be provided for drinking water supply to the enroute villages/towns lying in the command area in the above cited six districts and 397 MCM to industries in the vicinity of the link project, while the transmission losses work out to be 57 MCM. Further, since the diversion of 1772 MCM of water has been envisaged through the proposed link canal during the three monsoon months of July to September, which constitutes the prime flood season, the project would also help in mitigation of the intensity of flood in the downstream.

As intimated by the Government of Maharashtra, most of the command area of the scheme is drought prone. The existing water conservation measures are not enough to cater to the needs of domestic water supply, industries and irrigation. The scheme has therefore been envisaged to supplement water in the command area, by way of construction of 31 new dams and use of 6 existing dams along with about 427 km long main canal.

At DPR stage of Wainganga (Gosikhurd)-Nalganga (Purna Tapi) intra-State link project, all the parameters for Environmental Impact Assessment (EIA) and Environmental Management Plan as well as Socio-Economic Studies with Resettlement and Rehabilitation Plan have been duly considered. The impact of construction as well as operation phases of project on various aspects of ecosystem has been assessed.

1.4 The details of the present status of interlinking of Godavari and Cauvery rivers; whether any broad agreement / consensus has been reached to link Godavari and Cauvery rivers; if so, the details thereof and if not, the reasons therefor; the likely time by when these two rivers will be linked in order to relieve Tamil Nadu of the present waterwoes; and the steps taken by Government in this regard?

The Government of India formulated a National Perspective Plan (NPP) for transferring water from water surplus basins to water-deficit regions, in 1980. The National Water Development Agency (NWDA) has been entrusted with the work of the Interlinking of Rivers (ILR) program under the NPP. The Godavari-Cauvery link project is among the 30 link projects, identified under the NPP.

Detailed Project Reports (DPRs) of the Godavari-Cauvery Link Project [comprising 3 link projects, viz; Godavari-Krishna (Nagarjunasagar) link, Krishna (Nagarjunasagar)-Pennar (Somasila) link and Pennar (Somasila)-Cauvery (Grand Anicut) link] envisaging diversion of 7000 Million Cubic Metres (MCM) of water from the Godavari river were prepared and circulated to the party States in April 2021.

Five consultation meetings for arriving at a consensus among the party States have been so far held. As per the decision taken during the consultation meeting held on 18.2.2022, a proposal limiting the transfer of water from 7000 MCM to about

4000 MCM from Godavari along with combining the proposal for supplementation in the Krishna basin through the Bedti-Varda link has been studied by the NWDA. The modified proposal comprises two components, viz; (a) Godavari (Inchampalli)-Cauvery link project envisages the diversion of 4189 MCM from Godavari to Cauvery with the introduction of a micro irrigation system to improve water use efficiency and (b) the Bedti-Varda link project envisages the diversion of 524 MCM from the Bedti River to the Tungabhadra reservoir.

A Technical Feasibility Report on the proposal of diversion of 4189 MCM of Godavari water was prepared by NWDA and circulated in January 2023 amongst the party States. The comments received from the party States have been deliberated in the consultation meetings and subsequently, a DPR for the diversion of 4189 MCM through the Godavari (Inchampalli)-Cauvery link project has been prepared and circulated to the party States in January, 2024.

The Government of India has accorded top priority to the ILR programme and has been pursuing the programme in a consultative manner. The Government of India has made vigorous efforts at various levels for consensus building amongst the respective party States for implementation of matured ILR projects, including the Godavari-Cauvery link project. A Special Committee on Interlinking of Rivers (SCILR) has been constituted in September, 2014 for the implementation of ILR programme. 21 meetings of the SCILR have been held so far. Further, a Task Force for Interlinking of Rivers (TFILR) has been constituted in April, 2015 and 20 meetings of the same have been held so far. States have wide representation and participation in these meetings, wherein concerted efforts have been made for consensus building amongst the party States and for setting out road maps for implementation of the ILR projects. Apart from this, with a view to deliberate the issues regarding the Godavari-Cauvery link project and to expedite the consensus building for implementation of the link project, separate meetings have also been held with the representatives of the party States. It is, however, for the party States to reach a consensus for implementation of an ILR project.

The likely time by which these two rivers will be linked would depend upon the party States arriving at a consensus for implementation of the link project.