INTER-LINKING OF RIVERS

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGLA REJUVENATION be pleased to state:

(a) the current status of inter-linking of rivers under the National Perspective Plan of the Government, river/State-wise, along with the expenditure estimated to be incurred in linking of each river;
(b) whether any suggestions/requests/ objections have been received from certain States in this regard and if so, the details thereof including the action taken thereon;
(c) the quantum of funds allocated/ released/spent, if any, for the purpose so far, State/UT-wise;
(d) whether the Government has conducted or plans to conduct a social impact and environmental assessment of the effect on the livelihood of the people living in areas likely to be affected due to the project, if so, the details thereof; and
(e) the time by which each river linking is likely to be started/completed along with the benefits likely to accrue therefrom?

ANSWER
THE MINISTER OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGLA REJUVENATION
(SUSHRI UMA BHARTI)

(a) This Ministry has formulated a National Perspective Plan (NPP) for Water Resources Development envisaging inter-basin transfer of water from surplus basins to deficit basins/ areas. Based on surveys, investigations and detailed studies, National Water Development Agency (NWDA) has prepared pre-feasibility reports which facilitated identification of 30 links under the NPP. The status of river links identified under NPP are given in Annexure-I. Based on the concurrence of the States, Detailed Project Reports (DPR) for Ken-Betwa, Damanganga-Pinjal and Par-Tapi-Narmada links have been completed by NWDA.
The initial cost of the Inter Linking projects as estimated in Preliminary Studies at Pre-feasibility/Feasibility stage by the then Task Force on Interlinking of Rivers (TF-ILR-2002) is Rs 5.60 Lakh crore at 2002 Price Level. The expenditure on inter-linking projects can be estimated only after completion of Detailed Project Report (DPRs) of individual link projects. The estimated expenditure of link projects for which Detailed Project Reports have been completed is given at **Annexure-II**.

(b) The Government is pursuing the Interlinking of River program in a consultative manner. Its implementation is dependent upon the consensus and co-operation of the concerned States and upon obtaining various mandatory clearances from Ministry/ Departments of Central and State Governments including statutory clearances. The details of objections raised by concerned State Governments for taking up Feasibility Report (FR)/DPR of proposed inter-linking of river projects are given at **Annexure III**.

(c) Ministry of Water Resources, River Development & Ganga Rejuvenation has kept an amount of Rs.280 cr in 12th Five year plan, for preparation of Pre-feasibility Report (PFR), Feasibility Report (FR) and Detailed Project Report (DPR) for the various river-link projects. The budgetary provision for preparation of Feasibility Reports (FRs) and Detailed Project Reports (DPRs) for the last three Financial Year viz. 2012-13, 2013-14 and 2014-15 is Rs. 51.30 cr., Rs. 63.20 cr., and Rs. 60.0 cr. respectively, and for Fiscal Year 2015-16 Rs. 69.0 cr. has been allocated. The expenditure has been incurred for studies for establishing viability of the proposals from hydrological and technical angles. The expenditure incurred, is not maintained project-wise/State-wise.

(d) At the time of preparation of Detailed Project Report of the individual river link projects, detailed Environmental Impact Assessment (EIA) studies as per Terms of Reference approved by Environmental Appraisal Committee (EAC) of Ministry of Environment and Forests &CC are carried out. All environmental impacts and issues arising out of the EIA studies are duly addressed in Environmental Management Plan which forms a part of DPR. Resettlement and Rehabilitation (R&R) Plan in respect of project affected persons is an integral part of the implementation of any Inter Linking of River project and is included in the DPR.

(e) The time limit for the completion of individual link project can be identified only after Detailed Project Reports are techno- economically approved. The implementation of National Perspective Plan for water Resources Development would create an additional irrigation potential of approximately 35 million hectares and generate 34000 mega watts (MW) hydro power apart from the incidental benefits of flood moderation, navigation, drinking and industrial water supply, fisheries, salinity and pollution control etc. This is a big focus area of the Ministry and a special committee of the Ministry regularly reviews the programme.

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ANNEXURE-I

Annexure referred to in reply to part (a) of Unstarred Question No. 397 due for answer in Lok Sabha on 25.02.2016 regarding Inter-linking of Rivers.

Present status of Inter Basin Water Transfer Links

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name</th>
<th>States concerned</th>
<th>States benefited</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peninsular Component</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link</td>
<td>Odisha, Maharashtra, Andhra Pradesh, Karnataka, &amp; Chattisgarh,</td>
<td>Andhra Pradesh &amp; Odisha</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>2</td>
<td>Godavari (Inchampalli) - Krishna (Pulichintala) link</td>
<td>-do-</td>
<td>-do-</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>3</td>
<td>Godavari (Inchampalli) - Krishna (Nagarjunasagar) link</td>
<td>Odisha, Maharashtra, Madhya Pradesh, Andhra Pradesh, Karnataka &amp; Chattisgarh,</td>
<td>-do-</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>4</td>
<td>Godavari (Polavaram) - Krishna (Vijayawada) link</td>
<td>Odisha, Maharashtra, Andhra Pradesh, Karnataka, &amp; Chattisgarh,</td>
<td>Andhra Pradesh</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>5</td>
<td>Krishna (Almatti) – Pennar link</td>
<td>-do-</td>
<td>Andhra Pradesh &amp; Karnataka</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>6</td>
<td>Krishna (Srisailam) – Pennar link</td>
<td>-do-</td>
<td>--</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>7</td>
<td>Krishna (Nagarjunasagar) - Pennar (Somasila) link</td>
<td>Maharashtra, Andhra Pradesh &amp; Karnataka,</td>
<td>-do-</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>8</td>
<td>Pennar (Somasila) - Cauvery (Grand Anicut) link</td>
<td>Andhra Pradesh, Karnataka, Tamil Nadu, Kerala &amp; Puducherry</td>
<td>Andhra Pradesh, Tamil Nadu &amp; Puducherry</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>9</td>
<td>Cauvery (Kattalai) - Vaigai -Gundar link</td>
<td>Karnataka, Tamil Nadu, Kerala &amp; Puducherry</td>
<td>Tamil Nadu</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>10</td>
<td>Ken-Betwa link a) Ken-Betwa Link Phase-I b) Ken-Betwa link Phase-II</td>
<td>Uttar Pradesh &amp; Madhya Pradesh</td>
<td>Uttar Pradesh &amp; Madhya Pradesh</td>
<td>DPR Phase-I completed in April 2010 &amp; DPR Phase-II completed in January 2014</td>
</tr>
<tr>
<td>11</td>
<td>Parbati -Kalisindh- - Chambal link</td>
<td>Madhya Pradesh, Rajasthan &amp; Uttar Pradesh (UP requested to be consulted during consensus building)</td>
<td>Madhya Pradesh &amp; Rajasthan</td>
<td>Feasibility Report Completed</td>
</tr>
<tr>
<td>12</td>
<td>Par-Tapi-Narmada link</td>
<td>-do-</td>
<td>Gujarat</td>
<td>DPR completed in August, 2015</td>
</tr>
<tr>
<td>No.</td>
<td>Project Name</td>
<td>States/Regions</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>13</td>
<td><strong>Damanganga - Pinjal link</strong> (As per DPR )</td>
<td>Maharashtra &amp; Gujarat</td>
<td>Maharashtra (only water supply to Mumbai) DPR Completed in March 2014</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td><strong>Bedti - Varda link</strong></td>
<td>Maharashtra, Andhra Pradesh &amp; Karnataka</td>
<td>Karnataka Pre-Feasibility Report Completed</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td><strong>Neravati – Hemavati link</strong></td>
<td>Karnataka, Tamil Nadu &amp; Kerala</td>
<td>Karnataka Pre-Feasibility Report Completed</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td><strong>Pamba - Achankovil - Vaippar link</strong></td>
<td>Kerala &amp; Tamil Nadu,</td>
<td>Tamil Nadu Feasibility Report Completed</td>
<td></td>
</tr>
</tbody>
</table>

**Himalayan Component**

1. Manas-Sankosh-Tista-Ganga (M-S-T-G) link  
   Assam, West Bengal, Bihar & Bhutan  
   Assam, West Bengal & Bihar  
   FR in progress

2. Kosi-Ghaghra link  
   Bihar, Uttar Pradesh & Nepal  
   Bihar & Uttar Pradesh  
   FR in Indian portion in progress

3. Gandak-Ganga link  
   -do-  
   Uttar Pradesh  
   Draft FR completed (for Indian portion)

4. Ghaghra-Yamuna link  
   -do-  
   Uttar Pradesh  
   FR completed (for Indian portion)

5. Sarda-Yamuna link  
   Bihar, Uttar Pradesh, Haryana, Rajasthan, Uttarakhand & Nepal  
   Uttar Pradesh & Uttarakhand  
   FR completed (for Indian portion)

6. Yamuna-Rajasthan link  
   Uttar Pradesh, Gujarat, Haryana & Rajasthan  
   Haryana & Rajasthan  
   Draft FR completed

7. Rajasthan-Sabarmati link  
   -do-  
   Rajasthan & Gujarat  
   Draft FR completed

8. Chunar-Sone Barrage link  
   Bihar & Uttar Pradesh  
   Bihar & Uttar Pradesh  
   Draft FR completed

9. Sone Dam – Southern Tributaries of Ganga link  
   Bihar & Jharkhand  
   Bihar & Jharkhand  
   FR in progress

10. Ganga(Farakka)-Damodar-Subernarekha link  
    West Bengal, Odisha & Jharkhand  
    West Bengal, Odisha & Jharkhand  
    Draft FR completed

11. Subernarekha-Mahanadi link  
    West Bengal & Odisha  
    West Bengal & Odisha  
    Draft FR completed

12. Kosi-Meichi link  
    Bihar, West Bengal & Nepal  
    Bihar  
    PFR completed. FR to be taken up Entirely lies in Nepal

13. Farakka-Sunderbans link  
    West Bengal  
    West Bengal  
    Draft FR completed

    -do-  
    Assam, West Bengal & Bihar  
    Alternative to M-S-T-G Link. Not to be taken up.

FR  --  Feasibility Report  
PFR  --  Pre feasibility Report  
DPR  --  Detailed Project Report  
S&I  --  Survey and Investigation  
MCM  --  Million Cubic Meters
Annexure referred to in reply to part (a) of Unstarred Question No. 397 due for answer in Lok Sabha on 25.02.2016 regarding Inter-linking of Rivers.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Links projects for which DPR is completed</th>
<th>Estimated expenditure as per DPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ken-Betwa (Phase-I &amp; Phase-II) link</td>
<td>The estimated cost of Ken-Betwa Link Project Phase-I and Phase-II are about Rs. 9392.99 crores (2007-08 price level) and about Rs.2282.94 crores (2012-13 price level) respectively.</td>
</tr>
<tr>
<td>2.</td>
<td>Damanganga – Pinjal link</td>
<td>The estimated cost of Damanganga-Pinjal link Project is about Rs.2746.61 crores (2013-14 price level).</td>
</tr>
<tr>
<td>3.</td>
<td>Par-Tapi-Narmada link</td>
<td>The estimated cost of Par-Tapi-Narmada Link Project is almost Rs.9279 cr. (2014-15 price level)</td>
</tr>
<tr>
<td>4.</td>
<td>BurhiGandak-Noon-Baya-Ganga Link Project</td>
<td>The estimated cost of BurhiGandak-Noon-Baya-Ganga Link Project is about Rs.4213.75 crores (2012-13 price level).</td>
</tr>
<tr>
<td>5.</td>
<td>Kosi-Mechi Link Project</td>
<td>The estimated cost of Kosi-Mechi Link Project is about Rs.2903.25 crores (2013-14 price level)</td>
</tr>
</tbody>
</table>
Annexure referred to in reply to part (b) of Unstarred Question No. 397 due for answer in Lok Sabha on 25.02.2016 regarding Inter-linking of Rivers.

**Link wise Details of objections raised by various State Governments**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Link Project</th>
<th>Concerned States</th>
<th>Objections raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pamba - Achankovil - Vaippar link</td>
<td>Tamil Nadu &amp; Kerala</td>
<td>Kerala Assembly has passed a resolution against taking up of the Link Project (2003)</td>
</tr>
<tr>
<td>2</td>
<td>Parbati – Kalisindh – Chambal link</td>
<td>Madhya Pradesh &amp; Rajasthan</td>
<td>Govt. of Madhya Pradesh wants to implement intra-State Links in place of this Link Project.</td>
</tr>
<tr>
<td>3</td>
<td>Mahanadi (Manibhadra) – Godavari link</td>
<td>Odisha</td>
<td>Govt. of Odisha is not agreeable to this link Project due to large submergence of Manibhadra dam/reservoir and wants alternate diversion point.</td>
</tr>
<tr>
<td>4</td>
<td>Netravati – Hemavati link</td>
<td>Karnataka &amp; TamilNadu</td>
<td>Govt. of Karnataka intends to utilize Netravati water as per its own plan.</td>
</tr>
</tbody>
</table>

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