National Perspective Plan for Water Resources Development

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Need for the plan : In recent years considerable interest has been evinced both in the press and other public forums as well as in the Parliament regarding the need of a National Water Policy aiming at optimum development and most efficient utilization of the country's water resources for the benefit of the entire nation, overriding narrow regional considerations. Such a programme providing for storages and transfers of surplus waters can mitigate the ravages of annually recurring floods and also minimize the miseries brought by droughts.

Previous attempts to frame national perspective plans

In the past, there have been a couple of attempts at evolving such a national plan for development of the entire water resources of the nation. These proposals had, however, basic limitations.

Dr. Rao's Proposal- Ganga-Cauvery Link

The proposal visualized the following:

- Ganga-Cauvery link
- Ganga-Brahmaputra link
- Canal from Narmada to Gujarat and Western Rajasthan
- Links from Western Ghats
- Link from Chambal to Ajmer
- Canal from Mahanadi to Sharda

Captain Dastur's Proposals-Garland Canal

Captain Dastur's proposal mainly consists of two canal viz. (i) The Himalayan Canal at a level of 1100-1500ft. and (ii) the Garland Canal at a level of 800-1000 ft. He also proposed to have lakes one mile wide and 100ft. deep along the canal

alignment by cutting back the hill slopes. The Dastur proposals suffered from fundamental technical deficiencies.

National Perspective for Water Resources Development – Board Approach and Principles

The Ministry of Irrigation(now called Ministry of Jalshakti) and the Central Water Commission had formulated a National Perspective for Water Development. The broad approach adopted was as follows:

Existing uses have been kept undisturbed;

- **Normal water development under the existing legal and constitutional framework is assumed** to take place fully by the turn of the century
- The perspective envisages **developments within the framework of all the existing agreements** between or amongst the states within the country as well as existing treaties with the neighbouring countries
- The **plan is based on optimum development of available storage sites** including **development of new storages,** big and small, wherever feasible. **Inter-linking of the major rivers was envisaged**
- The plan envisages **multipurpose and multi-objective development of water resources,** namely, irrigation, flood control, hydro-power generation and navigation
- Power installations have been so envisaged that peak requirements of the regional power grid are made to the maximum extent.
- While planning inter-basin and inter-State transfer of waters, reasonable needs of the basin States for the foreseeable future have been kept in view and provided for
- **Most efficient use of land and water in the existing irrigation and hydro- power stations** has been kept as a principal objective to be achieved in the next 15-20 years

- **Water development should have preservation and enhancement of the environment as one of the major objectives**, and provide for the funds needed for afforestation and improvement of forests in areas nearby. Recreation, fisheries development etc. should also be taken into account;
- **Domestic and industrial uses of water as well as for irrigation should be given high priority**. Pollution control should be one of the main objectives
- **The people to be displaced by project works should be given liberal facilities for rehabilitation** and resettlement so that their living conditions are improved.

Outline of the Perspective

This perspective comprises two main components, viz:

1. Himalayan Rivers Development, and
2. Peninsular Rivers Development. These are briefly outlined below;

Himalayan Rivers Development

- It envisages **construction of storage reservoirs on the main Ganga and the Brahmaputra** and their principal **tributaries in India and Nepal** along with **inter-linking canal system to transfer surplus flows** of the eastern tributaries of the Ganga to the West apart from linking of the main Brahmaputra with the Ganga.
- Apart from providing irrigation to an additional area of about 22 million hectares the generation of about 30 milloion kilowatt of hydro-power, it will provide substantial flood control in the Ganga-Brahmaputra basin.
- It would provide 40,000 cusecs to Calcutta Port and would provide navigation facilities across the country.
- The scheme will benefit not only the States in the Ganga-Brahmaputra Basin, but also our neighbours – Nepal

and Bangladesh as well as the Northern and the Western States in our country.
- Implementation of this scheme will however largely depend on the cooperation of neighbouring countries.

Peninsular Rivers Development

This is divided into four major parts;

Part-I- Interlinking of Mahanadi-Godavari-Krishna-Pennar-Cauvery:

- It proposes to divert the surplus water of the Mahanadi and the Godavari to the water-short rivers viz; the Krishna, the Pennar and the Cauvery.
- The Mahanadi will also be linked on the north with Bura-Balang, and 6 million acre feet of Mahanadi waters will be utilized for irrigating the coastal areas in Orissa and interlinking the rivers to even out the hydrological variations.
- Essentially this proposal contemplates diversion of 15 million acre feet of Mahanadi flows to the Godavari and a transfer of 30 million acre feet from the Godavari and its tributaries to the Krishna Basin

Part-II- Interlinking of West Flowing Rivers, North of Bombay and South of Tapi:

- A number of rivers of short length flow in the West Coast North of Bombay and South of Tapi. Amongst the rivers are Ulhas, Vaitarni, Damanganga, Mindhola, Purna, Ambica, Auranga, Par and Kolak.
- These coastal rivers drain over 20,000 square kilometers areas of high rainfall ranging from 2000 to 2500 millimetres annually and carry plentiful supplies and have short coastal plains and therefore have significant surpluses.
- Construction of as many optimal storages as possible on these streams and interlinking them can make available appreciable quantum’s of water for transfer to areas

where additional water is needed badly.

Part-III- Inter-linking of Ken with Chambal

- The Ken, Dhasan, Betwa, Sindh Chambal rivers are southern tributaries of the Yamuna draining about 2.4 lakh square kilometers including Malwa plateau and Bundelkhandand Baghelkhand which are amongst the most backward regions in the country and are prone to frequent droughts.

Part-IV – Diversion of West Flowing Rivers

- The rainfall varies from 1500 millimetres to 5200 millimetres. The narrow coastal belt has numerous rivers and streams which empty into the Arabian Sea.
- The problem in Kerala is, therefore, one of storage and conveying water from one river basin to another and transferring the surplus portion of it from west to east for irrigation in an economical manner.

Current status of the plan

- Under the National Perspective Plan (NPP), National Water Development Authority has already identified 14 links under Himalayan Rivers Component and 16 links under Peninsular Rivers Component for inter basin transfer of water based on field surveys and investigation and detailed studies.
- Out of these, Feasibility Reports of 14 links under Peninsular Component and 2 links (Indian portion) under Himalayan Component have been prepared.
- Draft Feasibility Reports of 7 link projects (Indian portion) of Himalayan Component have also been completed.

Benefits of NPP

The National Perspective Plan would give additional benefits of 25 million hectares of irrigation from surface waters, 10

million hectares by increased use of groundwater, totaling to 35million hectares and 34,000 MW of hydro-power generation.