

## Interlinking of rivers - A vital necessity

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### Introduction

Water plays an important role in the existence of mankind. India has substantial water resources, but their distribution over the land is uneven. This is mainly because of the uneven rainfall distribution, both in space and time, even during the monsoon season. It varies from 12 cm in Rajasthan Desert to 1060 cm at Cherapunji in Meghalaya, as well as Western Ghats of south India.

Total precipitation in India is 4000 BCM including the total surface runoff of 1953 BCM. Out of this Ganga-Brahmaputra-Meghna Basin, covering roughly one third of the geographical area, accounts 60% of the resources. The water resource of the west flowing rivers occupying 3% of the geographical area is estimated at 200 BCM working out of 11% of the resource. The balance resource in the remaining 64% of the area is 553 BCM. just 28% of the resource. However utilizable surface water is 690BCM.

In case of groundwater, the total replenish able resource is estimated at 432 BCM. Out of this 71 BCM is meant for domestic and industrial usage besides other system losses. Balance 325 BCM is used for irrigation sector. In general the demand of fresh water from different sectors has been growing against a more or less fixed availability, resulting in scarcity situation in different parts in country.

As per International standard a country with less than 1700 cubic meter per person per year is considered water stressed. When the availability drops to below 1000, it is called water scare. India with present availability of 1800 cubic meter is nearly water stressed.

The tentative projection of water requirement for various sectors in the country as assessed by the Standing Sub-committee of Tenth Five Years Plan.

Use	Year		
	2000	2010	2025
Domestic	42	56	52
Irrigation	541	688	910
Industry	8	12	23
Energy	2	5	15
Others	41	52	72
Total	634	813	1093

Thus, it can be seen that the country's total water requirement barely matches the estimated utilizable water resources. The situation calls for an effective water management strategy for utmost efficiently in water conservation and optimum utilization like control of conveyance and evaporation losses, adoption of drip and sprinkler Irrigation methods, Inter-basin water transfers, etc. The planning for long-term future may have to include non-conventional sources like inter-basin transfers. The concept of interlinking of

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rivers envisages construction of 30 links, at a cost of Rs. 5,60,000/- crore. It would add to 25 Mha irrigation. Hydropower generation of 34000 MW is envisaged.

### **Inter-basin transfer**

The rivers like Ganga, Brahmaputra, Mahanadi, Godavari, etc will carry large volumes of surplus water which goes to the sea. The country with many drought prone areas cannot afford to lose this surplus water. It is essential that these waters are utilized for meeting the needs of the areas of deficiency. The National water Grid has therefore been conceived for remedying this imbalance to a certain extent by transferring waters from surplus regions to deficit areas by creating storages and interlinking of various river basins so that trans - basin transfer of water becomes possible. Large storages are essentially required to conserve monsoon flows of optimum and timely utilization and harnessing all the utilizable water resources. It is estimated that the utilizable quantum can be increased by 250 km<sup>3</sup> by inter basin transfer of water. The additional irrigation potential after implementation of interlinking proposals would be around 25Mha from surface water and 10Mha from increased use of groundwater.

### **National Water Policy**

The National Water Policy adopted by the Government of India emphasizes the need for inter-basin transfer of water in view of several water surplus and deficit areas within the country. It states "Water should be made available to water short areas by transfer from other areas including transfers from one river basin to another based on National Perspective after taking into

account requirement of the areas/basin."

### **Advantages**

There are lots of advantages of this project.

- It will produce lot of hydroelectricity, which will be solution to our power problem and also decrease pollution up to some extent.
- It will control flood.
- It will create many jobs- construction jobs, when the rivers are being linked, and new jobs in transportation, manufacturing, agriculture, fisheries and tourism.
- The urbanization trend can be reversed by creating farm and off farm jobs in rural area through this project.
- Resolve inter state problem.
- Creation of 37 million men per year employment.
- Boost of GDP by 4%.
- Intangible benefits include the creation of sense of nationality .

### **Conclusions**

From the foregoing discussion, it is concluded that the vital importance of water for life for maintaining ecological balance, and for economic and developmental activities of all kinds, planning and management of the resources and its optimal and equitable use has become a matter of utmost urgency.

The Union Government believes that interlinking rivers would be the right solution to it. Therefore, there is an urgent need to carry out detailed study of the components of this project. From the overall observations, the interlinking of rivers will be very much beneficial for fulfilling future demand of every human being.