Integrating of Rivers in India: Boost to Economy or Environmental Disaster

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ABSTRACT

The interlinking of river project is a Civil Engineering project, which aims to connect Indian rivers through reservoirs and canals. The farmers will not have to depend on the monsoon for cultivation and also the excess or lack of water can be overcome during flood or drought. The purpose of interlinking the rivers is to join the Indian rivers through reservoirs and canals. This will solve the problems of flood and will provide water throughout the year. Farmers will also get benefit as they will not be dependent on monsoon for water etc. This article is based on the river linking project, in which its history and the benefits of this project are covered. The Supreme Court of India, in 2002 directed the central government to link major Indian rivers within 10 years. In December 2002, the government appointed a task force on interlinking of 37 rivers and the dead line was extended by 2016. The RIL project not only raises national issue but also give way to international conflict in South Asia over sharing of river waters. The paper examines the impact of the RIL project on the paradigms and working of Indian federalism. It is based on triangulation of theory and qualitative method that applies content analysis of primary and secondary sources to draw conclusion. It finds that in the Indian Constitution water is in the State List while inter-state river is in the Union List and taking up such a mega RIL project without the consent of the concerned states is unacceptable. It considers the directive of the Supreme Court indeed, as an act of judicial activism.

INTRODUCTION:

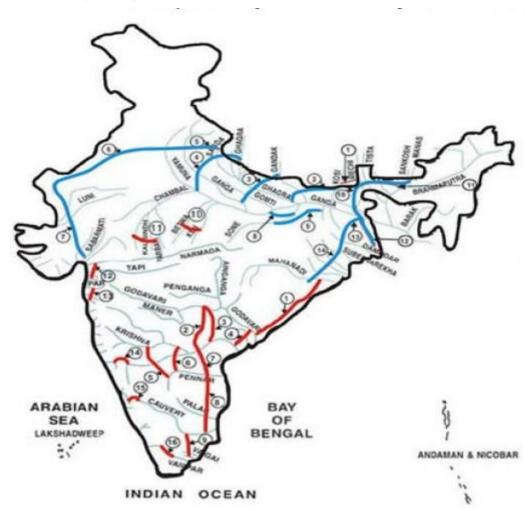
The interlinking of river project is a Civil Engineering project, which aims to connect Indian rivers through reservoirs and canals. The farmers will not have to depend on the monsoon for cultivation and also the excess or lack of water can be overcome during flood or drought. You will be surprised to know that India has approx four percent of the water available, and India's population is around 16 percent of the world's population. But every year, hundreds of millions of cubic cusec water flows into the ocean and India has to meet its needs with only 4 percent of the water. Every project has two aspects, but we should focus on how much more people will get benefit from this project. This article is based on the interlinking of the river project, in which its history and the benefits of this project are explained.

What is the interlinking River project?

This project will connect 60 rivers of India, including river Ganga. Hopefully, with the help of this project, there

will be a reduction in the dependence of farmers on uncertain monsoon rains and there will also be millions of cultivated land for irrigation. This project is divided into three parts: North Himalayan river link constituents; Southern Peninsular Component starting from 2005, Interstate interlinking of rivers. This project is being managed under the National Water Development Authority of India (NWDA), Ministry of Water Resources.

History of interlinking River project:



5 interesting facts about longest sea bridges:

With this project since the long debate is going on. In India, there are areas where an excess of water in some rivers are there and vice versa.

- First of all, the idea of linking rivers was presented by *Sir Arthur Cotton*, chief engineer of the Madras Presidency in 1919, 150 years ago.
- In 1960, the then Minister of State for Energy and Irrigation, *K. L. Rao*, revived this idea by presenting the idea of linking Ganga and Cauvery rivers.
- In 1982, the former Prime Minister Indira Gandhi formed the National Water Development Agency.
- On 31 October 2002, the Supreme Court after hearing a public interest petition asked the Central Government to complete this plan expeditiously, for it to generate a plan by 2003 and also emphasized to fulfill it by 2016.
- Prime Minister Atal Bihari Vajpayee had formed a task force under the chairmanship of Suresh Prabhu in 2003 and it was estimated that this project would cost about 56 billion crore rupees.
- In 2012, the Supreme Court again directed the Central Government to start this project in the time frame so that the cost could not be increased due to the increased time.
- Firstly in 2017, the Ken-Betwa link project will be joined, in which parts of Uttar Pradesh and Madhya Pradesh are included and its estimated cost will be worth 10 thousand crores. Under this project, additional water from the Madhya Pradesh will be brought to the Betwa River in Uttar Pradesh through a canal of 231

km. This will result in irrigation of one lakh 27 thousand hectares of land in Bundelkhand, as it is the most drought-affected area.

Benefits of Interlinking River Project:

his project can solve the problem of drought and flood because at the time of need the river which causes flood can give water to the area of the river which has a shortage of water because the water can be stored or water can be transferred from water surplus area to the deficit. Ganga and the Brahmaputra region can get rid of floods that come every year with the help of this project.

- The irrigation, land will also increase by about 15 percent.
- 15,000 km of river and 10,000 km of navigation will be developed. Thereby reducing the transportation cost.
- Large scale afford station and about 3,000 tourist spots will be built.
- This project will solve the problems of drinking water and financially also will solve the problem.
- It is also possible to get jobs for landless farmers in rural areas.

Environmental disaster or Disadvantages of Interlinking River Project:

There may be advantages as well as disadvantages of the project. Rivers are being considered an integral part of our life from the beginning, and any kind of human intervention can prove to be destructive. For the completion of the Interlinking River project, many big dams, canals, and reservoirs will have to be constructed due to which the surrounding land will become swampy and will not be suitable for agriculture. This can also reduce the production of food grains. Where or in which area to bring so much water, which canal is to be transferred, it is mandatory to study and research it adequately. The cost of this project in 2001 was Rs 5,60,000 crore but in reality, there is a possibility that it will be more. Taking the water of Ganga above the Vindhya towards Cauvery, will cost a lot more and for this, large diesel pumps will be used, more than 4.5 lakhs people will be almost displaced, 79,292 forests will also be submerged in water. It can also be understood that without joining rivers, the problem of flood and drought can be solved.

Some of the consequences of RIL are listed here - i. Unless the link channels are lined, which will be a cost-prohibitive proposition, they will cause heavy seepage which will not only constitute loss of water under transfer but may also create or exacerbate water logging conditions in certain areas. ii. They are likely to cause substantial displacement of people giving rise to problems of resettlement and rehabilitation. Also, as the people to be displaced will be far from being beneficiaries, it will be difficult for them to identify themselves with the positive aspects of water transfer and hence there is bound to be resistance on their part. iii. As these long link channels may pass through dense forests and habitats of wildlife, their ecological consequences may be serious and substantive. iv. Import of vast amount of water in arid or semi-arid areas may adversely affect their dry land ecology (Prasad, 2004b: 1223)

Several issues which may arise due to RIL project are discussed below. (i). Compensation for resettlement and rehabilitation of the displaced:-Compensation for the displaced people is one of the major problems that will arise due to RIL project. The Supreme Court has directed for complete rehabilitation and resettlement arrangement for the development-induced displaced people without actually calculating the cost of resettlement of the displaced people. Therefore, a social activist "Arundhati Roy calculated the cost of development-induced displacement and found that big dams displaced 33 million people in the last 50 years. India's Supreme Court initiated another development-induced displacement in the form of RIL project but failed to address the issue in a meaningful way" (Ahmed, 2012a). It is quite clear that RIL project would result in displacement of millions of people and the estimated cost of their rehabilitation will be billions of rupees. Here two questions arise, first what would be the cost of rehabilitation? and the second is, who will pay for rehabilitation? Now the problematic questions should be viewed in the federal set up of Indian polity and whether the centre; the states; the beneficiary states; or the state from which the people are displaced would bear the cost of rehabilitation. (ii). Compensation for environmental damages from the project: For the protection of environment, all the developed, developing and underdeveloped countries are making collective efforts with the help of the United Nations (UN). In such an atmosphere each and every project is required to get the environmental clearance for its execution that measures the adverse impact of the project on environment. Large amount of irrevocable environmental damage may put any project out of execution. In an analytical terms it is said that, every large dam kills a river, it plays havoc on flora and fauna" (Iyer, 2012f). In such a situation ,,big dams, reservoirs and conveyance systems will not only require large investments but also substantial environmental impacts and displacement/rehabilitation problems. All this will need to be analysed at very closely in every case. RIL project is unlikely to survive such scrutiny".

The environmentalists are against the execution of RIL project because of its unalterable damage to the environment. In case of its implementation, a big question arises what would be the compensation to the environmental degradation? And who will pay for it? (iii). Sharing the benefits and costs among the states:- We are very much aware of the fact that, ,,lifting, tunneling and long circuitous routing around mountains in interbasin transfer certainly involve heavy capital investments and continuing energy costs. The exponent of the RIL project claims that, it is going to solve the problems of flood and drought simultaneously; in such a situation it can be assumed that both the surplus and deficit basin states are the beneficiaries. But basins which are categorized as surplus are not ready to accept the claim, in response to the Supreme Court's judgement for the implementation of RIL project, Brijendra Yadav, a Member of Legislative Assembly (MLA) from Janta Dal (United) of Bihar, made an appropriate statement that the states located in these basins (Ganga and Brahmaputra) were the most undeveloped states of the country. If Bihar is not able to utilise its water, it is construed to be a surplus state. You think of a patient who has lost his appetite and cannot take food. Does it mean that he has surplus food with him? Amazing facts about Channel Islands In ancient times, there used to be ponds in the cities, due to which the problem of flood was also solved and the water that was collected during the rainy season helps in overcoming the shortage of water. On the other hand, there can be controversy regarding land under this project. In India, there is a dispute over water in the states like the Cauvery water dispute between Karnataka and Tamil Nadu or the dispute over the Chambal River in Rajasthan and Madhya Pradesh. For such a big project the consent at the international level also becomes mandatory. Finally, it can be said that in the country where Geo-cultural diversity is there, drinking and irrigation water are utilised from different sources. Here the population is so vast, center to start such a big project, it is necessary for the government to take suggestions from the researchers so that the subsequent adverse consequences can be avoided. But, on the other hand, drought-affected areas and where every year flood occurs can't be ignored; the governments to find out some solutions are also mandatory keeping in mind the environment. To make the society aware of the importance of water and to explain the characteristics of the rivers, how water is used is also necessary. So, this country is ours, along with the government, we also have to understand the importance of water and it is our duty to save water, save lives.

Conclusion:- Scarcity of water is a global issue but the most important fact is that neither the unitary nor any federal countries, are taking up any such assignment like RIL project of India to resolve it. It is a complex and complicated issue that requires comprehensive and unconditional professional assessment and analysis for all the stages of its implementation. The impact of such a grand scheme is irreversible; therefore it requires a very delicate approach. It revolves around the complications developing in the area of federalism or simply challenging the principles of Indian federalism. It finds that in the Indian Constitution water is in the State List while Interstate River is in the Union List and taking up such a mega RIL project without the consent of the concerned states is unacceptable. Due to change in power sharing between center and state government and encroachment of judiciary into executive domain it considers the directive of the Supreme Court indeed, as an act of judicial activism. The research contributes to the extensive debate on RIL project. It finds that the direction of the Supreme Court to implement RIL project is an act of judicial activism. Future work would benefit by including technical and hydrological complexity involved in RIL project

REFERENCES:

BandyopadhyayJayanta and ShamaPerveen, (2004a), "Interlinking of Rivers in India: Assessing the Justifications", Economic and Political Weekly, Vol. 39 No. 50. 7.

BandyopadhyayJayanta and ShamaPerveen, (2004b), "Interlinking of Rivers in India: Assessing the Justifications", Economic and Political Weekly, Vol. 39 No. 50. 8.

BandyopadhyayJayanta and ShamaPerveen, (2004c), "Interlinking of Rivers in India: Assessing the Justifications", Economic and Political Weekly, Vol. 39 No. 50. 9.

BandyopadhyayJayanta and ShamaPerveen, (2004d), "Interlinking of Rivers in India: Assessing the Justifications", Economic and Political Weekly, Vol. 39 No. 50. 10.

BandyopadhyayJayanta and ShamaPerveen, (2004e), "Interlinking of Rivers in India: Assessing the Justifications", Economic and Political Weekly, Vol. 39 No. 50. 11.

BandyopadhyayJayanta and ShamaPerveen, (2004f), "Interlinking of Rivers in India: Assessing the Justifications", Economic and Political Weekly, Vol. 39 No. 50. 12.

BandyopadhyayJayanta and ShamaPerveen, (2004g), "Interlinking of Rivers in India: Assessing the Justifications", Economic and Political Weekly, Vol. 39 No. 50. 13.

BandyopadhyayJayanta and ShamaPerveen, (2004h), "Interlinking of Rivers in India: Assessing the

- Justifications", Economic and Political Weekly, Vol. 39 No. 50. 14.
- D"Souza Rohan, (2003a), "Supply-Side Hydrology in India: The Last Gasp", Economic and Political Weekly, Vol.38 No.36. 15.
- D"Souza Rohan, (2003b), "Supply-Side Hydrology in India: The Last Gasp", Economic and Political Weekly, Vol.38 No.36. 16. 9.
- D"Souza Rohan, (2003c), "Supply-Side Hydrology in India: The Last Gasp", Economic and Political Weekly, Vol.38 No.36. 17.
- D"Souza Rohan, (2003d), "Supply-Side Hydrology in India: The Last Gasp", Economic and Political Weekly, Vol.38 No.36. 17.
