

# Resuscitating a Failed Idea

## Notes from Bihar

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The idea of a national interlinking of rivers needs to base itself on the past six decades' experience of river and flood control measures. A contribution from Bihar shows that not only is the state's "surplus water" tag a bit incorrect, the very structures – dams, canals and embankments – which are proposed to implement the river interlinking project have been a big failure. Then what explains the enthusiasm for this failed idea?

The Supreme Court judgment of 27 February 2012 on the River Interlinking Project (RIP) starts with a quote from the petitioners paying tribute to a great engineer Arthur Cotton who had done exemplary work in irrigation in Cauvery and Godavari basins of south India. Unfortunately, all his expertise and excellence was limited to south India. He failed miserably as he moved to Orissa, Bihar and the North West Provinces (present UP). He was a navigation enthusiast and that is where his RIP idea has its origin. He maintained that,<sup>1</sup>

...what India wants is water carriage; that the railways have completely failed; they cannot carry at the price required; they cannot carry the quantities; and they cost the country three millions a year, and increasing, to support them. That steamboat canals would not have cost more than one eighth of the railways; would carry any quantity at nominal prices and at any speed; would require no support from the treasury; and would be combined with irrigation.

Had the British administration taken him seriously, they would have ended up being an object of ridicule by ignoring railways in the mid-1850s. No wonder George Campbell who became Member of the British Parliament after retiring from Bengal, had once commented on Arthur Cotton saying, "... there was some truth in the saying regarding him, that he had water on his brain".<sup>2</sup> Excellence, sometimes, is geographical.

Similarly, Peter Salberg, an engineer from Assam, whose statement was read in the famous flood conference at Patna in 1937, described more aptly how man's interference started and developed, and how the situation grew progressively worse owing to the power of government and skill of engineers.<sup>3</sup>

### Voices from the Surplus Gallery

Following a similar judgment given by the Supreme Court in 2002 on RIP, a meeting was called by the Government of Bihar

(GOB) to discuss the implications of the RIP on the water resources of Bihar, a so-called surplus state, in Patna on 2 April 2003. Rashtriya Janata Dal (RJD) president Lalu Prasad Yadav said he would not allow "our water" to go elsewhere because nobody would give water to the state when it was needed. Brijendra Yadav, a Member of the Legislative Assembly (MLA) from the rival Janata Dal (United) – JD(U) party raised a very pertinent point

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?

The problem was, he stated, in the manner in which surplus was defined.

Lalu Prasad Yadav repeated his remarks in his famous "Lathi Ghumawan Tel Pilawan" rally in Patna, later that same month stating that he would not allow Bihar's water to go elsewhere. The next month he said "this water is our petrol". This had a different meaning altogether. Unless sold, petrol is as good as water. This implies that if somebody is prepared to pay the price of Bihar's water, the state would not mind selling it, thus, agreeing to river linking for a price that can rightly be claimed by other states/countries upstream. However, he never pursued this idea later.

According to the Report of the Second Bihar State Irrigation Commission (1994) only 19% of water that passes through north Bihar is generated locally while 81% comes from other states or countries. Further, it states that 70% of the flow of the Ganga during the non-monsoon months is contributed by rivers coming from Nepal. If Bihar lays its claim over the water, the states of Uttar Pradesh, Uttarakhand, Madhya Pradesh, West Bengal and now Jharkhand also will stake their claims, along with Nepal, over that water.

### Not Concerned about Bihar

In July 2003, the RJD government appointed an expert committee of senior engineers to study all the technical components of the National Water Development Agency (NWDA) proposal so that the interests of the state could be

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protected. The committee submitted its report in December 2003 and felt that<sup>4</sup>

...Interlinking of Rivers is the last big effort by the Nation to harness Water Resources of the country for equitable distribution. Hence Bihar must not miss the bus at this stage and must ensure that the seasonal water requirements of its various sub-zones are fulfilled before transferring water to other parts of the country.

But, it also said that the general belief that, "there is huge quantity of water available which can be transferred to southern and western parts of the country" should be dispelled.<sup>5</sup> The committee was concerned that<sup>6</sup>

most of the transfer of water is envisaged from the storage, though transfer of water from run-of-the river during monsoon is also proposed. But such transfer of water will not have significant impact on flood moderation.

It recommended<sup>7</sup>

The NWDA schemes do not at all show concern over the flood problem of Bihar, which must be given full priority... Bihar must be associated from the very beginning with the planning, execution and operation of the reservoirs on the rivers flowing through Bihar.

### Transferring Water to Bihar

The GOB appointed another committee of technical experts in September 2004 to look into the seven links that directly or indirectly concern Bihar. The committee, which submitted its report in April 2005, while appreciating the objectives of the NWDA, maintained that the present mega project of RIP is going to be the biggest and the final plan in water resource development, any mistake in its planning and implementation will lead to very adverse and serious consequences, which will have no remedial measures and will be almost impossible to rectify in future.<sup>8</sup>

The committee came to the conclusion that 76.2% of surface water yield in (entire) Bihar can be attributed to the catchment outside the state and only 23.8% of it is generated on its own ground. Also, around 76% of this water is generated during the monsoon months and since the land of the state is virtually flat, there is no chance of storing the water through structural means as dams cannot be built on flat lands.<sup>9</sup> The committee also observed that Bihar is often

misjudged as a flooded country but the areas located south of the Ganga are chronically drought affected.

The cultivable area of south Bihar is 37% of the entire state but the water resources available is less than 14%. Even within south Bihar, there are disparities between different river basins. The cultivable area of south Bihar, beyond the Sone Basin, is 24.09% of the state but water availability in that area is as low as 6.4% of the state. Most of the drought-prone areas of the state are located in this region. The committee therefore noted, "This clearly brings out the need for transfer of water to this sub-region from other regions and basins".<sup>10</sup> It is worth noting that the available water per person in many basins of south Bihar is far less than the water available per capita in the peninsular river basins of the Krishna, Cauvery and Pennar and the expert committee wants that water should be imported to these basins from outside to meet their demands.<sup>11</sup>

### What If the Canals Breach?

The state of the roads, canals and the embankments in Bihar continues to remain fragile during the rainy season. According to the annual report of the Water Resources Department (WRD) of Bihar (2011-12) there have been 371 breaches in the embankments between 1987 and 2010.<sup>12</sup> Breaches in canals are many and not counted. Village roads, state highways and even national highways breach in large numbers every year. We all know very well that all these structures lose their meaning beyond the breach point. Government attributes most of these breaches to the handiwork of "anti-social elements" as a routine to escape responsibility.

The repair process generally starts after January next year when the fog disappears. Also, dry earth is needed for the repairs and that may not be easily available till December in north Bihar. The proposed link canals are going to be much large in size and hence more vulnerable to the attacks of water flowing through them. This means that when the people of the Sabarmati or the Cauvery basin would be waiting for the Ganga water to reach them, the GOB would be

floating tenders for repairing the breaches in its interlinked canals.

It is certain that these canals would lead to severe waterlogging in the plains of Bihar, as they would behave like earthen dams obstructing rainwater and natural drainage, leading to stagnation of rainwater. It is unlikely that the canals would not breach or be cut by irate mobs of people facing waterlogging.

A journey along the eastern and western Kosi canals that run in the east-west direction while the ground slopes are from north to south is very educative. The canals behave like an earthen dam and breach at many places on their own or are cut by people, who face submergence due to waterlogging, to drain the water out. The Kosi-Bagmati link or the Kosi-Mechi link, a sizeable length of which will run in the west to east direction in Nepal will be a canal to be watched in future, if built. Seepage through the canals and the use of alluvial soil as the construction material would further worsen the situation. It must be mentioned that 8.36 lakh ha land of north Bihar, nearly 17% of its geographical area is already waterlogged. People living there would never like to add to their problems.

### Next Round of Land Acquisitions

Displacement of the people because of such constructions has always been a contentious issue which never gets resolved. The people of Bihar, as other states, should prepare themselves for another round of large-scale land acquisition that would go into main bodies of the canals, dams, residential colonies of project staff, burrow pits and rehabilitating the oustees. In a state where landlessness is high, a large number of small and marginal farmers would face pauperisation. This will inflate migration figures and crowds on the footpaths of major towns in the country. It must be reminded that the rehabilitation process of the Kosi Project (1955) and the Bagmati Project (1970) are yet not complete!

The expert committee had come out with its own plans for linking 18 of Bihar's rivers first. It states that any consideration of national river interlinking and surplus water sharing can only happen after assessing the performance of these

links and the availability of water after the needs of Bihar have been met. The chief minister had promised that the work on these links of south Bihar would start in April 2006.

The annual report of Bihar's WRD for 2010-11 says that the government has given priority to solving the drought problem of south Bihar, the flood problem of north Bihar, to improving the water-logging conditions and ensuring irrigation water through canals. The report claims that this is central to the state government's plan to achieve 250% crop intensity, develop water resources within the state and initiate the intra-linking of rivers programme. There has been a budgetary provision made in 2012 for starting one of the links in north Bihar.

The Bihar government has approached the NWDA for the preparation of detailed project reports (DPRs) for six links and it has already started working to prepare the feasibility and pre-feasibility reports of the other 12 links. Three such schemes have been prepared by NWDA and handed over to Bihar. It is really intriguing that the GOB, that has always charged NWDA with "ignoring the interests of Bihar", entrusted the same organisation with the preparation of the DPRs for these six interlinking projects.

### Government's Dilemma

The union minister for water resources, Pawan Kumar Bansal, told the Rajya Sabha on 28 June 2009 and on 9 July 2009 that 30 schemes under RIP have been identified. Of these 30, feasibility reports of 16 schemes have been prepared but this is a state subject and the centre cannot impose these over them. It can only help the states and act as a catalyst in the judicious use of water. The debate, however, was seemingly terminated when Rahul Gandhi, general secretary of the Congress Party expressed caution on 10 September 2009 at Chennai arguing that we should not play with nature on such a massive scale. He had said, "...my personal opinion is that such a move will be disastrous... Environmentally it is extremely dangerous... playing with the environment is not a good idea."<sup>13</sup> Even though Rahul Gandhi clarified that this was his "personal"

opinion, its importance can be gauged from the fact that within a few days of his statement, union minister for environment and forests, Jairam Ramesh, said in a press conference in Delhi on the 6 October 2009 that,<sup>14</sup>

...interlinking of rivers will be a human-ecological-economic disaster. It is easy to do interlinking on paper. Interlinking of rivers has limited basin value, but large-scale interlinking would be a disaster.

The Government of India had appointed a special task force to look into the problems of irrigation and floods in Bihar under the chairmanship of S C Jha. The report states,<sup>15</sup>

...Water Resource Department of the state is too big, unorganised, too much manpower, lack of professionals, and deficient in fund availability. In the light of its existing organisational set up, management and staffing pattern and staff calibre, it is incapable of handling large projects with multilateral dimensions. At best, it could take up the tasks of operation and maintenance of built-up projects. The field level situation is still much worse.

This special task force has asked for a total overhauling of the water resources department and its working.

### Conclusions

It will be unfair to assume that everything is wrong with a surplus source state like Bihar. The story may be the same elsewhere too. Otherwise the flood affected area of the country would not have doubled from 25 million hectares in 1952 to about 50 million hectares today.<sup>16</sup> This clearly indicates that the present strategy of investment in flood control through dams and embankments is doing more harm than good. The net irrigated area by canals all over the country was 17.79 million ha in 1991-92 but has been consistently falling since then.<sup>17</sup> It is this incompetent and corrupt water establishment which is expected to implement the river interlinking project. After all these failures of the water establishment of the country, what reason do people have to believe that this same establishment's pipe dream of national river interlinking will solve all their water problems? Given the gargantuan amounts of money involved, one wonders where does the people's money go and who controls such decisions.

It appears that the entire river interlinking proposal is a cover-up to hide the failure of this hydrological bureaucracy so that people, with carrots of river interlinking dangled before them, do not ask inconvenient questions which these departments find hard to answer.

Much has been said about up-scaling water rates but not a word if the department fails to provide the promised irrigation water. The farmer would be charged water rate but how about the impact of waterlogging? Will it not be necessary for the department which charges water rates from the farmers and takes credit for it to compensate the farmers in case their fields get waterlogged? Further, the Himalayan component of the RIP depends heavily on cooperation with Nepal and Bangladesh. There has been no appreciable progress about the dams proposed there on the Kosi (first proposed in 1937), Nunthar on the Bagmati (1953) and the Chisapani dam on the Kamala (1956). The Pancheshwar dam, despite a treaty signed in 1996, remains a non-starter. How can one think of a time-bound schedule and for the project to be "completed effectively and judiciously and without any default", as the learned judges of the Supreme Court have demanded? Let the past performance of India's hydrological bureaucracy be evaluated first. Taking up RIP without such an evaluation and in the absence of any popular consensus will actually turn it into a "final solution" to our water problems.

### NOTES

- 1 Arthur Cotton, as quoted in Romesh Dutt (1989), *The Economic History of India*, Vol 2, Publications Division, Government of India, p 251.
- 2 Ibid: 254.
- 3 Proceedings of the Patna Flood Conference, Government of Bihar, Secretariat Press Patna, 1938, p 11.

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- 4 K N Lal (2003), *Report of the Experts' Committee on Impact of Interlinking of Rivers on Bihar*, Water Resources Department, Government of Bihar, Patna, Preface of the Report.
- 5 Ibid: 3.
- 6 Ibid, Chapter VI, p 1.
- 7 Ibid: 3.
- 8 Government of Bihar (2005), *Report of the Expert Committee on Impact of Interlinking of Rivers on Bihar*, April, Water Resources Department, Patna, Chapter 1, p 10.
- 9 Ibid.
- 10 Government of Bihar (2006), *Theme Paper, Impact of Interlinking of Rivers on Bihar and the State Plans to Link the Rivers*, Water Resource Department, Patna, p 4.
- 11 Ibid: 7.
- 12 Government of Bihar, 2011-12.
- 13 UNI (2009), "Rahul Gandhi Opposes Interlinking of Rivers", report from Chennai, 10 September, <http://onlywaterwatch.blogspot.com/2009/09/rahul-gandhi-opposes-interlinking-of.html>, accessed on 23 March 2012.
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- 15 Special Task Force on Bihar (2009), *Road Map for Water Resource Development in Bihar, A Report*, Government of India, New Delhi, May, p 3.
- 16 Planning Commission (2012): *Report of the Working Group on Flood Management and Region Specific Issues for XIIth Plan*, Government of India, New Delhi, p 14.
- 17 Himanshu Thakkar (2010), "India's Tryst with the Big Irrigation Projects", South Asia Network on Dams, Rivers and People (SANDRP), [http://sandrp.in/irrigation/Failure\\_of\\_Big\\_Irrigation\\_Projects\\_and\\_Rainfed\\_Agriculture\\_0510.pdf](http://sandrp.in/irrigation/Failure_of_Big_Irrigation_Projects_and_Rainfed_Agriculture_0510.pdf), May, p 3, accessed on 23 March 2012.