

Why Inter-linking of Rivers is neither *necessary*, nor *Desirable*

The Supreme Court order of February 27, 2012, asking the government to "implement" the interlinking of rivers is very disturbing. It is not possible to dismiss it as a comedy or tragedy, even as we recall the famous Karl Marx quote, "History repeats itself, first as tragedy, second as farce."

Firstly, as a number of legal and constitutional experts have said, the Supreme Court has no mandate to ask the executive as to what projects it should take up. In that sense, whether to implement the Interlinking of Rivers (ILR) and if so in what form is a subject that is entering the domain of the executive and hence is beyond the mandate of the judiciary.

A decade ago, a few days after the bench headed by then Chief Justice Bhupinder Nath Kirpal delivered a similar order on October 31, 2002 (he retired the next day), he was asked at a meeting at the Bangalore Law School about how he could pass such an order when the judiciary does not have the mandate to direct the executive to take up certain projects. Justice Kirpal reportedly said it was only a suggestion, not a direction, but then he was already retired!

Now in the same case, the recent order by Justice Swatantra Kumar also noted that such decisions are in the domain of the executive. In such a situation, the order of Feb 27, 2012 is uncalled for, unfortunate and erroneous.

The Supreme Court order asks the government to implement the interlinking of rivers, when there is no existing scheme to do so. In case of 14 of the 30 schemes, there is no existing feasibility report. The pre-feasibility and feasibility studies that exist are also outdated, the water use pattern today has far outstripped availability in almost all basins. Including in basins like Ganga, Brahmaputra, Godavari and Mahanadi that the ILR assumes have surplus water. In any case, none of the water balance studies or pre-feasibility studies are in the public domain. The quality of the studies is so bad that National Water Development Agency is afraid to put them out in the public domain. In fact, I recall the then secretary of the Union water resources ministry being so exasperated with the poor quality of NWDA's work that he said in an open meeting about a decade and half ago

that NWDA should be closed down. Moreover, for none of the schemes is there a detailed project report or environment clearance or any of the statutory clearances.

How can the apex court ask for implementation of a scheme for which neither a feasibility report nor a DPR exists, and the available studies are not only outdated but they have not passed independent scrutiny?

Some of the ILR (inter-linking of rivers) schemes have international implications, with a possible impact on countries like Bhutan, Nepal and Bangladesh. How can the SC ask for the implementation of a scheme to be taken up beyond the boundaries of the country?

Each of the 30 schemes of the ILR is supposed to get through several statutory, legal and procedural steps. None of the schemes have gone through any of it. **How**

can the SC ask for implementation of a scheme where such legal steps are necessary?

If ILR is taken up before entire basin wide options are assessed and implemented, it is likely that we may end up finalising a project that will have no water, making the whole construction and costs incurred useless. If all the costs are counted, the local in basin water resources development and use would be more cost-effective, with less social and environment impact, and it is likely to be more sustainable and climate friendly. It would also be more democratic.

In each such legal step, the answer could actually be no. Now with the SC order, will the concerned sanctioning authorities be forced to say yes when law seeks their judgement on whether the scheme is viable or acceptable? If they were to say no, will they be prosecuted under contempt of court cases? If not, how can the scheme be implemented?

Will the sanctioning authorities dare to say no when the SC has clearly asked the government to implement the project? Has the SC not invited violation of law? For example, in case of the Ken Betwa link -- the first interlinking project that the SC wants the special committee ordered by it to take up -- the project will submerge 4600 ha of the Panna Tiger Reserve and almost double that amount of forest land. The Union Ministry of Environment and Forests has already said no to the project and former Environment Minister Jairam Ramesh has publicly said that the project is a disastrous proposition. **Now will the Union ministry of environment and forests be forced to reverse its decision? A decision taken under specific law that the ministry is mandated to implement? Wont such a reversal than be illegal under that specific law?**

The SC order also raises another legal issue as pointed out by Shri Ramaswamy Iyer, does the order now debar judicial review of all ILR projects by any court? Won't this be against the fundamental constitutional arrangement?

As mentioned in the same Supreme Court order of Feb 27, 2012, several states have opposed ILR plans. It is also worth noting here that only ten state governments filed responses in the Supreme Court; rest of the states did not even bother to file a response. Three of these states filed affidavits opposing the ILR plan. Three others gave only a conditional nod; the conditions in most cases meant they were not in favour of the ILR plan as it stands.

Among the three others that filed affidavits agreeing to the ILR plan, Rajasthan has not agreed to sign the MOU for the Parbati Kalisindh Chambal link, seven years after the ruling United Progressive Alliance put that link among the top five Prioritised links. Even Gujarat was reluctant to agree to the Damanganga Pinjal project, till Maharashtra did a quid pro quo in agreeing to the Par Tapi Narmada proposal that Gujarat wanted. That agreement is only for a DPR. No state is ready to give water to another state. In India's constitution, water is essentially a state subject. **Can the SC ask states give up their constitutional role and to comply with its order?** That too when almost no state, except Tamil Nadu has accepted ILR project as a whole?

Several states including Kerala, Andhra Pradesh, Assam and Sikkim have already opposed ILR plans. Orissa and Chhattisgarh have said there is no surplus in the Mahanadi basin, despite the fact the NWDA (which has been in existence since 1982 with only job assigned to it to do studies related to ILR)/Union Water Resources Ministry says Mahanadi has surplus water.

Andhra Pradesh, Maharashtra and Chhattisgarh say there is no surplus in the Godavari basin when ILR studies say they have. Bihar, West Bengal, Uttar Pradesh, Haryana say there is no surplus in the Ganga basin when ILR studies advocate the transfer of water from Ganga to non-Ganga basin areas. So where is the rationale for these ILR schemes?

Andhra Pradesh, Maharashtra and Chhattisgarh say there is no surplus in the Godavari basin when ILR studies say the basin is water surplus. Bihar, West Bengal, Uttar Pradesh, Haryana say there is no surplus in the Ganga basin when ILR studies advocate the transfer of water from Ganga to non-Ganga basin areas. **So where is the rationale for these ILR schemes?** ILR justifies this concept by saying that some river basins have a surplus and others have a deficit in terms of water availability.

You can arrive at such a conclusion only if you do complete options assessment including rainwater harvesting, watershed development, groundwater recharge, local water systems, optimum use of existing water infrastructure, improving water use efficiency, optimising cropping patterns, optimising cropping methods, demand side measurements, recycling where feasible. Do such assessment of

potential and its realization at a basin or sub basin level. But none of the NWDA water balance studies involve such an exercise for a single basin or sub-basin in India. In fact the Union or any of the state ministry of water resources has never done such a study for any basin or sub basin in India.

I, as a member of the ministry of water resources' expert committee on ILR, have been asking for such a study, but I have been told that it does not exist for any basin. This means that we have no basis for arriving at the conclusion that there is a surplus or a deficit in any basin. In that case, there is not even scientific basis to arrive at an acceptable answer to the question if a basin has surplus or deficit water.

Why is the basin wide full options assessment necessary before the ILR plan can be taken up? Can the ILR plan not be taken up simultaneously while other options listed above are taken up? The government says we are looking at all these options, but let us also take up ILR along with it. What is wrong in that?

Firstly, if you take up ILR before the entire basin wide options are assessed and implemented, it is likely that you may end up finalizing or worse, implementing a project that will have no water, making the whole construction and costs incurred useless. Secondly, if all the costs are counted, the local in basin water resources development and use would be more cost-effective, with less social and environment impacts, and it is likely to be more sustainable and climate friendly.

It would also be more democratic to first exhaust the potential of options listed above. Doing ILR before exhausting the in-basin options assessment and their realisation would thus be most unscientific, illogical and against the interests of the people of the basin.

In fact, no democratic exercise has been taken up in any basin to even find out the views of the people, starting from gram sabha onwards, as should have been done even before proposing the inter basin transfer of water.

When I, as a member of the Union Water Resources Ministry's Expert Committee on Inter-linking of Rivers, suggested to the Ministry and NWDA to consult the gram sabhas in the Ken and Betwa basins about need, possibility, optimality, desirability of taking up Ken Betwa river link proposal, they just point blank refused to do it.

They said water is a state subject and the centre cannot undertake such an exercise, only state governments can do it, even though they were doing all the work related to the inter-linking of the two rivers of the states.

Then I suggested: why don't you write to the state government to take up such an exercise? But they didn't do that either. This shows many things, but most importantly, it shows the lack of faith our water resources establishment has in the democratic process and the people. In the context of ILR, this shows that they have actually no sound case to claim that a basin has surplus water or deficit water.

In the specific context of the Ken Betwa link, it may be useful to know that the collectors of Panna and Damoh districts wrote to the Planning Commission and others to say that the only reason the Ken basin is seen to have a surplus is because very little of the potential of local water systems and irrigation has been developed in the backward upstream areas. If that potential were to be realised, there would be no surplus in Ken basin. This is another evidence to show that there is no scientific foundation to the claim that the Ken Betwa river link is justifiable. In fact [we have shown](#) how NWDA has manipulated the assumptions to show that Ken basin has surplus and Betwa basin has deficit. If same assumptions were to be applied for both basins, the surplus of Ken would simply disappear.

In fact, the equation that flood means surplus and drought means deficit shows hydro-logical ignorance. There are states like Orissa, Bihar, Andhra Pradesh, Gujarat, Maharashtra and even Tamil Nadu that face drought or floods in different parts of the year. This is even true for Assam. It holds true for surplus basins like Ganga, Brahmaputra, Godavari and Mahanadi and so-called deficit basins like Betwa, Chambal, Krishna, Narmada, Tapi or Cauvery.

There will be numerous environmental impacts of ILR including submergence of land and forests, destruction of rivers, aquatic and terrestrial biodiversity, downstream impacts, destruction of fisheries, salinity ingress, pollution concentration, destruction of groundwater recharge and increased methane emission from reservoirs, among others. Unfortunately there is no comprehensive assessment of all such possible impacts even for a single link in any credible way. Cumulative impacts will be greater than the addition of the parts in case of many of the serious impacts.

According to [a paper I wrote in 2007](#), "This paper estimates that based on available information, the ILR will require at least 7.66 lakh hectares land and will displace at least 14.8 lakh people. In addition, ILR will need at least 20 lakh hectares of land for the canal network. ILR will also need at least 1.04 lakh hectares of forest land as per available official information." (www.sandrp.in/riverlinking/DRR_paper_0107.pdf)

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Today, when land is scarce and at a premium, to even consider a project that requires large swathes of land and that displaces millions of people, and whose feasibility, viability, optimality or desirability is doubtful, is not going to be acceptable for the populations that would be affected.

The National Council of Applied Economic Research paper that the SC order quotes clearly says that NCAER has not done any environment impact

assessment or social impact assessment or options assessment or assessed if the ILR is the best options available or if it is even feasible option. It assumes ILR is feasible and will happen and then estimates what will be the economics, without even knowing what the social, environment or opportunity costs are.

Pertinently, the SC order quotes NCAER study saying that Bhakra dam created an irrigation of 6.8 million ha in Punjab and Haryana. This is completely wrong. Even as per Bhakra dam objectives set at the outset, it was to achieve an irrigation of 1.15 million ha irrigation in Punjab and Haryana, one sixth of the figure quoted in SC order. In actuality Bhakra never achieved even that figure!

Clearly, the NCAER study and the SC order that depends on the study uses grossly inaccurate figures. Here it may be noted that use of such grossly inaccurate figures seem to be plaguing most of those who support the ILR.

For example, the strategic writer Brahma Chellaney is so wrong in some basic facts, so he writes [in a recent article](#): "India, however, is downriver to China and gets almost one-third of all its yearly water supplies from Tibet". But that is totally wrong. Even as far as Brahmaputra is concerned (Chellaney talks about the whole of India, not just Brahmaputra), India gets hardly a sixth of the water from Siang or Tsangpo that China, it is feared, will divert.

In fact if the water resources establishment is interested in water security in deficit or closed basins like Krishna, than it should stop the completely, wasteful diversion of about 3.4 billion cubic meters of water every year out of water deficit Krishna basin to the water surplus west flowing rivers. This is almost criminal, and no attempt is being done to reverse this, when it is technically feasible do that. That quantity of water is sufficient for 3 to 4 mega cities like Delhi each year!

It is true that we need to store our rains to make it available after the rains. But for that, we have many storage options. We first need to use groundwater aquifers that have become and are becoming empty, we need to use local storage options, we need to desilt local water systems on regular basis say through MGNREGA and we need to ensure optimal use of existing large storages. We are not doing any of these.

Actually India's water lifeline is **groundwater**. Over 38-39 million hectares of our irrigation, out of total net irrigated area of 62 million hectares, comes from groundwater. 85-90 percent of rural drinking water, around 55 percent of urban and industrial water supply comes from groundwater.

With each passing day our dependence on this is increasing with more and more proportion of our water coming from this source. And whether we like it or not, such dependence is only going to increase. But our current use of groundwater is not sustainable. We need to make groundwater sustainability the focus of our water policy, plans and practices if we want our water lifeline to sustain. We are not taking any credible steps in that direction.

Our water resources establishment refuses to acknowledge the central position of groundwater for our drinking water and irrigation security. They continue to spend 70-75 percent of water sector budget on big dams (as is the case for the ongoing 11th Five Year Plan), the large dams actually reduce groundwater recharge due to destruction of downstream river and also other contingent loss of forests, wetlands and local water systems. ILR will actually destroy ground water recharging systems

on a massive scale directly and indirectly, it will make our water lifeline even more precarious.

In last 20 years, since 1991-92 when our net irrigated area from M&M (Major and Medium) irrigation projects reached a peak of 17.79 million hectare, it has never again reached that figures, as per govt figures. The NWDA director general suggested to me that some states are not reporting correct figures. Fact is that the states are happy to exaggerate their achievements, but even if we were to correct for some under reporting, it still does not change the picture in any material way. In this period we have spent over Rs 200 000 crore on big irrigation projects, but not adding any area to net irrigation!

The net area irrigated by M&M projects have actually reduced by 1.5 million hectare. ILR is nothing but and extension of the M&M agenda. And we continue to pour money in that ineffective black hole. Union Finance Minister, in his budget speech for 2012-13 (the first year of 12th Plan) in March 2012 increased the allocation for the Accelerated Irrigation Benefits Programme by 13% to over Rs 14000 crores. There is clearly no hope at least now of any course correction in 12th Plan.

The biggest issue is that we have better options available, we are not using them, we are refusing to take them up with any seriousness, only lip service is being paid to such options and we are going for unnecessary, unviable, undesirable, wasteful and destructive projects like ILR.

It would be in interest of everyone that the Supreme Court reviews and cancels this order and instead asks the government to go for democratic, participatory, transparent and accountable water resources management. This is indeed necessary to ensure water, food, livelihood, energy and environment security of the people and the nation.

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