

LOKTAK INLAND WATERWAYS IMPROVEMENT PROJECT



A CRITIQUE

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Critique of the Loktak Inland Waterways Improvement Project

The Loktak Inland Waterways Improvement Project (LIWIP) essentially aims to extend and expand the motorised inland transport on the Loktak Lake wetland, by augmenting the machinery and equipment that will clear the lake of all obstructions to the water transport. It promises to be a “community welfare” project, with the benefits including growth in trade and commerce, eco-tourism and livelihoods and job creation, all due to the motorised water transport that will increase the ease and means of transport.

Yet, a perusal of the “Revised Project Proposal September 2019” (Project Proposal) shows that:

- The promises seem to be based on most sketchy figures and highly inadequate calculations
- In particular, the economic analysis appears to be flawed and incorrect
- The project will have huge social and environmental impacts
- These impacts threaten the livelihoods of the local communities and particularly the hundreds of members of the fishing community.
- Though the project promises job creation through enhancement of tourism, it is likely to destroy the very things that make the Loktak Lake an ecological wonder and an attractive tourist destination
- The project has adopted an approach of physically tearing apart all so called “obstructions” to clear the path for water transport, but has not addressed the real reasons for proliferation of vegetation in the lake like pollution from sewage and eutrophication by nutrient enrichment arising out of pollution
- It has not discussed how the large quantities of dredged vegetation will be disposed off, except to say they will be disposed on the banks
- It has not considered all these impacts and losses that the local communities will bear.
- The project appears to be progressing without the statutorily necessary environmental clearances
- The project claims that it is demand driven, that the local communities want the project, but the project documents do not offer any evidence of how and if the opinion of local communities was taken
- Local communities are opposing the project and have warned of intense stirs, leading to doubts about the claim that local communities want the project.
- The LDA proposal to the Ministry has bypassed the scrutiny of the State Wetlands Authority and therefore it is invalid.

We look at these in detail below.

The Loktak System

The Loktak Lake – or more properly, the Loktak wetland in Manipur is the biggest natural freshwater wetland in North-East India and is spread over 26,000 Ha and fed by seven hill streams¹. Loktak is characterised by the floating *phumdis* (thick heterogeneous mass of vegetation, soil, and organic matters at various stages of decomposition) on which local people build thatched huts, and the largest of which houses the 40 km² Keibul Lamjao National Park². The lake provides a large number of

¹<https://rsis.ramsar.org/RISapp/files/RISrep/IN463RIS.pdf>

²<http://northeasttourism.gov.in/loktok.html#sthash.xB6C8mCz.dpbs>

benefits including flood moderation, drought protection and livelihoods to the local communities. It also houses rich bio-diversity. These unique characteristics of the Loktak system have been acknowledged when it was recognised as a Wetland of International Importance under the Ramsar Convention in 1990, primarily for the fact that the wetland supports trans-boundary migratory water birds coming from as far as Europe and Central Asia for their winter rest

A large number of interventions including National Hydro Electric Power Corporation (NHPC's) 105 MW Loktak Hydroelectric Power Project and increasing pollution are adversely impacting this unique wetland. The waterways represent another element in the continuing and increasing interventions in the lake systems. Motorised waterways were introduced with the help of the Inland Waterways Authority of India (IWAI) in 2008. The current project intends to undertake a major expansion of these waterways.

Flawed Economic Analysis

The Project Proposal gives a comparison with road transport (Page 15), where it shows how a waterway will cut the travel distance 43 km, resulting large savings of time and money. Yet, only one example is given whereas the project proposes to add six new routes. (Map on page 11). Thus, this data on saving is at worst misleading, at best only indicative and can hardly form the basis of a rigorous economic analysis.

This comparison gives two destinations Toupokpi and Komlakhong which are far separated by Loktak waters. However, if one looks closely at these two destinations, they have no real reason to be connected in economic sense. If the distance is 65 Km by road, there is no need for them to be connected as there is no demand for connectivity nor there is any specific purpose for linking them up. Fish caught by people on either side of these destinations are best sold in the nearby market or to the more easily accessible Imphal market. Therefore a cost assessment of these two destinations is aimed at misleading the people and more importantly the Ministry of Shipping.

Further, the financial analysis (Page 15-16), compares the income from passenger and cargo fares over the life of the project with the costs to show that the benefit cost ratio is 6.5 (The document calls it the cost/benefit ratio, showing the lack of rigour and casual approach of the document). In this analysis, while the income is taken as the fare charged to passengers multiplied by total passenger-trips over the life of the project, the costs are taken only as the costs of the project, which is only the cost of machinery to clear the waterway routes of vegetation, and its operation. The costs of the boats, the costs to run the boats (fuel and maintenance costs), cost of human resources to run the boats, all this is not considered. Additionally, the cost of the operations of the machinery is taken in the project only for first 3 years (Table page 14), whereas the time frame for calculating the benefits is taken as 10 years.

Social and Environmental Impacts

The very rationale of the project is that the vegetation – both, the unique *phumdis* that are characteristic of the Lake, as well as the weeds – are a major obstruction for waterways and water transport and therefore they need to be removed. The project plans for a blanket removal of the vegetation from the waterway routes, with little consideration of the inter-connectedness of the vegetation with other parts of the lake, and what the impact of this removal will be.

The very language used by the report shows its approach. It says that the vegetation is causing “enormous hardships” in maintaining waterways free from “obstruction and blockage” and that the

vegetation has become a “growing menace” (Page 2). Among the machines proposed is one with capacity of cutting 5 feet 4 inches deep, and another that will drag the floating *phumdis* to the shore. Another machine is called the “ Water Master” and will work with a “heavy duty shredder that will plough through effortlessly to open a channel along the designated route”. All in all, a picture of heavy machinery tearing through a sensitive ecosystem with only one purpose – to rip open a route through the vegetation. The proposal does not detail the extent of impact from removing aquatic vegetation that are part of the lake’s ecosystem and which supports micro-organism and feed for fish and water birds. There is no scientific assessment on how the removal of certain aquatic plants, for example HYDRILLA VERTICILLATA (L. f.) Royle locally *Charang*, from the lake would affect purification of the lake water and thus attract fish due to the clear water. *Charang* is also food for birds and it is because of the abundance of *Charang* that birds come in hordes in the lake

Benefits will be undermined

The irony is that these environmental impacts are likely to undercut or even nullify the claimed benefits from the project.

For one, close to one lakh (100000) fishers, in and around the lake, depend on this water body for their livelihoods. The forcible removal of the vegetation, the dredging, and the operation of motorised vessels, all will lead to destruction of habitats, impact on nutrients, increase in turbidity and noise, result in oil and lubricant leakage and pollution - all of which will have serious impact on the fish and other aquatic fauna & flora, and in turn on the livelihoods of the fishers. This aspect is not properly mentioned in the project proposal. While it speaks volumes on the mindset of the proponent, the Ministry of Shipping seems to be yet another engineering body that completely ignores environmental and social impacts of projects which comes for clearance.

Secondly, these interventions to clear the waterways could also impact on the unique ecology of the lake, which is the very thing that draws tourists to visit it. Increased tourism is one of the big claimed benefits and justification of the project, that is also expected to lead to job creation. The Project Proposal anticipates an 8% annual increase in the inland waterway commuters from 2800 per day today to 11,200 per day in 2036, with tourist traffic playing a major role in this. (Page 9). Yet, it is likely that the severe interventions of creating and operating the waterways could destroy the very unique vegetation that draws the tourists.

Moreover, the Tourism Policy indicates the kind of tourism that is likely to unfold at Loktak too. It is high end tourism that gets priority and this policy does not shy away from stating that trickle-down effect will help locals. We have seen this played out at Sendra hill (which is also within Loktak) where a hill once owned by the locals is accessible with a fee as it is now converted into a resort. Some few locals are employed. The waterways also seem to project that they will help boost tourism. Given the policy and the current practices, it is clear who will run the boats, who will own the businesses. Those displaced fishers as they can no more catch fish in the lake will be just mere guides or get some such low paid jobs as labourers in the tourism industry. Profit from such tourism activities will not go to them. If lucky it might trickle to them. The dugout canoes are technologies that are under the control of the fishers. A much more important point is that the number of fishers who will be displaced will far outnumber the number of employment that tourism can bring.

No assessment of impacts

The problem is that these impacts are not even acknowledged in the report and there is no attempt at understanding what the impact of such destruction of vegetation will be. The Project Proposal does

not mention any such study, or any sort of Environment Impact Assessment (EIA). The project's economic and financial cost/benefit calculations, or other project benefits mentioned in the Project Proposal do not even mention any such impacts. This means that the project is being pushed through with incomplete and inadequate assessments.

The fishing families who live inside the lake on floating huts, those who live on the two islands, those who live around the lake, in as many as 8 constituencies of 3 districts number around 1 lakh and will be affected by this project. There is not even a mention of any fishing activity in the lake in the proposal. This seems to be an intentional act of the Loktak Development Authority (LDA) so as to mislead the Ministry of Shipping. Introducing motor boats for several destinations which will crisscross the lake will impact the lives of several families. The introduction of nine commercial routes for mechanized boats will likely restrict the fishers from laying fishing nets and other means of traditional fishery in the lake. If such is known to the Ministry, this project might not have been cleared at all. LDA which is a known institution which lacks not only expertise to deal with a lake is also known for burning down floating huts of the fishing families. This project is only an additional indication of its effort to oust people from the lake.

These studies – including on how the environmental destruction will affect the project benefits – need to be done before any work is undertaken on the project.

After all, the Lake is a Ramsar site that has been recognised for its unique nature and beauty. So each intervention needs to be a studied and measured intervention.

The project in its entirety has neglected the emphasis stressed on “wise use” of wetlands as outlined in Article 4.2 and 1.7.2. of the Ramsar Convention - “...formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory”.

It may be stressed that the main criteria for conserving wetlands under the Ramsar Convention is the presence of migratory water birds (Criterion 5 of the Convention). This proposed project does not specifically address the issue of motorised boats likely to have considerable impact on the migratory water bird population during the winter months when they visit the lake.

The project also neglects the national Wetlands (Conservation) Rules of 2017 that specifically talks about the wise use of wetlands for maintaining ecological security (Article 4(1)) while restricting any activity having or likely to have an adverse impact on the ecological character of wetlands (Article 4(2)(iii)).

The project further neglects Article 5(4)m of the Rules that gives particular stress on the involvement of local people, emphatically on the awareness of locals on the intrinsic value and function of wetlands – which may be interpreted as proactive role of locals towards meaningful conservation of wetlands that support human and wildlife populations.

Environmental Clearance

The Project Proposal does not mention the need for any statutory clearances including the environmental clearance. The EIA Notification 2006, which lays down the activities that need prior environmental clearance, clearly mentions “Dredging” in its Item 7(e) in the Schedule that lists activities needing environmental clearance. It is true that the IWAI and Shipping Ministry has arm-twisted the Ministry of Environment, Forests and Climate Change (MoEFCC) to exempt maintenance

dredging in waterways from requirement of environmental clearance. However, capital dredging is not exempt. Moreover, this exemption for maintenance dredging is also legally untenable, and the National Green Tribunal is examining the matter. Moreover, waterways like the Ganga, even though claiming exemption from legally binding environmental clearance, are still doing EIAs outside the legal framework. Given all this, it is necessary that the Loktak waterways project must pause implementation till an EIA is done and an Environmental Clearance is obtained. The excuse of LDA that the current proposal is not a new one whereas it is an ongoing project initiated by the state's Transport Department in 2005 is a lame excuse as the revised project proposal needs to be reviewed in its entirety from various perspectives – environmental, ecological, economic and social as it seeks to undertake massive activities within the core zone including route deepening and fauna clearances

By Passing Institutional Mechanism

This project has by-passed the Manipur State Wetlands Authority, which is the nodal authority for all wetlands in the state. LDA is subservient to the authority and all projects must be scrutinized, technically and for environmental impacts, before the project is sent for approval; in this case, to the Ministry of Shipping. This means that the LDA has completely kept the State Wetlands Authority in the dark about this project, thus, disrespecting institutional roles. There are several wetlands that have been identified and are in dire need of attention. In order to conserve these wetlands, it is critical to strengthen the newly formed Authority (Wetlands). The LDA has done just the opposite.

Moreover, the LDA is a body set up to administer the affairs of the Loktak Lake and to protect and improve the natural environment of lake³. This project seeks to increase passenger transport and for tourists which goes against the very idea of the establishment of LDA. This institution is already known to the court for its unwillingness to cooperate in divulging details of its expenses and activities, and hence the High Court of Manipur has Ordered on 7th August 2019 that no new project or development program can be taken up by LDA without the permission of the court⁴.

Other measures

While the entire rationale of the project is that growth of vegetation is creating obstruction in the waterways, it is amazing that the key problems that are leading to this growth are not being addressed. While the Project Proposal itself clearly identifies that the pollutants, particularly sewage from upstream cities and towns is a major reason for the growth of weeds and *phumdis* (Page 4), it ignores this by saying that the state government is taking up plans for it – and it itself suggests the easy – but ecologically highly destructive method – of using machinery to rip and remove the vegetation to clear the way for motorised boats. The project moreover does not mention the outcome of previous project of the LDA for the removal of *phumdi* and other aquatic vegetation from the lake by an earlier project which ironically is currently under the scanner of the Central Bureau of Investigation (CBI) for possible scam.

Marginalising Local Communities

The Project Proposal does not mention whether intensive and extensive consultations were done with local fishers and farmers dependent on the lake resources. There are no annexures to indicate that

³ Loktak Protection Act 2006, Para 17 (A)

⁴ See PIL No. 24 of 2017 in the High Court of Manipur

mandatory public hearings or consultations with local communities were done during drafting of the project. This itself violates Article 5(4)m of the Wetlands (Conservation) Rules 2017.

The project is likely to have serious impacts of marginalising local communities in their own home and habitat. For one, as mentioned above, the project is likely to severely impact their livelihoods like fishing, with no measures to compensate or provide alternate livelihoods; the promises of job creation and increased trade etc. are all in the future, and there are good indicators that the benefits will be much less than envisaged. Lastly, as is often the case, benefits from such initiatives are often cornered by the more powerful, and hence, the local communities that are more familiar and dependent on traditional means of livelihoods are likely to suffer.

Equally important, the Project Proposal itself acknowledges that right now, the local people with their traditional dugout canoe have no problem in navigating the waterways. If the newly proposed motorised waterways become a reality, it is likely that they will be owned and operated by people other than the local communities. Further, the running of the motorised boats may prevent local canoes from navigating or fishing due to safety reasons. Thus, it is likely that with advent of motorised boats, the transport in the Lake would slowly become dominated by the motor boats, and by those who own and operate the motorised boats. This will marginalise the traditional means of transport.

Combined with the impact on livelihoods, this will mean a significant marginalisation of local people.

Lack of Rigour

Given that the project is likely to have serious impacts, and also that it intends large interventions in a sensitive and important Ramsar site, it is critical that the project proposal be done with care and rigour. However, the Proposal indicates a lack of rigour and casualness. Some instances have been mentioned above. Other issues include proofing errors, overwriting by hand to correct errors in documents and a general casualness in treating numbers and calculations. For example, while calculations of benefits (Page 15-16) say that the number of passengers is 3225 commuters per annum, but in calculations, it is taken as 3225 per day.

Such casualness is unacceptable in a report dealing with a project of this implication.

Conclusion

It is clear that the proposed project of extending and expanding the motorised waterways transport in the Loktak Lake will have serious impacts _ impacts that could even undermine the claimed benefits. The benefits themselves seem to be overestimated, based on shaky assumptions and calculations, and remain uncertain. The serious impacts on the lake ecology and their implications for the livelihoods of the hundreds of fishing families have also not been considered. The impact of these waterways on a sensitive and internationally important Ramsar site has not been factored in.

In general, there is a clear lack of rigorous studies for proper assessment of both, benefits and costs or impacts. The project claims that it is based on a demand from local communities, but where and how this demand has been articulated is not given in the report. On the contrary, there are indications that the project will marginalise local communities in their own lands.

Given all this, there is a need to stop this project and to properly study the mobility issue of Loktak based on comprehensive and extensive consultations with local people, civil society groups,

academics and other experts. Only from such a process can a solution emerge that will address the needs of livelihoods as well as preserving the ecology of this important Ramsar site.