

FOR VIZHINJAM, BUSINESS AS USUAL IS NOT AN OPTION

Relevant for: Environment | Topic: Environmental Conservation, Sustainable Development, and EIA

In Vizhinjam | Photo Credit: PTI

Revenues from the 7,525-crore deep-water port and terminal at Vizhinjam in Kerala will only be justified if the project provides sufficient safeguards against ecological destruction and addresses the rights of households displaced by the project. Nowhere is this socio-environmental imperative bigger than in Thiruvananthapuram because of its precarious ecology and coast-reliant economy. It is politically hard, but developmentally critical, to make a mid-course shift, to put port development with coastal management on a sustainable track.

Singapore, Shanghai, and Dubai took advantage of ports to become hubs, earn incomes, and drive economic growth. Vizhinjam's proximity to east-west shipping routes, its natural undredged draft of some 20 metres, and suitability for large vessels all make it a unique site. But in a lopsided agreement, the Government of Kerala bears 67% of the financing and the Concessionaire (extended to a generous 40 years) 33%, with a low internal rate of return of 3.7% for the Government and 15% for the Concessionaire. Despite the locational advantages, the Adani Vizhinjam Port Pvt. Ltd., finds the deal attractive only with the inclusion of large real estate components in prime port property. The financial picture of the enterprise for Kerala State is dicey at best.

Another crucial issue is that any revenue generation is at the cost of a heavy human toll. Some 350 families that have lost homes to coastal erosion last year, and those living in makeshift schools and camps are just a foretaste of things to come if coastal erosion and extreme cyclones continue unabated. Port projects in China, Kenya, and Vietnam have seen vast resettlement and livelihood outlays by the owners over the life of the project.

A further danger is an irreversibly destroyed ecology, triggering deadlier hazards of nature. Ports without adequate safeguards in a highly delicate ecology unleash destruction on marine life and the livelihoods of the local population. Visakhapatnam and Chennai show how siltation, coastal erosion and accretion can be exacerbated by deepening of harbour channels in ecologically sensitive areas; this risk is just greater for Vizhinjam by an order of magnitude.

Building safeguards could potentially run economic growth and socio-economic sustainability in tandem. A 2017 study warned of the fallout for the shoreline and marine ecosystem from construction of breakwater and dredging. But no funds have been earmarked for maintenance dredging within operational expenses, based on the false premise that siltation would be "negligible", with "minimum literal drift along the project site".

Equally, project documents hardly address the effects of the port on the precious marine ecosystem and biodiversity, a huge priority for Kerala. Recent studies have identified the Vizhinjam-Poovar stretch as a biodiversity hotspot and recommended that the region be recognised as a marine protected area. The discussion of flora, fauna, and lakes in the environmental impact assessment (EIA) is purely pro-forma.

The vital shoreline assessment in the EIA, released in May 2013, has come under heavy criticism for factual errors. For example, there is no mention of the ecological consequences of the dismantling of two hills in the Western Ghats to provide rocks for the project, aside from

destroying a few promontories at the project site.

A just published study shows that during 2006-20, the sea gobbled some 2.62 square kilometres or close to 650 acres from the Thiruvananthapuram coast alone. The rate of erosion is faster between Pozhikkara and Veli. Also, 0.7 km² of land was accreted.

The latest shoreline report, based on beach profile and satellite analysis, by the National Institute of Ocean Technology (NIOT), Chennai, appointed by the developer, shows significant erosion on the northern coast of the port (Poonthura, Valiyathura, Shanghumugham, Veli) and accretion in the port area and in the south (Poovar, Adimalathura) from 2015 to 2021 during port construction. Many of the spots themselves were the same during 2015-21 compared to previous periods, but new spots (Kochuveli, Cheriathura) too had emerged, post 2015.

The NIOT report attributes the erosion and accretion to climate change more than port activity, on grounds that construction has been modest in scale. That, in fact, aggravates the risk that stepped-up activity, without safeguards, will see more dire consequences. Anthropogenic climate change is unquestionably raising sea levels along Indian coasts, but the extreme stress north of the port cannot be explained by global warming, something that impacts everywhere.

In fact, a study of shoreline changes in Kerala by the National Centre for Sustainable Coastal Management attributes most of the drastic shoreline changes during 1972-2010 to structures built along its coast. Two-thirds of Kerala's coasts are eroding, and precautions are a must before constructing structures along its "eroding and vulnerable" coasts. Thiruvananthapuram has the highest percentage of erosion, facts ignored in environment clearances.

With a port, reclamation, dredging and construction of breakwaters further complicate erosion. Breakwaters have exacerbated the drastic shoreline changes in and around its proximity. In almost all these areas, the coast to the north of the breakwaters is heavily eroded.

A bedrock principle of environmental regulation worldwide is that pollution penalties should be high enough and borne by the creators of damages. For large-scale infrastructure projects, the financier and the borrower must implement sufficient safeguards to avoid marine pollution and destruction. On involuntary dislocation of people that society is willing to accept in return for financial gains, the project must allocate funds in recognition of people's centuries' old right to the sea and its resources.

There are many examples of projects that unduly harm the environment or society, which can be learnt from. Just to take two in relation to the Vizhinjam venture, the International Finance Corporation (IFC) supported the 4,150-Megawatt Tata Mundra coal plant (Gujarat) — the negligence greatly and unnecessarily exceeded the harm to the local poor people. Tata Mundra is one of the 50 biggest sources of greenhouse gas emissions. And in another more recent case, Bravus Mining and Resources (an Adani unit in Australia) has begun construction of its Carmichael thermal coal mine in Queensland's Galilee basin to export vast amounts of coal to India — when the world is moving away from fossil fuels in a desperate effort to save the planet.

Whether there were pre-existing health conditions or not, when COVID-19 infection precipitates illness or death, the pandemic is labelled the proximate cause. The same way, when port construction without adequate social and environmental safeguards harms lives and livelihoods, even in the presence of climate change, the project must take full responsibility for compensation. Corrective action by way of hard-engineering solutions such as seawalls and soft responses such as vegetation is in order.

The first order of business, as in infrastructure projects worldwide, is that the project provides

compensation to the displaced people and restores their rights. Second, the gross neglect of the damage to invaluable marine biodiversity must be redressed with an acceptable EIA, including inputs from experts in biology, ecology, and oceanography. Third, there needs to be an independent assessment of safeguards that port authorities must put in place as a precondition for any further construction.

A Turkish proverb says, “No matter how far you have gone on a wrong road, turn back.” That, in the context of unanswered financial, social and environment risks, means business as usual is not an option. On the other hand, rejecting the project, having approved it, is politically difficult. The way forward would be for the project management to take to heart, in the spirit of learning from experience, the red alerts, and the Government to allow continuation of the project only with agreement for a mid-course transformation, including a legal covenant to make the venture sustainable for Kerala.

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