Mega Water Projects in Baluchistan: Claims and the Reality

“Mega Projects”, or large civil-engineering based infrastructure projects such as dams, canals and ports, figure prominently in the federal govt’s vision for Balochistan’s development. Mega Projects are presented as the only way in which the grievances of Pakistan’s largest but least populated province could be compensated for decades of neglect.

The aim of this paper is to examine the govt claims about the financial outlay on Mega Projects in Balochistan and its supposed benefits for the people of the province. The paper questions some of the “headline” claims of the federal govt, and raises points for further investigation for technocrats, politicians, and development experts in Pakistan.

Mirani Dam The Mirani Dam project in District Kech just north of Gwadar is nearing completion at a total cost of Rs 5.8 billion. Officially, the Mirani Dam project is an irrigation project on the Dasht River. The Dasht River brings water from Nihang River and floodwater to irrigate lands of Dasht river basin in the flat terrain of Kech area. According to the design of Mirani Dam, it will be linked with two rivers to irrigate 33,200 acres.

It is useful to understand the irrigation system in the Dasht valley before the construction of the Mirani Dam. Like many other parts of Balochistan province, land was brought under crop through the construction of terraces or “bunds”. In the Dasht valley the bunds diverted river flow and flood water into fields, irrigating successive fields along a slope. The agrarian economy, therefore, was concentrated around the riverbed.

The concept of storing water upstream for irrigation using canals is alien to these regions. The Mirani Dam, therefore, will potentially require a complete overhaul of the traditional system of water distribution, and even the demarcation of property rights in land. It is not clear if the requisite institutional preparations have been made. What is striking, however, is that many local people in the Dasht valley fear that the Mirani Dam is not actually for irrigation purposes at all. They point to the free flowing Dasht River – along with occasional flash floods – as their traditional agrarian lifeline. The construction of the dam has stopped the river flow. A commonly expressed fear is that the dam is simply a storage for the supply of fresh water to Gwadar port and associated commercial, residential and industrial users. The Mirani Dam project design itself makes no mention of any non-irrigation use. Some other confidential official documents, however, do mention the supply of around 1.5 million gallons a day from Mirani and Akra Kaur dams to Gwadar. The fact that some property developers have begun to advertise this claim adds weight to the suspicions of the Dasht valley residents.

Kachhi Canal Project The largest single project under construction in Balochistan is the Kachhi Canal project with an allocation of Rs 31 billion. Kachhi Canal is supposed to irrigate 712 750 acres in Dera Bugti, Nasirabad, Bolan, & Jhal Magsi Districts of Balochistan. The capacity of this canal is 6,000 cusecs. It has a total discharge of 2.021 MAF (million acre feet) of which 0.452 MAF is perennial and 1.57 MAF is flood flow.

The fact that the canal runs for 300 km in Punjab before entering its command area, and the fact that those 300 km need to be lined, is clearly responsible for its high overall cost. Here it is pertinent to ask whether it might have been possible for Kachhi to take off from Guddu Barrage rather than Taunsa. Guddu is barely a distance of 20 km from Sui, whereas Taunsa is located 30 km away.

The canal takes off from Indus River at Taunsa Barrage in the Dera Ghazi Khan District of Punjab. The total length of the canal is 500 km, of which 300 km is in Punjab and the remainder in Balochistan. The 300 km of the canal in Punjab is going to be lined, in order to prevent water losses to non-beneficiary areas. The 200 km in Balochistan will be unlined. The route of the canal in Punjab passes through existing canals, such as the Dera Ghazi Khan Canal. Water will need to be lifted by pumps in order to cross the existing Dera Ghazi Khan Canal. The Kachhi Canal will enter Balochistan close to the Sui and run in a westerly direction towards Kachhi district. The govt has made much of the fact that the Kachhi canal passes through Punjab: “Punjab has been gracious to provide land for its 350 km stretch that will pass through the province. This is all for your benefit and
The fact that the canal runs for 300 km in Punjab before entering its command area, and the fact that those 300 km need to be lined, is clearly responsible for its high overall cost. What is interesting to note, however, is that the point at which the Kachhi Canal is supposed to enter Balochistan is literally a few kilometers (under 5 km) away from the route of the existing Pat Feeder Canal. The Pat Feeder Canal, constructed in 1969, takes off from the Guddu Barrage on the Indus in Sindh. It has a capacity of 3,180 cusecs and irrigates 352,000 acres in Nasirabad and Jaffarabad districts of Balochistan. There is an existing project for the re-modelling of the Pat Feeder Canal at the cost of Rs 2.2 billion. Here it is pertinent to ask whether it might have been possible for Kachhi to take off from Guddu Barrage rather than Taunsa. Guddu is barely a distance of 20 km from Sui, whereas Taunsa is located 300 km away.

Besides canal construction, a major component of the Kachhi Canal project is the re-modelling and capacity expansion for Taunsa Barrage, as well as other civil works on existing canals taking off from Taunsa. In principal, it might have been possible to re-model Guddu Barrage and to expand the capacity of Pat Feeder upto Sui, so that it might have acted as a feeder for the Kachhi Canal. In fact, it is remarkable that there has been virtually no public discussion of this aspect of the Kachhi Canal design.

Given the mistrust that has built up over the decades between provinces over matters of water distribution, it is of some political consequence that the Kachhi Canal off-take was chosen in Taunsa in the place the possibly cheaper option of Guddu.

The Pat Feeder Canal, which was chosen in Taunsa in the place the possibly cheaper option of Guddu, thereby becomes an important political resource, and there is a measure of mutual political sympathy between “nationalists” of the two provinces. This fact has already been used as an argument in the favour of the Greater Thal Canal, which is designed to be a flood canal, but which Sindh suspects of being a perennial. The proponents of Thal Canal have argued that Sindh ought to object to Kachhi Canal too on the same grounds as it uses against Thal Canal, because Kachhi Canal is also designed primarily as a flood canal.

Setting aside the political arguments about these canals the question still remains as to whether or not Guddu might have been a much cheaper option than Taunsa for the Kachhi Canal. If this indeed were the case, then the choice of Taunsa would suggest that a large part of the amount being spent on Kachhi Canal is not for the benefit of Balochistan, but other economic and political interests – such as the upper riparian, large landowners along canal route, or even the construction industry. These questions will remain speculative, but they are important to raise given the high economic cost and loud propaganda claims surrounding the Kachhi Canal project.

This canal is going to increase the acreage of irrigated land in the one region of Balochistan that is already endowed relatively good agriculture compared to other arid and semi-arid parts of the province. There are, moreover, questions about the choice of the point of take-off – Taunsa Barrage instead of Guddu Barrage – that suggest that it might have been possible to provide additional irrigated acreage to Balochistan at lower cost.

These technical questions are important for Balochistan and the rest of Pakistan. It is important to cut through the propaganda and to ask hard questions about the actual benefits of various projects and alternative ways of pursuing economic development. The present paper does not provide answers to these technical questions, but has provided sufficient material to suggest that there is a case to be answered.

(Edited from Mega Projects in Balochistan dated March 2007 by Azmat Budhani and Hussain Bux Mallah)

World Bank to fund Basha Dam A high-level World Bank delegation led by Chief Water Specialist for South Asia David Grey has made it clear to the govt that funding will not be made available for the proposed Diamer-Basha Dam till concerns over the possible environmental and social impacts of the project are addressed fully. (The Post 200307)
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REVEALING QUOTES
“Perhaps hydropower is not as green as we thought. A lot of these tropical hydropower schemes would have been made by simply flooding a forest. There would have been a lot of trees and plants, and you need to think about what happens to all that carbon.”
Prof Mice Acreman, UK Centre for Ecology and Hydrology (The Hindu 290307)

“But strangely, there is no subsidy for organic manure…(People displaced by the Upper Krishna Project) spent the cash and now they are steeped in poverty again. They didn’t use the houses because they were built on graveyards and they could not use the land because it lacked irrigation facilities.
Amar Nath HK, Senior economist, NIPFP, (The Mint 020407)

Only that they (biofuels) are a formula for environmental and humanitarian disaster. In 2004 I warned, on these pages, that biofuels would set up a competition for food between cars and people. The people would necessarily lose: those who can afford to drive are richer than those who are in danger of starvation. It would also lead to the destruction of rainforests and other important habitats... these effects are happening already.
George Manibot (The Guardian 270307)

“Like the sinking of Titanic, catastrophes are not democratic. A much higher fraction of passengers from the cheaper decks were lost. We’ll see the same phenomenon with global warming.”
Henry I Miller, Stanford University (The Times of India 020407)