Changes to Kaleshwaram controversial; to hike costs

DECCAN CHRONICLE. | DR BIKSHAM GUJJA Published Sep 4, 2018, 12:24 am IST Updated Sep 4, 2018, 12:24 am IST

Report by CWC rubbishes claims that there is more water downstream.



File photo of the Kaleshwaram project.

The Telangana state government has made three major controversial changes to the Kaleshwaram Lift irrigation Project (KLIP), the most expensive lift irrigation project ever attempted in India and perhaps in the world, which has significantly increased the costs and triggered a controversy.

The three changes are:

- Source of water drawal has been shifted from Tummidihatti to Medigadda;
- Partly completed work at Tummidihatti has been discontinued;
- Massive storage dam at Mallannasagar has been added.

The current pumping station is located at Medigadda on the Godavari. It was earlier located on the Pranahita at Tummidihatti, 70 km upstream. The justifications for this change were:

There is more water downstream, submergence in Maharashtra will be avoided;

Establishing more storage by constructing three barrages using the Godavari river as the dam site.

Dodgy data

The argument about having more water downstream has been seriously contested with data. This change has made this project too big with three additional barrages on the Godavari, pumping stations and complex technical designs. This additional infrastructure has no apparent advantage in getting more water.

A detailed study based on daily discharge data obtained from Central Water Commission (CWC) and using sophisticated computer models opposed the view that there was more water downstream.

A report released in November 2016 stated "Water is there for pumping at Tummidihatti and Medigadda." The report stated: "At Tummidihatti, at the rate of 2 tmc ft pumping, water is available between 82 and 164 days in a year, depending on bad and good monsoon year." The water is not the issue but drawing it in the most cost-effective way is.

Drawing water from Tummidihatti "has a strategic advantage" of less cost and the location clearly has the advantage scientifically, technically and economically, the report said.

For some strange reason, without any due process, scientific study, proper process or consultation, the site has been shifted. In order to suit the shift, the data has been manipulated in the detailed project report (DPR). This has been proved behind reasonable doubt, and has led to a massive increase in costs.

Cost escalation

This single decision has not only increased the cost by `30,000 crore but also added to the operation and maintanence (O&M) costs which will be forever. It has added to electricity costs, the need for establishing additional power plants and the associated project costs — direct and indirect.

This has also led to a major shift in priority, thus abandoning further work at Tummidihatti which would have provided much-needed water for irrigation in Adilabad.

It is known that lift irrigation projects are expensive and the O&M costs are higher that with gravitybased projects. Therefore, while designing and deciding on projects, utmost consideration should have been on cost reduction. KLIP seems to have done the opposite, increasing capital costs to Rs 80,000 crore which seems to have already reached close to Rs 1,00,000 crore and massive power requirements increasing the O&M costs.

Complications and delays

The shift to Medigadda has changed the project and its operational and engineering aspects. Water coming from Medigadda or Tummidihatti has to pass through Yellampalli. This is the gateway to pump water up to the mid-Manair project. There are already tunnels and other infrastructure for pumping water. This was planned and a major portion of the work completed earlier.

Shifting of the site and changing the pumping capacity has forced the reopening of tunnels to widen them. Instead of increasing the number of pumps from six to seven, the tunnels are being widened. There is apprehension that this process may lead to collapse of some tunnels, thus causing additional costs and additional delays.

These are not the only issues. The project has become too big, too unmanageable. Some of these issues include - the bottleneck at Imamabad both its sump capacity and the pumping capacity that has raised serious questions about the feasibility of pumping large quantities of water upward in order to fill the massive proposed storage facilities.

The KLIP has included the controversial storage at Mallannasagar. The location is geologically sensitive, which has been pointed out in the November 2016 report which stated that Mallannasagar was sitting on a 'major lineament', a geological fault zone. Construction of a structure and storing 50 tmc ft of water might "create reservoir induced seismicity similar to Koyna and possibility of massive earthquake."

The report requested further examination of the site. In addition to these more visible issues, the contracting and the the type of contracts have added to the controversy. On top of it, the government's hostility to engage in any form of public information-sharing or debate has fuelled controversy.

The way forward

The debate on KLIP is dividing the Telangana civil society and political establishment. The issue will not go away if discussion is curtailed. Therefore, a constructive dialogue based on the following proposals needs to take place.

Use the existing infrastructure: Major investments have been made at Medigadda. Explore the possibility of using this infrastructure, i.e. barrages, for other productive purposes, in case pumping to Yellampalli is not needed or other sources are going to be developed. This massive investments should not be wasted.

https://www.deccanchronicle.com/nation/current-affairs/040918/changes-to-kaleshwaram-controversial-to-hike-costs.html

Restarting water drawal from Tummidihatti: It is possible to draw water while building a major barrage to avoid submergence in Maharashtra. This needs to be explored and work should be started to bring water as fast and as cost effectively as possible to Yellampalli. This can also provide water for irrigation in Adilabad on priority.

Pumping water from Yellampalli: There is water in Yellampalli that can be pumped on priority.

Reassessing water resources: The government should have done this at first, before starting the mess around KLIP. There is an urgent need to reassess the water resources, opportunities and the comprehensive way of using surface water, ground water and recharging existing structures, filling the water storage facilities and using the canal network.

Let's talk

This is only possible if the government comes out of its "I know it all" and "our contractor is the best" attitude. There are also the elephants in the room - the lack of transparency, engagement with civil society, autocratic style of government functioning - all adding to the tensions and controversy.

The contracting and tendering to one or two major contractors with no resemblance of accountability, transparency, dialogue, contact are adding to the mistrust. Finally, the government should realise that it has come to power with the active participation, support and trust of civil society. That trust has to be restored, if it really wants KLIP to be successful.