

Mega Dams: Pitting Economy versus Livelihoods and Nature

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Not content with two large dams at Mangla and Tarbela, the water establishment pushes for construction of more mega dams. Ignoring waste, mandarins in both democratic and military regimes portray Pakistan as a water deficient country, which calls for immediate construction of a new large dam. Portrayed first as harbingers of national prosperity, new dams such as Kalabagh and Basha/Diamer are now being touted as the only defense against future "water wars" between provinces. But "it is better to have a peace process before war breaks out, rather than after the misfortunes of a badly conceived project is cast in concrete."

Today's enthusiastic dammers ignore that yesterday's calls for Kalabagh dam by Prime Minister Nawaz Sharif were met with widespread and intense protests. Fear among threatened communities led to expressions of rage across the country. For in matters so vital to life and livelihood, citizens saw an arrogant disregard of constitutional safeguards against arbitrary exercise of federal powers. Called upon to evolve a consensus, federal ministers and agencies such as WAPDA casually set aside moral and legal obligations to serve the federation. Fearful of substantive dissent from other water-related agencies, President Tarrar ordained that IRSA (the Indus River Systems Authority) be entrusted to state functionaries rather than provincial representatives. Such thoughtless actions cannot but be seen as pitting state against federation. The recent militarisation of government makes it even more essential to renew public debate over federal responsibility in managing Indus waters with efficiency and equity.

Leading the evangelists for large dams, WAPDA has incessantly proclaimed the necessity and feasibility of large dams. Reflecting its miniscule staff of environmentalists, the federal water agency contemptuously dismisses legitimate concerns of adverse economic, social and environmental impacts; and stubbornly refuses to acknowledge better alternatives to meet the dam's objectives. Its conduct is brazen defiance of repeated resolutions by three provinces as well as the federal Senate Standing Committee on Water & Power.

Spokesmen for the Panjab establishment and the federal government base their crusade on the following. First, a rapidly growing population requires more water and energy. Second, the dam will irrigate additional lands in all provinces and produce electricity through Indus waters otherwise "wasted". Third, people displaced in the vicinity of the dam can and will be compensated adequately. Fourth, there will be no other significant adverse impacts upon people or the environment anywhere else in Pakistan. Fifth, large dams are superior to all other alternatives for rapidly increasing food and energy supplies.

We believe that construction of any additional large dam on the Indus will be both inefficient and inequitable. A large dam is unnecessary because superior alternatives are available. When built and used as planned, a mega dam will benefit a small number of people but impose enormously high costs on a substantially larger number of people -- now as well as in future generations through large-scale displacement and environmental degradation.

The case against new large dams can be well illustrated through the issues raised by Kalabagh dam. These issues should be part of a comprehensive options assessment of new large dams, called for by both law and good sense. Such an assessment would take into account not only monetary and quantifiable variables, but also the non-monetary and non-tangible variables including cultural affinity, kinship ties, and sense of place and belonging.

ADVERSE IMPACTS

Located downstream of Tarbela, Kalabagh dam is promoted as an essential part of a grand scheme towards irrigating hundreds of thousands of acres across Pakistan. The dam is designed to also produce over 2500 mw of electricity.

Through land lost to the reservoir and seepage, the dam will directly displace between one and two hundred thousand men, women, and children in NWFP and Panjab. After the dismal performance of WAPDA in compensating and resettling a substantially smaller number of people displaced by Tarbela, Ghazi-Barotha, and Chotiari projects – and in the absence of a coherent National Resettlement Policy -- there is absolutely no reason to believe that the federal government and its agencies

will have the will, resources and capacity to deal fairly and promptly with Kalabagh's displaced people.

In order to protect Nowshera and other towns in NWFP from the heightened risk of damage by floods, WAPDA makes much of a lower dam height and its ability to handle complex water release techniques. After witnessing the outrageous mismanagement of WAPDA, which forced a choice between protecting Mangla dam and flooding the unfortunate people of downstream Jhelum, communities in the vicinity of the Kalabagh dam are unwilling to place their lives and livelihoods in certain jeopardy at the hands of WAPDA.

Like all large dams, Kalabagh dam will cause the water table to rise in surrounding areas. Substantial areas of central NWFP and the Potohar plains of Panjab will then have thousands of acres of cultivated land wasted through water logging and salinity. Tens of thousands of affectees are unlikely to receive any adequate compensation from a WAPDA that has historically been irresponsible and uncaring in these matters.

As observed in many international dam projects, often the most pronounced but also most neglected are downstream adverse impacts. WAPDA asserts that there will be no such significant effects of Kalabagh dam. In comparing the history of Indus flows recorded by WAPDA with water allocations in the Water Accord, one can only conclude that WAPDA is self-servingly casual about the evidence of adverse impacts. It will be a rare year in which Indus floods are large enough to utilise the dam project without reducing current flows to one or more province. It is a foregone conclusion that Panjab will not be allowed to suffer.

Years of normal Indus flows will permit Kalabagh dam and associated new irrigation schemes in Panjab to be used only by reducing water allocations to Sindh and Balochistan. If damage to upland agriculture and urban supplies is avoided, then hundreds of thousands in the Indus delta must bear the brunt of devastation to their lands, forests, and fisheries through reduced freshwater and silt flows, and increased sea water intrusion. It is absurd of WAPDA and the Planning Commission to base their arguments for a dam on the basis of "wasted waters" flowing into the sea – average flows to the sea are irrelevant to availability and need of the ravaged Indus delta.

Neither law nor tradition in Pakistan can be expected to ensure that *all* people affected adversely are adequately compensated, let alone assisted in becoming direct, net beneficiaries of dam projects. It would therefore be a travesty of national development to propose Kalabagh or any other dam which entails the forced destruction of the lives, livelihoods and community of millions of people across the country.

SUPERIOR ALTERNATIVES

Enthusiasm for the dam is inexplicable in the face of better alternatives that will cost much less, and avoid the massive human and environmental costs of another mega dam. Reducing waste within the irrigation system is an obvious measure, since at least half of the water is lost to seepage and runoffs. Pakistani agriculture gobbles more than half as much as what Egypt uses and three times more than what India consumes by way of freshwater. One estimate is that measures for lining water courses, land levelling and the like will cost only one-tenth of the cost of getting the same water from Kalabagh dam. All water for additional cultivation in *any* province can therefore be obtained from investing in conservation measures to more effectively use using current withdrawals from the Indus. This would be cheaper and pose no threat to human settlements or the environment.

A recent study by international consultants (which included senior WAPDA staff) has evaluated options for maintaining Tarbela's storage capacity. It concludes that the investment cost of desilting Tarbela dam and reducing future sedimentation will be less than \$700 million. An additional \$900 million would be required to preserve energy outputs. These investments are strikingly smaller than the many billions required for a new dam to achieve the same irrigation and energy objectives. Since no replacement dam will be required there will be no widespread human misery and immense devastation of nature. In fact, desilting Tarbela will begin to restore the natural fertility regime of the Indus.

The present WAPDA power system incurs enormous line losses, so that no more than 75% of power generated is able to reach consumers. Clearly, investments in reducing this waste are cheaper than building more capacity only to lose another one-fourth again. In addition, present generating capacity is already underutilised by a large margin, and a surplus is likely to remain when the Ghazi-Barotha Hydropower

project comes on stream in a couple of years. When getting new power to the villages is the priority, as it should be, decentralised projects of wind and solar power need to be taken far more seriously by provincial and federal governments than the lip-service accorded by WAPDA.

DEMOCRATIC CONSENSUS

Since 1991, the state has relied upon the Council of Common Interests to resolve conflicts over sharing water resources between the provinces. Allocations within provinces are left to the provincial government. The state believes it can resolve the conflict over Kalabagh or any other large dam in the same manner. As the Water Accord of 1991 shows, the Council is inadequate in safeguarding the interests of all federating units. After severe mismanagement of the economy, the state has no credibility as the guardian of public interest.

All conflicts over common resources, including dams on the Indus, should be resolved in support of justice and equity through a democratic federation. This will require adherence to the principle of prior informed consent of affected communities, no less than of regions and provinces, when negotiating options, and subsequent mitigation and compensation for adverse impacts.

These goals require two commitments from state and society. One, that development projects which use federal resources will not be decided unilaterally by the federal government. Two, projects which involve very unequal benefits and burdens across the federation will ensure fair and prompt compensation to people and regions adversely affected, paid by those benefiting from the project. Implementing these commitments demands specific action by federal, provincial and local government, as well as by civil society acting in support of communities. Such commitments require the following actions.

First, and most importantly, federal as well as provincial governments must announce a *complete moratorium on any more dams and barrages*.

Second, the federal government and provinces should together *constitute a National Water Commission*. Its terms of reference should be two-fold: to examine basin-wide social, economic, and environmental impacts of all existing and proposed irrigation

and drainage systems; and to propose alternatives for expanding irrigation and power supplies. To be credible, the Commission should be headed by an expert from the Non-Governmental Sector. Commissioners would represent dam affected communities, NGOs, technical experts, and provincial governments. If, as we hope, the World Commission on Dams gets a good study done on Tarbela, it will provide a useful starting point for national discussion and debate.

Third, public representatives should subsequently ensure *broad-based public discussion and debate* of the Commission's findings, with a view towards both establishing compensation due for existing dams and barrages as well as obtaining *informed consent of communities* affected by any future water project.

Fourth, federal and provincial legislators would ensure that all water projects qualify as a subject for negotiations at any federal forum only after *endorsement by provincial assemblies* through a process of *public hearings in Standing Committees*.

Fifth, federal government would proceed with implementation of only such projects as have received the Commission's approval, gained provincial recommendation, obtained *unanimous agreement in the Council of Common Interests*, and accorded subsequent *ratification by the federal Senate*.

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