

FLOWS AND FLAWS: DIVERTING THE DEBATE ON WATER WITH CHINA

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ABSTRACT

China's growing water thirst lends an urgency to understand China's resource choices, the possible conditions under which it is likely to exercise these choices and the ripple effects these are likely to have across the borders. While over-interpretation and hysteria has tended to take the place of informed scholarship and media, India's official narrative has largely tended to downplay many of these concerns. The paper argues that the debate has also unwittingly ended up being a single-issue debate fixated on water diversion, in the process inadvertently diverting attention away from other equally important issues. Can we frame the water debate with China in ways that can create institutional entry points for a whole set of missing issues that are currently invisible to the mainstream policy and research gaze? India and China's willingness to begin a subregional conversation on regional public goods could pave the way to designing norms of benefit sharing, negotiating trade-offs, and allocating risks and burdens on collective goods and bads in the region.

A DEBATE DIVERTED

China's growing water thirst lends an urgency to understand China's resource choices, the possible conditions under which it is likely to exercise these choices and the ripple effects these are likely to have across the borders. China is witnessing a virtual dam-building boom and much of this expansion is based on augmenting capacity in its western region, which is being projected as the energy powerhouse of the country. As the \$1.5 billion Zangmu hydroelectric dam, China's largest hydroelectric dam on the Brahmaputra (Yarlung Tsangpo) recently became fully operational, it brought in its wake a virtual paranoia over its likely downstream impact. While over-interpretation and hysteria has tended to take the place of informed scholarship and media, India's official narrative has largely tended to downplay many of these concerns. The debate has also unwittingly ended up being a single-issue debate, fixated on water diversion and its likely impact. But is that all there is to it?

WATER PURIFIERS, ANYONE?

A fixation with diversion has today inadvertently diverted attention away from other equally important issues that need to be placed on the agenda. For instance, water quality could soon emerge as a major transboundary concern. (Kurian 2015) Even within China, this is becoming a critical issue, with northern areas including Beijing anxious about the quality of southern waters that will be transported to the north. Added to these are concerns that the fragile ecosystem of the Tibet-Qinghai plateau is showing signs of stress as it struggles to cope with the furious pace of economic activity. The 'pillar industries' of mining and timber processing have fed the rapid industrialisation of Tibet, bringing in its wake assorted problems of deforestation, soil erosion, landslides, floods, acid rain and pollution especially of its water systems. These are creating ecological imbalances in the form of rising temperatures, retreating glaciers and droughts caused by indifferent rainfall. A particular area of concern for downstream countries will be the environmental degradation facing Tibet's 'Three Rivers area' comprising the Yarlung Tsangpo, Lhasa River and Nyangchu basins in central Tibet. One of the most intensely exploited areas in this region is the Gyama Valley with large polymetallic deposits of copper, molybdenum, gold, silver, lead and zinc. The Gyama valley is situated south of the Lhasa River, one of the five great tributaries of the Yarlung Tsangpo that merges with it 130 kms downstream. Studies by Chinese scientists are pointing to the possibility of a high content of heavy metals in the stream sediments and tailings that could find their way downstream.

DODGING THE DATA

Disputes over data, be it of access or of accuracy can be both endemic and damaging to riparian trust building. Establishing a baseline database for different biodiversity and ecosystems components will be an essential prerequisite to informed public policy on sustainable water governance. (Kurian 2013) It will also be critical to plug gaps in the knowledge base by bringing together local, national, and regional stakeholders. A successful case in this regard is that

of the Mekong Committee, the precursor of the Mekong River Commission, which foresaw the wisdom of investing the early decades of its institutional history to data-gathering projects.

Recent scientific studies have brought out grave errors in current assessments of precipitation data. High-altitude precipitation in the upper Indus basin was found to be higher by a factor of 10 than what is currently estimated. Such discrepancies are due to the lack of adequate meteorological stations in upper elevations, with datasets having to rely on a combination of satellite images and available measurements received from stations mostly located in the plains. A recent study by the International Centre for Integrated Mountain Development (ICIMOD) projects higher incidence of both floods and droughts in the Brahmaputra basin till 2050. (ICIMOD 2016) The capacity to predict water flows and water balance in any given transboundary river basin would hinge a great deal on addressing critical gaps in the knowledge base.

(NOT) RUN-OF-THE-MILL

The cumulative impact of run-of-the-river dams also remains ill defined and little understood. Evidence is emerging that run-of-the-river projects tend to retain rich silt deposits, which will result in decreased sediment flows downstream. This will have significant implications for the fertility of the Brahmaputra basin as well as food security given its impact on climate-sensitive sectors such as agriculture. More than one million people in the Ganges-Brahmaputra Delta are likely to be affected due to decreased sediment delivery and increased sea level rise by 2050. In this regard, the Ninth Report of the Inter-Ministerial Expert Group on the Brahmaputra (IMEG) in 2013 called for a close monitoring of the 39 run-of-the-river projects on the Yarlung Tsangpo and its tributaries. Despite being projected as run-of-the-river projects, the fact that the Jiexu, Jiacha and Zangmu dams are within 25 km of each other and at a distance of 550 km from the Indian border has stoked downstream concerns.

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These also raise larger questions about the cumulative impact of massive dam-building projects across the entire Himalayan region. In the geo-dynamically active Himalayas, earthquakes are an ever-present danger with a recorded history going back to the 13th century. Recent research by Chinese scientists has shown that the Sichuan earthquake of 2008, which resulted in the loss of 80,000 lives, could have been triggered by the Zipingpu Dam in Sichuan province in western China. Chinese seismologists had forewarned about precisely such a catastrophe in 2001 when construction of the dam began since a major fault system lay less than a mile away. As many as 50 research studies have since then validated this link, with further evidence of a series of dam-induced small quakes having triggered the big quake. (Lewis 2013).

A RIVER RUNS THROUGH IT

In a transnational neighbourhood, upstream management of river waters has obvious implications for downstream countries and communities. The increased pressure on resources, erosion concerns and water diversion plans raise critical livelihood questions for river-dependent communities both within and beyond borders. Given these multiple ripple effects, there is a need to frame transboundary water governance as a regional public good that require transnational as against bilateral frames. But are we making this causal link? Can we frame the debate on water with China in ways that can create institutional entry points for a whole set of missing issues that are currently invisible to the mainstream policy and research gaze? India and China's willingness to begin a subregional conversation on regional public goods could pave the way to designing norms of benefit sharing, negotiating trade-offs, and allocating risks and burdens on collective goods and bads in the region.

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