

Resistance to Reforms in Water Governance

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This article provides a response to the critique of the Report Submitted by the Committee on Restructuring the CWC and CGWB, by M Dinesh Kumar et al ("New 'Water Management Paradigm': Outdated Concepts?" EPW, 9 December 2017). Their critique misrepresents what the report says, and is part of an ongoing attempt to thwart reforms in the governance of India's water sector, which, in crucial respects, has remained unreformed for the last 70 years. Without these reforms, however, India's water crisis will only deepen by the day.

It is a curious tale. How is it that an institution set up in 1945 manages to continue virtually unchallenged and unchanged despite so much evidence and such widespread awareness that it has been unable to deliver on its fundamental premise of water security? Why is it that water has still not become a major political issue on which elections are won and lost, despite a water crisis on the ground that only gets deeper by the day?

The Central Water Commission (CWC) was set up in 1945. Ever since independence, it has continued to function unreformed, presiding over a development paradigm based on command-and-control over the rivers of India. The Central Ground Water Board (CGWB), set up in 1971, pioneered the deeper search for groundwater, which has relentlessly continued over decades, not always recognising that a major portion of the country's land mass is underlain by hard rock formations, leading to a situation where both water tables and water quality have declined to dangerous levels today. Even as the objective conditions on the ground, the demands of the economy and society, and our understanding of water have all undergone a sea change, both the CWC and the CGWB continue to function unreformed, still clinging to a long bygone era.

When former Prime Minister Manmohan Singh invited me to join as member, Planning Commission in 2009, one of my tasks was to try and initiate fundamental reforms in water governance in India. The new government in effect asked me to carry forward this process, when they appointed me chair of the Committee on Restructuring the CWC and CGWB in September 2015. We submitted our final report to the Government of India in July 2016. But even after 18 months have passed, it is evident that change faces serious obstacles, especially when reforms mean something quite different from the usual connotation of privatisation. The attempt to bring the voices of the marginalised into policymaking and to check widespread corruption in the irrigation sector is fiercely resisted by dominant vested interests. This is particularly true when the status quo has flourished undisturbed for seven decades, as is the case with water governance in India. I have personally been dubbed "anti-dam, anti-development, and anti-national" for arguing for the radical reforms the report proposes.

Part of the strategy in any such context is the marshalling of ideological power in defence of the status quo. This is evident in the article "New 'Water Management Paradigm': Outdated Concepts?" by M Dinesh Kumar et al (2017) in a recent issue of the EPW, which is a

critique of the *Report Submitted by the Committee on Restructuring the CWC and CGWB* (Shah et al 2016; hereafter, report). Their critique of the report misrepresents what it actually says. It also launches a full-scale attack on data cited in the report, which is, of course, entirely derived from official sources. This is a classic case of “shooting the messenger,” when it is no longer possible to ignore the message.¹ I provide below a point-by-point refutation.

Credibility of the Committee

Kumar et al repeatedly try to question the credibility of the committee set up by the government. It gives me great pleasure and sense of pride to state that the committee comprised some of the world’s leading scholars on water, who not only represent leading research organisations, but also have an impeccable track record of high quality, published academic work, as well as path-breaking work on the ground, aimed at finding solutions to India’s vexed water problems.²

Moratorium on Large Dams?

Kumar et al claim that the report is proposing a “moratorium on large dams” (2017: 90). Nothing could be farther from the truth. What the report contains is a comprehensive assessment of the physical and financial performance of large dams in India, which is derived entirely from information available in official documents. It takes as its starting point the question: Why does India, even 70 years after independence, continue to suffer successive droughts and floods, year after year, causing great misery to millions of people, and even resulting in suicides by farmers? As the report says:

At the epicentre of the present drought is Maharashtra, the State with the highest number of dams in India. Intervening in a debate in the State Assembly on 21 July 2015, the Chief Minister of Maharashtra remarked that the State has 40% of the country’s large dams, but 82% area of the state is rainfed. “Till the time you don’t give water to a farmer’s fields, you can’t save him from suicide. We have moved away from our vision of watershed and conservation. We did not think about hydrology, geology and topography of a region before pushing large dams everywhere. We pushed large dams, not irrigation. But this has to change.” (Shah et al 2016: 21)

So this is the question the committee posed itself: What has to change in the way we have managed the water in our irrigation commands to ensure that it reaches the farmers most efficiently? On examining the track record of large dam projects, we found that we have invested ₹4 lakh crore in major and medium irrigation projects since independence. Official records reveal that the irrigation potential created is 113 million hectares (mha), the potential utilised is 89 mha, and the gap is growing by the year.³ Vast storages of water are not reaching the farmers. We have focused only on the expenditure of vast sums of money for the construction of dams and main canal systems, not on enduring outcomes. This is borne out by the fact that the average cost overrun is as high as 1,382% in major irrigation projects and 325% in medium irrigation projects. We have to shift focus from expenditures to outcomes.

And, how does the report propose we do that? By learning from what the best states in India have to teach us, by the reforms that these states have introduced in the last decade or so, and the extraordinary outcomes this has resulted in. These reforms turned around the fortunes of Andhra Pradesh’s Department of Water Resources over the last 10 years, led to Gujarat recording a 11% rate of growth in agriculture over 2000–10, and to a dramatic rise in Madhya Pradesh’s irrigated area from 0.6 to 3 mha during 2009–14.

So this is not about a moratorium on large dams at all. That is a different debate and not one that fell within the terms of reference of the committee. The report, of course, does cite official data on the dismal performance of these dams over decades and chronicles their many failures. But the primary concern of the report is with making better use of the trillions of litres of water stored in these dams and ensuring that this water reaches the farmers for whom it is meant.

Irrigation Management Transfer

So what does the report learn from the states and, indeed, from hundreds of similar success stories across the world, all cited in the report? That we need to make water management in our irrigation commands more participatory, and understand that water is essentially a multidimensional resource, requiring a multidisciplinary approach towards its management. Kumar et al seek to debunk this approach, completely ignoring the successes achieved in several Indian states. They write:

As a matter of fact, WUAs [water user associations] are defunct in all the states, in the absence of devolution of any kind of powers to them. The state irrigation departments that are concerned with irrigation management are not willing to share any of their powers with the farmer organisations. Such delegation of powers happens only on paper. (Kumar et al 2017: 91–92)

I do not disagree that the states need to do much better in empowering the WUAs to enable them to function more effectively. What the report argues is that where states have done so, the results have been dramatic and, therefore, all states must adopt this model of Irrigation Management Transfer (IMT).

I agree with Kumar et al that “farmers shift to water-intensive crops once irrigation water is made available,” and that “most scholars in the water sector today agree that the key institutional reform needed in the water sector is to affect behaviour changes for regulating the growth in demand for water in various competitive use sectors” (2017: 91). But as shown in the report, this is precisely what successful WUAs have been able to achieve in states where the necessary reforms have been put in place to adequately empower the WUAs. Unlike Kumar et al, I believe that the key role has to be played on the ground by adequately empowered WUAs who pay central attention to resolving issues of equity within themselves. What common pool resources like water do very well is to make all those who share these resources realise that their destinies are closely linked. Of course, such a realisation takes time to sink in, but the benefits of cooperation finally outweigh its costs in such situations, as any student of Elinor Ostrom or even game theory would understand.

Bogey of Federalism

Kumar et al argue:

It also needs to be appreciated that because water is a state subject in India (except for the inter-state river basins), most of the reforms have to happen at the state level, in order to affect changes in the orientation and working of the agencies which plan, design, execute, and run water projects. (2017: 89)

They, therefore, claim that

the committee has taken the wrong patient to the operating table. Ideally, reforms are required to affect changes in the functioning of the state water agencies which plan and develop the water resources. But the committee has not made suggestions for improving their working. (2017: 90)

It is abundantly clear from these statements that Kumar et al have not read our report with any care whatsoever. First, they seem to forget that the mandate of the committee was “restructuring of the CWC and CGWB,” which is what it has concentrated on. However, it has done so in acute awareness of the fact that water is a state subject under the Indian Constitution and action on water happens primarily in the states. Indeed, this is the reason why the report is replete with examples of the reforms states in India have undertaken in the water sector, and has also taken meticulous care to record the suggestions of the states regarding reform of the CWC and the CGWB.

So, how does one resolve this apparent paradox, the fatal flaw Kumar et al appear to find in the committee’s approach? This can be done by emphasising the role of the centre in both incentivising and facilitating reform by the states through the instrument of the National Irrigation Management Fund, from where funds will flow to the states only to the extent that they undertake fundamental reforms in the direction of decentralising management of their irrigation commands by making them people-centred. Indeed, the report argues that the main task of a reformed Accelerated Irrigation Benefits Programme should be to place all the 99 currently ongoing large dam projects into “reform mode”:

As the Ministry of Water Resources, River Development and Ganga Rejuvenation’s draft Vision Document rightly points out, all these 99 projects must be placed in reform mode and funds for these projects must be made conditional upon reforms being put into place from day one. (Shah et al 2016: 122)

The crucial role of the centre would be to monitor the performance of the states against these commonly agreed benchmarks of reform, and ensure that funds are released as per the adherence by the states to the schedule of reforms in the direction of IMT and empowering WUAs. Thus, both the centre and the states will work together to accelerate the movement towards realising the national goal of *har khet ko paani* (water for every farm). Recognising that water is a state subject does not mean that the centre can continue to remain a passive and mute spectator as the water crisis goes from bad to worse across India, and as thousands of crores spent on irrigation continue to go down the drain or line the pockets of politicians, officials, and contractors. The report suggests a new way in which the centre can push the states to undertake urgent water reforms. Not by wielding the big but ineffective stick of command-and-control, but by incentivising and facilitating states to move towards reform by learning from the best practices of pioneering states.

National Aquifer Management Programme

One of the most baffling critiques offered by Kumar et al concerns the National Project on Aquifer Management (NAQUIM). For some reason, they appear to think that the report advocates mere aquifer mapping and ignores the challenge of groundwater management. Kumar et al claim:

The farmers as well as official agencies know well that the resource is fast depleting in many pockets. Participatory aquifer mapping can do little to halt this ongoing menace. The committee has neither suggested any model to fill this institutional vacuum nor been able to visualise how participatory aquifer mapping gets translated into participatory groundwater management under the much-touted National Aquifer Management Programme. (2017: 92–93)

This is totally perplexing, because our report has devoted considerable space to address precisely this question, and to outline in detail the reforms needed in NAQUIM to make it an

effective programme of participatory groundwater management, once again based on the exemplary work done in states such as Maharashtra, Madhya Pradesh, and Andhra Pradesh. Section 2.2 of the report is entirely devoted to this question and it notes with some satisfaction that

the new six-year programme that has just been initiated with World Bank assistance for Groundwater Development and Management with a total financial outlay of ₹6,000 crore is a step in the right direction, with each of its components exactly reflecting the paradigm shift outlined by our Committee in this report. (Shah et al 2016: 51)

River Rejuvenation

Perhaps even more perplexing is the claim of Kumar et al that

while the committee discusses “rejuvenation of rivers” at length, it failed to offer any practical suggestions on how to achieve it, except talking platitudes about integrated surface and groundwater development. (2017: 93)

One of the key proposals of the report is that the CWC and CGWB need to work much more closely together at the river basin level if we are to achieve the national goal of river rejuvenation. As argued in the report:

CWC and CGWB cannot continue to work in their current independent, isolated fashion. In India today, we see repeated instances of what the 12th Plan document has called “hydro-schizophrenia,” where the left hand of surface water does not seem to know what the right hand of groundwater is doing. The one issue that brings out the need to unify the two bodies more than any other is the drying up of India’s rivers. The single most important factor explaining the drying up of post-monsoon flows in India’s peninsular rivers is the over-extraction of groundwater. The drying up of base-flows of groundwater has converted so many of our “gaining” rivers into “losing” rivers. If river rejuvenation is, indeed, the key national mandate assigned to the Ministry of Water Resources, then this cannot be done without hydrologists and hydrogeologists working together, along with social scientists, agronomists and other stakeholders. (Shah et al 2016: 118)

The report further argues that

river basins must form fundamental units for strategic planning and management of water resources. For this we need to correct the currently skewed and inadequate presence of CWC and CGWB in the river basins and hydrogeological settings of India. (Shah et al 2016: 131)

The committee found that both the CWC and CGWB have regional centres in only seven of the 22 river basins. There are four river basins where there is either a CWC or CGWB regional centre. There are 11 river basins where neither the CWC nor the CGWB has a regional centre. Both the CWC and the CGWB have regional centres within four of the hydrogeological settings, with one such setting where CGWB alone has one regional office. There are no regional offices of the CWC or the CGWB in one of the six hydrogeological settings. The distribution of such regional centres, currently, is skewed and needs an improved representation. Larger river basins such as that of the Ganga are significantly represented through many regional centres, whereas the Brahmaputra does not seem well represented despite its size. Smaller river basins are poorly represented, and as many as 11 such river basins have no significant presence of these organisations. Hydrogeologically too, the unconsolidated sedimentary aquifers are well represented along with the Himalayan, volcanic, and crystalline aquifer settings. There are fewer regional offices within consolidated sedimentary aquifer formations.

It is imperative that we ensure the presence of surface- and groundwater-related interdisciplinary expertise in each of the river basins and hydrogeological settings. To enable this, the National Water Commission (NWC), the committee proposes, by integrating the CWC and CGWB, must operate at the scale of the river basin integrating these interdisciplinary functions. The current regional centres of the CWC and the CGWB in various river basins and across different hydrogeological settings could be used as the first set of NWC centres.

Based on a rationale that integrates the size of the river basin and physiographic, hydrological, and hydrogeological factors, the report proposes a network of NWC centres to strengthen the existing regional offices or to establish new ones in the different river basins of India. Our report attempts to rationalise a set of sub-centres under the NWC that can be used to decentralise operations pertaining to surface water and groundwater management. The headquarters of the NWC for each river basin has then been so chosen as to ensure that it is either a CWC chief engineer's headquarters and/or the regional directorate of the CGWB. The mandate and structure of the NWC will be mirrored in the constitution of the regional river basin centres of the NWC, primarily in the interdisciplinary functions that such centres are expected to perform.

The report also indicates how the concept of the NWC can percolate further down to a more decentralised, sub-basin water management. The sub-centres are only a list of indicative locations for the devolution of the NWC mandate, structure, and operations, and can be modified based on more work on the ground, especially on the institutional devolution of the river basin concept for managing water resources.

Need for Legal Changes

A running theme of the article by Kumar et al (2017) is that along with the institutional changes suggested in the report, there need to be put in place key legal changes in the regime governing water use in India. I agree entirely. So does the government, for that matter! Which is why, along with this committee, they set up two other committees: one to draft a Model Groundwater Bill for adoption by the states, and another to draft the National Water Framework Law. Happily, both these committees have also submitted these draft laws to the government, which is currently working on their enactment. The work of all three committees must be seen as of one piece, complementing each other.

Where Is the Disagreement?

Finally, what makes the abusive tone of Kumar et al towards the report even more difficult to understand is that they do not seem to disagree with its fundamental recommendations. The following words from Kumar et al could actually have been a verbatim quote from the report itself and are a good summary of its main conclusions. No better words than these from Kumar et al to close my response to them:

Managing water today is no longer only about developing new sources through conventional means by construction of reservoirs, digging wells and laying canals and pipelines, but also about finding new sources of water and allocating the limited water amongst various competitive uses, while protecting the hydrological integrity of our catchments, rivers, lakes and aquifers. Inter-sectoral water allocation requires greater use of sound economic principles for efficient pricing, introduction of water-use restrictions, etc. Water resource management requires application of ecological sciences, ecological economics and environmental economics. It is quite obvious that our water-sector institutions have to be equipped with more technical manpower, with greater competence and with

people from multiple disciplines. They also call for new institutions for basin-wide water allocation and for undertaking resource management action. (2017: 89)

Notes

1 Full of personal abuse and invective, the article by Kumar et al (2017) is replete with epithets like “wishful thinking,” “professional bias,” “poor knowledge,” “outdated concepts,” “strong ideological bias,” “concocted data,” “statistical lie,” “lot of rhetoric,” “false premises,” “faulty diagnosis,” “misrepresentation of facts,” among others, to describe the committee and its report, completely against the spirit and ethos of academic writing or credible research.

2 The full text of the report and details about the composition of the committee are available on the website of the Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India. See Shah et al (2016).

3 Kumar et al seek to debunk official estimates in this regard, a convenient case of “denialism” when facts do not suit their purposes.

References

Kumar, M Dinesh et al (2017): “New ‘Water Management Paradigm’: Outdated Concepts?” *Economic & Political Weekly*, Vol 52, No 49, pp 89–94.

Shah, Mihir et al (2016): *A 21st Century Institutional Architecture for India’s Water Reforms: Report Submitted by the Committee on Restructuring the CWC and CGWB*, July, http://www.wrmin.nic.in/writereaddata/Report_on_Restructuring_CWC_CGWB.pdf.

From <http://www.epw.in/journal/2018/6/commentary/resistance-reforms-water-governance.html>