The Way Forward

MIHIR SHAH

The chair summarises background, main features, and addresses some of the issues raised by the articles in this issue. s Member, Planning Commission from 2009 to 2014, I was able to play a small part in kickstarting fundamental reforms in water governance in India. When reforms mean something quite different from the usual connotation of privatisation, change takes a lot of time. The attempt to bring the voices of the marginalised into policymaking is fiercely resisted by dominant vested interests, particularly when the status quo has flourished undisturbed for seven decades, as in the case of water governance in India.

The Central Water Commission (cwc) was set up in 1945. Since independence, it has continued to function unreformed, presiding over a paradigm of development 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 continued over decades, not always recognising that a major part of the land mass of the country stands on a foundation of hard rock formations, leading to a situation where both water tables and water quality have declined to dangerous levels today.

Existing Paradigm

The report on restructuring the cwc and cgwB (July 2016) argues that the water crisis facing the country today is closely linked to this unreformed paradigm of water governance. The key features, dimensions, and principles that characterise the existing paradigm may be summarised as follows.

- (1) Command and control: Whether it be rivers or groundwater, the dominant paradigm is of command and control. There is little understanding of river systems or their interconnections with the health of catchment areas or groundwater.
- **(2) Bureaucratic governance:** Large, centralised, decaying bureaucracies are

charged with administering water through the length and breadth of India.

- (3) No reference to hydrological entities such as aquifers or river systems: When I joined the Planning Commission in 2009, I discovered that the word aquifer could hardly be found within government discourse. The integrity of river systems is only now beginning to get understood.
- (4) Unidisciplinarity: Since the goal is command and control through dam construction and groundwater extraction, the only disciplines evoked are engineering and hydrogeology, that too in their narrowest versions. Water cannot be understood within this narrow disciplinary focus.
- (5) Uni-dimensionality: Since the focus is extraction and development, all dimensions of water, other than economic resource use, are ignored. These various other dimensions are, however, of critical importance to the primary stakeholders in India's waters.
- (6) Water in silos: We have divided water into silos of groundwater and surface water, as also irrigation and domestic use, with little dialogue across silos, leading to "hydro-schizophrenia," where the left hand of drinking water does not know what the right hand of irrigation is doing; and the left foot of surface water does not know what the right foot of groundwater is doing.
- (7) Instrumental view of water, especially rivers: The way we look at our rivers is as water resources to be exploited, completely ignoring the numerous ecosystem services provided by living river systems, as also the intrinsic value of rivers for our people and other forms of life.
- **(8) Supply-side focus:** The entire focus has been on augmenting supplies, with little attention being paid on demand-side management of water.
- (9) No reference to sustainability: In the preoccupation with extraction and

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development, there has generally been an absence of considerations of sustainability, endangering the future of both groundwater and river flows.

(10) Discrimination and lack of equity in access to water: Historical forms of discrimination combine with the impact of growing economic inequalities in the country to create severe discrimination in access to water on grounds of caste, class, gender, location, and community.

(11) Lack of transparency and access to water information: Over the years, there has been needless secrecy in access to water data for researchers and stakeholders, which has meant that the quality of water management has suffered and conflicts have been exacerbated.

(12) British common law: The legal framework governing water belongs to the 19th century British Common Law, which legitimises and perpetuates inequity in access to water by giving unlimited powers to draw water to owners of land.

Outmoded Structures

The report is an attempt to ensure that we decisively move away from this paradigm of water governance. It shows how the present water crisis is a direct result of this paradigm and suggests reforms that could help us more effectively meet the challenges of water in India. The report argues that the cwc and cgwB were created in a very different era, with a mandate defined by that era. Today, the objective conditions on the ground, the demands of the Indian economy and society, and our understanding of water have all undergone a sea change. This requires a new architecture of governance.

Both the cwc and cgwb have useful and formidable capabilities for water resource exploration, assessment, and monitoring, and planning of infrastructure projects. These must be preserved, nurtured, and built upon. However, the technologies available today are so advanced that these tasks can be performed better and in a more cost-effective manner than is being done now. India's

water strategy has so far concentrated on public investment in infrastructure. While this has undoubtedly played a significant role in meeting the goal of national food security, we have placed very little emphasis on management improvements, governance reforms, and institutional innovations. This is why returns to public investments in water infrastructure in India have been poor; and water projects have suffered from the "build-neglect-rebuild" syndrome. The country can make rapid strides in water security by emphasising management improvements and institutional reforms rather than just public investment in water infrastructure.

The cGwB grew out of a small organisation with a narrow, specific purpose—drill exploration wells to assess ground-water resources. While the situation in India demands a shift in capacity from a well construction organisation to a resource management entity, the cGwB has been unable to keep pace. The new context requires interdisciplinary skills that will enable a transition to an organisation that has the capacity to lead and anchor a national programme on aquifer management in different parts of India.

It could be argued that India's growth prospects in the medium and long term will depend critically on how fast we can reform our water sector by moving away from an engineering-centred, command—and—control approach to a people-centred, sustainable one, and equitable demand management of water. We need to envisage an organisation that is forward looking, strategic, agile, and trans-disciplinary in its skill set. This has to be conceived of as an action organisation, not merely an assessment and monitoring organisation, although these too will remain aspects of its mandate.

It is true that all the action in the water sector lies with the state governments. Yet a well-designed central organisation can deploy and use funds, as well as scientific and knowledge resources, to influence and support what states do in water governance. This organisation should have a compact leadership with a broad range of expertise related to water. Moreover, it has to have a culture of

cross-disciplinary team-work rather than different disciplines operating in silos. The need of the hour is a new organisational culture, a new skill mix, and a new operating style.

Both the cwc and cgwB are weighed down by their highly specialised but narrow skill structure. These are massive organisations using up huge resources and energies in managing themselves. Their functioning is also mired by a highly dysfunctional organisation culture. There is literally a quagmire of hundreds of different designations, which has nightmarish consequences for framing recruitment rules, career progression ladders, promotions, seniority, pay scales, and the like. All these limitations constrain the capacity of these agencies to meet the major new challenges facing India's water economy. The larger water governance challenge requires a new age, modern, agile, and compact apex organisation that is untrammelled by the burden of having irksome internal management complexities such as unwieldy bureaucracies.

Surface and Groundwater in a Multidisciplinary Approach

The new organisation must view both groundwater and surface water in an integrated, holistic manner. The cwc and CGWB cannot continue to work in their current independent, isolated fashion. 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, this cannot be done without hydrologists and hydrogeologists working together, along with social scientists, agronomists, and other stakeholders.

Both the cwc and cGwB are lacking in the capacities essential for responding to the needs of the water sector in 21st century India. Civil engineers (the discipline overwhelmingly present in the cwc) and hydrogeologists (the main discipline in the cgwB) are crucial for effective water management. But they alone cannot be expected to shoulder the burden of the new mandate. There is an acute lack of professionals from a large number of disciplines, without which these bodies will continue to underperform. These disciplines include, most importantly, the social sciences and management, without which we cannot expect programmes such as participatory irrigation management and participatory groundwater management to succeed; agronomy, without which crop water budgeting cannot happen and water-use efficiency will not improve; ecological economics, without which we will not gain an accurate understanding of the value of ecosystem services, which need to be protected in river systems; and river ecology, which is essential to the central mandate of river rejuvenation.

National Water Commission

The report advocates the setting up of a brand new National Water Commission (NWC) as the nation's apex facilitation organisation dealing with water policy, data, and governance. The NWC should be an adjunct office of the Ministry of Water Resources, River Development and Ganga Rejuvenation, functioning with both full autonomy and requisite accountability. It should be headed by a chief national water commissioner, a senior administrator with a stable tenure and with strong background in public and development administration. and should have full time commissioners representing hydrology (present chair, cwc), hydrogeology (present chair, cgwB), hydrometeorology, river ecology, ecological economics, agronomy (with a focus on soil and water), and participatory resource planning and management. Not all these commissioners need necessarily be from within government. The best talent needs to be hired competitively from the open market.

The NWC should have a strong regional presence in all the major river basins of India. To accomplish such a major transformation, the report proposes that the

NWC build, institutionalise, and appropriately manage a stable architecture of partnerships with knowledge institutions and practitioners in the water space, enabling them to contribute to it in an open, meaningful, and enduring manner.

The key mandate and functions of the NWG include:

- (i) Enable and incentivise state governments to implement all irrigation projects in a participatory mode, with an overarching goal of *har khet ko paani* (literally, water for every field; or equitable and universal access), and improved water resource management and water use efficiency, not just construction of large-scale reservoirs.
- (ii) Lead the national aquifer mapping and participatory groundwater management programme.
- (iii) Insulate the agrarian economy and livelihood system from the pernicious effects of drought, flood, and climate change, and move towards sustainable water security.
- (iv) Develop a nationwide, location-specific programme for rejuvenation of India's rivers to effectively implement the triple mandate of *nirmal dhaara*, *aviral dhaara*, *swachh kinaara* (unpolluted flow, continuous flow, clean river banks).
- (v) Create an effective promotional and regulatory mechanism that finds the right balance between the needs of development and the environment, protecting the ecological integrity of the nation's rivers, lakes, wetlands, and aquifers, as well as coastal systems.
- (vi) Promote cost-effective programmes for appropriate treatment, recycling and reuse of urban and industrial waste water. (vii) Develop and implement practical programmes for controlling point and non-point pollution of waterbodies, wetlands, and aquifer systems.
- (viii) Create a transparent, accessible, and user-friendly system of data management on water that will support the attempt of citizens to devise solutions to their water problems.
- (ix) Operate as a world-class knowledge institution, available on demand for advice to state governments and other stakeholders.
- (x) Create world-class institutions for broad-based capacity building of water

professionals and primary stakeholders in water.

It may be hard for readers to believe that almost none of these unexceptionable objectives have been part of the mandate of the cwc and cgwb over these many decades.

Response to the EPW Discussion

It is truly gratifying to see the critical yet enthusiastic reception to the report from a range of scholars and practitioners. Especially welcome are the manifold suggestions for more effective implementation of our recommendations. I have the following clarifications and observations on the comments received.

(1) NWC not a centralised monolith: A false impression has been created that we are proposing a mammoth organisation that will centralise all functions related to water. Quite the contrary. The report strongly espouses the principle of subsidiarity and strongly advocates action closest to where the problems lie—at the river basin level. Indeed, even as I write, a major exercise is under way within the Ministry of Water Resources to prepare a road map for relocation of professionals, away from the centre, towards river basins.

(2) NWC not by government alone: The report advocates an NWC that is not housed within government alone, but is a carefully manicured network of partnerships. For the NWC to be able to play its mandated role will require building strong partnerships with a wide range of organisations across the country. We are not advocating that all the capacities required should be housed within the NWC. A lot of the professionals needed by the NWC would become available through a carefully crafted architecture of partnerships with world-class academic and research institutions, of which there are many in India, as also civil society organisations with a strong presence in the field and a track record of excellence over many years. The key here is how these partnerships are managed. Historically, many knowledge institutions such as the Indian Institutes of Technology (IITs) have had close

working relationships with the Ministry of Water Resources but the feedback from a large number of professionals is that these partnerships have lacked stability and enduring value. This requires imaginatively crafted formal partnerships embodied in a reasonably long-period memorandum of understanding (MOU), closely tied to well-defined deliverables to ensure the accountability that government rightly worries about. But the key change has to be that its partners feel they are an integral part of the NWC team and are not subject to fluctuating whims and fancies, which could see them going in and out of the team. We are greatly heartened by the strong endorsement of this approach by Sinha and Densmore ("Water Governance in India: Focus on Sustainable Ground Water Management"). Their suggestions on how this can be achieved are an invaluable contribution, which will help in more effectively designing the NWC. Khandwalla's suggestion ("Management of India's Water Resources: Comment on Proposed NWC") that the NWC hire professionals from the open market for the disciplines currently absent from the cwc and cgwB, such as ecology, management and the social sciences, is precisely what is advocated in the report.

(3) Are we perpetuating silos? Some comments suggest that while advocating breaking down silos, we may be perpetuating them. Joy argues,

For example having Irrigation Reform Division, River Rejuvenation Division, and Aquifer Mapping and Participatory Groundwater Management Division, and Water Security Division as separate divisions may go against grain of integrated water planning, use and management which is one of the core ideas of the paradigm shift. Keeping water security and ecosystem needs as the key organising principles we can integrate all these four separate divisions into one that could be called as a watershed division. ("An Important Step in Reforming Water Governance")

We believe this may reflect a common misunderstanding that separating executing divisions necessarily leads to silo-based perspectives, understanding, and functioning. To give due emphasis to river rejuvenation, a separate division is absolutely required. Aquifer mapping and participatory groundwater management is a humongous exercise, the largest ever attempted in human history, which requires a dedicated team. And irrigation reform here refers specifically to the command areas of large irrigation projects, which have failed to make water reach the farmers for whom it is meant. Each of these is a massive undertaking requiring specific attention and focus. However, the big change we have proposed is that all eight divisions will work under the overall guidance of the multidisciplinary commissioners, who will not be assigned separate divisions but will rather provide guidance to all the divisions and ensure well coordinated functioning across divisions. This is what will provide the overarching multidisciplinary focus to activities that necessarily need to come under the purview of separate divisions. Indeed, what we have in mind is brilliantly exemplified by Lele and Srinivasan ("Focusing on the Essentials: Integrated Monitoring and Analysis of Water Resources") when they state that the way to overcome silobased functioning is to "start with some 'crisis' basins as the foci, and constitute teams around each such basin that are charged with developing a joint 'product', such as a spatially disaggregated water balance model, and generating series of analyses of different scenarios that will feed into the planning processes in that basin."

(4) Are we challenging the constitutional design? Many interrelated questions have been raised about the report. Since water is a state subject under the Constitution, does the setting up of the NWC violate this scheme of things? What difference will changes at the centre make when action on water lies with the states? If states are leading reforms, why should the centre get involved?

Let me make it abundantly clear that the report does not tinker with the constitutional position on water. Indeed, if anything we are opposed to centralisation of water and advocate a river basinlevel functioning based on the principle of subsidiarity. The confusion seems to arise because it is not adequately recognised that the NWC will essentially be a facilitating, knowledge institution. It is clear from all experience on the ground that while the states are primary implementers, they require a lot of handholding support. The centre needs to facilitate and incentivise reforms. All primary stakeholders in the country also lack a national body that they can refer to for solutions to their problems. And conflicts across states demand a national knowledge body for resolution, if not obviation. Indeed, we could not agree more with Lele and Srinivasan's characterisation of the NWC as an "enabling" institution.

(5) Are we giving up on project appraisal? Dharmadhikary ("Welcome First Step to a Much Needed Change") is worried that we may be advocating giving up on project appraisals, "The report mentions the feedback from the states that delays in techno-economic appraisal by cwc have become a matter of great concern. The report seems to imply doing away with this process."

This is not what the report says. To quote from the relevant section, what we are proposing is a different appraisal process to address the concern expressed by the states, "There is a need to address this concern and make appraisal a demand-based exercise, done through a partnership between the central and state governments" (p 112). We also suggest that given the expertise available in so many of India's worldclass institutions such as Indian Institute of Hydrology, Roorkee; Central Water and Power Research Station, Pune; Indian Institute of Science, Bengaluru; and the IITs and various regional engineering colleges "project appraisal can become a truly collaborative process, with expertise flowing on demand from the best institutions of the country" (p 113).

(6) Lack of focus on watershed management and traditional waterbodies: Sengupta ("Merits Undeniable Despite Drawbacks"), Joy, and Dharmadhikari very rightly emphasise the crucial role of watershed management programmes and traditional local waterbodies in the rainfed areas of India and lament the lack of space devoted to them in the report. This is absolutely correct. The reason for this lack of space is that the report was concerned with the "restructuring of the cwc and cgwb" and so focused only on those parts of the water sector that fall within their domain. It is also our view that the Ministry of Rural Development, the apex body managing the watershed programme, should continue to do so. However, in our emphasis on river basins, we clearly underscore the significance of catchment area treatment and revival of local waterbodies in the task of river rejuvenation. The good news is that the Ministry of Rural Development has already revised the guidelines for the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) based on the reforms suggested in our report, recasting them on a watershed basis. What is especially heartening is that the guidelines have been jointly issued with the Ministry of Agriculture and the Ministry of Water Resources in a move to break down silos.

(7) Report does not go far enough: It is fascinating to see that though both Nilekani ("21st Century Water Governance: A Mirage or an Opportunity?") and Raina ("Water Governance Reform: A Hopeful Starting Point") feel the report does not go far enough; they do so from almost opposite standpoints. For Nilekani, water governance reform is fundamental; for Raina, it is a red herring. But to both I would say-please pay more careful attention to how change happens in real societies, rather than those in our dreams. We need to also acknowledge that the reforms proposed in the report have been fiercely and successfully resisted for seven decades, and draw the right lessons on how such change could be realistically fashioned. To imagine that everything that needs to happen will happen in one fell swoop because we write a "perfect" report would be deluding ourselves. The report proposes what it believes is both necessary and possible to do within a

reasonable time frame. And it believes this because the crisis on the ground is so acute that it will not allow business as usual to continue for very long. But it also is carefully mindful of the constraints within which change ineludibly occurs in every real context, and the process that may need to be adopted to make this change an actuality. Hence, its recommendations are necessarily realistic, not hopelessly romantic.

Nilekani is deeply sceptical of reforms within government systems. Instead, she chooses to list some innovative work on water at the grassroots, presumably believing that this shows the way forward for water governance. I do not dispute the huge potential of some of the positive examples cited by her. Nor do I disagree with the need for government reform precisely for the reasons given by her. But what I have learnt from three decades of work in a similar direction at the grassroots is that without strong partnerships with reformed government structures, such civil society action will never get successfully scaled up to make a significant dent in the humongous problems facing a country of India's size, complexity, and diversity. This implies that we cannot shut our eyes to the massive challenge of public sector reform.1

We cannot dogmatically assert that change is impossible in government, even as we recognise how challenging it is. This is a luxury the deprived and marginalised people and sectors of India's economy and society cannot afford. The lazy option of privatisation will not work for them due to ubiquitous market failure in the most crucial sectors such as water. Indeed, the report is replete with examples of how the reforms proposed by it have been successful. All its recommendations are based on proven successes at scale across many different parts of India—from Andhra Pradesh to Bihar, from Gujarat to Madhya Pradesh, and Karnataka to Maharashtra, to cite only a few.

Raina argues, as does the report, that "the ecosystems perspective brings values of sustainability and ecological justice centre-stage." Her disagreement is that the reforms suggested by the report do not move us forward in the direction of a real paradigm shift. Once again, I think, the issue is of how we are to conceptualise change in society. I agree with almost every desirable Raina argues for. My argument is with us replacing one kind of hegemonic stance with another by refusing to engage in serious, respectful dialogue with those who disagree with us, even obstruct the path to the change we espouse. Can we insist on an all-or-nothing approach to change and reject anything and everything that falls short of that imagined perfection?2 Do we not understand the dialectics of change that necessarily demand engagement with what we wish to transform?3

These questions arise in my mind when I read, for example, in Raina,

Both, the current mindless extraction of ground water amply abetted by the state's supply syndrome (which has become the legitimate public policy following the green revolution), and effective Irrigation Management Transfer marked by demand-driven stakeholder-led water governance, are located in the same institutional framework of human-water interactions.

In one word, the attempt at moving from a supply-centric approach that has dominated India's water policy for seven decades towards a primary stakeholdercentred, democratic, demand management is dismissed as being part of the "same institutional framework" it seeks to challenge. I do not dispute this statement. Everything new is always, for some time, to some extent, part of the old, before it gathers the critical mass necessary for it to reach the point of inflection, where qualitative change happens. What is critical is that we support every small, humble step in the direction of change, guarding it against the possibility of regression, at each point, which is, of course, a real and ever-present danger. But nothing could

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Near Firayalal, H. B. Road Ranchi 834 001 Jharkhand Ph: 0651-2205640 be worse than a dismissive attitude to what is being attempted because there may be no other impact pathway available on the horizon. That judgment needs to be carefully made in each situation. In my view, the NWC could make possible for the first time what Raina correctly insists on, an engagement with "diverse stakes and ways of knowing water." As Raina says, "Water, an integral part of natural and social systems, cannot be governed by expertise and administrative prowess alone—it needs people, and direct democratic participation of people in an ongoing dialogue."

This is precisely how the report positions the key role of the NWC.

New Paradigm

From the above discussion, we get a clear idea of the fundamental change required in the paradigm of water governance in India if we are to meet the challenge of sustainable and equitable access to water and livelihood security for the Indian people. The new paradigm would need to have the following features, principles, and dimensions.

- (1) Suiting our interventions to the contours of nature: Rather than command and control, our attempt should be to fully appreciate and apprehend the enormous diversity that characterises this nation and plan our interventions in full cognisance and understanding of this diversity, making them as location-specific as possible to avoid the pitfalls of indiscriminate centralised planning. Watersheds, aquifers, and river systems would be the cornerstones of such planning.
- (2) Governance based on partnerships: Rather than making governance the sole responsibility of governments, we need to craft a carefully designed architecture of partnerships where all primary stakeholders get involved in the collective endeavour of participatory water governance.
- (3) Multidisciplinarity: We must acknowledge that we cannot understand water other than in a deeply multidisciplinary perspective. This involves not just

engineering and hydrogeology, but also river ecology, agronomy, soil science, the various social sciences, and management, among others.

(4) Multidimensionality: We must adopt the perspective proposed in the current draft of the National Water Framework Law (NWFL), which states,

Water is the common heritage of the people of India; [it] is essential for the sustenance of life in all its forms; an integral part of the ecological system, sustaining and being sustained by it; a basic requirement for livelihoods; a cleaning agent; a necessary input for economic activity such as agriculture, industry, and commerce; a means of transportation; a means of recreation; an inseparable part of a people's landscape, society, history and culture; and in many cultures, a sacred substance, being venerated in some as a divinity (Preamble to NWFL).

- (5) Breaking the silos: The proposed NWC will hopefully help in our being able to take an integrated view of water, so that the current hydro-schizophrenia can be overcome, ensuring protection of watersheds, river systems, and aquifers.
- (6) Demand management and sustainability as a central focus: Rather than seeking to endlessly augment supplies of water, the focus must shift to effectively managing demand, so that we recognise the finite nature of the resource and that sustainable use will be impossible without this shift. The supply-side thrust is a vicious infinite regress with no end in sight other than depletion of quantities and quality.
- (7) Emphasis on equity in access to water: We must centrally emphasise the imperative to end discrimination in access to water on grounds of caste, class, gender, location, and community, as emphasised in the NWFL.
- (8) Transparency and easy access to water information: The issue here is not just access to information that should have transparency, but also the availability of information in a manner and form that is useful to primary stakeholders. The aim must be to proactively proffer water solutions to problems people face in a dialogic manner.

(9) National Water Framework Law: The draft NWFL provides an essential corrective to British Common Law by building upon the public trust doctrine enunciated by the Supreme Court, whereby the state at all levels holds natural resources in trust for the community. This would ensure that no one's use of water would be able to deprive anyone of their right to water for life as defined under the NWFL.

Conclusions

Only through this comprehensive shift in the paradigm of water governance in India can we come to grips with, and find sustainable and equitable solutions to, the growing water crisis facing India. The setting up of the NWC must necessarily be regarded as only the very first step in our journey in this direction. There is a very long road ahead.

A key bottleneck is the lack of required human resources to carry the paradigm shift forward. Our education system on water-related topics is so terribly limited in its scope and understanding that it is not clear where the necessary complement of professionals for the NWC is going to come from. A lot of work needs to be done to generate the required army of multidisciplinary professionals on water. There is the whole issue also of the present cwc and cgwB staff interfacing with both the new recruits from other disciplines, as also the new NWC partners. There is very little positive history of this to build upon to fashion a new culture of work and understanding, without which there is a real danger of the NWC also retrogressing towards a suboptimal functionality. As Gaur ("New Structures of Governance Needed") correctly emphasises, the success of the NWC will "depend on how genuinely the new organisation embraces the new paradigm, and how deep the new required capabilities are embedded in the system." He adds,

Also crucial will be the task of facilitating absorption of new knowledge products amongst the user communities, to evoke constructive responses. Scientists are not well versed in phrasing science-derived knowledge products in easily assimilable forms.

WATER GOVERNANCE

Gaur's suggestions on how this could be best achieved are worthy of the most careful attention by the NWC. But let me, nevertheless, hasten to add that these are still issues for the future, a future we are not even near witnessing yet. The changes being proposed in the report are so fundamental that even this primary step of disbanding the cwc and CGWB and setting up the NWC is itself a huge challenge and is being fiercely resisted. The report is the result of a vast consultative process, which included all relevant stakeholders of India's water sector, from within and outside government. Within the cwc and cgwb there were concerns whether the restructuring suggested would end up undermining them. Such concerns were only natural as prospects of change always generate apprehension. As a committee, we made a concerted effort to engage both the cwc and cgwB in an intensive and prolonged dialogue to allay these apprehensions. It is our considered view that the thousands of professionals in

both the cwc and cgwb will get an even better chance to improve their technical capabilities and career prospects within the NWC

Even so, it is clear that this is not how many perceive the changes proposed. To discredit the strong case made out for radical reform in the report, a wellorchestrated campaign of personal vilification has been launched against me by entrenched vested interests, painting me variously as anti-dam, anti-development, and anti-national, especially as support for the report has grown.4 But there is also good news. Many young and dynamic officers of the cwc, who see the changes proposed in the report as being in the right direction, are working with a team of senior officers in the Ministry of Water Resources to carefully think through the next steps in implementing the recommendations of the report. This is the first time ever that the Ministry of Water Resources has shown itself open to fundamental reform.⁵ The response so far from the Prime Minister's Office has also been positive. It, of course, remains to be seen how far the government finally goes in acting upon these long overdue reforms that should have been initiated at least two decades ago.

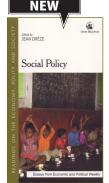
NOTES

- This could either be in the direction of New Public Management, as suggested by Khandwalla. Or, more fruitfully in our view, it could follow the path shown, for example, in Judith Tendler's 1998 classic *Good Government in the Tropics* or Lant Pritchett and Michael Woolock (2003): "Solutions When the Solution Is the Problem: Arraying the Disarray in Development", World Development, 32 (2).
- 2 Constraints of space do not allow me to argue these implications of human finitude at greater length. For a fuller treatment, see my essay on The Power of Uncertainty (Economic & Political Weekly, 19 June 2010).
- 3 I fear it is this lack of understanding that leads Raina to make statements like "agriculture is a key culprit scripting the water crisis."
- 4 See, for example, this editorial in the *Economic Times* (3 September 2016); http://blogs.economictimes.indiatimes.com/et-editorials/mi-hir-shah-report-brims-with-sense/.
- 5 Even as Member, Planning Commission, from 2009 to 2014, I faced fierce resistance from the Ministry of Water Resources when I proposed similar reforms.

Social Policy

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The reach of social policy in India has expanded significantly in recent years. Facilities such as schools and *anganwadis*, health centres, nutrition programmes, public works and social security pensions are reaching larger numbers of people than before. Some of these benefits now take the form of enforceable legal entitlements.

Yet the performance of these social programmes is far from ideal. Most Indian states still have a long way to go in putting in place effective social policies that directly address the interests, demands and rights of the unprivileged.

This collection of essays, previously published in the *Economic and Political Weekly*, has been clustered around six major themes: health, education, food security, employment guarantee, pensions and cash transfers, and inequality and social exclusion. With wide-ranging analyses by distinguished scholars brought together in a single volume, and an introduction by Jean Drèze, *Social Policy* will be an indispensible read for students and scholars of sociology, economics, political science and development studies.

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