

World Bank's Urban Water Report on India Thinking Backwards

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The latest World Bank report on reform in India's urban water sector focuses on institutional and financial arrangements between urban local bodies, water service providers and the customer. Like earlier reports, this too starts with a purely banking objective and works backwards to come up with policy advice. It fails to assimilate the technological boundaries of the sector, ignores strengthening of governance, building institutional capacity in research and training, and developing collaborations between governance and knowledge institutions.

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Post-2000, World Bank (wb) projects and reports have had a substantial impact on the water sector in Maharashtra, and the rest of India. Through these projects and reports, the wb has influenced rural drinking water service provisioning, research in irrigation and groundwater, the setting up of the Maharashtra Water Resources Regulatory Authority (MWRRA) as the independent regulatory body, and now, with the reports of 2006 and 2012, urban water reform. These reports have largely set the framework within which administrators, elected representatives and researchers have discussed these problems, the various minutiae of the recommendations and their pros and cons. This review points out the great externality in this debate, namely, the information asymmetry in the position of the wb vis-à-vis other participants, and the limitations that this poses in exploring the solution space.

The latest wb report on the water sector in India is titled "India: Improving Urban Water Supply and Sanitation Service Provision". It reports on the work

done by the wb in collaboration with several state bodies (those of Maharashtra, Rajasthan and Haryana), union bodies and external consultants (wb 2012). It should be read together with the earlier "Bridging the Gap between Infrastructure and Service" (wb 2006), another wb report, which sets much of the agenda for the reform of the urban water supply sector, as the wb sees it. The current report is important in two respects: (1) it sets out a clear series of steps by which reform should take place, and (2) it offers a report card on the progress made on this agenda in the three states of Maharashtra, Rajasthan and Haryana. Our review of this part will concentrate on developments in Maharashtra. The report also presents a few "business plans" for the organisation of urban water supply and sanitation (wss) systems along the lines suggested. The work was largely funded by the Non-lending Technical Assistance Programme of the wb.

Report Outline

Chapter 1 sets out the "three pillars" of wss reform as (1) policies and institutional arrangements to enable service providers, both private and public, to function smoothly, (2) financing frameworks for infrastructure development focusing on user charges and loans, and (3) capacity building to ensure that these service providers have suitable manpower.

Chapter 2 "sets the context" by narrating international good practices. The terrain here is predictable – decoupling

of wss functions from urban local bodies (ULBs), efficiency, operations and maintenance (O&M) ring-fence,¹ 24×7 service, regulation, targeted subsidies and so on.

Chapter 3 details out the “business plans” for each state and makes a comparison. Here we learn that the WB estimates that \$1.8 billion are required by the state of Maharashtra for its wss upgrade and that there is a shortfall of \$0.7 billion. This report is based on the basic premises that (1) ULBs will need to tap capital markets for this additional investment, and that (2) this will need private sector participation. The three pillars of Chapter 1, and the report, essentially work backwards from these two premises. Chapter 4 sets out the policy for creating the wss Service Provider (wssSP) and Chapter 5 is a proposed policy statement for state governments to use, leaving nothing to chance.

As with other WB reports, the devil is in the annexures. The first, Annexure 1 sets the specifications or benchmarks for an ideal wss. In Annexure II, we see a detailed and almost rhapsodic step-by-step procedure for achieving a separation of wss from the ULB, in both O&M and infrastructure costs. This is a must-read, for it sets out the WB thinking on subsidies, private groundwater extraction, “corporatisation” and “professionalisation”, regulation, etc, right down to foreign exchange risks. Annexure 3 describes the current scenarios and business plans for each state. Annexures 4, 5 and 6 are summaries. Annexure 7 lists the stakeholder meetings held to arrive at the report.

Context and Contents

The first point of interest is the locus standi of this report. Were there clear terms of reference (TOR) to which this study is a response? It is quite evident that much money was spent in the research and distillation. While it may be argued that this was “non-lending”, it is clear that the WB is an interested party since various state governments, including Maharashtra, are customers of the WB. It is also clear that the WB received substantial inputs from various

departments and ULBs. Thus, if this report, in parts or in entirety, is to be accepted by the state machinery, then a clear TOR must be produced and circulated and similar funding and access be offered for an independent study. Since much of the risk is to be borne by ULBs and not WB, it would be a moral hazard to accept advice from an interested party without (1) a TOR, and (2) a second studied opinion.

The second point to note is the absence of any civil society organisation or knowledge institution in the stakeholder consultations. There are many groups and research institutions that have studied urban wss for many years. The WB study has not involved them in the process. The WB inputs may well be regarded as precious foreign direct investment (FDI) in the area of knowledge and methodology. It may be useful to consider the trajectory of China in FDI (see, for example, Davies 2010), where the state started by insisting on joint ventures and then moved carefully to wholly owned entities. Like in the Chinese model, perhaps it would be better to have a policy of having a local collaborator for such projects. This would help create knowledge institutions capable of conducting studies such as the current one. Thus, we recommend that (1) all primary and secondary data generated by the WB study be put in the public domain, and (2) an institution of excellence be nominated to initiate a parallel study on this data and to collaborate with the WB on future work on this topic. This would reduce the knowledge and data asymmetry in the current situation and potential knowledge capture in the future.

The third point is also strategic. One important recommendation in the report is for the unbundling of wss functions, for example, of the design and implementation of infrastructure, or of service provision. The first one is already in place for public works across most departments, and there are many private players. However, the quality of the assets created leaves much to be desired. Given the weak judicial process, the contractor and ULB interaction is much like the wage-worker/supervisor game.² Similarly, the contractor/ULB game too

will lead to inefficient outcomes unless there is a discerning “permanent” supervisor, i.e., a sound long-term technical advisor who will monitor. This is precisely the skill which is in short supply with ULBs. In this case, it is safer to work with agencies which may be inefficient but which are perpetually answerable (e.g., the Maharashtra Jeevan Pradhikaran or MJP). This strategic understanding of the situation is missed by WB (2012) but is present in the previous report (2006: 25), which claimed about State Engineering Agencies (SEAs) that:

Leave ULBs free to Select Engineering Consultants and NGOs of their choice to identify, prepare and implement wss projects on the basis of the best technical and financial proposals received; there is no justification for continuing the de facto monopoly of SEAs as both the Indian wss markets and available human resources are large enough to support a viable private consulting industry. If ULBs do not have the capacity to appoint and supervise consultants, they could request technical assistance from a SEA, whose role should gradually evolve to that of a ‘Facilitator’ and ‘Advisor’.

In any case, for Maharashtra, some ULBs have approached other non-SEAs for creating assets. Their experience should be analysed. Meanwhile, the “facilitator” role of MJP now seems to be enshrined in its restructuring.

The fourth point is more technical and concerns service provision. One motivation for all the financial and institutional restructuring is to create avenues for mutually profitable private participation with clear roles and responsibilities. However, from the ULB’s viewpoint, its own deliverable to society is hardly clear or simple. One example is its responsibility to the urban poor. Even for this relatively familiar requirement, the report

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fails to suggest satisfactory options in the business plans other than some remarks on targeted subsidies. In fact, charitably speaking, as we follow Kuznets' inverted-U in development (see, e.g., Ray 1999), our cities will likely grow more unequal before they grow more equal. In which case, the provision of a safety net may require closer integration of some of the municipal functions. Moreover, as water becomes scarce, actions such as rainwater harvesting, private groundwater extraction, water reuse, etc. will need an even messier interface between the service provider and the ULB.³ Hence, it is not clear that such a separation is indeed feasible or desirable.

In fact, the report is silent on most technical issues such as sourcing of urban water, demand management, groundwater extraction, reuse and recycling. All of these need careful thought and new technological inputs. These inputs may guide the investment and taxation options available to a ULB. Thus, one cannot design a policy framework without assimilating the technological boundaries of this sector.

Capacity: Where and How

Finally, there is the matter of capacity building. This is dealt with cursorily, too cursorily, in the form of certification courses and extramural training for employees at all levels. The role of educational, research and knowledge institutions is completely side-stepped.⁴ In the whole report of 139 pages, the word "education" does not appear at all, both "learning" and "knowledge" appear once, and "research" twice, both times on the first page of Chapter 2 on "International Good Practices". Presumably, much of India's urban water reform can happen without these functions.

In our opinion (Sohoni 2012), many of our developmental problems have their roots in poor engineering capacity in key governance institutions. Building this capacity will require educational and research institutions to focus on developmental problems of water, energy, livelihoods and so on. In fact, through its own project – the Technical Education Quality Improvement Programme (TEQIP) (WB 2009) – WB is funding quality improvement in many premier technical

institutions.⁵ It is surprising then that (1) WB has not tied the TEQIP project to capacity demands of the water sector, (2) TEQIP actually seems to encourage an "international" version of engineering largely at public expense.⁶

Ideally, TEQIP or Ministry of Human Resource Development (MHRD) should encourage engineering colleges to move towards programmes and curricula aimed at regional knowledge needs. It should seek to train students as future entrepreneurs, planners and researchers in key sectors such as water and energy, and to align this training with the capacity needs of interdisciplinary programmes such as the Mahatma Gandhi National Rural Employment Guarantee Scheme. Indeed, engineering colleges could engage with regional ULBs and support them by developing attractive interdisciplinary courses in the water sector and bring together students and faculty members with practitioners, bureaucrats and elected representatives. The District Innovation Fund (DIF), instituted by the Thirteenth Finance Commission (Ministry of Finance 2011: 2), provides funding of "Rs 1 crore per district, aimed at increasing the efficiency of capital assets already created and provide immediate benefits" which may be utilised for such projects.

The report also misses one important option – that of actually improving the outcomes of the ULBs and their engineering departments within existing frameworks. If this is achieved, then all subsequent arguments of the report are moot. One possibility is to strengthen the monitoring and coordination functions of the government. This role is generally to be exercised by the District Planning Committee (or the District Planning and Development Committee (DPDC), in Maharashtra). Via Article 243ZD of the 74th Constitutional Amendment Act, the DPDC is a constitutional body and is a meeting of all senior elected representatives of the district and attended by all senior functionaries of the state, including chief executive officers (CEOs) of municipalities within the district. Adding independent technical capacity to the DPDC (for which there is clear constitutional provision),⁷ say, of independent verification, consultancy, etc. will bring added

transparency, new knowledge and an outcome orientation to both the demand side (i.e., the representatives of the people) and the supply side (i.e., the engineering departments). In fact, regional research and educational institutions, including those in TEQIP, can gainfully participate in this way. See, for example, the unique compendium spanning various states of India by the non-governmental organisation (NGO) Society for Participatory Research in Asia (PRIA) (2009).

The Maharashtra Scenario

In Maharashtra, we learn that the state has already launched a plan called the Maharashtra Sujal Nirmal Abhiyan (MSNA), presumably a programme by which ULBs may access funding for a fixed set of procedures and reforms. The exact TOR and the rationale are unclear since we could not find any official document (as on 30 July 2012) nor any reference in WB (2012). Two interesting documents are (1) a recent tender call from the MJP on behalf of Baramati ULB,⁸ and (2) a presentation by an MJP officer to the Confederation of Indian Industries (CII).⁹ From these documents, we understand that the first MSNA objective seems to be the non-sewage subset of the MSNA Level I presented in WB (2012). It refers to an agenda of household surveys, water and energy audit, geographic information system (GIS) representation, hydrological simulation, metering of commercial users, and computerised billing of water supply services within the ULB.

The WB report outlines MSNA Level II and Level III as well. These are largely about internal business processes and service expectations from a WSS system. The plan for MSNA III takes us beyond 2025 and it is only then that ULBs will either be able to raise capital, or hand out WSS services completely to private service providers. That will lead to issues of regulatory bodies and governance, which the report does dwell on, at some length. Since the crossing of this policy bridge is some way away, we have kept that subject out of this review. Broadly speaking, the expectations of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and the WB report will match up to MSNA Level III. They

will differ henceforth: JNNURM recommends only an O&M ring-fence and robust property tax collections for use in infrastructure investments (JNNURM 2006: 19), while the WB recommends that the WSS system itself raise money for its infrastructure investments.

Actually, the MSNA Levels I-III comprise a welcome agenda and coincidentally, MSNA Level I comes close to our own internal studies of a few taluka towns of Maharashtra.¹⁰ All of the above steps are required for arriving at economic rationality and technical efficiency in WSS service. Further, opening up the tasks of design, analysis, monitoring, installation, etc, for non-state players and consultants does indeed encourage innovation and new knowledge creation.

And what about the restructuring of the MJP? What we understand from a smattering of side-references is that the MJP has been split into four parts:¹¹ (1) MJP O&M, which presumably consists of those schemes implemented by the MJP for which they continue to provide O&M on behalf of the ULB, (2) MJP Project Management, which will provide consultancy services to ULBs in the “facilitator” role, i.e., as a supervisor on behalf of the ULBs in its interactions with private contractors and “engineering agencies”, (3) MJP Rural and Urban which will look into the business of asset design and creation, and finally (4) an advanced technology group, presumably to look after training. Its actual training centre has been hived off into an autonomous institute called the Maharashtra Environmental Engineering Training and Research Institute (MEETRA).¹²

Thus, in effect, a slow decommissioning of the important technical capacity of the state is now underway. The other technical agency in the sector, the Groundwater Survey and Development Agency, is also in a state of neglect and poor morale.

It may be instructive to look at the rural drinking water sector for comparison. The WB-anointed and so-called demand-driven approach to rural drinking water schemes (WB 2003, 2008) has restricted the solution space to single-village schemes (svs). The success of these svs’ is not at all evident with source failures and poor technical designs being

the primary issues. In fact, our analysis of over 70 svs’ in Thane and Raigad districts (reported in Centre for Technology Alternatives for Rural Areas or CTARA 2012),¹³ including the Jal Swarajya programme, indicates no significant difference in the quality of assets created. Even more, in regions of widespread groundwater collapse, where multi-village schemes are indicated, the demand-driven approach does not easily allow this demand to be aggregated and a multi-village solution to be found. Indeed, in the last 10 years, MJP has initiated only a handful of multi-village schemes. Given the vulnerabilities of climate change and frequent droughts, regional rural drinking water grids are an important solution option that should not have been discarded purely on ideological grounds.

Reforms: Capacity and Practice

On the whole, it is important that we look at these reforms carefully. Given the overall water stress, it would be foolish to trust some set of ideological solutions to work well or at all. There is no substitute to long-term investment in building capacity in both training and research in the water sector. What is needed is a new interdisciplinary engineer who is both technically sound and can work in the social context. This must be done by a vibrant partnership between the state machinery and institutes of higher education, civil society organisations (CSOs) and NGOs and by creating avenues for young professionals to work with government agencies in design, analysis and monitoring functions. After all, no system (even from the WB) can be so perfect that it does not require us to be good.

The second point is deeper. One measure of development of a society is its collection of good practices, i.e., of incremental cycles of protocols and procedures, and of incentive structures, both monetary and cultural, by which interdisciplinary agents interpret societal problems and develop solutions for common benefit. The question of capacity and its building arises after good practices have been developed. The globalised world is supposed to be one such collection of good practices which the WB recommends. Most societies, on their road to development,

have synthesised their own as a syncretism of existing and new practices. It is now for us to develop our good practices, with smaller and more direct cycles of participation and inclusion, signals and rewards. Or else we will have to wait for the trickle-down from the globalised world.

NOTES

- 1 An O&M ring-fence in the context of utility company requires that the utility raise all running expenses for service provisioning through tariffs and fees. These expenses could include energy bills, routine maintenance, establishment costs and salaries.
- 2 See Eswaran and Kotwal (1985) for an example from agriculture, where the quality of inputs from the daily wage worker affects the long-term farm output, whence the supervision skills of the landlord/supervisor are crucial to efficient outcomes.
- 3 As an example, Chennai city threatened to cut off sewage and water services to buildings which did not comply with rainwater harvesting norms.
- 4 See for example, the contributions of Anna University and Chennai Metrowater Training Centre also mentioned in Annexure I of WB (2006).
- 5 The implementation of TEQIP is managed by the National Project Implementation Unit under MHRD and its website is hosted at (<http://www.npiu.nic.in>). There is a wealth of data here on how college performance is measured, key indicators and so on.
- 6 See, for example, the faculty visits of Jadavpur University under TEQIP at Faculty of Engineering and Technology (2012), “Faculty Development Plan for 18 months (up to June 2013)”, Jadavpur University, viewed on 5 August 2012: http://teqip.jdvu.ac.in/doc/faculty_deve.pdf
- 7 See 2(b) of Article 243ZD, which allows up to one-fifth of the members of the DPC to be nominated from outside the body of elected representatives, and 3(b) which allows for it to consult outside institutions and organisations. In fact, the Guidelines for District Plans for the Eleventh Five-Year Plan recommend that this 20% be filled by experts (Planning Commission 2006:4).
- 8 MJP, B-1 Tender for Baramati Water Supply Scheme, Reform works under Maharashtra Sujal Nirmal Abhiyan, 2012-13.
- 9 R Holani Chief Engineer, MJP, “Non-Revenue Water and Sujal Nirmal Abhiyan of Maharashtra”, presentation to the CII, 2012.
- 10 We would however recommend free software such as Quantum GIS (instead of the proprietary Arc GIS) and the United States government’s EPANet instead of proprietary WaterGems.
- 11 See for example, the website www.mjp.gov.in
- 12 The author is a member of the Board of Governors of this proposed institute and awaits its first meeting.
- 13 These studies can be seen at the CTARA webpage on current research in water sector at CTARA, Indian Institute of Technology (IIT) Bombay, 2012, viewed on 30 July 2012: <http://www.cse.iitb.ac.in/~sohoni/water>

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