The Slow Road to the Private: A Case Study of Neoliberal Water Reforms in Chennai.

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Abstract

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The process of reforming Chennai's water service began in 1978, with the formation of an autonomous water board, divorced from local government and oriented toward global "best practice" principles, with financial viability as the central goal. The process was shaped and steered by the World Bank since the inception of the Board. A study of the documents of the water utility – including World Bank mission aide memoires, project proposals and reports -- reveal the continuities between this step of corporatization, and later moves toward commercialization and privatization of the water service. Social and political relations encasing the water service were transformed through this process of reform, as the utility adopted "institutional strengthening" measures that focused on enhancing its financial health, introducing commercial forms of accounting, and building professional management systems modeled on the commercial sector. The World Bank simultaneously pushed the utility to implement tariff reforms aimed at full cost-recovery, reduce cross subsidies from industrial to domestic consumers, and, crucially, to roll back its obligation to serve the poor populations of the city who did not contribute to its revenues.
This paper outlines the structure, patterns and implications of neoliberal water reform orthodoxies through a case study of the reforms pursued by Chennai's Metrowater over a twenty-five year period, using archival documents from the agency as the primary source of data. It provides an instance of how the World Bank's agenda of putting water supply in Third World cities into the hands of the private sector is achieved through gradual, incremental and "rational" steps that have become commonsense in the water sector.

Later phases of reform emphasize consumer-satisfaction and public relations measures explicitly associated with the drive toward cost-recovery from users. The paper shows how the neoliberal compulsions of demand-responsiveness and consumer satisfaction pull against the agency's mandate to protect and ensure the long-term sustainability of the resource. The institution of "modern water rights" – individual, tradeable rights over groundwater – emerges as a crucial strategy through which utilities attempt to assure endless supply to metropolitan centers through extraction from peri-urban acquifers.

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1. Introduction: Anomalies and Contradictions of Reform

A tragic conundrum of the turn of this century is that the changes so long awaited and demanded in our governing systems have appeared in the form of "reform" – a term that serves as a euphemism for the unleashing of neoliberal orthodoxies across the spectrum of sectors and services. The term reform has come to index a politics of complicity between global commercial interests, international aid agencies, and national governments, aimed at transforming public resources into profitable enterprises. In the institutional arena, a reforming agency means one that has come under the financial and managerial disciplines of the commercial sector: the consensus on "best practice" across sectors is one in which state agencies operate like profit-making businesses, firmly turning their backs on transfer-based or relief-oriented welfarism. This new order, then, spells an even greater alienation of public institutions from the public than was witnessed under bureaucratic regimes.

But reform of municipal water systems is tricky business in more ways than one. From a business perspective, these systems have scales of operation, capital intensity and tariff structures which are not easily amenable to commercialization and/or privatization. At a deeper level, the social, political and cultural contexts in which water as an element and water provision as a service are embedded pose a number of challenges to the project of commodification. Reform of the water sector inevitably, then, becomes mired in a set of contradictions and tensions in practice. The case of Chennai's water utility, Metrowater is revealing. Its career of over twenty-five years on the path of reform has been marked by dilemmas and distortions that reveal the discrepancies between the stated goals of municipal water service reform (to ensure equitable, sustainable and efficient water distribution and management) and its methods (corporatisation, commercialization and privatization).[1]

On the surface, Chennai's Metrowater emerged by the early 2000s as among the most successful water utilities in India, and one of the most dynamic public infrastructure organizations in the city. In 2001 it was praised by the World Bank for achieving the principles of best practice widely held for water utilities around the world. In contrast to the huge deficits and government subsidy common in public sector utilities, Metrowater is a financially strong and viable organization: by 2001, it reported a surplus on its revenue account for the eighth continuous year, and had been operating without State government grants for over six years. Its capable performance allowed it to take over the running of water and sewerage systems for housing projects run by the Tamilnadu Housing Board, the Chennai Metropolitan Development Authority and the Slum Clearance Board. New townships and small municipalities on the edges of the city rely on Metrowater for technical guidance and/or contract with it to run their water and drainage systems.

Over the last decade-and-a-half, Metrowater has streamlined operations, frozen hires, instituted audits in a wide range of operational sectors, expanded its network and coverage to more parts of the city, modernized many of its systems, contracted out

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[1] This article is based on research conducted from 2001 to 2003 for my dissertation on neoliberal reforms in Metrowater. See Karen Coelho, *Of Engineers, Rationalities And Rule: An Ethnography of Neoliberal Reform in an Urban Water Utility in South India*. (Ph.D. Dissertation, University of Arizona, Tucson: November 2004). I gratefully acknowledge the assistance of the American Institute of Indian Studies, the Foundation for Urban and Regional Studies, and the Richard Carley Hunt Fellowship of the Wenner Gren Foundation for Anthropological Research in making this work possible.

several components, and stayed on track with its Master Plan. It has made steady improvements in revenue collections and has become creditworthy in its own right (i.e. independent of government guarantees), as testified to by infrastructure lending institutions in the city. A senior executive of one of these lenders dubbed it "a damned good borrower".

Outside this circle of funders and investors, however, the image of the organisation and the service is far from rosy. By 2002-3, it was clear that water governance in the city was in serious crisis. As droughts accumulated, the approximately ten billion rupees (1000 crore) spent on infrastructure improvements and source augmentation efforts proved to have yielded meager results, and large sections of the middle classes stopped depending on Metrowater for their drinking water[2]. The city's waterways remain perennially choked with untreated sewage, and the abundant rains of late 2005 brought disastrous floods, turning plenty into a problem. Meanwhile, the agency's endless search for supply-side solutions to meet the city's growing water needs grows increasingly more desperate. Following the failure of the expensive inter-basin transfer schemes during the drought of 2002-3, Metrowater began relying increasingly on groundwater extraction. Entrusted with protecting the region's groundwater resources, the agency emerged as the greatest culprit in depleting the aquifers of river basins near the city through highly unsustainable extraction over a decade.[3] In 2001-2, when yields fell in its own deep borewells in the Araniyar-Kortalliyar basin (northwest of the city), the agency began purchasing water from farmers in the area. By late 2004, when Metrowater's extraction from private agricultural wells in the AK Basin reached about 100 million liters a day, crises erupted in the peri-urban areas.[4]

How does reform play into these crises of water management? The reform paradigm guiding Metrowater is one of turning the water service into an industry responsive to consumer demand.[5] Such a framework propels the agency toward exploitative and short-sighted handling of water resources, in direct contrast to its legal mandate to

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[2] Studies estimate that Metrowater provides only a small fraction of the total water demand in the city. While Metrowater claims that 98 percent of the city is covered with piped water supply, a survey conducted in 2003-2004 of over 1500 households in Chennai found that only a third of the city's water demand was met by Metrowater, while almost two thirds of the demand was supplied through private means such as consumer-owned borewells, tankers and packaged water (A.Vaidyanathan and J.Saravanan. "Household Water Consumption in Chennai City: A Sample Survey, Centre for Science and Environment, 2005).

[3] The Chennai Metropolitan Water Supply and Sewerage Act of 1978 vests the Board with all powers to "control extraction, conservation and use of underground water in the Chennai Metropolitan Area". In addition, the Chennai Metropolitan Groundwater Regulation Act of 1997, amended in 2002, identifies Metrowater as the Competent Authority for regulating groundwater extraction in the metropolitan area. However, the Act was never implemented and extraction remained entirely unregulated. A consultancy study commissioned by Metrowater in 2002 found that few, if any, licenses or permits had been issued since the Act was passed. It also found that the annual average extraction from the AK Basin Aquifer over the past 30 years was about four times the sustainable yield, resulting in progressive depletion of aquifer storage and saline intrusion extending to 15 km inland from the coast. (Scott Wilson Piesold, *The Reassessment of Ground Water Potential and Transferable Water Rights in the A-K Basin.* Inception Report on Phase II: January 2005).

[4] Farmers, residents and women's organisations went on protests, claiming that the sale of water to Metrowater had depleted wells and damaged agriculture in the area. In 2004, farmers of Velliyur gave an ultimatum to the Chennai Metrowater and to the water sellers of the village to stop pumping groundwater. When Metrowater failed to heed the request, 400 farmers took action in February 2005, breaking Metrowater's pumping structures. Forty four farmers were arrested, kept under judicial custody for 15 days, and later released on bail.

[5] Metrowater's 1998-99 Annual Report boasts, "The Board is moving forward to reach a status of demand driven consumer oriented service provider." (p.51).

protect and promote the long-term sustainability of the resource. Revenue-enhancing supply-side investments are privileged over conservationist strategies.[6] The reform slogans of transparency and accountability are conceived on a model of public relations, limited to complaint-response and consumer grievance-redressal measures. Not only does this serve as a substitute for genuine citizen consultation and information-sharing, it also absolves the agency from accountability to sections of citizens that do not fit the bill of revenue-paying consumers.
This paper outlines the context, provenance and character of reforms in Metrowater, demonstrating how they fit a hegemonic model of global "best practice" in running infrastructure utilities. It outlines some of the effects produced by the reforms, including the ways that meanings are conscribed (e.g. "institutional strength" now refers to success in commercializing operations), the organizational culture is transformed (audit and finance now dominate over engineering), and most importantly, subsidized or common-access components of the service are progressively marginalized.

Although senior engineers in Metrowater were able to speak about reforms in a much more coherent and fluent way than junior engineers, there were many different views within the organization on what the reforms were and when they were launched. For some, they referred to the technical improvements in infrastructure implemented under the Second Chennai Project starting in 1996. To others they referred to the changes in "public communication" initiated in the late 1990s. However, a closer study revealed that all of these components were of a piece with a process of transformation set in motion over 25 years earlier. The package of reforms that would prepare the utility for eventual, if not immediate, privatization, had its roots in the formation of the "progressive" corporate-style parastatal in 1978.

2. Corporatisation: cleansing the water service of "politics"

How does municipal drinking water, traditionally the domain of local self-government, a field of struggle between local bureaucracy, city councilors and their constituencies, become shaped and steered by a global regime of discipline? In Metrowater's case, the process was set in motion with the formation of the Board as an autonomous statutory body, removed from the jurisdiction of the Municipal Corporation and placed directly under a department of the State government. A divorce from local government was thus written into the constitution of the new organization. The Madras Metropolitan Water Supply and Sewerage Board (MMWSSB) was created as the result of a major pre-investment study commissioned by the Government of Tamilnadu (GTN) and sponsored by the World Health Organization (WHO) and the United Nations Development Program (UNDP) in 1976, in response to the growing population and infrastructure needs of the city. The study comprised an engineering component which resulted in a 20-year water and sanitation Master Plan for the metropolitan area, and a component on Organization,

[6] The latest proposal for augmenting supply to the city is a 100 mld. seawater desalination plant, proposed to be installed in Minjur, north of the city on a DBOOT (Design-Build-Own-Operate-Transfer) basis at a cost of Rs. 500 crore. This proposal has been severely criticized by citizens' fora in Chennai on the grounds of its high installation and operating costs (water produced would cost about Rs.50 per 1000 litres), environmental impacts (primarily in the form of "marine desertification") and the lack of transparency about how the water would be distributed. More crucially, they argued, Metrowater failed to first explore other, more sustainable long-term options such as treating and recycling waste water, regeneration tanks and lakes, and promoting reuse and conservation.

Management and Finance (OMF), carried out by the multinational accountancy firm A. F. Ferguson in collaboration with the British firm Peat, Marwick, Mitchell and Co. The key recommendation of the OMF study was the establishment of a new autonomous board that would integrate under its jurisdiction the various scattered components of the city's water service. The Bill that would give statutory basis to the proposed Board was drafted by the consultants, introduced in the state legislature in January of 1978, approved in April, and enacted in June. Thus the birth of the organization was engineered largely by foreign consultants and *ad hoc* directors of the Board appointed by the State government.

The primary motive of this institutional innovation was autonomy, in particular financial autonomy: the power to manage, independently obtain, and invest funds, to set tariffs, and to contract with private parties.[7] Also envisaged was substantial "managerial autonomy, giving independence from short-term influences on its policy and finances".[8] The gendered character of the reforms is best captured in the language of the OMF report, which envisages the creation of an "efficient *and virile* service," the core of which would be a staff "with the capacities and aptitudes needed to carry out the various duties of an expanding and modern water and sewerage undertaking".[9] The documents proposing and outlining the structural details of this new Board carried a celebratory tone: the creation of the Board was portrayed as a highly progressive step in the movement toward excellence in the water and drainage sector. Many of the staff from relevant departments of the Municipal Corporation were inducted into the new utility. An expert was sent from the UK to identify organizational needs, and the consultancy document proposed that an expatriate training expert should set up a training school for technical upgrading of engineers. The restructured "finance function" was to be "responsible for guiding the new Board through a difficult period".[10] Fiscal imperatives were stressed from the start, and provided legitimation for all change.

The study recommended the formation of a Public Relations Committee and the launching of a full-scale public relations campaign aimed at "attuning people to accepting that water is becoming a scarce and expensive commodity, thus providing a receptive climate for the acceptance of inevitably higher tariffs…". [11] The campaign was also supposed to prepare people to accept disciplinary cut-off action for non-payment.

The immediate upshot of the formation of the Board was the interest of the World Bank. In fact, the World Bank was already active in the wings before the organization was set up: the terms of reference for the pre-investment study required that its financial analysis follow World Bank requirements for project appraisal, and its draft report as well as the draft legislation for the formation of the Board were

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[7] The pre-investment study concluded that the Municipal Corporation lacked a convincing image with creditors: "the Corporation would have considerable difficulty convincing the financial institutions that it was the most suitable borrower of funds for the scale of expansion envisaged." *Interim Report on Organization, Management and Finance. September 1977.* Study conducted by A.F.Ferguson and Co., Bombay, in association with Peat, Marwick, Mitchell and Co., London. Sponsored by World Health Organization (WHO), United Nations Development Program (UNDP and Government of Tamil Nadu (GTN). [hereafter OMF Interim Report]. p. 5.47.

[8] *Final Report on Organization, Management and Finance. August 1988.* Study conducted by A.F.Ferguson and Co., Bombay, in association with Peat, Marwick, Mitchell and Co., London. [hereafter OMF Final Report]. p.5.50.

[9] OMF Final Report p.11.14. Emphasis added.

[10] Id. 8.35.

[11] OMF Interim Report. p.8.39.

submitted to the Bank for review. This institutional transformation initiated the flow of funds for the agency, a flow that has continued ever since. As a retired senior engineer who had been active in the agency at the time recalled,

> Even at the time of finalization of the Master Plan some aspects were picked up by World Bank for funding – the first time an international agency funds a project before the document is even complete! … So what was a pre-investment study turned into a set of proposals for funding – a milestone in the development of the Board, wherein it crossed two stages in one step: one, the move from the city corporation to the Board, and two, the move of attracting the interest of funding agencies.

This moment of formation, then, brought Metrowater, directly and indirectly, into line with the orthodoxy of infrastructure sector reforms that was emerging in World-Bank funded projects since the mid-1970s and culminated in the Bank's influential report entitled *Infrastructure for Development* (World Development Report 1994). This report presented a general picture of failure in the predominantly state-run infrastructure utilities of the Third World, and attributed these failures to institutional, rather than economic, technological or even financial factors. It argued that infrastructure agencies in Third World countries had focused on investment at the expense of maintenance, resulting in massive under-utilized capacity, overstaffing, and inefficiency. The crux of the problem, it concluded, was that decisions were made on the basis of political expediency rather than sound utility-management principles.

The report identified three core instruments for reversing the failures of government utilities, short of privatizing them. These were: *corporatization*, which "establishes the quasi-independence of public entities and insulates [them] from noncommercial pressures and constraints," a *pricing strategy* "designed to ensure cost recovery, which creates a desirable form of financial independence for public utilities…,"and contracts between governments and private entities, which "increase autonomy and accountability…".[12] Thus, managerial and financial autonomy – in effect autonomy from the political ("non-commercial") sphere – and an unwavering focus on commercial viability were held as the touchstones of a good service. The role of government in this scheme was seen as regulatory, limited to setting policies and goals.

Recent phases of reforms have expanded and intensified these basic principles of corporatization, commercialization and privatization. While Metrowater was an early reformer in India, by the late 1990s these thrusts had become part of the national discourse of reform in the water sector.[13] The National Water Policy of 2002 favors widespread private sector participation in the country's water management. The privatization agenda is promoted by a subtle conflation of the private sector with "community" and "civil society", all of these shown in opposition to 'the state.' This

[12] World Bank, *World Development Report: Infrastructure for Development*. (New York: Oxford University Press, 1994).

[13] The Eighth Five Year Plan (1992-97) of the Government of India outlined a key principle for the sector: water being managed as a commodity and not a free service. This thrust was carried over into the Ninth Plan (1997-2002). The report of a national conference on reform in the water sector in India in 1999, outlining the principles of financial viability of services and a shift in the role of government from provider to facilitator, stated: "The(se) principles …shape a new paradigm in the implementation of water projects and require commitment from political, bureaucratic and civil society sectors" (Water and Sanitation Program, South Asia. "Politicians for Reform: Proceedings of the State Water Ministers' workshop on rural water supply policy reforms in India." in Politicians for Reform. Cochin, Kerala. December 1999).

strategy was evident, for example, in Prime Minister Vajpayee's speech at the Fifth Meeting of the National Water Resources Council in 2002, in which he promoted the revised National Water Policy:

> The policy should … recognize that the community is the rightful custodian of water. Exclusive control by the government machinery, and the resultant mindset among the people that water management is the exclusive responsibility of the government, cannot help us to make the paradigm shift to that participative, essentially local management of water resources. … Wherever feasible, public-private partnerships should be encouraged in such a manner that we can attract private investment in the development and management of water resources.

By 2001, the rationales of reform had been so successfully internalized within Metrowater that the majority of officials saw them as independently arising imperatives. As one middle-level engineer declared:

> The state is bringing these reforms, they are not imposed! Yes, funding agencies require them because they want to be sure that their loans are repaid and that the public will benefit… (But) my perception is that reforms were necessary. … Services run by the state traditionally have been subject to a lot of direct recruitments, pushed by politicians. So we have an unnecessarily large staff.

Some officials portrayed the reforms as a dialogic achievement, arising both from the need for funds and the need for change. As one engineer who had been involved with the studies that created the Board described it,

> Reform was both internally and externally driven – external interest came from the pre-investment studies that were really internal documents, or internally motivated….
>
> A funding agency like the WB would like to invest in a program which is self-sustaining, which arises only when the organization has financial autonomy. Before that, water was funded as any government program: it was a developmental program, one among many priorities of the state government. [Allocations] were not made on the basis of demand, but of resources available.
>
> The Master Plan laid out the demand, the funds needed to meet it and suggested how, by raising tariff, this could be repaid. It introduced the concept that Metrowater could borrow and repay from tariff. Metro was one of the first among utilities in this country to think in terms of financial autonomy.

Another engineer saw the reforms as part of a larger external push for change:

> I don't think a government department can reform itself, they cannot simply change from within. … There has been association with the World Bank, which has been responsible for some of the changes. Then there have been some dynamic officials. And also, with things like privatization, that came about because of the freeze on recruitment. It was generally felt that Metrowater was overstaffed. The World Bank has indicators for measuring productivity and Metrowater was found to be heavy on staff by those measures… So, reform is not something that can happen on its own, it has to be present in the country, in the society, there has to be a climate. I think it is a

> combination of things: the time was right, when Narasimha Rao and Manmohan Singh took it on – it was not just the World Bank.

But one engineer, who was openly critical of the direction of the reforms, attributed them squarely to donor conditionalities:

> Reforms must be seen in a larger context – when you are looking at reforms in Metrowater, you have to recognize that they did not originate within Metrowater. They were imposed. …Starting from the financial crisis in 1991, where we had to go to international lending agencies for support, we have been implementing these reforms. Why do we need this assistance? We have our own infrastructure, the materials, manpower, technical expertise… Part of the reforms are about institutional reengineering. It used to be taken for granted that the state serves the poor. Now they want to change that – tariff revision is part of that. To pay for the increased investment. Metrowater's expenditure has increased from 20 or 30 crores at the start of the Board, to several thousands of crores now. They had to go to foreign lenders, who then imposed this organizational re-engineering. All the reforms you are talking about – public communications, public grievance redressal, etcetera -- all start from that point.

These varied perspectives within the organization on the role of conditionality in bringing about reforms was partly due to a process of negotiation between the Board and the Bank that produced the "consensus" on Metrowater as a commercial entity. This process of negotiation was at least partly textual: a study of the documentary history of the organization reveals how local "ownership" of the reforms was slowly organized, through a subtle shift in the World Bank Aide Memoires, from a language of conditionality ("items that are critical to satisfying the conditions of appraisal and negotiations") to that of shared agreement ("Discussions were held with the Government of Tamil Nadu and the Metroboard and an understanding was achieved of the importance of these measures and the reason for them"[14] and back to one of mentorship ("Metrowater's proposals for reform should be completed by the time of appraisal so that the Bank may review it at that time").[15]

Metrowater's own documents are a study in apprenticeship, revealing the process through which the organization was steadily shaped by World Bank orthodoxies over the years since its inception. Its Annual Reports and project proposals increasingly reflect or echo the World Bank's Aide Memoires, Staff Appraisal Reports and other official commentaries, which in turn reflect the World Bank's more foundational document, the *Infrastructure for Development Report.* This report reads like a policy manual for reforms in Metrowater, so closely do the latter's discourse and actions adhere to its diagnoses and prescriptions.

Thus, the basic thrusts of reform in Metrowater – corporatization, commercialization, and privatization – were set by the conditions of its formation over 25 years earlier. The consumer relations reforms introduced in the 1990s were simply extensions and elaborations of this move. As a middle-level engineer in Metrowater put it,

> The first set were macro-improvements, the new changes are micro, in-depth reforms, operational reforms. For example, five to six years back the bill collector went to people's houses, now the Board feels the employment of these guys costs a lot, so they define it as the duty of citizens to go and pay

[14] World Bank *Preparation Mission Aide Memoire (December 5 1985).p.* 2
[15] Id. p.5.

their bills. An awakening has been created in the public, that payment of water charges is necessary. Another example: if you have a sewer block and approach your local Metrowater office to get it fixed, they will first check if your taxes and charges have been paid in full.

The next section elaborates on how the ongoing transformation of the service culture, from a welfarist to a commercial paradigm, is achieved.

3. Projects of Commodification and Commercialization

Like the commercialization of a government service, the commodification of water is not instantly accomplished. Not only does it pose complex economic and legal challenges[16], it also calls for extraordinarily detailed work in the domains of discourse, language and daily practice. Water in India and in Tamilnadu, as in many places around the world, is a highly symbolic material, surrounded by thick systems of social and religious meaning, and located in rituals of gifting, exchange and rule.[17] As Vandana Shiva puts it, one aspect of the "water wars" raging around the globe is the "paradigm war" – a conflict over how water is perceived, valued and treated: "The culture of commodification is at war with diverse cultures of sharing, of receiving and giving water as a free gift."[18]

The banner of "scarcity", once a favored prop of bureaucratic patronage systems[19] is now a pennant of the movement for marketizing water. In Chennai, with its heavy dependence on surface water sources and its unreliable monsoon patterns, water crises are both acute and chronic. However, given the political context within which the service is embedded, the push for market pricing of water as a solution to the problem of scarcity can only win limited acceptance. Solutions in India have thus tended to focus more on massive source-augmentation schemes, which raise the imperatives of attracting investment finance and hence of improving the financial viability of utilities. In Metrowater, then, the process of commodifying water proceeded concomitantly with -- and through – the process of commercializing the service itself. Two major projects were implicated in these processes: first, "institutional strengthening" of the utility, using financial and management disciplines modeled on commercial organizations, and second, turning clients into consumers through attempts at tariff reform and full cost recovery from users. This section traces the organization's efforts along these lines over the
25 years of its existence, as evidenced in policy documents and project proposals as well as in the discourses of senior agency officials.

The central thrust of reforms in Metrowater, since its inception, was on "institutional strengthening." Early World Bank Aide Memoires consistently foregrounded this

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[16] In legal and economic terms, water remains notoriously hard to commoditize. Developing water markets is a challenging proposition due to 1. its character as a non-exclusive resource in piped systems (i.e. it is difficult to exclude individuals once they have entered the system), 2. difficulties in defining tradeable property rights in water; and 3. especially in the case of groundwater, difficulties in pricing (see Marcus Moench and S.Janakarajan, "Water Markets, Commodity Chains and the Value of Water", MIDS Working Paper No.172, Madras Institute of Development Studies, June 2002).

[17] See Vandana Shiva, *Water Wars: Privatization, Pollution and Profit*. (Cambridge, Mass: South End Press, 2002), David Mosse, *The Rule of Water: Statecraft, Ecology and Collective Action in South India*. (New Delhi: Oxford University Press, 2003), and Wendy Espeland, *The struggle for water : politics, rationality, and identity in the American Southwest.* (Chicago: University of Chicago Press, 1998).

[18] See Shiva, note 17. p.x.

[19] cf. P. Sainath, *Everybody Loves a Drought: Stories from India's Poorest Districts*. (New Delhi: Penguin, 1996).

component as one of the items on the "critical path to project appraisal"[20] A systematic conflation of "institutional strengthening" with financial strengthening and commercialization of operations has been at work since the first preparation missions of the World Bank. "The goal of better and more efficient provision of water supply and wastewater services in Chennai requires, *by definition*, a financially strong Metrowater."[21] The Bank's vision of Metrowater "exercising leadership in the water sector" – a rationale for the Bank's involvement with the organization – was also grounded on its achievement of commercial viability. The (Second Chennai) project's "strong emphasis on strengthening Metrowater, enabling it to live up to its mandate to be a commercially viable entity" would be achieved through "tariff increases and improvements in financial performance"[22] and also through "increased worker and management productivity" through the application of incentives and an improved, more creative organizational environment for leadership and competition to emerge".[23]
Also listed under the overall goal of institutional strengthening are goals to "ensure full cost recovery of Metrowater's investment and operational costs," and to "improve the performance of Metrowater in key areas such as revenue mobilization and utilization, … commercial accounting, consumer education, and sector management."[24]

A major part of the commercialization of the service was the effort to build "management capability" in the organization. In the late 1990s, three major consultancies were initiated to review the integrated functioning of the organization: one, an "Organization Re-engineering Study" carried out by Osmania University; two, a "Twinning Consultancy" with the Compagnie Generale des Eaux (GdE), a subsidiary of the French giant multinational water utility Vivendi, and three, a "Strategic Review of Institutional Options" carried out by the multinational accounting firm, KPMG. The first was a diagnostic study of Metrowater's corporate performance, recommending measures for capacity-building toward "a customer-oriented, demand-driven, financially sound and self reliant organization." The second consultancy aimed "to guide CMWSSB toward providing a commercially minded customer orientated service that will operate in an efficient and cost-effective manner". The third study combined a study of institutional functioning with a wider consultation among stakeholders to involve them in deciding the levels of service they wanted and were willing to pay for. All three studies repeatedly reiterated the vision of an organization on its way to becoming a commercially viable utility through the application of sound management principles. The proposal for the Twinning Arrangement, for example, claims that:

> The main factors contributing to [Metrowater's] poor performance include poor institutional capability to effectively manage and operate its facilities, a lack of capable management and trained manpower, poor management information systems, and a general lack of commercial orientation in its operations.

[20] World Bank. *Preparation Mission Aide Memoire (December 5 1985)* p.2.
[21] World Bank. *Second Review Mission Aide Memoire (July 17 to August 2 1989)*. p.6. Emphasis added.
[22] World Bank. *Preparation Mission Aide Memoire (March 2 1986)*.p.4.
[23] Id. p.3.
[24] Id.p.3.

The proposal strings together a set of tropes that have become familiar in these documents: "performance" – "capability" – "effective" – "management" – "commercial". There is a certain ritual quality to the vocabulary, an easy fluency in the deployment of terms that bring into being the "New Organization". The proposal goes on to list its objectives: "… to ensure that it is operated in the most efficient, cost-effective manner possible." This conflating of efficiency and cost-effectiveness is another crucial plank of the ideology of reform. An official at the organization's training and resource center explained how he facilitated shifts in the mindset of engineers toward what, borrowing from neoliberal discourse, he called "leaner and meaner government:"

> We introduce them to modern management techniques, sort of sugar coating the pill! We make them feel that what they do is good, only they can do it better. We get Human Resources experts from private firms – these people have analyzed systems thoroughly for working on a profit basis.

The Twinning Consultancy sought to improve operational efficiency by bringing to bear on the public utility the experience, disciplines and best practices of a private sector water utility using its "experts in management, commercial and financial administration." As a senior government official explained it,

> The idea was to bring in exposure to international practices in running this service – through some handholding. To expose us to some private sector experiences. They are supposed to train us on various things, on attitudinal change, on public communication and public relations – that's the software part, and then to help with hardware aspects, such as refurbishing and leakage reduction. When I originally proposed this, I did not want a private sector company – I wanted a public sector to public sector twinning. But the World Bank got into the picture and they always want the private sector. I had originally wanted it to be with Singapore and Malaysia – when I visited their utilities, I found they were carrying out a lot of internal reforms. They have a public utility Board like ours. And I think the communication would have been easier – a lot of their documents are in Tamil, plus they are easy to travel to – a lot of our junior staff could have gone and worked there too!
>
> But it's not bad having Vivendi – your stock goes up, having Vivendi as consultants!! But they have some problems bridging the cultural divide.

The Bank, apparently, also intervened in shaping the policy-making capabilities of the Metrowater Board in its early years. A World Bank Preparation Mission in 1985 expressed concern about:

> the position of the board of directors of Metroboard (sic) related to transforming Metroboard into a commercially viable public utility. The mission is particularly concerned about this objective because to achieve it implies not only support of this objective by the board of directors but also working relations with the staff which permit the staff the degree of managerial flexibility that is required for it to do its job. It is not uncommon in public utilities in other parts of the world for it to be prevented from carrying out its objective by well-intentioned but poorly informed board members.[25]

According to the Bank, "Further work with the Board will need to be carried out to assist them to further identify policy issues…". The same mission then acknowledged

[25] World Bank. *Madras Metropolitan Water Supply and Sanitation Project. Brief on Policy Making. 16 July 1986.* pp.5-6.

that "the project is bringing into sharper focus a policy agenda for the Board of Directors…"[26]. The mission recommended a set of consultancy studies that would be presented to the Board members as policy briefs "for their edification".
An earlier mission in 1986 also commented on the absence of a Finance Director who would be "responsible for the institutional objectives of the project", and feared that "the financial and institutional strengthening components will suffer setback because of a lack of accountability for them placed at a proper level in the enterprise".[27]

> The Chief Engineer [of the Project Preparation Unit set up to manage WB projects] is not shown reporting to the Financial Director but only to the Engineering Director… A balance must be struck between engineering objectives and the financial and institutional objectives of the project. Agreement was reached that this balance should be sought in this project and indeed within Metroboard itself…"[28]

By 2001, it appeared that the Bank's efforts at institutional capacity building had been successful at least in so far as large sections of senior personnel in Metrowater had internalized the disciplines of thinking and acting in a commercial way. As a senior official of the organization described it, "Commercializing the organization has been very much on stream for more than ten years now: Metrowater has been functioning not like a government department but like a company for a while now!" Internal reformers, for instance, had begun to recognize the potential of organizational re-engineering to address the problems of waste in the system. A former head of the organization said:

> I personally believe that there was enormous wastage in the system – not only of water, but of funds, of manpower, of resources of all kinds. …I instituted systems of internal communication that were very systematic. Costing – I introduced costing in every activity – even an ad for a tender had to be costed. If a vehicle had to be purchased, we examined what the costs and benefits were.

Thus, by 2001, all spending was closely scrutinized for its potential returns, and engineers were routinely asked for a cost-benefit analysis on all budget requests. As a senior financial manager put it,

> We made this mandatory, in a prescribed format. All proposals had to show what the benefit of the expenditure would be and the profit to be realized. Earlier we used to simply sanction funds without asking any questions, now we are more particular!

As part of the ongoing strengthening of financial and internal auditing functions, the Management Audit wing was set up in 2000. According to the Annual Report of 2000-1,

> The Board made this an integral part of overall financial systems, with well-defined responsibility of the audit wing. Various concepts such as transaction audit, compliance audit of government rules and procedures, systems audit, management audit, energy audit, stores audit, etc., have been clearly defined and used as tools to enhance productivity.[29]

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[26] World Bank. *Preparation Mission Aide Memoire (March 2 1986).*
[27] Id. p.4.
[28] Id.p.7.
[29] Chennai Metropolitan Water Supply and Sewerage Board. Annual Report 2000-1. p.83.

The deployment of internal audit resulted in a significant streamlining of expenditures and in cost-cutting. The energy audit, for example, resulted in negotiations with the Electricity Board for lower rates on High Tension connections for pumping stations, based, ironically enough, on the claim that Metrowater was a non-commercial organization! Budget control was carried out on a monthly basis, as compared to annually or biannually before. Accounting practices were changed from location-based manual accounting, to activity-based accounting, wherein each activity was coded in the computer as a "cost center" or "profit center" and analyzed for its profitability. This "unbundling," the breaking down of integrated functions into units that lent themselves to easier commodification – such as sewerage, revenue collection, waste treatment, water distribution, etc. – is a classic strategy of commercialization. Each of these "strategic business units" could then be turned into limited companies or concessional contracts or privatized. This strategy was not only advocated by the World Bank, but was a key recommendation of the KPMG consultancy study.

By 2001, as a result of vigorous audits, cost-saving drives and the accelerated trend of contracting out as many "cost centers" as possible, expenditure on operations and maintenance, a category that yielded the most "budget flexibility," had declined both in absolute terms (Rs. 320 million in 2000-2001 compared to Rs. 394 million in 1990-91) and as a proportion of total expenditure (see graph) because of the huge increases in debt servicing and depreciation caused by the Second Chennai Project's large capital investments.

The agency, in public documents and in interviews, proudly proclaimed its success in reducing overall expenditures, but officials were more coy on the subject of cuts in Operations and Maintenance, preferring to use terms like "tightening", "streamlining", "rationalizing". A senior financial manager chose his language carefully in describing these measures to me:

> There have been no cuts in spending on maintenance. What we did was streamline the process so that all proposals had financial and economic analysis…. On the whole there is no cost-cutting per se, only tightening of funds, especially on manpower. … Operational expenditures are not restricted, but we are consciously reducing cost wherever possible, especially in the reduction of high-cost debt, and by privatization.

3.1 Organizational relations

Inevitably, the transformation of the bureaucracy to a commercial entity called for changes in the culture of organizational relations. The new organizational chart drawn up on the recommendations of the pre-investment study in 1977 proposed designating the heads of engineering divisions as "managers", e.g. Sewerage Operations Manager, Water Distribution Manager, etc. However, this project was never achieved: according to one informant, the engineers remained resistant to being called managers right up to the present.

While engineers strove to hold fast to their special identities and status in Metrowater, the winds of change were moving toward a dissolution of this engineering ethos, in favor of a stronger role for finance and auditing wings. Against the backdrop of a general freeze in recruitment in the agency, the Finance Wing hired several new personnel, many from the private sector. Its strength increased from one Controller of Finance (COF) and one Deputy COF (DCOF) in 1991, to five DCOFs, two internal

auditors, and one CCOF (Chief Controller of Finance) in 2001. As one engineer bitterly commented, "We are becoming a financial organization!"

A key element of organisational restructuring was the larger role given to financial managers and auditors in the public sphere of the service, i.e. at the interface with clients. This marked a significant change in the culture of service delivery. A senior finance official noted:

> Internal auditors now regularly make field visits. If a complaint comes about lack of water, it is not the engineer alone, there is involvement of finance and administrative people as well. This is recent … We also have more say in the settlement of contracts, opening of tenders, etcetera. The views of the Finance Department are taken more these days.

A former head of the organization confessed that the centrality of engineering knowledge to the running of the service was being re-examined in recent years:

> To be honest, I feel that this kind of work does not require a great knowledge of engineering – some simple knowledge is enough. There is this feeling that but for the engineers, the service cannot be run. But when we went into details of the different operations, we found that these were myths. There was quite a lot of resentment when other non-engineers were brought into decisions that were earlier the prerogative of the senior engineering staff. I opened up a lot of technical decisions to be reviewed by a mixed team, with financial people and managers also given a say. Many of the senior engineering staff began to feel a bit redundant.
>
> For example, when it comes to the type of pipes – say we have about four options that may be suitable for our purpose. You have to think about what the goal is –do you want something that will last a hundred years, or an option that will be good for 30 years, and then the next generation can replace it if needed. So, sometimes cost accountants' suggestions and recommendations were selected over those of engineers, and later the engineers also came to feel that the decision was a right one. But there was a lot of resentment still. In fact, I can tell you that the three and a half years of my tenure were full of turbulence – there was *dharna* after *dharna*, lots of protests….

The de-centering of engineering knowledge in the organization, then, was of a piece with the shortening of investment planning horizons with a view to cost-cutting. While the incorporation of financial managers and cost accountants into technical decision-making was presented as efforts toward a greater inclusiveness and integration in the organization, for the engineers these moves were not so benign. A repeated theme that surfaced throughout the study, voiced by engineers across the spectrum from seniors at the Head Office to those in the field, was the lowering of the collective morale of engineers in Metrowater, and the impacts of these moves on the service. A senior engineer said:

> You asked about why the 16-zone project was not fulfilled according to plan – whether it was faulty design, or wrong data? *This* is the reason! Not taking the engineering perspective seriously! Cost-cutting in some cases is fine, but it often has wrong consequences! There have been many instances where projects are unsuccessful because the engineers are not listened to!

Field engineers were in agreement on this. As one said,

> My opinion is that if proper preventive maintenance is done, we should not have any problem. The concept of preventive maintenance, unfortunately, is not properly understood by finance. Finance managers have to believe technical people, their analyses of the problems

The atmosphere of horizontal distrust across departments appeared to have spilled over to cause tensions in the vertical relationship between senior engineers and depot engineers. Junior engineer complained that the buck was invariably passed down the line to field officials, and that senior technical officers were afraid to speak out before the MD and other administrators, even on technical issues. There appeared to be a general reluctance among engineers to take responsibility for decisions in this climate of constraint and suspicion.

3.2 Citizens to Consumers: Toward Tariff Reform and Elimination of the Commons

The meanings of a "good service" were increasingly associated in Metrowater with the creation of consumers. As Metrowater's 2000-2001 Annual Report put it, "A sound tariff policy remains the backbone of any viable financial management system and also for (sic) improving the relationship of 'consumers as the user' (sic) and the Board as "service provider".[30] Market-oriented reforms were adopted not only for pragmatic reasons, but as a spur to enhanced performance: "not because capital markets are the only sources for the volume of investments required, but because market-oriented financing increases efficiency in use of capital (and in) overall performance".[31] This section reviews the strategies deployed to produce consumers, particularly to separate the urban poor, who receive water free of charge, from the ambit of Metrowater's services.

Key to the creation of the efficient and virile service was the removal of all subsidies. This was a consistent theme in World Bank Aide Memoires from the start. An initial step toward "full cost recovery" was a shift in the funding relationship between Metrowater and the Government of Tamil Nadu. World Bank loans were chanelled via the State government to Metrowater and were initially received by the latter as part grant and part loan. Bank missions since the early 1980s opposed this pattern and insistently pushed Metrowater toward eliminating the grant component and funding its projects through a combination of loan and internally raised revenues. The Board, while accepting full cost recovery as the ultimate objective in principle, could not comply immediately: "[F]or the present, the existing financing pattern of 50 percent loan and 50 percent grant will have to continue." By 1996, the goal was achieved: Metrowater stopped receiving grants from the government and was financially self-sufficient, with debt service forming almost 25 percent of its expenditure.

A second critical component of the project of full cost recovery was tariff reform. The pre-investment studies recommended that "Eventually the total capital and operating costs of the water and sewerage system have to be borne by the consumer through the tariff".[32] This principle was subjected to a stinging critique by a senior executive of an infrastructure financing institution in Chennai, as posing an unfair burden on the current generation of water users: "Since the benefits are not accruing only to the current users of the system, it is unfair to bill them in the way the [World] Bank and

[30] CMWSSB *Annual Report 2000-2001*, p.85.
[31] CMWSSB *Annual Report 1997-98*. p.45.
[32] *Interim Report on Organization, Management and Finance (OMF). September 1977.* Study conducted by A.F.Ferguson and Co., Bombay, in association with Peat, Marwick, Mitchell and Co., London.

others are doing now. It is now fashionable to say that users have to pay. But this is nonsense! It's an orthodoxy, and a nonsense orthodoxy! Theoretically, there is no case in economics – even a first year economics student will tell you that when there are externalities, you cannot price the entire thing on to the consumer."
This "nonsense orthodoxy" of "moving toward full-cost pricing of water services" however, is one of the five key actions that the World Water Vision (a document of the World Water Council[33]) identifies as necessary to achieve sustainable access of all people to safe and sufficient water. Given the increasing pressure on water resources, it is hard to dispute the need to re-examine the highly subsidized provision of water that has hitherto been the norm, especially since such subsidies tend to benefit wealthier people with access to piped water and storage facilities rather than the poor who rely on mobile sources often involving private providers. However, in the vast majority of cases, tariff reform occurs in preparation for, or as a concomitant of, privatization, and/or as part of donor-imposed reform conditionalities. The notion of costs also differs radically between private companies and the public sector. Government costs go to provide protected employment with living wages and benefits to large numbers of public sector staff, while private company costs include the salaries of multinational corporate bosses and shareholders profits. In 1986, a World Bank mission quoted findings from a consultancy study to suggest that Metrowater would need to raise average tariffs by 400 percent "to move toward commercial viability while at the same time maintaining affordability"[34]
Once more, linguistic strategies were deployed to achieve specific discursive effects in the project of consumerization: the term "equitable" took on a new meaning in World Bank usage, referring to the removal of the cross-subsidy built into Metrowater's tariff structure. The cross-subsidy kept domestic water rates low by charging high rates to industrial bulk consumers. A 1986 Bank mission wrote: "[The tariff reform study should] result in a structure which is administratively cost-effective, *equitable among all of the consumers*, and efficient from an economic point of view".[35] The word appears again in an Aide Memoire in 1990 in the same context: the tariff study being proposed "should review the entire rate and cost structure of Metrowater to determine an *equitable* and reliable method of recovering costs".[36] As a result of these pressures, cross-subsidy from industry to domestic consumers was substantially reduced.

This specific meaning of equitability is strengthened by some marked silences in the Aide-Memoires. The urban poor are largely absent from the documents, although they are sometimes indirectly invoked through the term "affordability," or in discussion of service to the slums, as will be seen below. However, they are mentioned in a 1999 Aide Memoire under a section entitled "Tariff Discrimination due to Cross Subsidies". The Bank mission acknowledges that cross subsidization is "often used for the purpose of helping the poor have access to the service", but contends that the "outcome, almost without exception, is that the poor seldom benefit

[33] The World Water Council is a self-designated "multi-stakeholder platform" on international water policy, founded in 1996 by, among others, the large multinational firm Suez Lyonnaise. Its membership includes over 300 private companies, including some of the world's largest water corporations, as well as international financial institutions like the World Bank and government ministries.
[34] World Bank. *Preparation Mission Aide Memoire (March 2 1986)*.p.6.
[35] ibid. p.2, emphasis added.
[36] World Bank. *Proposed Second Madras Metropolitan Water Supply and Environmental Sanitation Project. Preparation Mission Aide Memoire (May 30 1990)*.p.10. Emphasis added.

from these subsidies".[37] They argue that "many countries are fast abandoning this practice as they realize that there are better instruments to subsidize the poor." None of these instruments are described; the document instead goes on to detail how price distortions can be gradually removed.

The creation of categories is critical to projects of commercialization and market formation. "Unbundling" the service in Metrowater involved an attempt to create, apart from cost and profit centers, a clear distinction between consumers of the reformed service and the government's protégés, sections of the population that were supplied water free of charge through public fountains. This attempt dates from the pre-investment study, which, while recommending the integration of all aspects of the municipal water service, set up a separation between public fountains and the mainstream (piped) service, with the ultimate goal of removing the former from the responsibilities of the Board. The study recognized that "traditionally, water supply and sanitation are treated as civic functions with particular reference to public health, safety and convenience" and are handled by municipal government.[38] But it also

> felt that the construction and maintenance of public fountains and public conveniences is essentially a civic function and should be discharged by local bodies. The MMWSSB as a commercial body should not be involved except to the extent of supplying water to the public fountains at a charge. Thus these assets should not be taken over by the Board. The Corporation and other local bodies should continue to own them …[If the Board continues to supply water to the public fountains, the charges] should be paid for in full by the appropriate authority. Any subsidy required to enable poor people to receive an adequate supply of water should be provided through these bodies and not by the Board".[39]

Thus, service to the poor was to be excluded from the major institutional innovation expected to enhance the quality of the service. The draft bill excluded public fountains, public conveniences and stormwater drains from the ambit of the Board's operations. However, the Government of Tamilnadu, in reviewing the Bill, reinstated the care of public fountains under the Board.

The issue of service to the slums has remained a contentious theme in World Bank's relationship with Metrowater from the start. A 1986 mission pushed the organization to re-examine its responsibility for supplying water to the slums.

> Whether MMC [the Madras Municipal Corporation] should be accountable for paying for water consumed by slum dwellers has not been resolved, resulting in bills being sent but payment not received…".[40]

The mission also insisted that:

> The principle of cost recovery, even if indirectly recovered from MMC, should be sought from slum dwellers especially those occupying illegal land since they pay no taxes nor water charges.[41]

In 1989, the World Bank spelled out its opposition to the utility being directly involved in government schemes to provide water to the poor through unlevied public

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[37] World Bank. *Proposed Third Chennai Metropolitan Water Supply and Sanitation Project. Preparation Mission Aide Memoire. (June 14 to July 1 1999).*p.7

[38] *Interim Report on Organization, Management and Finance (OMF). September 1977.* Study conducted by A.F.Ferguson and Co., Bombay, in association with Peat, Marwick, Mitchell and Co., London. p.6.2.

[39] ibid, pp.7.10 and 14.6.

[40] World Bank. *Madras Metropolitan Water Supply and Sewerage Board. Preparation Mission Aide Memoire (March 2 1986).*p.7.

[41] Id.p.15.

standpipes, especially as such involvement keeps Metrowater reliant on grants from the government.

> The mission discussed the use of grants from the Government with MMWSSB, which pointed out that grants were used in part to cover the costs to MMWSSB of providing a social service at subsidized prices, such as the subsidized water provided through standpipes. The mission explained that the Bank's policy is not to reject the use of subsidies per se, but to require that such subsidies be transparent and explicit. Thus it would be better for MMWSSB to charge the public agencies a fair price (e.g. the actual cost) for standpipe supply, and for the GTN [Government of Tamilnadu] to pay for this service outright – either by paying in cash or by making an appropriate accounting adjustment (such as subtracting accounts payable from long term debt). This would assist the authorities in understanding and recognizing the cost of subsidizing.[42]

Thus, while the Bank was "not opposed to subsidies per se", it objected to the form in which they are given, a form that integrated all citizens into the domain of state service. Using the language of transparency and the discourse of "recognizing the true costs", the Bank sought to redefine the accountability of the state for water provision as a commercial accountability to consumers, and separate it from the government's accountability to the poor. This move to bring subsidies out into the open is also part of the World Bank's larger goal of separating "politics" from the service.

By the late 1990s, Metrowater had adopted a policy of gradually eliminating public standpipes. The policy was never publicly announced, and circumstances made it difficult to implement. A senior engineer told me:

> There has been a decision to not provide public standpipes in new areas that are being served… This was a decision taken internally by Metrowater in 1996 or so, because of the problems in maintaining these standpipes … And also because the Board has turned toward revenue generation as the focus.

When I asked a senior engineer what would happen to people who could not afford private connections, he responded: "Yes, that is the dilemma Metrowater is dealing with now." I persisted: "But if the organization is committed to meeting the needs of the poor…?" He countered:

> Where is that written? Where do you find such a stated commitment? I can show you the charter of the Board and any other policy document, you will not find such a statement! It used to be part of the orientation, but now when the organization is trying to become commercial, this becomes a big dilemma. The charter says it will serve the citizen. But when the citizen is now being seen as the consumer, the basic assumption is that the relationship is one of paying for a service. This debate has been going on for a while – it will be resolved only when they recognize the basic distinction between the concept of citizen and of consumer.

The official then referred me to the Chief Controller of Finance for further clarification on this issue "because it is the financial side that controls this whole thing." A high-ranking official of the State government outlined the policy of eliminating public fountains as part of a more ambitious vision of promoting private water connections in the slums.

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[42] World Bank. *Madras Metropolitan Water Supply and Sanitation Project. Review Mission (April 13-21 1989).*

> I am encouraging private water connections for two reasons. The environmental benefits of having a private toilet, which entails a private water connection, and second, the more private connections there are, the less I need to provide public standpipes. These public standpipes are all controlled by mafia fellows who extort money. And they generate no revenue at all. Besides, the advantages to the women of not having to wait for water, carry it, all of that – I have no doubt that she would be willing to pay for a connection. I feel we have not marketed this idea enough. …The political economy of water in slums is amazing. They already pay for water. Water is by no means coming free to them now! … All are willing to pay for water, in some way or other. But Metrowater has not effectively marketed the concept of a private service. … I really believe, if the quantities of water are sufficient, and it can be, then there is no reason not to give everybody a connection.

In the reformist visions of the state, then, faith in the potential for endless supply augmentation is combined with a discourse of "willingness to pay" and an assessment of poor people's capacity to pay, to portray universal private connections as a pro-poor solution. Yet, each of assumptions underlying this vision is specious: supply augmentation efforts are fast reaching the limits of sustainability, the vast majority of the urban poor in slums do not live in conditions that would encourage them to invest in private connections (even though they are compelled to pay for daily supplies of water), and the shifting constitution of the urban poor predicts a continued reliance on public facilities. Meanwhile, these visions of reform feed into a discourse that consigns public taps, the commons[43], to the margins of order and citizenship.

In Metrowater, pressures to achieve full cost recovery and tariff reform have translated into punitive effects for clients as well as frontline service-providers. Field officials face sanctions if they fail to achieve ambitious revenue-collection targets; annual performance awards are based on success in meeting these targets; and clients are denied service until they meet all arrears, even if they have not received water for several months.

4. Privatization

Although outright privatization in the form of long-term concession contracts or disinvestment are not yet publicly on the cards in Chennai, the process of contracting out components of the service for maintenance and service on short- to medium-term term leases has become standard practice. All new installations, from sewage pumping stations to water treatment plants are now constructed on BOOT or DBOOT arrangements. Reforms in contracting systems in Metrowater since 1997 have moved the organization toward turnkey type contracts which favor single large contractors over the many small firms that the agency traditionally partnered with. Large contractors are considered to have the necessary equipment and to be more experienced and reliable. However middle-level engineers in Metrowater confessed that holding contractors accountable on the ground was often harder with large corporations like L&T than with small local firms.

Privatizing O&M depots, the nodes of direct services to the public, is regarded as a particularly challenging task, as these depots handle far more complex and sensitive

[43] In municipal water systems, public fountains are arguably a type of "commons", despite the fact that they are not naturally occurring resources, but installed and supplied by the state. They constitute a public-access option for urban dwellers who lack private sources. In Chennai, public fountains are heavily relied on during drought periods even by people with private connections, as domestic pipes often receive no water in these periods.

functions (including micro-level allocation and distribution of water, policing irregularities in the grid, and public relations) than technical facilities such as treatment plants or pumping stations. In 2000, Metrowater initiated a pilot project of contracting an O&M depot to a small local private firm to manage. The cost savings to the agency were significant, and there are indications that more depots will be privatized.

But privatization of water has, according to a number of commentators in Chennai, been long underway in one way or another. Apart from the high and increasing reliance on private groundwater sources by individual households, more than a fourth of the city's households purchase packaged water for drinking, and about a fifth of the city's water supply comes from private suppliers that form a powerful lobby. Most commentators ascribe this situation to Metrowater's failure to manage water supply for the city. As a journalist who covered the city water beat said,

> Who depends on Metrowater? …They never ever managed to supply their own minimum target of 140 lpcd. [liters per capita daily] – the best they did was about 70 lpcd! Even in non-drought periods -- private parties have made inroads, this is not so easily reversible. …The groundwater legislation of 1987 which prohibits commercial exploitation of groundwater has never been applied, except in the case of the East Coast Road! … Metrowater does not want to enforce the law, because they cannot supply enough water themselves, so they have to let these people go ahead and supply!

The reform orthodoxy of full-cost recovery is linked to the agenda of privatizing water in ways that are not directly obvious. While cost-recovery is widely understood as the recuperation of the financial costs of treating and supplying water, the more radical long-term goal of reformers is to reach the full "economic costs" of water. In this system, water will be valued according to its opportunity costs, which in turn will reflect its highest value across the spectrum of water use. In other words, the cost of drinking water to the average consumer would reflect the price that industrialists would be willing to pay for it. Economic pricing is promoted as a means of reducing water consumption. The vision of global water policy, as articulated by the World Water Council, is of the development of "markets of transferable water rights" and the reallocation of the limited resource to "high value users of water" through "treating water as a tradable commodity." A World Bank Strategy paper foresees that "… in case after case reformed utilities… (will) push for market-based rules for facilitating the voluntary temporary or permanent transfer of water rights from low-value to high-value users."

This brings us back to the links between municipal water reforms and the over-exploitation of the AK basin aquifers, outlined at the start of this paper. The practice of sucking resources out of rural hinterlands to cater to the ever-expanding urban appetite is now a globally recommended policy breakthrough, facilitated by the institution of "modern water rights", which create markets in groundwater and permit individual farmers to profit from selling water commercially. This strategy fits into a larger "development" vision of re-allocating water from low-end uses (like small-scale agriculture) to high-end uses (like urban growth). In 2002, Metrowater hired consultants to study the introduction of a system of tradeable water rights in the A.K.Basin, which would allow the organization to continue extraction of groundwater from these areas under a legal, ostensibly more controlled regime. The consultants' report met with mass opposition at the public meeting called to present the draft. The revised report has not yet seen the light.

5. Conclusion

Reforms in Metrowater have not always moved as smoothly as the agency claims. Many observers who were involved with the agency in some form or other over the years commented that the basic goal of autonomy from political decisions had never been achieved – that all key decisions, like those on hires and tariffs remained under the control of the State government. In fact, tariffs were raised only once or twice since 1978, and have remained very much politically driven. In 2001, when the financially strapped State Government announced steep and unpopular hikes in a wide range of government services and provisions from bus fares to milk and rice, water charges remained untouched. As a senior executive of a lending institution put it,

> The World Bank is (still) very unhappy with the current tariff structure of Metro. …. Now Metro has taken the exceptionally reasonable stand that: I cannot [raise tariffs] first of all in a drought year, and secondly, as long as I have a cash surplus, I see no reason to do tariff hikes for the fun of it! So get off my back!

He claimed that Metrowater could afford to say "get off my back" because it did not need to go to the Bank for further loans. Meanwhile, the Vivendi consultants dubbed Metrowater "an unwilling client, or at least a reluctant one" in terms of its amenability to new patterns of functioning:

> Metrowater has been unable to go up the learning curve …and consequently it faces a huge amount of learning in a short period of time in order to get the management systems they would need to face the future. There is a long way to go and a lot of learning to be achieved in the organization. The process of reorganization and privatization of such an organization is profoundly difficult, and was very painful even in the UK, a lot of people suffered, there was a lot of stress, but they ended up with a significantly better system.

However, the trajectory of reforms seemed to be clear to some senior officials in Metrowater, one of whom predicted:

> Slowly [the agency] will be privatized. Mainly in the form of small contracts. They are not yet talking about it, this is just my guess. Already so much has been privatized… Our lower levels [of staff] are not aware, have not understood the transformations that are coming within Metrowater.

That he was right about the slow road to privatization was revealed by a senior government official in the water sector, who claimed that the process of setting up a regulatory authority was already secretly underway.

> [But] it is happening quietly, because once you start talking about a regulatory authority, people know there is privatization in the offing, and all the shouting starts. There will be a huge debate the moment you announce the setting up of a regulatory body!
>
> …So we are working at this, setting up the regulatory authority, simultaneously preparing ourselves for privatizing components that will benefit from the efficiencies brought by the private sector. The Twinning relationship is part of this effort.

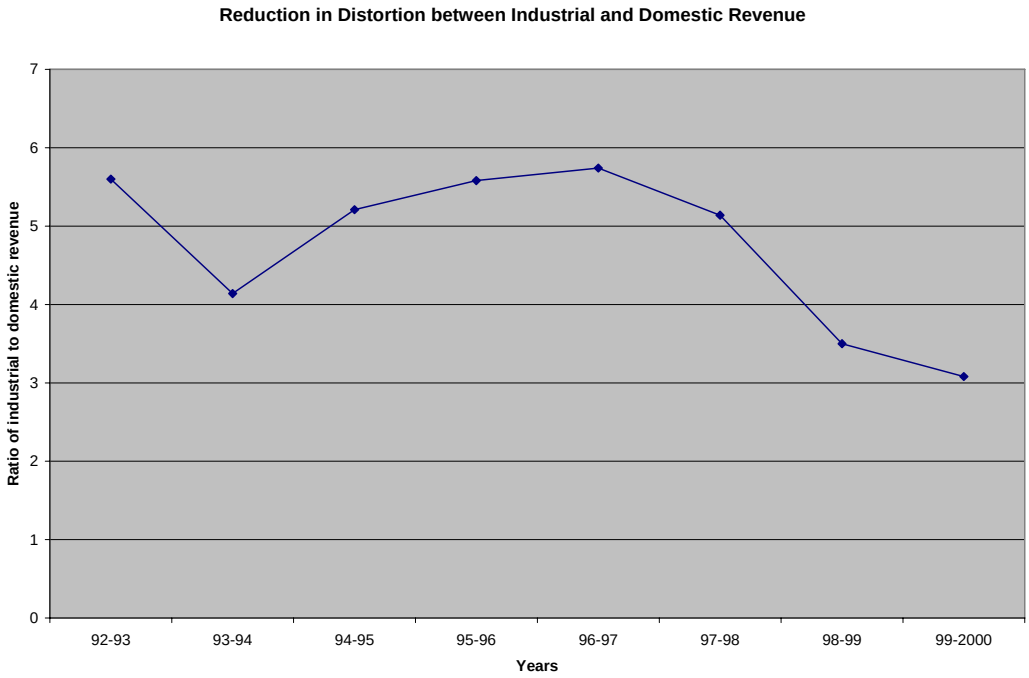
Several senior officials in the water sector had serious misgivings about privatization as an option for water services in poor countries, based on their experiences with private contractors in the past. Many of them believed that water provision was a public service that could not be turned into a free market operation. Yet they also seemed to accept it as the inescapable destiny of such services, albeit one that the state could help to co-produce. The global orthodoxy of privatization as the route to better

quality of service, and the pragmatics of the bottom line, overrode their misgivings about its potential threats to state sovereignty and accountability. The following comments from a senior government official reveal the continuity between the commercializing reforms in Metrowater and the larger agenda of privatization:

> Ultimately the public don't care who supplies them the water as long as they get water… This system anyway is headed for extinction – these huge government-run utilities will die like dinosaurs, they are on their way out. We need to evolve a new creature, part public, part private, something that combines the strengths of the two. … The bottom line is that we need to generate the resources to take the service to more people…The public sector is burdened with a long-established way of doing things, with a culture of all kinds of interference and claims…
>
> We nationalized everything a few years ago, and now we are disinvesting. There was good reason then, and there is good reason now – these things keep moving and changing, one has to remain dynamic. Metrowater will die like a dinosaur! Government organizations cannot be lean and mean, so they will die. We need to evolve new ways of responding to the needs. That's why I say we need to hold hands and create a private sector that will meet our needs, a local private sector.

Reforms, then, appear to constitute, even for state officials, an inexorable and pre-determined evolutionary trajectory within which some limited creative options are possible.

Figure 1.



Source: Chennai Metropolitan Water Supply and Sewerage Board, *Annual Report 1999-2000*. p.55