



Water and Sanitation: Barriers to Universalization

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1. Facts: Inequalities and Vulnerability

The Millennium Development Goals aim by 2015 to halve the proportion of people without access to safe drinking water and sanitation and is a yardstick to measure the progress of India towards ensuring universal access.

1.1. Water data: an apparent success

In the beginning of the 1990s, an estimate of around 90% of the urban population had access to safe drinking water as compared to an access of 95.3% in 2005. According to the Government of India, the MDG objective was reached in 2007. By 2015 the overall access figure will reach 98% of the urban population (Central Statistical Organisation, 2009: 84). In other words, universal access is within reach.

However, the story is less rosy if one looks at the percentage of households with a house

connection and the quality of service provided. The decline in the percentage of in-house connections from 52% to 48% in the last 20 years demonstrates the weak link between higher investment and better services for the poor (Mehta and Mehta, 2010). Aggregated statistics are insufficient to capture the situation of water supply in Indian cities.

In the first place, variations among states are significant: according to the 2001 Census, for 13 states, provision of safe water remains below 90%. Performance varies across states, and considerably so in terms of modes of access. A number of states provide tap water for more than 90% of their population (Karnataka, Jammu and Kashmir, Sikkim, Meghalaya and city-states like Puducherry and Chandigarh), while others perform badly (Bihar: 29%, Assam: 36%) or on average (Uttar Pradesh and Kerala with tap water provision of 47% and 41%)⁹³.

⁹³ Data from Census 2001. Census 2011 data are not yet available.



City size also matters⁹⁴. Piped water access in 2001 varies from 73% for class I cities to 58% for cities in the class IV to class VI bracket (World Bank, 2006: 13)⁹⁵. Further, in the class II to class VI city categories, Maharashtra has the highest percentage of piped water coverage (around 60%) while in each of those classes, the lowest performing state supplies around 30% of its population with piped water. Differentiated access is a cumulative process aggravating the situation in the small towns of poorer states.

Finally, Indian cities are characterized by an unreliable and restricted supply limited to a few hours per day, even for households with in-house connections. Problems of quality of service (predictability of supply, timings of supply), of water quality and of quantity of water supplied are considerable (Zérah, 2000; World Bank, 2006).

1.2. Sanitation data: an evidently unsatisfactory situation

Regarding sanitation, the situation is much worse. The MDG will not be attained in the near future and the level of access to improved sanitation has not progressed rapidly enough.

Variations in definition provide different figures related to access to improved sanitation: 77.5% according to the 2006 NFHS data and 54% according to the WHO/UNICEF data (JMP 2010). Both data sets show that open defecation remains a common practice for 17% - 18% of urban dwellers. Only about 28% of the urban population has a sewerage connection and about 63 to 73% has a household toilet connected to a sewer or onsite disposal (WSP, 2009: 9). The overall cost of inadequate sanitation (including rural settlements) is estimated at 6.4% of the India's GDP, and inequalities are strongly embedded in social and cultural practices (WSP, 2010).

Another concern is the low level of wastewater collection, disposal and treatment systems. The treatment capacity for the wastewater generated reaches 51% for metropolitan cities (1 million plus), 32% for cities with a population above 100,000 and 8% only for cities with a population comprising between 50,000 and 100,000 inhabitants (CPCB, 2009). Variations are significant among metropolitan cities: the sewage treatment capacity of Hyderabad is 100% as compared to 65% in Delhi or 26% in Nagpur and 11% in Lucknow. Practices of discharge of untreated sewage into water courses and water bodies and neglected open drains have a negative impact on the environment and public health.

Similar outcomes result from inefficiencies in the management of solid waste. Collection efficiency is estimated at a national average of 72% with large variations according to states. The best performing ones are Kerala and Haryana (collection efficiency level of 82%) and the worst performing ones are Bihar and Gujarat (59% and 61% respectively). Among cities, Mumbai has 96% collection efficiency as compared to 52% in Madurai and 19% in Salem⁹⁶. Transport capacity is also limited (around 70%) and manual handling remains a widespread practice despite investments in mechanized machinery in recent years. Finally, inadequate disposal of waste (open dumping and badly operated landfill sites) leads to environmental degradation.

This being said, these data do not convey the importance of water and sanitation as one of the main telling indicators of the quality of life in cities, in material, social and symbolic terms. Discrepancies between poor and residential colonies, vulnerability of specific groups, distribution inequities and maintenance of discriminatory practices portray the Indian city as far from inclusive in terms of access to urban basic facilities.

⁹⁴ Population size-class is defined as follows: Class I: 100,000 and above; Class II: 50,000 to 99,999; Class III: 20,000 to 49,999; Class IV: 10,000 to 19,999; Class V: 5,000 to 9,999 and Class VI: Less than 5,000 persons.

⁹⁵ These figures are also in the Eleventh Plan of the Government of India.

⁹⁶ These various figures (state wise and city wise) have been compiled and analyzed by Sharholy et al. (2008).

1.3. The ground reality: distributional inequalities and cumulative vulnerabilities

Modes of access and levels of consumption are the first indicators of urban inequities in the sector. The low level of in-house water connections is a reflection of the absence of connection to piped water supply in slum and poor areas. Public utilities often provide water through hand pumps, standpipes and wells (or more recently through water tankers). Other sources available can range from free traditional ones (lakes, common resources) to collectively or privately managed small networks. Supply from these sources is limited in time and imply long queues to access water and coping strategies to fulfill consumption need, that remain often below 70 litres per capita per day (Shaban and Sharma, 2007). Consequently, all studies on water access in slums point out to the reliance on at least 2 or 3 sources of water supply.

Even though some water sources, such as standpipes, provide an effective form of cross-subsidy, reliance on multiple sources leads to heavy financial and time opportunity costs. Many studies have demonstrated that in proportion to their incomes, poor people pay more for water than others (WSP-SA, 1999): they rely on costly individual and collective strategies ranging from storage, water tankers or payment to employees of public utilities for supply and also paying for protection from the police. The inclusion of health and environmental impacts adds to the economic costs borne by the poorest. Indeed, for sanitation, “the per capita economic impact of inadequate sanitation for the poorest 20% is 60% more than the urban average” (WSP, 2009).

Beyond the low level of access and the related economic costs, this situation emphasizes the inability to leverage the potential of urban services to reduce social inequalities and promote social justice. Narratives of daily experiences related to water supply and sanitation bear testimony to the feelings of exclusion, lack of

security and fear related to the denial of basic rights. Such consequences are particularly acute for women and children as well as workers involved in sanitation services.

1.4. A focus on vulnerable groups

Due to their responsibilities in the family as water collectors, women are the prime victims of poor water supply. A large share of their time is devoted to fetching water (also carried from their place of work), to negotiate access to water points, to queue and wait for water and to face household disputes when water is insufficient (Sharma, 1999). Further, they suffer the most from inadequate sanitation facilities: women face sexual harassment at water collection points and in toilet facilities; when going outside for toilet needs, they face physical danger leading them to leave in groups during early mornings, absence of toilet facilities also force women to hide during menstrual periods and to be helpless when stomach related ailments strike them in the night as they cannot go out in fear: this exacerbates strong feelings of shame. Even when there are toilet blocks, problems persist: open roofs lead to peeping and the absence of dustbins are problematic for women during the menstrual cycles⁹⁷. Apart from entrenched and disempowering socio-cultural practices, this indicates the lack of consultative processes by public utilities which would address specific demands while planning infrastructure.

Children represent another vulnerable group. Along with women, young girls and children are assigned the task of filling water vessels before going to school. The lack of toilets in school affects the enrolment of girls. Death and diseases due to inadequate water and sanitation affect children worse below five years of age. SC/STs are also under-provisioned. Tap water is provided for 78% of “others” in the population, as against 69% for SC/STs and the absence of latrine concerns 4% of other groups as against 23% for SCs and 21% for STs (NSS, 2010).

⁹⁷ Presentation done by Jagori on 26th November 2010 on their ongoing work in two resettlement colonies in Delhi.



Workers and employees in the sanitation sector are confronted with a very poor and degrading working environment. The conservancy staff works without any protective equipment – a fact that leads to both injuries and diseases (Srinivasan, 2006). Permanent employees, organized through trade-unions, are better off than daily wage contractors but are still denied adequate working conditions. The situation of rag pickers, at the lower level of the waste chain is much worse as they work in (and often live on or close to) landfill sites. Similar problems are encountered by those involved in the practice of manual scavenging. They suffer from respiratory and skin diseases (in particular children), and though critical to the functioning of the waste management system, their earnings and working conditions are very low, leading to ongoing debates on their inclusion in formal public policies. Finally, the stigma still attached to these jobs and practices undermine the right to self-respect and dignity.

Exclusion results from a cumulative process and some sections of the poor are more vulnerable than others. Beyond negative externalities for all, there are multiple dimensions (material, economic, social and cultural) in which basic rights to amenities to ensure good living and working conditions, safety, and a form of social justice are denied.

2. The Legal and Policy Framework

The relationships between the legislative and policy domains are complex. As some authors have underlined (Cullet, 2009), water policy and the introduction of policy instruments are overriding water laws. This raises a number of questions, from ethical ones to more pragmatic complexities in understanding both the framing and the implementation of laws and policies, whose outlines are ill defined and sometimes overlapping.

2.1. Legal framework

The question of the right to water has been one of the most debated questions in the international arena in the last few decades. In July 2010, the General Assembly of the United Nations voted for a resolution recognizing access to clean water and sanitation as a human right. There was no consensus on this resolution since some states were wary of the problems of enforcement and legal implications. Nevertheless, it reveals a process at work in many countries towards recognition of this right, which also follows a series of campaigns for the right to water⁹⁸ by international NGOs.

However, there are a number of arguments that question the heuristic and the strategic value of a right to water. Bakker (2007: 438-439) summarizes some of the critiques of the right to water: (i) the right to water necessitates a number of conditions for its implementation and might lead to issues of trans-boundary conflicts, (ii) the existence of a right does not automatically translate into improving access, (iii) a more radical criticism comes from the perspective of the conflict of human rights with ecological rights, accordingly, an implementation of the right to water might degrade further hydrological and eco-systems, (iv) and, finally, the right to water is based upon the notion of individual right. On the one hand, this is not in itself contradictory with the processes of privatization and commodification and undermines the resilience of the commons that are based upon community management and collective responsibility. This debate poses the larger question of the fundamentals on which the notion of a right is to be devised (individual or collective notion) as well as its strategic value in improving the conditions of life.

In the case of India (who voted in favour of this resolution), the right to water is implied by

⁹⁸ See for instance the campaign by Green Cross International (<http://www.greencrossinternational.net/>) or the Canada based campaign (<http://www.righttowater.ca/>) or the collective forum (<http://www.righttowater.info/>) among others.

judiciary interpretation in the Article 21 (right to life) and in the recognition of the right to a clean environment (Cullet, 2009). According to Baxi (2010a), the Indian Supreme Court “creatively interprets the Article 21 guarantees of the right to life and liberty to shaping a new regime of human water rights”. Despite this, some authors underline the fact that the understanding of water in all its dimensions (cultural, symbolic, historical, environmental and even religious) is very limited in the Indian laws that mostly deal with irrigation and water supply. Consequently, there is an ongoing debate regarding the importance of drafting a Right to Water rather than just deriving it (Baxi, 2010a) and on drafting a National Water Law that would be binding for the state and would enunciate clear principles.

Located in the legislative realm, the Municipal Solid Waste (Management and Handling) Rules of 2000, notified by the Ministry of Environment and Forest, incorporated the recommendations of an important Supreme Court judgment. This judgment was the response of a Public Interest Litigation filed in 1996 regarding the inability of urban local bodies to handle their waste. The Supreme Court set up an expert committee whose conclusions got included in the MSW Rules of 2000. A series of directives are given (such as prohibition of littering, door step collection of waste, compulsory street sweeping and measures to improve transport and treatment systems) with dates for compliance. States are responsible to ensure that urban local bodies design and implement adequate policies.

2.2. Public policies

Water is a state subject. The centre can have a role to play (for instance regarding the disputes around river sharing among states) and water supply for domestic, industrial and commercial purposes is part of the functional domain of urban local body as defined by the 12th Schedule of the 74th Constitutional Amendment.

At the national level, the National Water Policy (NWP) of 2002 and the recent National Urban

Sanitation Policy of 2008 are the two main documents pertaining to the sector.

The NWP of 2002 attempted to reach a consensus among states and is not very operational. It provides a number of guiding principles and enunciates the priority of drinking water. It mentions the importance of community participation and the possibility of recourse to private sector participation with the condition that water is not treated as a commodity. However, this policy has very little impact on what is decided, designed and implemented at the state and cities level and is not binding upon states when they draft the State Water Policy.

In 2008, the Government of India passed a National Urban Sanitation Policy whose objective is that “All Indian cities and towns become totally sanitized, healthy and livable and ensure and sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and affordable sanitation facilities for the urban poor and women” (GOI, 2008: 2). Total improved sanitation includes repealing manual scavenging and the socio-cultural biases against sanitation and sanitary work. It also states that open defecation needs to be eliminated and that every “urban dweller should be provided with minimum levels of sanitation, irrespective of the legal status of the land in which he/she is dwelling, possession of identity proof or status of migration” (GOI, 2008: 12). These elements appear as very progressive in their entitlement dimension. States are responsible for enacting state policies and city sanitation plans need to be submitted. One incentive to pursue sound policies is the creation of a national rating and award scheme.

Finally, provision of water and sanitation to the urban poor is one of the mandatory elements for the funding provided by the Jawaharlal Nehru National Urban Renewal Mission, which has funded a large number of water supply and sanitation schemes. However, the JNNURM funded schemes have mostly dealt with building new infrastructure such as traditional water

Box 25. The stakes of providing 24 hours water supply

No Indian city provides 24 hours continuous supply. Unreliable water supply has negative outcomes, principally network degradation, water contamination and high coping costs for users. Pushing for a shift from an intermittent to a continuous water supply is a policy objective of the Central Government.

Since the middle of the 2000s, a few pilot experiences of round the clock water supply were initiated, mostly in three cities of Karnataka and Nagpur. These projects are carried out through a public private partnership contract and both contracts have been awarded to an international French water company. The main documented example is the case of Karnataka where in 2003, the State Government with the financial and technical support of the World Bank launched a pilot project in Belgaum, Gulbarga and Hubli-Darwad in selected pilot zones that represented around 10% of the city connections and a select mix of the population. Operation started in April 2008.

What are the lessons and the concerns of these projects from a technical, social, economic and governance perspective?

From a technical point of view, each pilot zone had to be isolated to be provided with continuous supply. The whole distribution network (old, leaking and unable to stand high pressure) had to be upgraded and in-house connections were replaced and metered. Critics of the project raised two issues: (i) the delineation of a pilot zone separates the city in to two (those with 24 hours and the others) and could lead to a skewed distribution of water resources to ensure 24 hours in the pilot zones; (ii) the high cost of refurbishing the whole distribution system is not feasible without external financial aid. The response to those critics points out that an unfair distribution of water (linked to the urban political economy) already exists and that 24 hours supply was achieved thanks to improvement in the distribution network and not to increased supply. If pilot projects are not segregating *per se*, cost and financial sustainability issues bring to the fore the necessity to accurately assess their outcomes in order to ensure conditions on how to maximize the existing network for new generations of projects.

From a social point of view, a billing and consumer service system and an increasing block tariff system were established to ensure payment for better services while ensuring subsidies for the poor. Evaluation of the first two years of operation already point towards the positive benefits of continuous water supply with a reduction in the cost of coping strategies (in particular through reduction of the electricity bill for pumping water into storage tanks) even though many households kept their tanks and filtering systems despite the higher water quality. Booster pumps that lead to network deterioration have been removed. Regarding willingness to pay, resistance is stronger than expected by the project team. It is greater among higher income groups well equipped with alternatives. Another group not satisfied with the new service provision were households who still have cattle and are unhappy with the new tariff. For slums, continuous supply means no queues, better hygiene conditions and lower bills, which led to a more rapid acceptance of the scheme. On the other side, revenues increased and efficiency was improved for the urban local body. In the face of diverse perceptions of the project, there is a need to better understand the users' demand for and their perspective on the 24 hours supply in case of a national strategy to expand similar projects.

Finally, many critics of the project have also underlined the manner in which the urban local bodies in Karnataka were bypassed by the project implementation structure that heavily relied on the State Government. In the case of Nagpur, the Municipal Commissioner was the main driver in the negotiations with the private operator. From a governance perspective, capacity building among local elected representatives as well as their involvement in the water reforms implementation is a prerequisite.



supply schemes and waste water systems and treatment plants.

At the state level, a number of states have passed state water policies but Karnataka is the first (and only one) to have enacted an Urban Water Policy. This policy claims universal access and improvement of services for the urban poor as its main objective. However, as with most of the existing reforms, it also reflects a shift towards a number of underlying principles. A first shift regards the recognition of water as an economic good, leading to reforms such as tariff increase, cost recovery, and water commodification as well as a push towards providing 24 hours supply (Box 25). A second shift regards the institutional framework with the trend towards the setting up of a Water Regulatory Authority (such as in the case of Maharashtra and Uttar Pradesh), even though these authorities have had little influence up till now. A third shift corresponds to the decentralization and participation agenda, in particular for sanitation and solid waste management, since urban local bodies all over India are responsible for solid waste management. In the case of water supply and sanitation, water boards or other city or state parastatals are responsible for water supply and distribution - a contradiction with the 74th constitutional amendment which delegates water supply to the urban local bodies.

Finally, it is important to underline that water sector reforms, which have influenced changes in water laws and policies, are the main factor of change in the sector. These reforms have been largely influenced by a consensus around the underlying principles mentioned above. The influence of international funding agencies or international organizations concerned with water issues stems from a number of international conferences organized in India since the middle of the 1990s. Central government guidelines and landmark reports on commercialization of infrastructure played a role in forging national trends at the state or city level bureaucracies. However, because of its symbolic dimension, water reforms remain a site of conflict and debate

as to how urban services can be provided to all.

3. Current Debates Regarding the Existing Mechanisms of Exclusion

Reforms are influenced by an approach that assumes that well designed incentives can ensure better accountability, performance and service delivery mechanisms. However, advocates of reforms work within a minimalist institutionalist framework limited to a sectoral understanding, unconcerned by other types of institutions, such as belief systems and social structures (Jaglin and Zérah, 2011). This explains the contested debates, as research, aiming at understanding the role of social structure and practices, demonstrates the inefficiency of some of the reforms to reach the poor on the one hand, their perverse effects on the other hand, or their unintended effects.

3.1. Legal and administrative procedures as a tool of exclusion

Provision of urban services requires proofs of legal tenure or land ownership. Despite repeated policies highlighting the importance of security of tenure and land tenure regularization, many settlements in Indian cities are still located on plots of land without any legal title. Most often municipalities do not extend services to these settlements, which is a denial of their right to urban services. In view of the complex political dynamics surrounding regularization processes and provision of land titles, there is a push towards delinking the question of land tenure from service provision. Some municipalities in India have made steps in this direction such as Bangalore (Box 26) while others face serious constraints to implement programmes, that are conceived to provide services such as the Slum and Sanitation Program in Mumbai (Box 27).

Lengthy and complex procedures, even when security of tenure exists, are another barrier to access adequate level of services. First of all, despite the 74th Constitutional Amendment, parastatal agencies remain very important actors and this often leads to fuzzy boundaries in terms

Box 26. Bangalore – delinking land tenure and service provision

Since 2000, the Bangalore Water Supply and Sewerage Board started to think of strategies to improve services in slums. An important measure concerned the downscaling of the requirement for service provision from formal tenure documents to simple proof of occupancy (for instance ration cards, electricity bills). It also revised its tariff policies in order to reduce the cost of a new connection (either individual or shared) as the Board decided to eliminate public standpipes. Finally, it created a Social Development Unit that acted as an intermediary platform with the communities and established links and networks with known NGOs. Critically, this unit worked in close connection with chief engineers and street-level engineers to “elicit interest from within”.

Constraints to roll out this strategy remain, such as: (i) the recognition that accountability mechanisms are much more complex than usually described by international organizations. Brokers, intermediaries are to be taken into account rather than simply building new institutions such as “user committees”, (ii) building confidence among various actors takes more time than the usual duration of projects and acknowledging failure is critical, (iii) engaging with conflict can lead to potential solutions rather than simply analyzing it as a resistance to change.

Source: (Connors, 2007)

Box 27. Contradiction of slum policies and land ownership – the case of Slum and Sanitation Program (SSP) in Mumbai

The Slum and Sanitation Programme (SSP) was negotiated between the World Bank and the Municipal Corporation. It started in 1995 with the objective to construct 35,000 toilet seats with a participatory approach. The Municipal Corporation ensures support to contractors and NGOs as well as provision of water and electricity. Regarding the technical implementation of the contract, the World Bank agreed to more flexible standards in order to enable NGOs to bid. Two local private entrepreneurs and SPARC were awarded contracts in different localities. The contract includes the construction of toilets as well as social intermediation with the communities and the support extended to form a CBO. The project plans to involve communities at each stage of the process. Before construction, they participate in the design of the infrastructure and have to contribute to the capital cost (at least 70% of the families have to agree). The CBO will certify completion of the work. After construction, the CBO manages the maintenance of the toilet and collects user fees.

In its own assessment, the Water and Sanitation Program highlights the problem of the legal recognition of slums. For non-notified slums, services are not provided as these settlements are likely to be removed and the SSP cannot be applied. For notified slums under the State’s Slum Areas Act, households are given a “right to dwell” but this does not imply security of tenure on the housing plot. This enables the state to secure the possibility of redevelopment schemes, in which case, implementing the SSP would entail sunk costs. Further, the diversity and complexity of land ownership leads to varied procedures that translate into spatially unequal implementation of the SSP. In Mumbai, 48% of slums are located on private land, 21% on state government land, and 17% on municipal land and the remaining are mostly with Central Government and the Indian railways, two institutions reluctant to notify slums. Programmes for slums, including the SSP are more easily implemented for slums on municipal and state lands, while for private land, a no objection certificate (NOC) is required for the municipal corporation to intervene.

Source: Sarkar et al. (2006: 9-10).



of responsibility on how to get a new connection (Box 28).

Such complex procedures are intimidating. They also lead to the incidence of intermediaries or kickbacks and can deter poorer household unequipped to deal with complex bureaucratic machineries. Middle-class households, thanks to their social and class status, can access bureaucrats and talk to them as equal while poorer sections of the population are left to find other modes of intermediation to access the State (Harris, 2005). Consequently, simplifying and streamlining procedures for connections appears

Box 28. Procedure to get a new water connection in Puri

- Purchase of new water connection application form from the Public Health and Engineering Office (PHEO)
- Submission of filled application with supporting documents to the office of the Junior Engineer, PHEO
- Application form is forwarded to the concerned Junior Engineer (JE)
- JE undertakes a site visit to determine feasibility of sanctioning new water connection
- If the connection is feasible, the JE forwards the application to the concerned Assistant Engineer (AE)
- Assistant Engineer reviews the application, supporting documents and the feasibility report
- If AE finds the documents in order, he prepares a demand note for connection fee and forwards it to the applicant
- Applicant deposits connection fee, connection is sanctioned, applicant is required to take the connection in the presence of the concerned JE

Source: (NIUA, 2010: 31)

as an important means to ensure easier access to WSS (water supply and sanitation) services but also needs to be seen in a larger perspective of increased transparency and access to the State. Finally, this question is also related to the significance of being connected and raises the question of affordability.

3.2. Are services affordable for the poor?

On an average, 50% of city dwellers have an in-house connection. Costly individual and collective coping strategies, which rely on other sources (the last NSS data point for the first time that bottled water is used by 3% of urban households), are required for most households but poor people often end up paying more for water than connected households (WSP-SA, 1999). Further, beyond legal and administrative barriers, high connection fees and payment of water are a deterrent to shift to a more formalized supply. This question of the cost and the tariff for WSS services is central to a scorching debate among those more concerned with economic efficiency and those more concerned with social equity.

Pro-reformers have argued that weak tariff structure contributes to a vicious circle of low tariffs leading to low revenues and hence low investment in the sector. They have pushed for a modification in tariff structure, arguing that water tariffs are too low. However, ensuring accessible tariffs for the poorest section is critical. This tension has led to a number of debates and has at times percolated into policies.

A first question relates to the type and the amount of subsidies. Reforms have tended to reduce the importance of cross-subsidies. This practice, though denounced as ineffective, remains a powerful tool that should not be discarded. Therefore, careful understanding of the existing cross-subsidies and some of their distortions need to be understood. When domestic consumption is not metered, in-built subsidies favour those with a higher consumption level. In the case of metered consumption and



tariffs based on the increasing block tariff (IBT) system (that covers about 38% of the urban population), the first lower tariff block is considered the “lifeline” block. The design of the blocks is significant. If the first block is not well designed, allowing large level of consumptions, in the end a large number of consumers benefit from the subsidies. Another well-known problem with the IBT structure concerns the shared connections mostly in poorer localities. Joint usage pushes costs up to the end of the price range. In the end, all users connected to the network get subsidized to an extent. In addition, these subsidies, barely reach the most deprived sections of the population who are either not connected or face the regressive inbuilt tariff subsidies.

In short, a policy of full cost recovery is simply not feasible. To ensure social equity, various options need to be thought of. For instance, free water provided by public fountains and taps located in low-income areas is the most effective targeted subsidization possible. But they only represent 5% to 10% of the subsidies channeled into the sector (Foster et al., 2002). Since the middle of the 1990s, many utilities (Box 26) have chosen to eliminate public taps but maintaining a sound network of free taps might be more effective in ensuring the right to water than more ‘progressive’ solutions.

In order to implement the right to water, a legal entitlement in South Africa’s legislative arsenal, the first six cubic meters are provided free for all households to ensure that there are no self-imposed restrictions on consumption with adverse effects on health. Payment facilities, reduction of connection fees as attempted by many utilities can also be used but they still might not reach all city dwellers. These are just examples of the debates that need to take place in a larger perspective than the one usually seen by reformers and utilities.

Finally, this question is even more important in the case of wastewater. Since the cost of connections is high, it creates an entry barrier

for poorer households but also for more wealthy users. Pricing for sewerage is difficult as payment is not towards the “consumption of a good” but rather to dispose of waste. It leads to a resistance towards an increase in rates, even among those who can afford to connect. Nevertheless, public policies, based upon expansion of underground sewerage and construction of wastewater treatment plants will entail a substantial increase in investments by public utilities, for which user charges will only contribute marginally. The implications of these dynamics are critical and could lead to a rethinking of technical choices that will not be discussed here.

Finally, in the last fifteen years, the debates around tariff increase and shift in subsidies pattern have contributed to the emergence of the figure of the “consumer”. It has subtly replaced the notion of user or beneficiary. The focus is on ability to pay. This shift has also led to efforts by public utilities to improve their billing facilities and their complaint system, as well as the publication of a citizen charter. This highlights the ambivalence of this shift that could also be seen as more empowering and relates to the question of voice.

3.3. Understanding demand: accountability, incentives and voice

Accountability, transparency, and the increased participation of users have been leitmotifs in reform processes aimed at improving the accountability route between users and providers of services.

A first trend, adopted by many cities, has been to rely on ICT (informations and communication technology) to facilitate payment of bills, online complaint systems, and information dissemination. Hyderabad put a lot of emphasis on this relational aspect with the creation of a metro consumer care, a single window cell and a citizen charter. All of these initiatives combined with astute public relationships improved accountability mechanisms and the image of the board, leading to some form of confidence building between users and the utility (Caseley,

2004). Many cities have followed similar strategies: Chennai created an active customer cell and increased its number of bill collection centres; the corporation's website provides increased information on urban services, as well as the possibility to apply online for connection and to make complaints. However, these shifts towards more efficiency have not always led to an improvement in the actual level of service. The problems of scarcity experienced by Chennai and Hyderabad are good examples of the potential disjunctions between customer services and actual service provided. Secondly, these changes have mostly benefitted the middle-classes.

A second important trend is the increase of participatory schemes. First of all, the tool of participation is seen in policy circles to ensure a better understanding of demands and diversity at the local level, to make the voices of citizens heard, and to ensure project ownership. It is promoted, in particular for slums, as a tool for empowerment. Many initiatives are also calling for citizens' responsibility to cooperate with public authorities.

Pockets of success exist and have been documented but the question of their long-term sustainability (both social and financial) remains. More structurally, questions have to be raised as far as participatory schemes are concerned, especially since there is an overall consensus that participation cannot be done away with. First of all, in many participatory schemes, the main focus has been on ensuring payment by communities rather than engaging in long-term capacity-building with communities (Zérah, 2009). Secondly, as mentioned before, it has often been limited to selected pockets in cities where rights are granted while the most marginalized groups such as squatter settlements or urban nomads are left out. Thirdly, it leaves the responsibility of service regulation to the communities themselves, a process that can aggravate social exclusion and undermine urban regulation (Box 26).

A third trend is the increasing rise of civil society platforms and arenas involved in consultation

processes. The "right to the city" encompasses the right to participate in decision-making processes, to discuss and to debate in the public arena. Such arenas have either been created by the government or result from the varied actions of NGOs, urban think tanks, networks of associations, in particular federations of Resident Welfare Associations. Urban water and sanitation services are often a concern civil society organizations engage with, either through the coproduction of urban services or by being part of decision-making processes on various scales (from ward meetings to larger urban platforms for debate). Urban services have been one of the sites where "middle-class" groups have been able to make their claims on the city. Secondly, citizen charters, the single window cell, improvement in billing and services, simplification of process and online procedures promoted by the public utilities have enlarged the access to information therefore one dimension of accessing the city.

3.4. Reforming the government vs. claiming the right to water

Water reforms have been mostly based on improving efficiency. A rapid overview of "best practices", in the India Urban Portal (www.indiaurbanportal.in), mostly provides examples of tariff regime changes, use of new technologies (rainwater harvesting, improved landfill management), and practices of operation and maintenance efficiency and of 24 by 7 water supply schemes. Very few examples deal with the question of improving services to the poor.

These calls for reforming the government have rarely been based on a reading of the failure of the Weberian type of bureaucracy in a context of sharp inequalities and class differences. The more recent ethnographic-based reading of service provision for urban dwellers demonstrates the importance of everyday political mediations and of practices of patronage and brokerage (Berenschot, 2010), effectively used by the poor. In this regard, the reforms have made no dent in a dual system of service provisioning based on the one hand on a Weberian bureaucracy, providing

services on norms and planning to legally entitled citizens (the ‘civil society’ of P. Chatterjee) and the ‘porous bureaucracy’ (Benjamin, 2008) accessible to the ‘political society’. On the contrary, this disjunction, which provides to some extent a *de facto* right to services, has been dismissed by reformers as consolidating clientelist networks (Keefer and Khemani, 2004).

Consequently, these reforms have called for a lesser discretionary power to political diktats through the politics of corporatization, ring-fencing and the setting up of regulatory authorities. On the contrary, we argue with others, that any policy related to urban services need to engage with the politics both at the state and at the city level and the larger debate of the attitudes, norms and practices towards the poor and the larger question of social exclusion. Transformation of urban services cannot be read separately from the larger context of cities increasingly becoming sites of exclusion and marginalization.

In this context, the importance of growing social movements, or simply groups claiming their rights to the city, around the question of urban services, is undermined or bypassed by a focus on public policies. Indeed, recent years have seen the rising mobilization of groups and movements against processes understood and theorized as water privatization, the destruction and commodification of the commons and of decent dignified conditions for labour (Boxes 29 and 30).

The articulation of the notion of a right to water is gaining ground and is articulated by NGOs in the face of specific reforms. One such example relates to the potential introduction of pre-paid water meters in Mumbai that interestingly has raised both the question of the right to water (as these meters could limit the usage of water) and of the right to the city, as for some it would introduce a right to stay. More significantly, it underlines the circulation of rights-based claims as the protests in Mumbai were closely following the steps of protests in Phiri, Johannesburg, South

Box 29. Anti water privatization campaigns in large Indian cities

Strong resistance against ‘privatization’ reforms has emerged in a number of large Indian cities, where projects with private sector participation have been considered .

A first example is the case of Delhi, where a coalition of resident welfare associations and of the civil society organization, Parivartan, opposed the project of water privatization promoted by the World Bank. This group demonstrated irregularities in the consultant selection process for the feasibility report by relying on access to official documentation. They also led a ‘counter-expertise’ campaign towards the project focusing on the overall cost of such projects and the question of access of the poor to services. This movement started by “middle class” resident welfare associations also reached out to groups more concerned with water and the urban poor.

A second example of mobilization is the case of Mumbai where a similar loose coalition of diverse interests against the introduction of private sector projects , ranged from municipal officers, resident welfare associations (sometimes in contradiction with the larger network of these associations) and community-based organizations, strongly opposed any attempt at privatization. Similar examples in Karnataka and in Bangalore exist with the involvement of CIVIC as part of an anti-privatization campaign in Bangalore and a larger movement for a Peoples Campaign for the Right to Water, is also present on Facebook and using electronic media as a tool for dissemination.

Sources: on Delhi, see the debates between Parivartan (Bhaduri and Kejriwal, 2005) and the World Bank (Jagannathan, 2006); on Mumbai, see Bawa (2009), and on Bangalore, see the People’s Campaign for the Right to Water.



Box 30. The Safai Karamchari Andolan: a movement for the elimination of manual scavenging

The Safai Karamchari Andolan is a movement fighting for the eradication of manual scavenging. Following the lack of implementation of the Eradication of Manual Scavenging and Dry Latrine (Abolition) Act of 1993, the Andolan in December 2003, filed a petition in the Supreme Court for ensuring implementation of the act by various state agencies. Despite positive decisions by the Courts, the process is still seen as extremely slow. This has led the movement to launch a campaign in 2008 called “Action 2010” that includes marches and protests, mostly held in cities. Even though a large share of the actions by the Andolans are related to the rural situation, the location of the protests related to the right for decent work is clearly located in the cities, that appear to be a locus for the rights-based movement.

Source: see <http://safaikarmachariandolan.org>

Africa on a similar question. This demonstrates the embeddedness of the debate on water with the larger debate on the right to the city and its articulation in international debates.

4. Policy Recommendations

Recommendations could be made regarding three main domains: institutions (that includes norms, rules and law), organization and governance.

As regards the question of institutions,

- Clarify the relationship between law and policy by rethinking the content of the existing water laws and the rationale it is based upon.
- Prioritize sanitation and wastewater, which are two sectors with important environmental and public health externalities. This concerns

both the question of investment as well as the importance of accompanying socio-cultural changes.

- Take into account the situation of smaller towns whose level of services is significantly lower than in large cities. This implies investment in these towns, as well as ensuring the empowerment and capacity building of local authorities and local administration.

Concerning organizations, the main question relates to improving service delivery mechanisms through a set of possible reforms that need to be thought of at each state and city level:

- De-link the question of access to services from the question of land tenure.
- Reduce entry barrier for households that cannot connect to the network: simplify procedures for getting connections, reduce their cost and introduce payment in installments.
- Maintain a well functioning network of free public taps rather than dismantling them.
- Ensure effective subsidies through tariff policies incorporating the question of social justice.
- Take measures to make utilities more socially sensitive to the issues faced by the poor: recruitment of social scientists to engage with communities and engineers, the creation of a special cell, the setting up of communication channels with communities, etc.

In the domain of governance,

- Empower local councillors.
- Democratize decision-making processes to discuss the contents of water reforms lest they face opposition and any attempt at improving services is blocked.
- Recognize the potential role of communities for the management of the commons that still exist in the cities.

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