

# 24/7, 'Privatisation' and Water Reform: Insights from Hubli-Dharwad

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A variety of water reforms are being undertaken in different parts of the country. This paper discusses a project in the twin cities of Hubli-Dharwad in north Karnataka, a pilot for 24/7 functioning as well as for the institutional and other changes required for private sector participation in urban areas. Three specific aspects of the project are discussed – the need and feasibility of the concept of 24/7, institutional relations and equity. The experience to date indicates that critical concerns along all three fronts remain, and need to be engaged with more carefully before institutionalising processes that would be difficult to reverse in the future.

The last decade has seen a wide range of changes in the water sector in many parts of the country. Changes include the handing over of management of irrigation systems to water users' associations (WUAS), a move from supply-oriented to demand-oriented drinking water schemes, an emphasis on people's contribution to costs, greater power to local bodies, the setting up of regulatory bodies, the involvement of private corporate players in specific aspects of water provision, and a growing emphasis on concepts such as 24/7 (supplying water 24 hours a day, seven days a week) and water audits. These, in turn, have been met with mixed reactions by different actors. On the one hand, the changes are believed to usher in much-needed improvements in the water sector; on the other hand, they are also perceived to have negative implications for equity and lead to greater private control over a critical resource. This paper attempts to contribute to the debate on water reforms by discussing a specific case study – the twin cities of Hubli-Dharwad in north Karnataka – that is a pilot for 24/7 as well as for the institutional and other changes required for private sector participation. While the reforms in this locale are still ongoing, the experience to date offers useful insights with respect to a number of dimensions which, in turn, can be useful in framing/adding to some of the important debates on water today.

The discussion in this paper is based on primary data collected during a brief field visit to Hubli-Dharwad in July 2007 as well as on secondary data. It starts in Section 1 with a brief account of urban water provision in Karnataka and of the Karnataka Urban Water Sector Improvement Project (KUWASIP), of which the pilot at Hubli-Dharwad is a part. Section 2 describes the general water situation in Hubli-Dharwad. Section 3 first summarises the current status of the 24/7 component of the KUWASIP project at Hubli-Dharwad and then analyses three specific aspects – the implication of the concept of 24/7, institutional relations and equity. The paper concludes with some brief comments in Section 4.

## 1 Urban Water Provision in Karnataka and KUWASIP

The main actors involved in urban water supply in Karnataka are the urban development department (UDD), the Karnataka Urban Water Supply and Drainage Board (KUWSDB), the Bangalore Water Supply and Sewerage Board (BWSSB), urban local bodies (ULBs) and the Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC). While UDD is the main agency for urban water supply schemes, the KUIDFC is the channelling agency for the schemes of multilateral agencies. The KUWSDB designs and implements water supply schemes in all urban parts

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of Karnataka (except Bangalore, where the BWSSB is in charge). Following the 74th amendment to the Indian Constitution, the government of Karnataka passed statutory orders in 1994 and 1995 requiring the handing over of the maintenance of all water supply schemes by the KUWSSB to ULBs. The process has been completed in most areas barring a few [KUIDFC 2006a].

However, provision of water supply is inadequate in terms of both quantity and quality, and there are problems in the sector such as inadequate capacity utilisation, poor maintenance, and lack of adequate finances. These features are not unique to the urban water situation in Karnataka, and have led to calls for reforms at the national level [see, for instance, GOI 2002]. But Karnataka has been at the forefront of reforms in terms of policy measures and legislative changes adopted as well as in terms of the large number and variety of projects taken up. For instance, Karnataka adopted a state water policy as well as a state urban drinking water and sanitation policy in 2002, and amended the Karnataka Municipal Corporations (Water Supply) Rules to provide a legal entry to private operators in urban water delivery systems [GOK 2005a].

The World Bank-funded KUWASIP<sup>1</sup> aims to launch the government of Karnataka urban water reform process by creating a sound institutional and regulatory framework as well as an enabling environment for private sector participation. It is supposed to be the first phase of a long-term programme of the World Bank funding in the water and sanitation sector in Karnataka; depending upon the success of this phase, operations will be scaled up in the second and subsequent phases.

The project has three main components:

- (1) Technical assistance studies for water and sanitation sector reforms at the state and ULB levels.
- (2) Investments in three ULBs (Hubli-Dharwad, Belgaum and Gulbarga) to improve bulk water supply and to demonstrate the feasibility of continuous, pressurised (24x7) water supply in selected demonstration (demo) zones. More specifically, the 24/7 component has been piloted in eight wards in Hubli-Dharwad, 10 in Belgaum and 11 in Gulbarga. Further, in order to ensure that water supply to non-demonstration zones continues to be at least at the current level, the project has undertaken certain critical minimum investments called priority investments (mainly for rehabilitation/replacement of bulk water transmission lines) as well as certain other urgent works (mainly in Hubli-Dharwad).
- (3) Contracting a private party for the operation and management (O and M) of the demonstration zones for two years following the above improvements.

This paper focuses on the working of the second component in Hubli-Dharwad. But before turning to this, it is useful to briefly consider the financial and institutional arrangements in the KUWASIP. The total cost of the KUWASIP project is about Rs 237 crore, with the 24/7 demonstration costing Rs 65.60 crore. Of the total cost, the loan component from the World Bank is Rs 182 crore and the contribution of government of Karnataka to the three cities is Rs 55 crore.

In terms of institutional arrangements, a number of different actors are responsible for various components of the project. The nodal agency for the KUWASIP project is KUIDFC. A branch office

of KUIDFC, called the project implementation unit (PIU), is located in each ULB; its main work is to coordinate between different stakeholders and to do the day-to-day monitoring. Compagnie Generale des Eaux, France (CGE) is the executing and supervising agency for demo zone works (including O and M of the distribution system for two years following the commissioning of 24/7). With some restrictions, the CGE can sub-contract part of the services provided by it to third party sub-contractors [GOK 2005b: Clause 14.1]; for instance, Jain Irrigation Systems is in charge of rehabilitation of the water distribution system.

Ownership of all assets continues to remain with the respective ULBs and at the end of the O and M period, the ULBs will take over the distribution system in the demo zones. The process of taking over would be facilitated by the fact that there are corporation staff on deputation with the CGE whom the CGE is supposed to train; the CGE is also supposed to train management and staff of the corporation during the last six months of the O and M period [GOK 2005b: Schedule 16]. Tariff-setting is in the domain of ULBs. The government of Karnataka has formed a core committee (consisting, among others, of the commissioners of the three corporations) to finalise the tariff framework in the three ULBs. This committee, in turn, appointed Fichtner India, Chennai to make recommendations in this regard.

The KUWSSB is in charge of carrying out the priority investments by using contractors. The demo zones were selected by the Bristol Water Services, Austria on the basis of technical considerations and socio-economic mix of households.<sup>2</sup> Fichtner India monitors the quality of both priority investments and the works in the demonstration zones, and the payments are made only after certification from Fichtner.

We now turn to the general water situation in Hubli-Dharwad.

## 2 General Water Situation in Hubli-Dharwad<sup>3</sup>

The twin cities of Hubli and Dharwad constitute the second largest city in Karnataka, with an area of 202 km<sup>2</sup> and a population of about 9,40,000 (about 6,25,000 in Hubli and 3,15,000 in Dharwad) in 2001. Fifteen per cent of the population lives in designated slums [GOK 2005b: Schedule 3].

There are two main sources of water – Renukasagar Reservoir (on Malaprabha river) and Neerasagar Tank. Until recently, the former had a design capacity of 68 MLD (million litres per day), of which 41 MLD was used; the latter had a design capacity of 40.9 MLD, of which 33.5 MLD was used.<sup>4</sup> Currently, Hubli-Dharwad draws about 110 MLD, although the daily requirement as per prevailing government norms is 130 MLD. Almost 95 per cent of supply is to domestic consumers; and it is on this component that the discussion in this paper focuses. However, it is important to note that the lack of a large commercial/industrial demand for water limits the potential for cross-subsidy of water tariffs.

**Under the HDMC:** Until 2003, the KUWSSB was responsible for bulk water supply and for O and M of the bulk water supply system. The Hubli-Dharwad Municipal Corporation (HDMC) was in charge of the O and M of the distribution system, management of underground drainage system and billing and collection. The HDMC also made provision for supply from public and private

groundwater sources. But water supply services were poor and there were heavy losses in the distribution system, which has been attributed to mismanagement by HDMC [GOK 2002a]. There was also an inequity in distribution of water, with local variations in both frequency and duration of water supply. The low point of the water service delivery was reached when water delivery fell to two hours of water every 15 days in the summer of 2002. In April 2003, the water supply of Hubli-Dharwad was handed over to KUWSDB [GOK 2002a]. Since then, both bulk water supply and the distribution network are being maintained by KUWSDB up to consumer point (including billing and collection of water charges).

**Measures of the KUWSDB:** Since the board took over, a number of changes have been made to improve water supply and increase recovery – some specifically under KUWASIP, and others part of the board's general move in various locales to improve efficiency [Ramamurthy 2006]. We start with the latter set of measures, with the caveat that at least in Hubli-Dharwad, these may not have been completely divorced from the fact that an important component of the KUWASIP project was to be implemented there.

One important change is a shift from the polyvinyl chloride (PVC) pipes to metal pipes – which last longer and are less prone to leakages – at least in city limits which fall within the jurisdiction of the board. Secondly, the new metal pipes (as also the replacement of pipes/valves in the last two years) have been financed by pro-rata charges, which Hubli-Dharwad is the second city in Karnataka to charge.<sup>5</sup> This measure is important because the financial support from the state government is typically available only for capital works and not for O and M.

The third measure relates to tariffs for water use. Soon after the board took over in 2003, it proposed to the municipal corporation that an increase in tariff for domestic use and an increase in metering would be taken up after three to four years, during which period various improvements in the water supply system would be undertaken. Accordingly, there is now an increased metering as well as higher tariff rates. The minimum monthly charge (for unmetered water connections as well as water use of less than 10,000 litres) was first increased from Rs 45 to Rs 60 in 2005. In June 2007, tariff was raised from Rs 60 to Rs 90 with retroactive effect from April 2006.<sup>6</sup> Volumetric rates are Rs 5.8 per kilolitre (KL),<sup>7</sup> but most households (at least in the demo zones) seem to be paying the minimum water charge.

Apart from the above measures, other general measures undertaken include a move from manual to computerised billing, computerisation of the customer database, spot billing, and introduction of the board's own counters for bill collection (instead of the former practice of banks collecting the bills) which in turn has facilitated payment.

We now turn to the measures undertaken by the board under KUWASIP.

**Objectives of KUWASIP:** An emergency water supply scheme was commissioned in August 2004; under this, the design capacity of Malaprabha was increased to 73.8 MLD, a water treatment plant was constructed at Amminbhavi and the Neerasagar Reservoir

was desilted. As part of the priority investments, a new pipeline has been installed to enable direct pumping from the treatment plant at Amminbhavi to Hubli; this would replace the earlier two-stage process whereby water was first pumped to Dharwad and then onto Hubli by gravity flow, and hence, save both water and energy [KUWSDB 2007a]. Further, in line with the broad objectives of KUWASIP, a number of private players have been involved in the above investments in Hubli-Dharwad. For instance, management of bulk water supply of both supply systems (Malaprabha and Neerasagar) up to storage reservoir was handed over by KUWSDB to Larsen and Toubro (L&T) in February 2006.

The aforementioned changes have resulted in an increase in frequency in supply (once in four to five days as against the earlier scenario where water was supplied once in eight to 10 days); Board officials also anticipate further improvements once the existing problems in the pumping and distribution systems are taken care of. Recovery rates have improved from 30 per cent to 92 per cent and there has been an increase in revenue collection. But while the need for changes in the water sector in Hubli-Dharwad cannot be denied, as also the positive impact of many of the individual measures taken by KUWSDB, it is important to keep in mind the far-reaching nature of some of the changes (such as metering) as also the broader context of reforms within which they are being made. This becomes clearer when one examines the 24/7 component of the KUWASIP project in detail.

### 3 Continuous Water Supply in Hubli-Dharwad

The component of the KUWASIP project that has received the most attention is the piloting of 24/7 in selected wards of the three ULBs. The provision of 24/7 continuous water supply involves refurbishment of the distribution network, upgrading customer connections, and ensuring 100 per cent metering.<sup>8</sup> The demo zones were handed over to CGE in September 2005. Although the capital works required for 24/7 were supposed to be completed in all three ULBs by September 2006, the work was delayed. In this sub-section, we summarise the current status in Hubli-Dharwad.

The demonstration zones in Hubli include wards 27, 28, and parts of 29 and 32; in Dharwad, wards 8, 9, 10, and 11 are included. There are about 6,225 household connections in Hubli and 4,829 household connections in Dharwad, covering a population of 35,950 and 34,305 respectively [KUIDFC 2007a]. The major capital works are almost completed. 24/7 started in Hubli around mid-June. Performance targets were demonstrated in October for 15 days, and O and M will start once the appropriate certification is obtained by KUIDFC [KUIDFC 2007c]. Work has been slower in Dharwad which has seen more protests against the project; among other things, protesters have raised questions about the lack of transparency in the project, particularly with respect to the tariff structure. But the final door-to-door connections are being made and 24/7 is likely to start soon.

Recommendations regarding the new tariff rates (put forward by the core committee on the basis of Fichtner's study) are currently awaiting the cabinet approval. An increasing block

system of volumetric tariffs has been proposed for metered connections in both demo and non-demo zones.<sup>9</sup> For domestic connections, the monthly tariff per KL would be Rs 6 for consumption between 0 and 8,000 litres, Rs 10 for consumption between eight and 15 KL, Rs 15 for consumption between 15 and 25 KL, and Rs 20 for consumption above 25 KL. Minimum charge per connection for all slabs would be Rs 48. But even after approval, the new rates will be charged only six months after the formal commissioning of the water works. For the first six months, tariffs would continue to be charged at the current minimum rate of Rs 90. However, dummy bills with the new volumetric tariff will be issued so that people understand the new tariff structure and can change their consumption pattern if desired.<sup>10</sup>

Given that the 24/7 component (as also KUVASIP) is breaking new ground on a variety of fronts, we now consider three dimensions that are critical in terms of the reforms that are being proposed/undertaken in Karnataka and other parts of the country.<sup>11</sup>

### 3.1 Implications of 24/7

The concept of 24/7 has been a major point of controversy in the project, with strong justifications being put forward for it, as well as scepticism being expressed about it. In this sub-section, we summarise both sets of arguments and then point out how the critiques of the concept of 24/7 in the specific context of Hubli-Dharwad remain inadequately addressed to date.

The official justification for 24/7 involves a number of inter-related points.<sup>12</sup> Intermittent water supply is held to lead to a number of problems such as greater possibilities of contamination of water, wastage of water, health hazards due to inadequate/poor quality of water, and coping costs. With 24/7, on the other hand, there would be (i) reduction in leakages and unaccounted for water; (ii) improved energy efficiency; (iii) accurate measurement of flows, better demand management, and increased revenue; (iv) improvement in general health; (v) longer life of distribution assets and a consequent reduction in capital costs; (vi) greater willingness to pay for water due to the improvement in service levels; and (vii) reduced coping costs.

Viewed in isolation, there is merit to at least some of these arguments. However, what one needs to remember is that many of the advantages of 24/7 can be obtained only in conjunction with other conditions/measures, which may either not be always present or are problematic from the point of equity. For instance, an adequate and reliable source of water supply is a prerequisite for 24/7. Such a system also requires high degree of leakage control and continuous maintenance of pressure, which in turn, call for large investments and good O and M [Dharmadhikary 2007]. This not only has implications for cost, but would also determine the extent to which the advantages of 24/7 are obtained in a given context. Similarly, lower use that is supposed to result from 24/7 assumes the presence of metering and volumetric pricing. But apart from the fact that these measures may not necessarily result in lower use [Bakker 2005], their equity implications are also not always positive.

In the case of Hubli-Dharwad, the long history of water problems makes it a strong candidate for water reforms. But there is scepticism about 24/7 on four counts – need, feasibility, costs

and the particular institutional arrangements being used. In terms of need, it is important to note that perceptions about how much water is enough differ widely. In a rapid survey conducted in 2003 by Samaj Vikas Development Support Organisation (svdso) Hyderabad as part of a pre-appraisal study, 67 per cent of the households in the three cities merely wanted a more reliable supply with specific timings and pressure. When the idea of 24/7 was mooted, 64 per cent wanted 24/7; however, the percentage of people who wanted 24/7 was lowest in Hubli and Dharwad (12.29 per cent and 13.53 per cent, respectively), a point that was attributed to greater cynicism given their history of water supply problems. In our informal conversations with people in Hubli and Dharwad (both in the demonstration and non-demonstration zones), a range of opinions were expressed. There were people (usually those with adequate storage facilities and/or access to groundwater) who said that the board's supply (once in four to five days for about three hours) was more than enough; others welcomed 24/7 since it would eliminate the need to store water. Some slum-dwellers in the Hubli demonstration zone also felt that the implementation of 24/7 was in response to their demands for more regular water, since the poor stand to lose the most (in terms of time and wages foregone) when water is irregular and intermittent.

But even those in favour of 24/7 raise questions about the feasibility, cost, and the particular set of institutional arrangements under which it has been undertaken. In fact, these questions were raised in the very first set of public consultations that were carried out in Dharwad in 2003 [KUIDFC 2004]. At that point, the official position was that there was adequate water for 24/7 in the demonstration zones and that inadequacies in the supply of water stemmed from shortcomings in the distribution system, which would be corrected in the course of the project. Further, the government of Karnataka was tackling the question of water supply at various levels by way of measures such as river basin management, watershed development, and groundwater recharge (ibid). In contrast to these claims, the 24/7 project, as it is currently working out in Hubli-Dharwad, does not include any groundwater or rainwater harvesting strategies; nor does it take into account the private players who are already involved in the provision of water. This is particularly glaring given that there seems to be a fair amount of groundwater use in the twin cities, as also groundwater extraction by private tankers and packaged drinking water suppliers [KUIDFC 2004]. There is no doubt that improving the distribution system is much needed and would result in better use of available water. But while the water currently available may be adequate for 24/7 in the demonstration zones,<sup>13</sup> it is not obvious that 24/7 can be extended to the remaining areas in the two cities as well as to other cities in the state, which is supposed to be the long-term plan [KUIDFC 2007a]. This is particularly given that there are already conflicting claims to the waters of Malaprabha, the major surface water source for Hubli-Dharwad.<sup>14</sup>

A similar argument could be made in terms of the cost of the project too. Currently, due to the pilot nature of the project, the entire contribution of the government of Karnataka has been passed on to the beneficiary ULBs as a grant. In case of any upscaling,

this would clearly not be possible. Hence, even if one accepts the argument that 24/7 is needed, undertaking it without engaging with the question of how its cost requirements would be met when scaled up is problematic, especially given the high cost of conversion to 24/7 supply.<sup>15</sup> Apart from need, feasibility and cost, the other concern that has been raised about 24/7 are the institutional arrangements, which we discuss in the next sub-section.

### 3.2 Institutional Relations

Two sets of concerns emerge from the large number of players and complex institutional arrangements involved in the working of the 24/7 project as well as related components such as the priority investments – those stemming from the division of labour and those arising from the role of private players.

We start with the concerns that relate to division of labour. A large number of actors such as HDMC, KUWSDB, KUIDFC, CGE, and L&T and other private players are involved in the project, who in turn sub-contract specific parts of their work to other parties. At least one rationale of involving many actors is that each one could then specialise in the task best suited to them. But given the inter-related nature of the functions in water provision, such separation of functions, as also the various levels of contracting and sub-contracting, also result in problems of coordination and accountability.<sup>16</sup> For instance, one of the advantages of 24/7 is supposed to be the reduction in contaminants in water; thus a CGE official claimed credit for the improved quality of water since 24/7 started in Hubli. However, as the supplier of bulk water, it is KUWSDB that continues to be responsible for the quality of bulk water, although within each demonstration zone, the CGE is supposed to maintain the quality of water at the same level as that of the bulk the water supplied by KUWSDB [GOK 2005b: Schedules 8, 10, 12, and 14]. Hence, it is not clear who would be held accountable in case of any problems with quality.

This problem is compounded by the fact that information may not even be available easily in the public domain. For instance, there is a confidentiality clause in the contract that the operator shall keep confidential all matters relating to the services it provides, the relevant assets of the distribution system, and the contract, and use reasonable endeavours to ensure that their employees, sub-contractors and agents do not disclose such information too (*ibid*: Clause 23.1). How such a clause would stand up to the Right to Information Act remains to be seen. Nevertheless, it is not clear what the rationale of such a clause is, or even the aspects that it would cover, especially because there is also a clause that calls for the operator to cooperate with the government and the corporations in the implementation of the communications programme designed to inform people about the demonstration project (*ibid*: Schedule 16).

Problems of coordination also result from the fact that the formal division of labour – laid out in state legislation, government ordinances and contracts – may not give a complete picture of the actual powers or autonomy that each entity has over its function(s). For instance, in theory the HDMC has the power to set tariffs, a point that has been strongly emphasised in response to activists' critiques about the project resulting in reduced public control over water. However, tariff-setting is dependent on a

number of other decisions (the kind of water infrastructure that is set up, the extent of cost recovery needed, and so on), which may not be entirely in the control of HDMC. For example, there is a requirement that the initial tariffs should cover 50 per cent of O and M costs, and subsequent increases should cover 80 per cent of O and M costs by the end of the project [World Bank 2004]. This in turn limits HDMC's power to set tariffs.<sup>17</sup>

The second set of concerns relates to the role of private players in the project. The biggest private player involved is the CGE and its presence has led to a debate about whether this project constitutes "privatisation" and about the effect of involvement of private parties in the water sector. The official stand is that the project does not constitute privatisation since the source and assets continue to remain with the state, as also the final decision-making powers; as a member of CGE emphasised, this is a government project. The counter-argument made to this is that privatisation can take a number of different forms, of which direct ownership of source and assets is only one. Further, similar pilot projects have, in other parts of the world, been a prelude to even greater involvement by private parties, which in turn, is deemed to be problematic on a variety of grounds. It is not our intention here to go into the whole gamut of arguments put forth in this context. What we seek to do, instead, is highlight a number of points/questions that emerge in the context of Hubli-Dharwad which could potentially contribute to the larger debate on privatisation.

Firstly, one argument that is often put forward is that private contractors have always been involved in the water sector (in Hubli-Dharwad, as also in other parts of the state and country). However, what is not sufficiently emphasised is that the current form of participation is different in terms of both the nature of contracts and the kind of contractors involved. Increasingly, a whole package of functions is contracted out instead of the earlier piecemeal functions; further, large non-local companies are also emerging in the water arena, particularly for such package of functions.<sup>18</sup> The implications of these differences need to be carefully considered; for instance, how differences in power positions of contracting parties might be greater now, and how this in turn may affect their bargaining position.

Secondly, while it is the presence of the foreign private company CGE that has been subject to the most attention, there are also domestic private companies involved in the project. In general, many Indian companies are entering the water market. An important question to engage with then is what differences (if any) there are between domestic and foreign private companies in terms of motivations, actual behaviour, laws applicable, and legal recourse open to the state and citizens.

Thirdly, private companies, whether domestic or foreign, are not necessarily more efficient, a point that has been made by many anti-privatisation groups. For instance, the priority investment work undertaken by Pratibha Industries – the new direct pipeline to Hubli – was delayed, and 24/7 in Hubli started with the old pipeline. Similarly, the CGE is doing the major technical work city by city because there is only one technical expert (specialised in checking pressure, fixing valves, and metering) for all three cities. There are also questions about the kind of functions that private contractors are willing to take on. For

instance, one KUWSDB official claimed that private companies are not willing to do anything beyond the letter of the contract; thus there is constant negotiation by L&T about particular functions not being part of their mandate. In fact, even as L&T handles day-to-day operations at the reservoir and the treatment plant, supervision by the board continues and board officials continue to be called for in a crisis situation. At one level, this involvement of the board is needed since it is ultimately responsible for the provision of bulk water. At the same time, it does seem that when both public and private bodies are party to a contract, the public body ends up taking on all “residual functions”, that is, those which are not believed to be part of the contract.

This is not to claim that the board necessarily took on and did well all functions in the past, but rather to question the view that the involvement of the private sector is possible in all functions and will by itself necessarily lead to greater efficiency. Ironically, when the Hubli-Dharwad water supply distribution system was handed over to KUWSDB in 2003, it was felt that the body had the “necessary wherewithal and technical expertise in managing water supply systems” and also that water service delivery and operational efficiency would improve “if bulk and retail distribution of water is vested with a *single agency*” [GOK 2002a: Clause 3 of Preamble; italics ours]. In fact, there have been demands from KUWSDB that the entire responsibility of execution and maintenance of water schemes should be handed over to the board [Anonymous 2006]. At the same time, there is at least some acknowledgement within the board that considerable changes are needed in its working (upgradation of skills, improved incentives for staff), though not all of these are within its control. But the point remains that the question of who should handle which particular functions of water provision is a complicated one and should be resolved only after careful deliberation.

### 3.3 Equity

In this sub-section, we focus on the potential equity impact of three aspects of the project – pro-poor policy, public standposts and tariffs.

We start with a discussion of the pro-poor policy. This policy was issued by the government of Karnataka with the aim of providing concessions to the urban poor with respect to water supply in the context of KUWASIP, and is at least partly a response to concerns expressed by activists and civil society groups. There are a number of different dimensions to it. The policy starts by identifying the urban poor as those residing in houses measuring up to 600 square feet built-up area regardless of whether they live inside or outside slums. For such urban poor, it simplifies the procedure for new connections, waives the one-time connection deposit for 24/7 (but not the cost of the meter), and fixes a lifeline supply of 8,000 litres per household per month at a concessional rate (to be decided by municipal corporations). The policy also mentions that water would be provided free of charge through public kiosks/cisterns/borewells fitted with handpumps to vulnerable sections such as nomads, the destitute, and the homeless.<sup>19</sup>

While the attempt to put forth the policy is commendable, there are a number of problems with its conceptualisation. Firstly, the upper limit of 8,000 litres per month for the first slab of the

proposed volumetric charges has been fixed in accordance with the pro-poor policy, and is based on the provision of 55 litres per capita per day (lpcd) for a household size of five. But this means that households of larger sizes (such as joint families) would be implicitly penalised, since they would move to the next slab even if they just consume the minimum of 55 lpcd. Further, the first 8,000 litres are subsidised: the proposed charge of Rs 6 per kilolitre is lower than the expected O and M cost in 2007-08 of Rs 11.20 per kilolitre for the demo zone [KUIDFC 2007c]. But while the subsidy is laudable, it is not applicable only to the poor, since all classes would be paying the same rate for that slab. That is, ideally, there could be a higher subsidy for the poor. Alternatively, one could have a model similar to the South African case which allows for a free basic water supply of 6,000 litres per household per month.

Secondly, the HDMC has a policy of collecting a one-time connection charge (earlier Rs 2,000, but now charged on a pro-rata basis), a policy independent of KUWASIP. But given that only households with legal connections are eligible for 24/7, what this means is that those with illegal connections who want to avail of 24/7 first need to regularise their connections by paying the connection charge to HDMC. However, not everyone may be able to afford this charge, which is additional to the Rs 900 for the meter. For instance, in Hubli, in a declared slum that is part of the demonstration zone, slum-dwellers claimed that 70/450 households had not been given 24/7 (as of July 10, 2007) because they had failed to regularise their connections. What the pro-poor policy failed to anticipate is that 24/7 would be supplied via a new distribution network, which in turn meant that the old network in the distribution zone would be disconnected [KUIDFC 2006b], so that, in theory, the poor with illegal connections who failed to regularise their connections would not receive any water on operationalisation of the new scheme. The local-level actors have found their own way to deal with this: since disconnecting people from the public distribution system was not considered desirable, in Hubli-Dharwad, just before the commissioning of 24/7, KUWSDB legalised the illegal connections by taking nominal payments of Rs 30.<sup>20</sup> It is not clear at this point if there will be any attempt in the future to recover the full connection charge. But what we wish to highlight is the emphasis on legality at the policy level and how this serves to implicitly bifurcate the poor into the legal poor, who are accorded explicit concessions by the state such as those in the pro-poor policy, and the illegal poor, whose interests are left to be determined by local-level dynamics (although the equity outcome resulting from this is not necessarily negative).

The second aspect that is pertinent from the point of view of equity is the policy with regard to public standposts (PSPs). While there is provision (at least on paper) for public kiosks/cisterns/borewells with handpumps for vulnerable sections who cannot afford to pay anything, PSPs are to be discouraged in the demonstration zones [KUIDFC 2006b]. There is, however, the option of shared group connections to those who cannot afford individual connections. The tariff for this would be Rs 6 per KL per month for consumption levels up to 8 KL per household in the group; for additional consumption, the tariff rate recommended for individual connections can be charged. Effectively, then, the only difference between a group connection and an individual one is that the

cost of the meter and the 24/7 connection charge would be shared in the former (since volumetric rates remain the same).

In the case of Hubli-Dharwad, initially there were attempts to shut down PSPs. Following protests by local residents, they were restarted. The HDMC has now approved 13 PSPs in Hubli and 15 in Dharwad. These PSPs seem to be more in the nature of group connections in that they will be metered and billed; but at least in Hubli-Dharwad, the current plan is that the bills will be paid by the corporation.<sup>21</sup> How this policy actually works out in practice remains to be seen, especially given the general emphasis on cost contribution by users.

The third aspect is the proposed tariffs in Hubli-Dharwad. One question that has repeatedly come up since the project was mooted is whether people can afford the rates that would be charged under 24/7. The major argument used to show affordability was (and continues to be) the fact that in the face of inadequate and intermittent supply, people have high coping costs (in terms of money, time foregone and so on), and the charges under 24/7 would be no more (at best) than these costs (see, for instance, KUIDFC 2004). Further, the willingness to pay for more regular supply seems to be quite high. For instance, the SVDSO's survey in the demonstration zones (in 2003) indicated that 39.8 per cent of the households in Hubli and 22.2 per cent of the households in Dharwad were willing to pay Rs 100 more for 24/7 than the then prevailing tariff of Rs 45. In fact, the ULBS' "willingness to charge" is perceived as a greater hurdle than consumers' willingness to pay [World Bank 2004: 23]. The more recent survey done by Fichtner in 2006 (which is based on both ability to pay as well as willingness to pay) also indicates that in Hubli-Dharwad, willingness to pay is higher than current average expenditure, although average expenditure is already close to average affordability in the case of poor and low affordability households (where households are classified on the basis of income and assets).

But apart from the fact that there are methodological limitations to the techniques used in eliciting willingness to pay and ability to pay, the point that is often missed out in these discussions is that the volumetric tariff is not the only charge for 24/7 – there is also a capital cost recovery component for the non-urban poor. The current proposal is that for existing legal connections, 50 per cent of capital cost invested out of project funds for house service connections would be recovered at the rate of Rs 50 per month; for new connections and previously irregular connections that are regularised, full capital cost invested out of project funds for house service connections would be recovered [KUIDFC 2007b]. If both volumetric tariff and the capital cost recovery component are taken into account, the cost per household may be more than what many households are willing (and able) to pay.<sup>22</sup>

Secondly, even after 24/7 has started/is close to starting, people do not seem to have an inkling about the proposed tariffs. First there was a delay in fixing tariffs, which at least one KUIDFC official justified by saying that their initial focus was on giving water. Fichtner submitted its report in November 2006 and after a series of meetings, the core committee accepted the recommendations and submitted it for cabinet approval in March 2007. But although meetings were supposedly held with different stakeholders at various points, people in the demonstration zones are still unaware of the proposed tariffs. This is in spite of the fact that there is a social intermediation and communication strategy cell at the regional office of KUIDFC with an explicit mandate of working with the local community as well as an NGO – rural and urban development association of Dharwad – appointed by this cell to act as a liaison between the project unemployment unit (PIU) and citizens. Further, this lack of knowledge among citizens is not restricted just to tariffs, but applies to various other dimensions of the project too.

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Thirdly, the new volumetric tariffs have been proposed for both demo and non-demo zones. While the administrative and political difficulties of having two sets of tariff rates in the same city can be appreciated, charging the same rates for zones with very different levels of service provision is also problematic, especially given that there are doubts about the feasibility of extending 24/7 to the rest of the city.

#### 4 Conclusions

The preceding discussion of 24/7, institutional relations and equity raises a number of concerns that are pertinent not just for Hubli-Dharwad or for Karnataka, but for the manner in which water reforms are being undertaken throughout the country. For

instance, it highlights the need to go beyond a discussion of what constitutes privatisation, and instead, focus on specific aspects (such as the kind of functions that private players are willing to undertake). There are also issues that the paper hints at like the fact that state departments, parastatal agencies and government bodies at various levels (including ULBs) often function with limited powers and autonomy (even given recent changes such as decentralisation), and hence merely labelling them as “inefficient” detracts attention from the need for more fundamental changes (such as greater powers to ULBs). Perhaps most importantly, the paper underscores the need to engage more critically with the kind of changes required in the water sector before institutionalising processes that would be difficult to reverse in the future.

#### NOTES

- 1 The discussion of KUWASIP in this section draws on GoK (2005b), the web site of KUIDFC (<http://www.kuidfc.com/WEBSITE/WebPage.nsf/lookupAllCat/Projects-KUWASIP>) and World Bank (2004).
- 2 The criteria employed to select the demonstration zones were (a) the feasibility of hydraulically isolating a portion of the distribution network to which the required water could be supplied from an independent reservoir; (b) the number of connections in these zones forming about 10 per cent of the total connections in the city; and (c) the population in these zones representing the typical socio-economic mix of the city.
- 3 A large part of the discussion in this section (especially, on the recent changes) draws on interviews with KUWSDB officials on July 10 and 11, 2007.
- 4 In addition to the two surface water sources, groundwater is also used. GoK (2005b) indicates that there are 728 powered and 890 handpump borewells with the powered borewells contributing about 8.2 MLD; however, actual groundwater use is likely to be much higher.
- 5 The pro-rata charges (which vary by plinth area) are meant to recover the costs of the Malaprabha augmentation scheme and other systemic improvements.
- 6 The earlier increase in tariff had initially been proposed as a hike from Rs 45 to Rs 90. Following protests, it was increased only to Rs 60. Then, in 2006, there was once again a move to increase it to Rs 90, which also met with protests. The general body of the corporation passed a resolution to stop the increase, which was eventually rejected by the government of Karnataka.
- 7 1 KL = 1,000 litres.
- 8 Interview with CGE officials on July 10, 2007.
- 9 In the demo zone, all connections would be metered. For unmetered domestic connections in the non-demo zones, the proposed tariff rates are Rs 60, Rs 120 and Rs 240 for house plinth area up to 600 square feet, between 600 and 1,200 square feet, and above 1,200 square feet, respectively.
- 10 The discussion in this paragraph draws on KUIDFC (2007c).
- 11 Apart from the three dimensions discussed in this paper, there are also other aspects of the project that merit attention such as environmental impacts (particularly the disposal of the wastewater generated), the exclusion of sanitation and sewerage concerns, the financial implications of the specific loan arrangement used, the relation between domestic and commercial uses of water, and the nature and extent of citizens' participation.
- 12 The discussion of the official justification draws on interviews with CGE and KUIDFC, WSP-SA (2003), and KUIDFC (2007b).
- 13 The requirement for the 24/7 pilot is 7.39 MLD for Hubli and 6.39 MLD for Dharwad. This is expected to be met without any increase in bulk supply, especially since the new line to Hubli has resulted in savings in water [KUIDFC 2007a].

- 14 The inadequacy of water to meet the needs of different users in the basin led the government of Karnataka to propose the diversion of about 8 TMC (thousand million cubic feet) of water from the Mahadayi to the Malaprabha under the Kalasa-Bandhur Nala project [Kohli 2003]. Further, 1 TMC out of the 8 TMC is supposedly earmarked to meet the drinking water needs of Hubli-Dharwad. However, the project is currently suspended due to opposition from the Goa government and by activists protesting against its potential negative environmental and social impact.
- 15 Preliminary studies on distribution system diagnostics in the three cities provided estimates of Rs 7,500 to Rs 11,000 per connection for conversion to 24/7 supply [WSP-SA 2003]. KUIDFC (2007d: 87-89) also provides a tentative estimate of Rs 122 crore to extend 24/7 to the rest of Hubli-Dharwad; this figure excludes the additional investments needed in bulk supply and unlike in the pilots, does not aim to replace all pipes in the distribution system.
- 16 Note also that a large amount of sub-contracting happens in the case of labour-intensive tasks, since contract labour is considered to be more “cost-effective”. This in turn raises questions about labour practices adopted (by both public and private actors).
- 17 There is also the bigger question of whether each project needs to be financially sustainable, or whether it can be subsidised by other projects within or outside the sector.
- 18 Informal interaction with a KUWSDB engineer on July 11, 2007.
- 19 The pro-poor policy is available at <http://www.kuidfc.com/WEBSITE/WebPage.nsf/lookupAllCat/Projects-KUWASIP-Pro%20Poor%20Policy>.
- 20 Personal communication with PIU official, November 13, 2007.
- 21 Interview with PIU official on July 12, 2007.
- 22 Note also that an increase in volumetric tariffs at 25 per cent is recommended every two years to ensure that O and M expenditure is matched by revenue over a period of time, which would further complicate the comparison.

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