

**Reaching Out to Consumers:  
Making Sure We Know what People Really Think and Want, and Acting Upon It**

**Clarissa Brocklehurst  
May 2003**

As water sector professionals and decision-makers, our ideas of the perspective of consumers on water pricing and tariff reform may be based on any or all of the following misguided assumptions:

- That price is the most important factor for consumers, and they want to pay as little as possible;
- That consumers take a short term view, and only care about immediate changes to water supply services – they cannot see the “big picture”;
- That the poor cannot afford water tariffs, are not willing to pay them, and must always be offered very cheap water, even if this means heavy subsidies and lower levels of service;
- That providing consumption subsidies delivered through water prices is the best and most effective way to help the poor;
- That we already know more or less what consumers want, can afford and are willing to pay for;
- That water pricing reform is too complicated to explain to consumers; and,
- That the best way to avoid opposition to plans for tariff reform is to keep consumers in the dark until irreversible decisions are announced.

**None of these is true.**

Experience shows that consumers, including the poor, may have many more concerns than just the price of water, and may be willing to pay for more reliable service, better quality, or greater access. Consumers are also willing to be participants in the process of reform, and will not oppose changes if they are logical, provide demonstrable benefits, and are well understood, well explained, and undertaken in an environment of transparency.

We will examine each of the “myths” of consumer perspective in turn, and then discuss methods of outreach to bring consumers into the dialogue on reform, and to build their support for it.

***Myth: Consumers are short-sighted and only care about having prices as low as possible.***

While consumers want to be reassured that they are not being “gouged” on price, they understand the fact that sometimes you have to pay more to get better quality service – this is, after all, true of most commodities and services. Many consumers have immediate experience of what happens to a water system on which not enough is spent for maintenance – they may not be able to examine the books of the utility, but they see frequent service interruptions and declining water quality. They also see the effects on

their wallets – the need to invest in storage to even out supply, and in water treatment in order to be able to drink the water that comes out of the tap.

The poor feel these impacts most keenly. The neighbourhoods in which they live often experience service interruptions more frequently due to their lack of “clout” politically, and poor households cannot afford storage systems (with overhead tanks and pumps) or water treatment (boiling, filtering). The economic effects they suffer thus include the need to develop a set of backup water sources in order to ride out periods when there is no network water, some of which involve additional payments, and the impacts of frequent water-related illness.

However, even these people are better off than those poor who have no access at all to the system. The unconnected poor are forced to rely entirely either on public standposts (which usually involves time spent for queuing, and drudgery as water must be carried home) or on vendors who deliver water or sell it at kiosks. The prices charged by vendors are many times those paid by people with water connections. This is due not only to the fact that vendors must legitimately cover their own overheads, but also because tariff structures are often flawed, forcing vendors to buy water at retail prices in upper categories of the tariff – often priced prohibitively in order to curb consumption among private users.

Consumers in general are thus willing to consider higher prices **if they are clearly linked to service improvements**, and in some cases will see financial benefits from the changes. The unconnected poor are often among the *most* willing to consider paying for piped water, as for them the price of network water may actually be much *less* than what they are currently paying. The unconnected poor also want access to network water because:

- Time saved (that is, not spent in queuing and transporting water) can have a direct monetary value for day-labourers, and frees up time for leisure, a scarce commodity among the poor;
- Network water is usually of better quality than the much-handled water from vendors and standposts; and,
- In some cases being an established utility customer in good standing makes vulnerable shanty-dwellers feel more secure, and gives them a level of legitimacy.

We have only to look at the large body of literature built up over the last few years on willingness to pay to see the evidence of consumer readiness to pay for better service. For instance,

- in Kathmandu, users in general indicated a willingness to pay of more than 20 times the “lifeline” block of the current domestic tariff, and poor users were willing to pay more than 15 times the current tariff for a reliable piped supply<sup>1</sup>
- In India, willingness to pay studies have shown that households in several cities are willing to pay more than the current tariff for reliable water services: for instance

---

<sup>1</sup> Pattanayak S., Whittington, D., Kumar, K.C., 2001, Willingness to Pay for Improved Water Supply in Kathmandu Valley, Nepal, RTI, North Carolina

1995 studies in Dehradun and Baroda showed a willingness to pay of 2 times and 3.4 times the current tariff, respectively<sup>2</sup>.

- Surveys in six countries in Central America showed willingness to pay of 1.5 to 2 times more than the current tariffs<sup>3</sup>.

The research shows that the poor have a high willingness to pay for the consumption charges related to a water connection – that is, the regular bill. However, many poor families find it difficult to afford the one-time charges associated with getting the connection in the first place, suggesting that this is a more logical area to target government assistance. This is discussed further below.

***Myth: Subsidies delivered through water prices are the best way to assist the poor***

The fact is that current water pricing practices, which often involve large subsidies delivered through tariffs, do not necessarily have the intended impact on the poor.

Recent studies and subsidy modeling in Kathmandu and Bangalore illustrate this. In both cities there is an attempt to deliver subsidized water through consumption subsidies, using an Increasing Block Tariff (IBT), but this results in the poor actually receiving less subsidy than the non-poor. This is because a large proportion of the poor population in both cities is not connected to the network through private connections, and therefore cannot benefit from the heavy subsidies on this type of service. While those poor people who are not directly connected to the network can still use utility water from standposts, research in the two cities showed that the absolute value of subsidies to public taps is very small compared with subsidies to private taps, absorbing only 5% to 10% of overall subsidy resources. (In addition, while water at public taps may be subsidized or even free, there are of course costs associated with collecting it. Water collection is onerous both in terms of the time spent - users often spend hours queuing - and drudgery - water used at home has to be carried there.)

Calculations of the subsidies in the two cities reveal that the average non-poor household receives 44% more subsidy than the average poor household in Kathmandu, and 15% more in Bangalore (see Table 1). Looking at the overall distribution, the average subsidy received by the richest 10% of the population is two to three times as high as the average subsidy received by the bottom 10% of the population. This can be seen in Figure 1, which shows that the subsidy received increases as the income decile goes up, from the poorest 10% at the left of the graph to the richest 10% at the right.

---

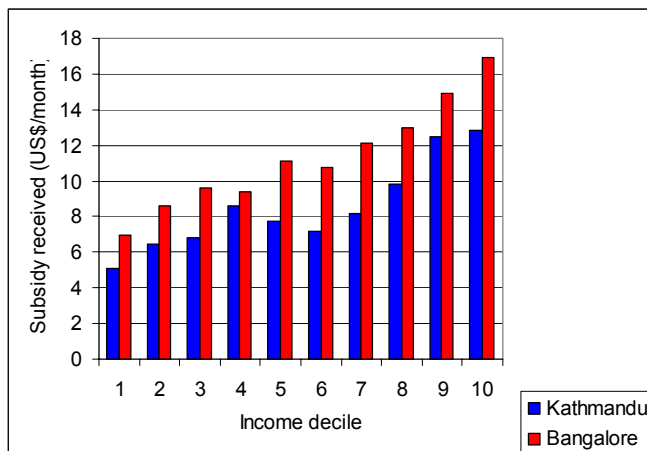
<sup>2</sup> Water and Sanitation Program-South Asia, 1999, Willing to Pay but Unwilling to Charge, Fieldnote

<sup>3</sup> Walker, Ian, Ordoñez, Fidel, Serrano, Pedro and Halpern, Jonathan, 2000, Pricing, Subsidies and the Poor: Demand for Improved Water Services in Central America, World Bank, mimeo.

**Table 1 Average Monthly Subsidies (US \$)<sup>4</sup>**

	<i>Private Tap</i>		<i>Public Tap</i>	
	Kathmandu	Bangalore	Kathmandu	Bangalore
Poor	6.75	14.22	0.69	4.19
Non-Poor	9.76	16.38	0.72	2.30
All	8.88	15.74	0.71	3.74

**Figure 1 Average Monthly subsidy received by income decile<sup>5</sup>**



Increasing block tariffs have other shortcomings for the poor. For one thing, they are based on the assumption that volumetric water consumption is a good proxy for poverty, that is, that poor families use less water. In fact, there is little evidence that this is a valid generalization. In Bangalore and Kathmandu it was found that the average consumption by non-poor households was only about 20% more than that by poor households. Poor families may in fact have more members than middle class or wealthy families, but as the subsidy is calculated per household rather than per capita, large families are at a disadvantage. Their consumption may drive them into the next block of the tariff. Likewise, where connection costs are high, several poor families may share a connection, and their consumption may be in the second or even third block of the tariff, in which water is priced at double or more than the price of the first block.

The presence of a large subsidy on consumption also makes adding new customers unattractive for the utility. A water company, whether private or State-run, will hesitate to make the investment needed to run new network into unserved areas if the net impact on their books is a loss because serving subsidized consumers costs them money. This is

<sup>4</sup> Foster, Vivien, Pattanayak, Subhrendu, and Prokopy, Linda Stalker, 2003. Water Tariffs and Subsidies in South Asia: Do current water subsidies reach the poor? World Bank, Washington D.C.

<sup>5</sup> *Ibid.*

more likely to have an adverse effect on the poor, as the poor are more likely to live in unserved areas.

Thus, the assumption that the best way to make water affordable to poor consumers is through consumption subsidies is a myth – but it may be the case that assistance is needed in order to make connections *accessible* to the poor. A major barrier to connecting to the network for many poor families is that, without access to savings, they cannot afford the one-time, up-front cost. Financial support may therefore simply take the form of allowing connection costs to be paid over time. It is also important to make sure that the charges for connections are as low as possible (and not padded with unnecessary costs or large deposits), and that households have the option of lowering them by undertaking some of the labour themselves.

It may be the case that a subsidy is still required<sup>6</sup>. Subsidy modeling based on the research in Bangalore and Kathmandu showed that targeted connection subsidies are far more likely to reach the poor than consumption subsidies. As most of the non-poor are connected to the network, the errors of inclusion (that is, the proportion of subsidy recipients who are non-poor) are low. Unlike consumption subsidies, the errors of exclusion (the proportion of the poor who do not receive the subsidy), are also low.

Theoretical simulations were carried out in Bangalore and Kathmandu involving eliminating all subsidies for water consumption, so that all consumers were charged full cost recovery tariffs<sup>7</sup> on all units of consumption, and the subsidy budget which was thereby saved was then allocated in its entirety to subsidizing new connections. In the simulations, it took no more than a decade to reach universal coverage in both cities (assuming that parallel investments in network expansion and densification were financed).

***Myth: We already know, more or less, what consumers want, can afford, and are willing to pay for.***

This myth is closely connected to the two earlier ones, that is, that consumers want lower prices and that the poor have to be supported through consumption subsidies. In fact, as we have seen, affordability of consumption may be much less of an issue than affordability of access, and there may be large suppressed demand among consumers, and great willingness to pay. However, none of this is apparent unless rigorous research is done to determine, among other things:

- Current patterns of water use, including the mix of sources used by consumers and the volumes used;
- Current payment patterns – who pays what, for what water;
- Willingness to pay and the determinants of this;

---

<sup>6</sup> There is also a case to be made for eliminating connection fees altogether. Part of the rationale for this argument is that the investment costs of the main piped network are so high, that it does not make economic sense to risk having customers fail to connect for the sake of a relatively small fee.

<sup>7</sup> Operation, maintenance and debt service costs, but not depreciation.

- The aspirations of consumers in terms of service levels (do they want standposts, yard taps, fully plumbed connections?); and,
- Household characteristics, especially of the poor, about whom often little is known.

Planners often make assumptions that low-income people have to be offered low levels of service, usually below the level of private house connections. In fact the convenience and control provided by private connections may be of great value to the poor. Having said this, there are often ways to provide poor people with innovative systems which provide the same level of service as conventional systems but at lower cost. Poor households may be very willing to provide labour in lieu of cash contributions towards connection costs, in order to further reduce the cost to them. An example of this is the Bayan Tubig system in Manila (see Box 1).

**Box 1 Low cost water systems in Manila**

Responding to the need for alternatives for reaching the poor, one of the Manila concessionaires has developed a system for water delivery in densely-populated, hard-to-reach slum areas. In Bayan Tubig (“ Water for the Community” ) systems, an underground water line carries water service to the perimeter of a slum neighborhood, and is then extended above ground -- partially covered, attached to a wall, or lying on the surface. The line connects to a battery of meters from which each homeowner makes their own plastic connection, using small diameter pipes running from the main to households on the surface or along walls. Maintenance responsibility for the plastic pipes lies with the customers. Community-based organisations and NGOs play a role in intermediation and mapping of the network.

Estimates suggest that the Bayan-Tubig connections have reduced water costs for poor families by up to 25%; a figure that explains the popularity of the scheme despite what are, for poor families, relatively high costs (up to US\$ 97). To make the scheme more affordable, the concessionaire has introduced an interest free repayment scheme over a period of 6 to 24 months. The program had provided water connections to 19,000 poor households by the end of the year in which it was initiated (1999) and to the end of 2001 had served more than 50,000 households.

Making decisions based on assumptions regarding consumer demand, behavior and aspirations is dangerous – especially when those assumptions are based on an incomplete and simplistic knowledge of the often complex lives of the poor. Companies who sell other commodities such as toothpaste and soft drinks invest enormous amounts in market research, yet water utilities seldom bother to find out exactly what consumers think and want. It is true that this can be time consuming, and requires an investment of money and personnel, but there are now well-established methodologies for carrying out such studies. **In the case of a sensitive commodity such as water, which has such a large impact on the well-being of not only individuals, but whole communities, it is essential to not only survey people, but *involve them in the decision-making process.***

There is a now great deal of experience in gathering information on consumer demand, behaviour, opinions and perceptions. Household survey can be undertaken, using rigorous random sampling, carefully designed survey instruments and high quality interviewing techniques. Focus group discussions are also a powerful way to poll consumer opinions. There is a broad range of well-established participatory techniques for learning about communities which were developed for use in rural settings, but have

been adapted for use in urban ones<sup>8</sup>. Civil society groups also have an important role to play in helping utilities understand their consumers, and bringing consumer concerns to the attention of politicians and managers.

Two examples of the use of high-quality consumer research to dispel misunderstandings about priorities in service delivery can be found in recent experience in Kathmandu and Central America.

In Kathmandu, the government assumed that the provision of heavily subsidized water through an increasing block tariff was both appropriate and adequate to meet the needs of the poor, and that there would be strong opposition to both raising domestic tariffs and bringing in private sector management of the utility. A survey undertaken in March 2001 revealed, however, that most of the poor did not use network water, and so did not benefit from the existing subsidies. The same survey included a contingent valuation component, which showed that willingness to pay was much higher, even among the poor, than had been assumed. The survey, and parallel participatory research undertaken in poor communities themselves, also revealed that there was little opposition to private sector participation, and a great desire for better management of the utility. A process of consultation with civil society organisations which represented the poor in the city, and provided a direct link to poor communities, resulted in a series of proposals for water sector reform. These proposals included reducing the amount of water provided at subsidized prices, working towards cost recovery tariffs, and focusing on assisting the poor to get connected to the system<sup>9</sup>.

In a series of studies undertaken between 1995 and 1998 in six countries in Central America, researchers found that willingness to pay for 30 m<sup>3</sup> of water per month was higher than the current tariff for that amount, with those without a formal piped connection generally prepared to pay more than those who already had one. The survey results indicated that the poor were willing to pay similar amounts to the non-poor for water. The Central American surveys also showed far more support for metering than politicians had assumed. The percentage of consumers in the surveyed cities who indicated that metering was the fairest way to decide the charge for water ranged between 54% and 76%, far ahead of the next most popular category, ability to pay, which was chosen by between 11% and 39% of respondents (see Figure 2). Despite the fact that politicians are often reluctant to install meters, fearing the resistance of low income communities, the authors conclude that there is a high potential for acceptance when metering is associated with service improvement and is considered as part of a component of programs to upgrade service quality<sup>10</sup>.

---

<sup>8</sup> Srinivasan, Lyra, 1990, *Tools for Community Participation*, UNDP, New York

<sup>9</sup> Brocklehurst, C., 2002, *Setting the Stage: The Process of Preparing for Pro-Poor Water Sector Reforms in Kathmandu*, Water and Sanitation Program.

<sup>10</sup> Walker, et al, *op. cit.*

**Figure 2 Attitudes towards water meters in Central American cities<sup>11</sup>**

*Which of the following is the fairest way to decide the charge for water?*

% with each opinion	Managua	Caracas	Barquisimeto, Venezuela	Mérida, Venezuela	Panama City and Colon	Guatemala City
Metered volume of consumption	55	66	59	67	54	76
Number of people in household	14	4	4	9	n/a	n/a
Zone of the city	n/a	5	7	7	n/a	n/a
Ability to pay	25	14	21	14	39	11
All should pay the same	7	6	7	3	7	11
No opinion	0	5	2	0	0	2

***Myth – Reform is too complicated to explain to consumers, and it is better to keep them in the dark until irreversible decisions are announced***

As we have seen in the preceding sections, there may be many reasons that consumers will welcome reforms to the water sector which offer them higher levels of service, options which better match what they want, and greater equity in pricing. Even tariff reforms which result in higher prices for water may be acceptable to consumers – in fact if consumers are aware of all the facts, they themselves may be the ones to call for more financially sustainable services<sup>12</sup>.

The key to a positive reception for changes is **transparency**. Proposed changes in utility management, sector governance and water pricing must be presented to stakeholders early on, and all stakeholders, particularly consumers, must be invited to participate in a process of consultation and debate. This is time consuming, and may require patience as some stakeholders will need assistance to understand the issues – understanding the economics of tariff reform, or even the language of private sector contracting arrangements, is difficult for the uninitiated. However, efforts to provide information to stakeholders, build the capacity of all to understand decisions, and provide open fora for public debate will reinforce efforts to establish good-governance practices, and help ease the process of reform. Consultation is also an opportunity to dispel misconceptions and educate people, and lays the groundwork for on-going consumer relations. Consumers naturally view decisions taken in secret, and announced as a *fait-accompli*, with suspicion. Many utilities have found that consumer groups and civil society organisations which believe their government has not acted in good faith can launch powerful opposition movements, and can ultimately thwart the entire process.

The process of research and consultation undertaken recently in Kathmandu is one example of a methodology for gathering solid data on the needs of poor consumers and

<sup>11</sup> *Ibid.*

<sup>12</sup> For a discussion of this, see *Should Consumers Demand Higher Prices?* by Robin Simpson of Consumers International



involving civil society in the debate on options. The process followed there was as follows:

- An initial rapid and participatory situation study of poor communities was carried out with local NGOs as implementing partners – this study highlighted some of the issues, such as the fact that many poor people faced obstacles to using network water and relied heavily on other, low quality sources such as shallow groundwater
- A workshop was held at which NGOs, the Private Sector Participation Committee, the water utility managers and the World Bank Water and Sanitation Program discussed the results of the research and the implications
- A rigorous household survey was carried out to gather more data on all households in the city, including current water use practices, demand for better services, and willingness to pay
- Consultations between the government, the World Bank and civil society continued, now using the results of the second survey which confirmed many of the findings of the first survey, and also showed significant willingness to pay for improved services. These consultations were greatly enhanced by the creation of the NGO Forum on Kathmandu Water Supply and Sanitation which brought together all the interested civil society organisations. The Forum obtained financial support from an international NGO and undertook its own capacity building and information gathering activities. The Forum met regularly with government and other stakeholders, and its members studied the documentation relating to the reform plans.
- A series of proposals for serving the poor was developed through the consultations. These proposals were based on solid knowledge of the situation and fit into the context of the planned reforms.

At the time this process came to a close, there was a well-informed group of stakeholders in Nepal who were ready to discuss reforms in a constructive atmosphere. Civil society organisations knew more about the challenges faced by the government in improving services, and the government knew more about the reality of the lives of the poor, and their needs<sup>13</sup>.

One of the most important pre-conditions for undertaking consumer or civil society consultation is that decision makers *must* be willing to make changes in their plans based on what they learn from them. A one-way flow of information, essentially just telling people what is planned for them, is not consultation. This is all the more reason that the process of consultation and learning must be started very early in the process<sup>14</sup>.

---

<sup>13</sup> Brocklehurst, *op. cit.*

<sup>14</sup> There is, however, still a role for communication with consumers after changes have been made. For instance, in Durban, the utility faced a major challenge in changing customer behaviour as they worked towards a more financially sustainable system. Using innovative techniques such as comic books and street theatre, Durban taught customers how important it was to pay bills on time, report leaks, and refrain from blocking drains.

## ***Conclusions***

This paper has sought to point out the reasons it is important to challenge and verify any assumptions we might be tempted to make about what consumers think and want with respect to water pricing. This is especially true of poor consumers, for whom well-meaning but misguided decisions can have unintended effects.

Consultation is vital in order to get customer feedback on proposed approaches, to educate stakeholders, to ensure transparency and to lay the groundwork for on-going consumer relations. Civil society organisations have a key role to play in consultation, as they can represent certain perspectives – they may, for instance, be important advocates for the poor.

Our starting point should therefore be an understanding that:

- Price is not the most important factor for consumers, and they are often willing to pay more for better service;
- Informed and educated consumers are able to take a long term view and see the “big picture” in terms of the overall health of their water service provider;
- The poor are willing and able to pay the cost of good quality, well designed water services which are affordable and meet their needs, but need the opportunity to access these services;
- Consumption subsidies delivered through water prices can introduce distortions and perverse effects, and may actually create disadvantages for the poor, and subsidies which assist the poor to connect to the system may be more effective;
- We need rigorous research to understand what consumers want, can afford and are willing to pay for;
- Good consultation and consumer education can help users understand the issues behind water pricing reform and result in innovative and practical proposals; and,
- The strongest reform is carried out in a spirit of transparency and consultation, with a willingness to understand and listen to stakeholders, and to act upon their concerns.

## References

Brocklehurst, C., 2002, *Setting the Stage: The Process of Preparing for Pro-Poor Water Sector Reforms in Kathmandu*, Water and Sanitation Program Fieldnote

Brocklehurst, Clarissa, Pandurangi, Amrit, Ramanatha, Latha, 2003, *Water Tariffs and Subsidies in South Asia: Tariffs in Six Cities in South Asia - do they target subsidies well?* World Bank, Washington D.C.

Foster, Vivien, Pattanayak, Subhrendu, and Prokopy, Linda Stalker, 2003. *Water Tariffs and Subsidies in South Asia: Can subsidies be better targeted?* World Bank, Washington D.C.

Foster, Vivien, Pattanayak, Subhrendu, and Prokopy, Linda Stalker, 2003. *Water Tariffs and Subsidies in South Asia: Do current water subsidies reach the poor?* World Bank, Washington D.C.

Foster, Vivien, Raghupathi, Usha, 2003, *Water Tariffs and Subsidies in South Asia: A Scorecard for India*, World Bank, Washington D.C.

Pattanayak S., Whittington, D., Kumar, K.C., 2001, *Willingness to Pay for Improved Water Supply in Kathmandu Valley, Nepal*, RTI, North Carolina

Simpson, Robin, 2002, *Should Consumers Demand Higher Prices?* Consumer 21, Issue 11, Consumers International Office for the Developed and Transitional Economies.

Srinivasan, Lyra, 1990, *Tools for Community Participation*, UNDP, New York

Walker, Ian, Ordoñez, Fidel, Serrano, Pedro and Halpern, Jonathan, 2000 *Pricing, Subsidies and the Poor: Demand for Improved Water Services in Central America*, World Bank, mimeo.

Water and Sanitation Program-South Asia, 1999, *Willing to Pay but Unwilling to Charge*, Fieldnote

Whittington, Dale, Boland, John and Foster, Vivien, 2003, *Water Tariffs and Subsidies in South Asia: Understanding the Basics*, World Bank, Washington D.C.