

## Chapter 4

### Knowing low-income consumers

*'I know everything' built a house without a door. (Skjonsberg 1989:189)*

#### 4.1 Summary - knowing low-income consumers

##### **Vulnerability and poverty**

All communities are made up of individuals who may or may not hold similar views or experience similar needs. Men and women, rich and poor, able-bodied and disabled, high and low status will all use water supply and sanitation services in differing ways, as their work, resources and opportunities vary (Reed ed. 2003). Some of these men - and especially women - are more vulnerable than their neighbours. The poor are most vulnerable because they lack shelter, tenure, possessions, security, education and health, and other basic services, including access to water and sanitation (Moser, 1996).

The reality of poverty and the higher risk of vulnerability that it imposes affects people's decision-making powers and reasoning. Therefore knowing people's perceptions of poverty and degrees of vulnerability is critically important to understanding their preferences, ability and willingness to pay for services including water and sanitation.

##### **Consumer decision-making**

People make many assumptions about the poor without checking the facts and therefore utilities are should learn to understand what it means to be a poor consumer from the perspective of those affected. This will allow appropriate decisions to be jointly made about realistic service levels and payment options.

Understanding the process people go through when they are deciding to buy a product or service is important. Ensuring that this understanding is in place and helping the most vulnerable people throughout the process will ensure that the impact of any decision will be more positive for the end users (mainly women) and ultimately the utility (responsible for sustaining the service).

##### **Understanding what people want**

PREPP works to gain an understanding of the different elements that together determine how a consumer will express his/her demand for water supply. The elements are the consumer's:

- Perceptions
- Experiences - including existing practices and coping strategies
- Preferences

The process of investigating these elements assists a utility to determine the criteria for the most suitable - and so acceptable - service option.

## 4.2 Vulnerability and poverty

All communities are made up of individuals who may or may not hold similar views or experience the same needs. Men and women, rich and poor, able-bodied and disabled, high and low status people will all use water supply and sanitation services in different ways, as their work, resources and opportunities vary (Reed, 2003). Some of these people especially women, are more vulnerable than their neighbours. The urban poor are extremely vulnerable because of their lack of shelter, tenure, possessions, security, education and health, and other basic services, including access to water and sanitation (Moser, 1996). This level of deprivation is associated with poverty, that is a poor quality of life combining low income, poor health and education, deprivation in knowledge and communications, and the inability to exercise human and political rights (ADB, 1999).

In addition to very low financial incomes the poor face three main types of constraint:

1. Access to opportunity (infrastructure, education, health)
2. Personal security (income, social protection, gender, natural disasters)
3. Personal empowerment (governance, participation) (Pathak 2000)

In any given community men and women will have their own measures of poverty; it may be sleeping without a mattress or not having a bed frame, lacking the privacy of a household latrine, being illiterate, eating one meal a day or having no access to water within walking distance.

The reality of poverty and the higher risk of vulnerability that it imposes affects people's decision-making. Therefore knowing people's perceptions of their status (what in their eyes makes them poor) is important to understanding their preferences, ability and willingness to pay for services including water and sanitation. At one level it sets the context for demand.

## 4.3 Consumer decision-making

In poorer communities social and economic decisions are often based on the views of those claiming to hold (but not always having) impartial views. Therefore when decisions are made about where to target urban services the vulnerable and less articulate are often not adequately represented. As a result investment steers toward either the more vocal or established and affluent areas. Although an increasing number of women (the main users of water) are now being heard, decision-making is still often male dominated at a city, ward, community and household level. In low-income areas especially, the fact remains that there is a high percentage of poor households headed by women, single parents, children, or people with disabilities - all of whom have very limited decision-making power.

Many assumptions are made about the poor without checking the facts, for example in relation to paying for services. Rather than continue to be misled, utilities should learn to understand what it means to be a poor consumer from the perspective of those affected. This understanding of the constraints and opportunities will allow appropriate decisions to be made jointly about realistic service levels and payment options. These approaches are critical to begin to overcome issues of bad social relations and powerlessness, without

which environmental health improvements will not be achieved, however much pipe work is constructed (Franceys and Bos, 2002).

### ***The buying decision process***

When people buy something, or agree to enter into a contract, they go through a series of stages before making their final choice or decision to buy. As indicated in the case of water, men lead the majority of all decision-making. This bias affects the position of women and those vulnerable in the community and how they may, or may not, benefit from the purchase or service. Once again this means that dialogue about new service options, including payment, must take place with women as well as men. Ensuring that this happens means that the impact of any decision will be more positive for the end user (mainly women) and ultimately the utility (responsible for sustaining the service). If men take responsibility for the type of service that is required without taking in to account the views of women (the main users) it is questionable whether the service is viable or sustainable. This is especially the case when the service is operational and women inevitably play some part in its physical and financial upkeep.

Table 4.1 describes a typical buying process for water supply indicating the type of decisions made, the people involved and the impact this has on sustainability of the service.

## **4.4 Understanding what people want**

PREPP works to gain an understanding of the different elements that together determine how a consumer will express his/her demand for water supply. The elements are the consumer's:

- Perceptions
- Experiences - including existing practices and coping strategies
- Preferences

The process of investigating these elements assists a utility to determine the criteria for the most suitable - and so acceptable - service option.

### ***Perceptions***

The way in which people perceive a situation usually determines how they will behave. This process extends to how people interpret messages and information, for example those promoted by utilities about water payment, interruptions to supply or disconnection. People also forget a lot of what they learn. They have difficulty distinguishing between fact and opinion and often trust their own 'reliable' sources of information, even if they are sometimes wrong.

People's perceptions are important in relation to demand-responsive and customer-orientated approaches. Understanding perception and being able to anticipate behaviour is an essential part of the right marketing mix.

**Table 4.1. Typical consumer buying decision process <sup>1</sup>**

<b>Decision-making role</b>	<b>Probable predominant gender in low-income communities</b>	<b>Stakeholder(s) that influence the decision-maker</b>	<b>Impact when men (by role) dominate the decision-making process</b>
The <i>initiator</i> - who first suggests the need for a different level of water supply	Men  Women less so	NGOs, donors, CBOs  Householders Utilities or municipal departments	Little consultation throughout  Services may not reflect needs of all users
The <i>influencer</i> - whose comments and opinions affect the decision that is taken	Men  Women less so	Traditional leaders, councillors, neighbours, engineers, women's representatives	Technical designs may not be suitable for users (such as women)  Lack of equitable access  Lack of sustainability
The <i>decider</i> - who ultimately makes all or part of the decision	Men  Women less so	Male head of household, engineers, CBOs	Acceptance by women who may be concerned about their continuing water collection burden
The <i>buyer</i> - who physically makes the application and pays the bills	Men decide on new connection applications  Women may pay a high proportion of the family budget to water, e.g. to vendors	Male heads of household, female head of household	If men decide that water should be collected from vendors, or traditional sources or standposts, women will have to suffer the inconvenience and burden. Women benefit if the water source is closer to home
The <i>user(s)</i> or collectors of water	Mainly women	Women and men	Women are left dealing with the costs of exclusive decision-making on their everyday lives, health, economic and social standing

1. Adapted from Wilson and Gilligan (1998)

Perceptions can also work for or against the utility because they are so closely linked to attitude. A consumer's attitude about payment for water, their immediate environment, responsibility for management and the role of government all affect how that person interacts with both those that provide the service and the service itself. While perceptions and attitudes are notoriously difficult to change, understanding the perspectives of consumers is vitally important if satisfactory services are to be provided in the long term (see Box 4.1).

If negative attitudes or incorrect perceptions persist the utility-consumer relationship will be weakened. It is important to establish and understand consumer perceptions. They affect the quality of consultation and dialogue, participation and ownership, and help to determine existing and future service, management and payment options (see Box 4.2).

## Box 4.1. Consumer perceptions

The following comments reflect the perceptions of one community to the service provided by their local utility. Some are correct while others, according to the utility are not. Either way the relationship between the utility and the consumers may be damaged as a result.

- The utility is too slow in responding to breakdowns.
- There are not enough taps and the supply is erratic.
- They (the utility) have not realized the economic potential of our compound. They should be like the electricity company who has provided power lines within the compound.
- The residents are like orphans, they are very poor, we are charged too much.
- For the utility to improve the service they should bring chlorinated water to every home. Our water is not safe now.
- Some people are becoming darker in complexion (because of using dirty water) than the residents of X compound where the donor is providing clean water.

## Box 4.2. Consumer attitudes toward two water and sanitation utilities in small towns in Uganda <sup>1</sup>

Consumer research into attitudes toward the local water and sanitation institution revealed that:

### Institution A

- Current levels of water supply did not meet demand: 'there is always a struggle between customers and the water department' and 'before tendering water services in this town we used to pay US\$50 but now we pay US\$100 and worst of all there is no improvement in service'.
- Utility staff do not communicate with residents except through the town council.
- Utility activity is not formally publicized but picked up via hear-say.
- Little is known about what to do in cases of complaint.

### Institution B

- The majority of those questioned said that the water office is performing fairly well but with limited water supply and so the services were generally rated as low.
- There is direct contact with the utility through the water staff, who do routine meter reading, repairs and reconnections.
- More women than men did not know where the utility is based nor how to become a customer.
- Communication between the users and the utility was highlighted as a major concern to all residents who believe that there should be a policy of informing customers of impending disconnections for unpaid bills.

1. Source: Eyatu Oriono et al. (2001)

## Experiences

A lot can be learned too from consumers' ongoing experiences of accessing, using and paying for water supply. These 'existing practices' hold the key to understanding why certain consumers have particular perceptions and preferences for certain sources of supply. Knowing about existing practices also reveals a lot of information about coping strategies, that is, how different people manage in times of financial or resource

shortage. Three main factors influence why people's experiences lead them to use a particular water source, or a number of different water sources. These are: type(s) of source, how the source is managed, and how the supply is paid for. Pieced together, this information provides a profile of existing experiences that can be translated into:

- criteria that can be used to determine preferred utility service options; and
- consumer willingness to remain confident about a specific option and so be loyal to its use.

This investigation is similar to market research. As with market research for material goods, information is also learned about competing forces. Competing forces in this context are those that distract or divert the consumer from one source of water supply to another. The existence of competing forces could pose a problem for a utility, especially in retaining its customers (see the 'Coping strategies and competition' section later).

### ***Existing practices***

The urban poor have a range of practices related to water supply. For example in Mombasa, Kenya the following practices are common in low-income settlements:

- Ordinary water kiosk (considered good water - some of which comes from the utility)
- Kiosk without a structure (considered good water)
- Water collected from shallow well (considered to be too salty)
- Roof catchments (considered poor quality)
- Borehole or well with pump (considered to be too salty, often belongs to a mosque or similar institution)
- Vendor with handcart (taking water from a kiosk, wells and boreholes, generally considered to be lower quality but still used for drinking)
- Water tanker (free water only during severe shortages)
- Traditional sources (mainly puddles of muddy rain water, unprotected springs)

A similar situation is found elsewhere in developing countries. These options are largely non-utility-dependent with the utility only providing limited water through relatively few ordinary kiosks. Many of the practices are not guaranteed to be safe. Why people favour one practice over another depends on a number of inter-related factors including:

- cost;
- reliability;
- convenience;
- perceived quality and links to health and well-being;
- access (queuing times and availability);
- lack of faith in existing supplier;
- local disputes; and
- cultural beliefs and practices that prohibit certain use.

An additional and often overlooked factor is their overall choice or assessment of safe and adequate supply, or rather a lack of it.

PREPP field-testing revealed interesting and useful information about existing practices including those related to cost. In line with other studies, the use of PREPP confirmed that the poor pay high prices for their water in terms of both direct costs (e.g. bills, payments to vendors) and indirect costs (e.g. time, convenience, health). A complementary survey in Kampala, Uganda showed that consumers in low-income settlements who are not direct customers of the utility pay between three and seven times more than that paid by direct utility customers (Kayaga and Sansom, 2004).

Whichever options or practices are found in a particular community, only some will be preferred and there may or may not be consensus. Preferences can vary markedly between different communities in the same city. It is therefore important to conduct PREPP in each community where service improvements are being considered, to capture the particular mix of preferences in each area.

### ***Coping strategies and competition***

Rich and poor people have ways of coping with water shortages but for the poor especially these can be detrimental to health and well being (see Boxes 4.3 to 4.6). Having a better understanding of coping strategies provides two types of information that are useful to a utility. It shows what people will do to obtain water, and the limits of their tolerance and efforts. It can also explain why customers choose to leave a utility supply for an alternative. Together this information can help to predict the conditions and level of service that a utility must provide to obtain and keep customers. The following scenarios provide examples of typical coping strategies.

#### **Box 4.3. Coping strategies - Scenario 1**

Normally Mrs Phiri queues for her daily water at a utility-managed standpost. She pays for her water by the bucket and as such is a reliable customer. During the dry season the queues become longer and the conditions hotter. Many women leave their buckets and containers by the standpost in the early morning and return to their homes, expecting to be higher up the queue once the tap attendant opens the supply. However frequent arguments break out about who is first, suggestions of favours and the length of waiting times. Mrs Phiri has had enough and reverts to her traditional source, a pond that is some kilometers away. She knows the water is not as clean but this inconvenience is outweighed by the trouble of accessing the utility supply. Until her new supply runs completely dry the utility has lost a valuable customer. In the meantime Mrs Phiri's neighbour is extolling the benefits of obtaining an illegal connection which would ensure that the water is nearer to the house.

These scenarios illustrate 'coping strategies' but also highlight the threat to the utility's market base. In other words the pond, the reservoir and the open well are forms of competition. Even though such competition may be of inferior quality and no more reliable than the supply provided by the utility, consumers may prefer to stay with them. This type of competition could be called 'dormant competition'; it does not seek to attract use but consumers know it exists. Consumers only revert to these sources when an external factor or a specific utility performance failure triggers them to do so (see Box 4.5). Vendors and on-sellers are far more pro-active forms of competition.

**Box 4.4. Coping strategies - Scenario 2**

The Ghandi family is amongst the few living in their neighbourhood to have an individual house connection. They share their supply and payment of their water bills with a neighbouring family. The system works reasonably well and their water bills are generally paid on time. However, there is no storage tank for the supply, which is at best highly unreliable. When shortages become critical both families revert to a reservoir or an open well. Both of these alternatives provide them with free, and generally reliable water. This situation threatens the families' patronage of the utility's service.

**Box 4.5. Triggers for reverting to non-utility supplies**

- Reliability
- Convenience
- Perceived quality
- Access (queuing times and availability)
- Lack of faith in existing supplier
- Local disputes
- Cultural beliefs and practices that prohibit certain use

**Box 4.6. Coping strategies: Peri-urban compounds, Lusaka<sup>1</sup>**

Examples of coping strategies for water supply as reported by peri-urban residents of Lusaka, Zambia:

- Inflexible tap opening times by the utility tap attendant leads to friction in the community, long queues and allegations of corruption. This leads some users, particularly women, to resort to traditional sources (open wells and puddles) to avoid feeling vulnerable.
- All the residents were aware of the need for treated water and know that untreated water leads to sickness. However economic constraints regularly lead households to resort to unsafe supplies. Illegal connections are reported among those that the community see as being unsafe but a necessary source.
- Convenience is a key factor in determining which supply to use, and when. Untreated supplies are used to save collection time. In some cases these supplies are seen as being more reliable, i.e. they are 'open' and this overrides the issues about the safety of the water.
- Most houses use several sources of water supply on a regular basis; they differentiate between water used for drinking (which is often stored in jerry cans and buckets) and water used for cleaning and bathing.
- Water vendors and on-sellers are treated with mistrust but are used nevertheless.
- Community meetings are often focused on issues to do with water shortages.

1. Source: WUP/WSP/LWSC Peri-urban Section (2002)

**Preferences**

Engaging with consumers to find out about their preferences for particular service options is at the heart of the PREPP approach. Understanding and anticipating consumer preference for service options, rather than assuming knowledge, is an essential part of



getting the marketing mix right. Expressing a preference is closely connected to a consumer's concept of demand. In the context of PREPP, 'an expressed preference' is made for a particular water supply or service that is 'best for purpose' from the consumer's perspective. The problem is that 'best for purpose' means different things to different people and interpreting this can be difficult. The best way forward is to try and understand the preferences within the local context so that improvements are those seen to be good from the perspective of local people.

### **Box 4.7. Expressed preference and demand**

- If the expressed preference is based on effective demand then this is likely to be based on an ability to weigh up the pros and cons of the service and pay for it. Effective demand is the result of good information about the option and its alternatives.
- If the expressed preference is based on latent demand then it is highly likely that the consumer has been influenced, perhaps by neighbours or through observation of the service (or another similar service) over a period of time. Thus the consumer has slowly become aware of the benefits of the improved service. The preference may only become apparent long after a community or household was first made aware of the options.

There is no blueprint for how this discussion is facilitated, particularly because what is already known about a certain group of consumers or market segment differs from one to the next. Establishing preferences can only be achieved through a step-by-step process of gauging the situation (understanding where the consumer is now), presenting the most likely scenario (realistic options), listening to the consumer (where does he/she want to be), acting upon this feedback (working out how to best satisfy desires) and then refining what is on offer. Likely determinants of preference, include:

- ability to pay and the frequency and form of payment (money or contributions through labour, volunteerism);
- preferred characteristics or features (convenience, reliability, design, location);
- price and relative costs (including personal/household gains made in return for payment);
- ability or option to upgrade;
- performance;
- sense of ownership;
- gender;
- level of education and access to information; and
- the influence of others.

Preferences may be expressed for existing water supply practices or future service options. The expression may be stated in positive terms (reasons for wanting the service) or negative (reasons for preferring a different service). The following case studies provide examples of expressed preference.

#### **Box 4.8. Preference for service options offered to low-income consumers in Lusaka, Zambia<sup>1</sup>**

'The most preferred option in all the communities spoken to is the communal tap with four taps. There are various consistent reasons for this choice including, security (the taps are locked); fairness (the taps are metered); lower cost per unit, and the fact that payment is 'as you go' rather than large amounts at one time. The number of taps was a key selling feature. Interestingly people equate this system as being the same as that in [another] compound, showing that people can be influenced by schemes that are around them and there is a desire to upgrade.'

1. Source: Banda et al. (2003a, 2003b)

#### **Box 4.9. Preferences for existing water sources in Bushenyi, Uganda<sup>1</sup>**

The existing water sources were ranked in order of preference and the result was: protected spring, yard tap and borehole.

Relative advantages of the **protected spring** are:

- Its water tastes better and is good for washing.
- It is free. No one pays to use it and it is always available.
- It is a good colour.
- It has clean water whose quality is assured all the time.

Disadvantage included quality during the wet season; contamination and colour changes. Relative advantages of the second choice, the yard tap are:

- Convenience (saves time) as it is near home.

Disadvantages included the high cost of connecting the house to the system; expense; unreliability; and low pressure.

The least preferred source was a borehole because:

- It is unsafe, especially in towns due to underground contamination with sewage.
- The technology is not user friendly because one has to pump for a long time and much human energy is required.
- Lack of technicians for maintenance.
- The quality is low
- It is expensive to maintain.

1. Source: Eyatu Oriono(2001)

**Table 4.2. Preference for service options in informal settlements in Mombasa, Kenya<sup>1</sup>**

Brief description of service option	Market segment	Percentage of respondents within market segment who bid for the stated service option
Continuous supply with storage tank at shared yard connection (about 10 dwellings)	People living in dwellings in informal settlements (slums)	98%
12-hour supply at shared yard connection (about 10 dwellings), rationing		95%
4-hour supply at shared yard connection (about 10 dwellings), rationing		63%
Privately managed kiosk with shelter and tank		54%
Community managed kiosk with shelter and tank		48%
Privately managed kiosk, no shelter or tank		10%

1. Source based on a willingness to pay survey, Njiru and Sansom (2004)