

**PREPP – improving utility watsan services to low income consumers***Sue Coates, Kevin Sansom, WEDC and Sam Kayaga, Uganda*

THIS PAPER IS based on the interim findings from a Department for International Development (DFID) funded research project looking at the application of strategic marketing approaches in urban water utilities in developing countries. The context for the research is that many of these utilities despite increasingly favourable legislation are under performing. Table 1 highlights the low level of piped water services in African cities. This situation is not acceptable if the targets stated in developing country government policies are to be realized. The purpose of the research is to provide utility managers with mechanisms to enable them to use and adapt marketing techniques to provide better services to all consumer groups in a financially sustainable manner. This paper focuses on services to the market segment comprising the ‘urban poor’.

**Table 1. Utility under performance**

Service levels in selected African cities	A	B	C	D	E	F	G
Source of water for household use (% of households)							
• In-home connection	36	31	29	19	27	23	17
• Standpipe water fetched by household	5	0	3	30	0	49	19
• Independent providers/traditional sources	59	69	68	51	73	28	64

A = Kampala (Uganda), B = Dar Es Salaam (Tanzania), C = Conakry (Guinea), D = Nouakchott (Mauritania), E = Continuo (Benin), F = Ouagadougou (Burkina Faso), G = Bamako (Mali)

Source: Adapted from Kayaga S (2001) ‘Strategic marketing Plan for Water Services in Kampala’ DFID-KAR Output, WEDC, Loughborough University

The researchers asked who, from a utility perspective comprise ‘existing and potential customers’ and secondly, where are the urban poor placed in relation to water supply market segmentation and business strategies? Mapping exercises in urban centres show that most attention is given to those citizens residing in low and middle density areas. Their neighbours living in high density, illegal and informal settlements, despite playing a vital economic role in the city, are largely not served by the utility. So although in many respects it is an exciting time for water utilities, which with legislative support often have newly found powers, the poorest of consumer groups are not benefiting.

The research led to the development of an approach to remedy some of the many methodological problems and barriers associated with utility provision of services to the urban poor. The paper demonstrates how utility managers and water engineers can understand this valuable consumer group and begin to work with them, using a reasonably rapid participatory approach.

The notion of ‘customer is king’ and ‘consumer choice’ is beginning to impact upon water utilities in developing countries. Examples of customer orientated thinking can be found in utilities from India to South Africa<sup>1</sup>. Approaches to improved organizational performance and effectiveness are gaining interest and credibility in the sector. The principles of Total Quality Management (TQM) and business re-engineering can be effectively used for dealing with issues such as commercialisation and cost recovery. Improvements in quality service delivery and customer care are beginning to be evident in initiatives such as dedicated customer free-call lines as seen in Hyderabad and more accessible ‘zonal’ offices as in Kampala.

The inequities that exist in service differentiation in urban centres are well documented<sup>23</sup>. So too is the growing recognition that governments must do more to improve

<sup>1</sup> See [www.chennaietrowater.com](http://www.chennaietrowater.com), and [www.durban.gov.za/water/index.htm](http://www.durban.gov.za/water/index.htm)

<sup>2</sup> See WSP-SA, (2001) ‘Serving Poor Consumers in South Asian Cities – Private Sector Participation in Water and Sanitation’,

<sup>3</sup> Overview paper, Kariuki M., ‘Water Services for the Urban Poor,’ Vision 21, WSSCC.

access for the urban poor to water supply and sanitation services. It is often cited that together policy, partnership and technical innovation provide the required enabling environment to facilitate a change in the status quo. These opportunities exist and yet they remain illusive.

However, progressive water utilities are taking a lead and learning from the lessons of government, NGO and donor facilitated urban poverty programmes. Lusaka and Durban provide good examples of where partnership development and the offer of technology and management choices has proved key<sup>4</sup>. Utilities are also beginning to network more effectively in an effort to share what works and find solutions to problems<sup>5</sup>.

Such innovation requires management leadership so that policy can become meaningful at a practical level and innovative institutional solutions can be pro-actively supported. Innovation in service delivery undoubtedly requires technical expertise, organizational flexibility and above all relevant and timely knowledge of consumer needs, perspectives and preferences. This latter area of business strategy is a new concept in the public sector in many countries. Given this situation it should not be surprising that utilities first look toward developing customer orientated business strategies with those market segments where there is already a demonstrated, albeit limited relationship. This does not however assist the position of those who as yet are not perceived as customers and therefore do not have a consumer voice.

Focusing on demand responsive approaches and drawing upon the participatory methods such as 'Social Marketing and PHAST' that are synonymous with sustainable development, the researchers sought a way to apply the emerging new principles of 'doing business' in high density informal settlements. One of the main barriers seemed to be one of miscommunication and poor information.

### New principles of 'doing business'

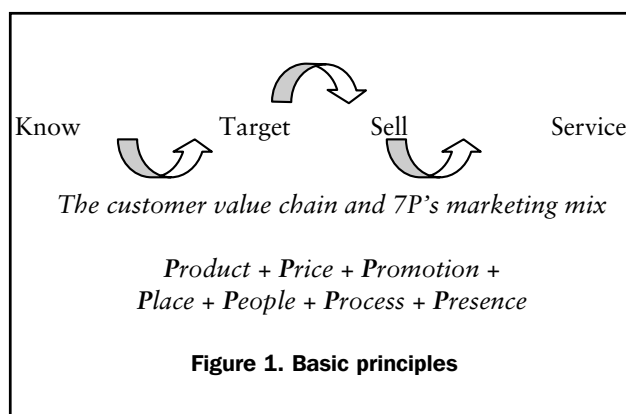
- Cost recovery
- Customer and demand focused
- Quality driven
- Flatter, more efficient and effective organizations
- Partnerships

### The PREPP Methodology

Over the last two years an approach known as *PREPP* – 'Participation, Ranking, Experience, Perceptions and Partnership', has been undergoing development and testing in East Africa and India. This approach provides a practical

method of directly addressing some of the issues that arise from the miscommunication between the utility and the poor. Too often the utility-poor relationship is one where low-income consumers do not see themselves as valued customers now or in the future. Some utilities cite reasons such as unclear land ownership as justification for doing little in informal settlements, but many utilities overcome these problems to provide improved services in partnership with other stakeholders. The starting position for the PREPP approach is that far from being a problem the poor are very often somebody else's valued customers and therefore provide a significant opportunity. This situation is made patently clear in the growing urban markets captured by independent providers (Table 1)<sup>6</sup>.

PREPP is a practical method for utilities to communicate with low-income consumers. Developed with the assistance of utility engineers, social scientists and economists and piloted in low-income communities in Kenya, Uganda and India, PREPP is grounded in the belief that a utility and a low-income consumer can have a mutually profitable relationship. One of the strengths of the methodology is that it is a reasonably rapid means of gaining quality information about a community's experiences and perceptions about water services, together with their preferences for alternative service options. The approach is consistent with basic marketing principles such as the customer value chain (Fig 1); which in essence is: get to know and understand existing and potential customers, then target particular groups with different options, sell or promote viable options, then provide agreed service options reliably. The 7p's marketing mix (also in Fig 1) is also a useful framework for ensuring we are comprehensive in relating to different groups and this is demonstrated in this paper.



<sup>4</sup> See WUP (2000) 'Improving Water Supply and Sanitation Service Delivery to Low income Communities in Africa – Summary of Workshop Proceedings, Nairobi, June 2000', Water Utilities partnership, Project Number 5.

<sup>5</sup> Examples of networking initiatives include the Water Utilities Partnership (WUP) in Africa

<sup>6</sup> See Collignon B., and Vezina M., (2000) 'Independent Water and Sanitation Providers in African Cities', World Bank Water and Sanitation Program

PREPP is a process involving water engineers, facilitators (usually drawn from NGOs and/or local councils) and low-income consumers in a mutually beneficial exercise based around a comparison of proposed service options with the existing sources and supply. It serves a number of purposes not least demonstrating the decision making process used to select 'best for purpose' water supply options by the utility and the consumer.

In focus groups, usually segregated by gender, the PREPP facilitator and engineer take the participants through a set of carefully prepared steps providing a framework for informed dialogue between the water engineer and his/her potential customers. Another person needs to document the responses of the focus group to questions raised by the facilitator. The whole process takes on average less than a couple of hours to facilitate and is proving to be eye opening for the engineer and water users alike. The key steps 1 to 5 are shown in the table below.

The researchers have found that just as engineers and utility managers often have entrenched perceptions about the viability of service provision in informal settlements, the residents may have ill conceived views of utility motives and interests.

**Table 2. PREPP – the basic steps**

	Topic/research area	Tool used to facilitate
<b>Step 1</b>	Existing experiences (sources, supply and coping strategies)	Water ladder
<b>Step 2</b>	Existing preferences (exploration by type)	Household voting, group probing and discussion
<b>Step 3</b>	Consumer perceptions (of the utility)	Questions and probing
<b>Step 4</b>	Service option preferences (existing options compared to new)	Costed option ranking Pocket chart voting
<b>Step 5</b>	Household expenditure	Household expenditure charts

The key step is 4 - costed option ranking. Here the purpose is to determine which service options should be considered by the utility for future marketing in the same or similar market segments or consumer groups. The consumers are informed that the utility wishes to find out what local consumer preferences are for potential future service options, compared with the existing water services and sources. The group is presented with pictures showing a mix of two types or categories of service option - potential options with estimated costs for the following year and the most popular existing sources determined during step 2 of the PREPP process.

PREPP enables the utility to find out information regarding the consumer's first, second and third preferences for a range of service options as part of a negotiated demand process.

What has emerged is that consumers are acutely aware of the costs, financial and otherwise incurred in coping with existing water supply options and are readily open about how these compare with the proposed unit and management costs of a utility supplied service. They are also able to explain their preferences for particular service levels, duration and timing and which management options seem most viable. Issues related to storage, shared resources and sustained willingness to pay are explored via pictures and the sharing of experiences. The nature of water service competition in their area is also exposed, for example, access to supplies from illegal connections and reliance on water vendors.

### Who PREPP is for and its benefits

PREPP is primarily for water engineers and their managers. The information gained through PREPP is used directly by the utility to make decisions about service and price differentiation in relation to low-income consumers. The approach's primary purpose is to benefit the poor and low-income consumer. Benefits include:

- Greater utility understanding of the nature of consumer preferences for different potential service options that it is both willing and able to offer.
- Improved utility understanding of consumer preference for existing sources and consumer coping strategies.
- Improved mutual understanding and trust between the utility and its potential customers built upon open dialogue that can continue after the PREPP process.
- Improved utility understanding of the key determining factors that influence a consumer's choice of service, including cost.
- Improved knowledge of the utility's comparative advantage – or disadvantage against other providers.
- The information generated can contribute effectively to a utility's normal investment planning.

PREPP is consistent with a partnership approach and draws on techniques that are familiar to social scientists, economists and engineers. It does not attempt to reinvent the wheel but does provide a mechanism to seriously challenge the many unenlightened assumptions about providing services to low income consumers.

The information gained during the PREPP research consultative exercises have been triangulated against household semi-structured interviews and observation at existing water points, in order to verify information.

This process can assist utilities to think strategically about how it engages with the urban poor and the customer-utility relationship thereafter. PREPP's potential is clearly demonstrated in the type of information and mutual benefit that can result from facilitating the process. This is highlighted in relation to the 7P's below.

Armed with this information the utility can now begin to make informed decisions about which service and management options are most feasible in which areas. Planning for services that involves the primary stakeholders enables mutually beneficial solutions to be found. Looking for mutuality is a key purpose of the PREPP approach. This is because proposed service options, particularly those in informal settlements, have to be realistic, or failure and false expectations prevails.

The 'software issues', including consumer surveys, are increasingly contracted out. This is often because while utilities may see a need to address 'soft' issues, they rarely

believe they have the adequate skills or appropriate human resources. While NGOs and CBOs are well placed to undertake these roles, the information reaches the engineer and the utility second or third hand, usually via a report. The information rarely impacts upon engineering project design. Questions also remain unanswered from the consumer's perspective, as sociologists are not experts in technical issues related to service options. This is why the utility engineers should actively participate in the consultation process and take ownership of the results.

Recent WEDC research shows that engineers often fail to take gender preferences, particularly those of women, into the design of technical options<sup>7</sup>. The proposed process allows the perspectives of both men and women to be documented. PREPP is based on acknowledging the need and place for partnership between the engineer and the sociologist/facilitator. It is clear that both groups require adequate training in the PREPP process, to achieve the most useful results. Crucially however the engineer is required to step into the domain of the poor consumer to understand what potential customers want, expect and actually need.

PREPP is promising as an approach. Recent fieldwork has pointed to the need to think more analytically about the information gained in consultative processes, how it is used and how it is fed back to the consumer groups in the form of action for improved water supply. PREPP is one way to provide mechanisms for two-way dialogue and better dissemination of information. One thing is very clear, once engineers and utility managers step out and enter such dialogue with their existing and potential customers the expectation is that there is no going back.

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Other partners with WEDC in this DFID supported research project include IHE-Delft, the Netherlands and ASCI-Hyderabad, India. The views expressed in this paper are not necessarily those of DFID.

**Table 3. Typical outputs of PREPP**

<b>Product</b>	<ul style="list-style-type: none"> <li>• Knowledge of existing provision – by all suppliers including traditional sources, private sector participation and private on selling</li> <li>• Knowledge of type of service and management options preferred by the communities and comparative advantages to existing sources</li> <li>• Existing pressure, hours of flow, reliability etc.</li> </ul>
<b>Price</b>	<ul style="list-style-type: none"> <li>• Knowledge of existing informal and formal tariff structures and seasonal fluctuations</li> <li>• Cost of provision for storage, queuing, treatment and scarcity (coping costs)</li> <li>• Knowledge of attitudes toward connection schemes, payment options, willingness to pay and ability to sustain payment</li> </ul>
<b>Promotion</b>	<ul style="list-style-type: none"> <li>• Knowledge of existing communication patterns between utility and consumers, potential marketing opportunities; potential for active on-going customer- utility dialogue</li> <li>• Enables the development of future targeted promotion strategies for each area</li> </ul>
<b>Place</b>	<ul style="list-style-type: none"> <li>• Knowledge of where the competition operates, where new potential markets exist</li> <li>• Better sense of specific local problems and living conditions, to enable the development of realistic solutions</li> <li>• Improved estimates for service option take up in each area</li> </ul>
<b>People</b>	<ul style="list-style-type: none"> <li>• Knowledge of present and potential customers, income distribution, behaviours and practices, resistance to change, representative samples of household preferences according to housing type</li> </ul>
<b>Process</b>	<ul style="list-style-type: none"> <li>• Establishes the beginning of a consultative planning process between utility &amp; the communities, as part of realistic negotiated demand</li> </ul>
<b>Presence</b>	<ul style="list-style-type: none"> <li>• Establishes a means for future mutually beneficial exchanges</li> <li>• Improved utility corporate identity and image</li> </ul>

<sup>7</sup> See forthcoming B. Reed et al, 'Gender – the Engineer's Perspective', WEDC, Loughborough University