

Chapter 9

PREPP analysis and findings

9.1 Dealing with the data

After the PREPP sessions have taken place the data has to be analysed and interpreted. This is an essential stage that requires management. The process will involve some basic quantitative analysis and qualitative interpretation. Although PREPP provides data that can be presented in a statistical way its main reporting value is found in combining this with its unique qualitative information. This is because PREPP is looking to draw together the following factors that influence a willingness to sustain an eventual customer relationship between the consumer and the utility,

- willingness to pay, couples with
- reference for service, based on
- knowledge and experience of existing options weighed against the perceived value of newly proposed services.

The overall purpose is to draw out this key data from each of the PREPP steps (existing practices/coping skills, perceptions and preferences) and document them in a way that is clear and precise.

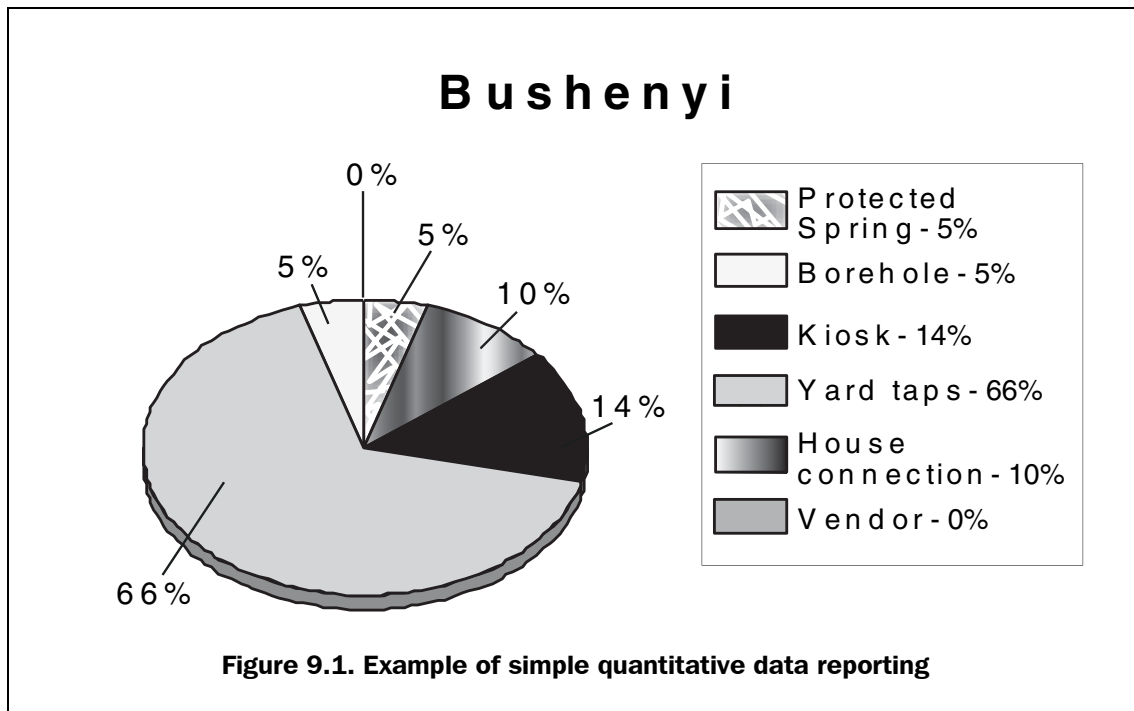
Quantitative data - ranking

As the sample size is likely to be manageable collating the quantitative data can be done using a commercial spreadsheet package, for example Microsoft Excel, that can assist with data presentation as is shown in Figure 9.1. The collated results should be looked at sensitively involving a process of 'weighing up' the emerging picture. Where it is difficult to tell if the information is sufficiently rigorous the data should be crosschecked.

Qualitative data - participant's answers to questioning

There is no set way of interpreting qualitative data but the following guidelines are helpful.

- Analysis should take place as soon as possible by the PREPP team who did the field work;
- Good organization and indexing is important;



- It is useful to place the comments of the focus groups under broad headings that are relevant, such as: utility water services, non-utility water services, coping practices, preferred options, perceptions of water connection procedures, etc.
- Work systematically and complete the analysis of each session by community or ward before comparing the data; and
- Work towards taking the data apart and then rebuilding a picture using comparison. Look for trends, common statements, statements of particular relevance or interest to the purpose of the PREPP programme.

In addition the team should avoid working mechanically. It is better to constantly reflect and think about what is being read and suggested taking in to account,

- Its truth-value -is what was said credible based on what is already known or checked?
- Its applicability - in the situation or like communities
- Its consistency - is it likely that the same group would give the same type of information a second time?
- Its neutrality - did the team lead the answers?

Source: adapted from Robson 1998

9.2 Cross-checking and verification of PREPP findings

Research has indicated that there is good correlation between PREPP results and other data collection techniques that rely on a greater number of interviews, such as household semi-structured interviews and consumer surveys. It is important however, to verify the PREPP results. This can be done in a number of ways,

- Check and confirm local water supply coping strategies in the specified areas to check for correlation with PREPP results, this can be done through observation walks and site visits.
- Conduct a minimum of two PREPP sessions within different parts of the same residential area, more will be required in larger communities.
- Consult experienced local social scientists on the required number and location of PREPP sessions in the defined research area(s).
- Crosscheck results with other data sets available such as household consumer surveys.
- Revisit the research areas to verify the results with community groups.

9.3 Presenting PREPP data

PREPP data, particularly the ranking exercises for existing and proposed options, is more valuable to utilities if presented clearly and is more likely to influence effective decision-making. Common formats include concise text descriptions, tables, matrices and pie charts. It is advisable to keep formats simple and uncluttered

Using consumer perception information

Data on consumer perceptions is valuable for determining future utility marketing and communication strategies. Table 9.1 sets out typical consumer perceptions (column 1) and potential utility marketing or communication strategies (column 2) that can address those perceptions and thereby increase the prospects of increased numbers of satisfied customers.

Presenting option ranking data

Option ranking data is most conveniently presented in table form with a brief description. Two examples are shown below in Table 9.2 and Table 9.3.

Costed option ranking research results obtained in Guntur, India are in Table 9.3. The preferred proposed option is for shared or group connections, as can be seen in the table, followed by community managed public standposts and individual connections. This preference is probably motivated by the perceived affordability of the group connections and public standposts, compared to the individual connections.

When a number of PREPP sessions have been carried out throughout an urban area, average ranking values for all results can be included in summary tables. Because a utility would generally be looking for around three or four service options to promote, it does not matter if some areas have slighting different ranking orders compared to other areas where PREPP sessions have been conducted. If however, there are large discrepancies between the preferred options between two low income areas, the results should be checked, perhaps with further surveys. If large discrepancies are confirmed, then the utility should consider offering different options in different informal settlements, or reach some compromise menu of options to be offered.

Table 9.1. Typical consumer perceptions and potential utility strategies

Typical response	Possible utility strategy
Disconnections happen unfairly	Issue bills on time State clearly through different routes (leaflet, radio, door to door contact) what will happen if bills are not paid and why
Price rises do not mean a better service	Explain price rises before they happen Develop a meaningful Customer Charter that outlines what the utility will do when, how and why Negotiate price - rather than imposing it
Traditional sources (shallow wells, scoop holes) are more convenient than public stand posts	Market stand posts as safe and reliable sources of water (quality, security for women collecting) Market at a price that minimizes a return to traditional sources at financially difficult times of the year Monitor use and non use and re-market appropriately
Utility staff do not spend enough time in the community	Hold regular consultation forums in community buildings Publicize new initiatives and success stories on the radio Develop community liaison roles for engineers and operation and maintenance teams and make time for this new responsibility Open and publicize ward/zonal offices with customer service counters
The utility office is too difficult to get to and is always closed	Decentralize customer services to local offices Work through intermediaries (NGOs, local leaders, teachers) to tell households how to access the utility Negotiate opening times of local offices and trial different schemes

Linking PREPP data to strategic and investment planning

By using a rapid and efficient demand assessment approach such as PREPP, a good picture of initial demand in informal settlements and potential service options emerges. The PREPP data can also contribute to answering the question 'Where are we now?' in terms of consumer perceptions of utility performance and consumer water service experiences and coping strategies. As a utility gains better knowledge and understanding of consumer experiences and perceptions, it is better able to adapt its marketing and service provision so it can attract more customers and then keep them satisfied. Improved customer satisfaction then provides better opportunities for increasing revenues that can in turn be invested in better service provision. In addition, PREPP provides a good basis for ongoing dialogue between a utility and community groups as part of a beneficial partnership.

The costed option ranking results give a clear indication of user preferences. This information is valuable for a utility considering which service and payment options to promote and offer in different areas of a city. PREPP can be carried out in a number of informal settlement locations in an urban area, so the varying patterns of demand emerges. This data can then be used to estimate future option take up and hence inform the utility's financial projections and investment planning. This process is discussed further in chapter 7 of Book 2.

Table 9.2. Example of PREPP results and commentary, Soroti, Uganda¹

Option	1st choice		2nd choice		3rd Choice	
	Core	Fringe	Core	Fringe	Core	Fringe
Protected spring	1	1	1	5	2	5
Borehole	0	2	11	5	4	10
Kiosk	0	3	2	3	7	3
Yard tap	6	14	0	3	1	5
House connection	1	1	3	2	0	0
Vendor	0	0	1	0	4	0

NB: The core and fringe headings represent the different locations of the focus groups

Option one is protected spring, option two borehole, option three kiosk, option four yard tap and option five house connection. The results of the private voting show that most participants preferred the yard tap to any other option. The second choice option for most of the people was borehole while the new improved kiosk came third.

The results show a strong demand for yard taps among the participants mainly because the tap are installed in their compounds and so are very convenient. A yard tap would be shared among six or so families with each family contributing Ush 11,100 per month.

A borehole fitted with a hand pump was second choice because it is near homes and according to the participants it yields good quality water. The improved kiosk came third because of its low cost. The cost of Ushs 40 per 20-litre jerry can was perceived by the participants to be very low.

Overall, the results show that participants were mainly influenced by the convenience of the water source in voting for their preferred option. However, house connection would be even more convenient than yard taps but were too expensive at UShs 22,100.

1. Source: Eyatu Oriono et al (2000)

Well designed WTP studies also provide data on the maximum WTP values for service options, which is very useful for investment planning. Where the main objective is to inform future tariff policy to pay for substantial new investments, willingness to pay surveys are appropriate (Wedgwood and Sansom, 2003). But where the focus is on developing an understanding of user perceptions and preferences in informal settlements, then PREPP is particularly suitable.

The selection of the preferred list of service, payment and management options to be offered in which locations, should be done to seek to maximize consumer satisfaction, but also be feasible for the utility to provide or support on a sustainable basis. Refer to Part III of Book 2 - (guidance notes for managers) for more discussion of strategic marketing and sustainable service provision.

Table 9.3. Example of PREPP results from Guntur, India¹

Proposed Options (Women)	I		II		III		IV		V	
	K.B. Colony		A.T.Agraharam		Nallakunta		Anandpet		Nallacheruvu	
	Group	Ind	Group	Ind	Group	Ind	Group	Ind	Group	Ind
Community managed PSP	3	-	5	-	1	1	2	1		-
Shared connection	1		1	3	2	5	1	7	2	3
Individual connection *2	2*		3	1	-		-	-	1	7
Ground tank connected to municipal line	-		2	-	-		-	-	-	-
Ground tank connected to bore well	-	-	-	-	-		-	-	-	-
Ground tank connected to water tanker	-	-	-	-	-		-	-	-	-
Ground tank connected to open well	-	-	-	-	-		-	-	-	-
Water kiosk (Municipal water)	-	-	4	-	3		-	-	-	3
Open wells	-	-	-	-	-		-	-	-	-

1. Source: Narender, Chary and Coates, 'Testing PREPP methodology in Guntur', April 2002

2. Note - *If connection fee is spread over instalments