Serving all urban consumers - a marketing approach to water services in low- and middle-income countries: Book 2 - Guidance notes for managers

This item was submitted to Loughborough University's Institutional Repository by the/an author.

Citation: SANSOM, K. ... et al, 2004. Serving all urban consumers - a marketing approach to water services in low- and middle-income countries: Book 2 - Guidance notes for managers. Loughborough: WEDC, Loughborough University.

Additional Information:

- This record is made up of 20 files. Individual chapters and the complete pdf are available to download from the record.

Metadata Record: https://dspace.lboro.ac.uk/2134/30757

Version: Published

Publisher: WEDC, Loughborough University

Rights: This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the published version.
Chapter 8

Stage 3: 'How we might get there?'

It is assumed that draft financial projections for proposed new investments have been completed based on estimated future take up of service options and reasonable tariff policies, as discussed in the 'Where do we want to be?' section. There may of course be one or more preferred investment scenarios still under consideration. We shall now consider how the preferred scenario might be achieved as part of a marketing strategy, considering the 'marketing mix - 7Ps', which provides a useful planning framework. Other key aspects that contribute to answering the question 'How we might get there', are improving 'customer relations management' and utility institutional improvements.

8.1 Product positioning

When a utility is considering a significant expansion of its services in a particular area, it needs to consider advantages/disadvantages of its service options compared to other...
service providers already being used in that area such as: vendors, private borewells, dug wells etc.

A utility should seek to ensure that it achieves its projected take up of its service options in the market segments chosen. Product positioning is the process of designing an image and value so that people in the target market segments appreciate the comparative benefits between what the utility offers compared to the alternative water service providers.

The process of product positioning involves three steps (Wilson and Gilligan, 1997):

- Identifying the possible competitive advantage of the organization's services;
- Deciding on those aspects to be emphasized
- Implement the positioning concept.

Many water utilities assume that it is obvious to everybody how their water quality is superior. This is not the case, as many water utilities operate in a macro-environment where literacy rates may be low and misinformation can spread. Furthermore the utilities often underestimate the impact of negative propaganda carried out by alternative water supply providers. It is important that water utilities adopt a suitable positioning strategy to assert themselves in the market. Water utilities can design their positioning strategies along the following lines:

- Positioning by attribute:
- Positioning by price
- Positioning by quality
- Positioning by application

At Durban Metro Water in South Africa a dedicated R&D department was established to develop and promote new water supply options, refer to Box 8.1. The people working in this department promoted the new options pointing out the relative merits of each option in comparison with alternatives.

**Box 8.1. Community mobilisation at Durban Metro Water**

The Research and Development Department of Durban Metro Water Services is mandated to maintain effective communication with low-income communities in Durban Metro. The Utility employs full time Community Liaison Officers, who are social development professionals, to keep constant contact with low-income communities. The Community Liaison officers get involved in identification of new water projects, mobilisation of communities, cultivating a willingness-to-pay among members of the communities, community involvement in the project implementation, project commissioning, and ensuring cost recovery.
There has been heightened interest in the water and sanitation sector to assist in the promotion of hygiene education to water users. Research has shown that hygiene education and promotion influences health benefits. A lot of progress in promotion of good hygiene has been made in the rural water sector. However, many water utilities have not taken on hygiene education as a vital tool for product positioning. Various NGOs/CBOs are doing the little work on hygiene education in urban areas. There would be a bigger impact if water utilities got involved in hygiene promotion. Box 8.2 gives an example of how Umgeni Water handles hygiene promotion:

### Box 8.2. External education services unit of Umgeni water, S. Africa

The External Education Services (EES) Unit is of Umgeni Water, South Africa specializes in promoting hygiene education to communities and schools. The Unit disseminates this information through workshops, and through a number of other educational tools such as videos, material suitable for teaching aids, puzzles and information booklets. People are also taught how to monitor their water supplies using low-cost water test kits, and also how to treat contaminated water.

Such activities can assist in generating demand amongst consumers for utility supported water service options that present less risks of contamination than alternative unprotected sources. Another example of the benefits of promotion activities in India is given in Box 8.3.

### Box 8.3. Marketing Sanitation in Rural India

WaterAid-India's rural sanitation program was making slow progress in 1995-96. A lack of demand from households meant that partner NGOs had constructed only 460 out of 1,100 latrines planned for the 12-month period. WaterAid-India decided it was time to reformulate its strategy and focus on marketing sanitation. As a result of this change in approach, by the first six months of 1997-98, partner NGOs had achieved a dramatic turnaround in demand and constructed 5,000 latrines but were still unable to meet the spiralling demand from rural households in the project areas. WaterAid stimulated demand for sanitation through social marketing and hygiene promotion.


### 8.2 The marketing mix - the seven P's

A useful tool for an organization wishing to ensure that it is comprehensive in it is approach to marketing and its’ interactions with customers is the 7Ps which are listed in Figure 8.1. This figure includes typical key issues for a water utility to consider for each of the 7Ps.

Typical questions that may arise for a utility that is developing investment plans and marketing implementation strategies are set out below for each of the 7Ps. It is assumed that the utility has already completed the development of feasible options, demand assessment and financial projections, although the development of detailed marketing implementation strategies, are also likely to have implications for the financial projections.
Products or options

- Is any further product/option development required (refer to section 3.6)
- Will the utility sell or provide new options (e.g., ground tanks or kiosks), or are they readily available from the open market, in which case are negotiations with suppliers necessary?
- Is any further demand assessment for the option required?
If a new option is being piloted in a certain area, how will its viability be assessed and reported on?

Is the utility in the position to deliver the proposed range of options? If not what needs to be in place in order to achieve sustainable management of services?

**Price**
- Is the proposed tariff structure consistent with the results of willingness to pay surveys and government policies?
- Does the proposed tariff structure for different service options and consumption levels follow the 'AESCE' principles (Adequate, Equitable, Simple, Conserving and Enforceable? Are the tariffs consistent with the level of service being offered?
- Do key stakeholders need to be consulted and agree on the tariff structure and policies?
- If subsidies are being offered, do they provide appropriate incentives and disincentives for customers and are the subsidies sustainable?

**Promotion**
- What are the most suitable options for promoting new services and options? (see Box 8.4 on Durban experiences)
- Does the promotion plan take into account the typical steps towards a purchase? (Refer to Figure 8.2)
- How can the relative advantages of the proposed improved utility services compared to alternative water service providers be emphasized in the promotion plan? (refer to the section on product positioning)
- What is a suitable range of promotional material for the utility to develop?
- How will the various utility departments be involved in promotion of new options?
- How will the utility promote its' corporate image and new simplified procedures?

What are appropriate promotional channels? For each message or piece of material what channel should be used such as: direct mailing, posters, radio, television, meetings, internet, phone book etc.

**Place**
- Is there an agreed market segmentation plan of the city/town that clearly shows where the different market segments (consumer groups) are located?
- Have some informal areas been missed out in the segmentation plan or in consumer surveys, could these be included in the next surveys?
- Has it been agreed which service/payment options are to be offered in which market segments and areas? Perhaps piloting in some areas is necessary?
- In some poorly served areas is it appropriate to support and regulate local water vendors by providing good water collection points and publicizing the price that the vendors pay the utility for water?

**People**
- Who within the utility will be responsible for service option development and approval?
Box 8.4. Durban Metro Water's promotion of service options

Durban Metro Water have promoted their service options, including individual ground tanks and overhead tanks by a number of means including:

- Taking a demonstration model of the ground tank to different poorer communities around the city.
- Production and distribution of clear and concise leaflets explaining each option with drawings of each service level offered.
- Utility staff attended community meetings in the poorer areas to discuss the advantages and disadvantages of their service options and their implications.
- Production of a video dealing with the merits of ground tanks and the process of obtaining one.
- Community representatives invited to utility offices for further discussions and video shows.
- Negotiations with community groups to finally agree on their preferred options and the management arrangements.

Extensive use of the promoted service options was apparent in visits to poorer communities in Durban.


---

Figure 8.2. Typical steps towards a purchase and the communication tools

1. Source: Adapted from Wilson and Gilligan p 463 (1997)
Who within the utility will be responsible for communications with community groups in poorly served areas? Will community liaison officers be appointed?

Is there good potential for some form of shared management of services together with community groups or small scale private providers? How will this be taken forward? (Refer to chapter 4).

How will the utility develop a good understanding of the perceptions and preferences people in the different market segments? Which combination of consumer surveys, focus group discussions and meetings is appropriate in each area? The PREPP approach to utility consultation with the poor that is described in book 3, provides a good basis for commencing ongoing dialogue.

How will staff in the different utility departments be involved in implementing the marketing strategy and improving customer relations? (Refer to section 8.3 for references on improving customer services and relations.)

What human resource development programme is required to develop the capacities of utility staff and other stakeholders to successfully implement the marketing strategy?

**Processes**
- Are the key steps in the 'customer value chain' being followed?
- Can key processes be streamlined, particularly those involving existing and potential customers? Examples of such processes could include procedures for:
  
a) obtaining a new connection
  b) obtaining new service options offered
  c) disconnections and reconnections
  d) bill payment options and billing systems
  e) customer complaints and complaint redressal
  f) maintaining effective dialogue with community groups or small scale providers, where there is some form of shared management
  g) preventive and corrective maintenance
  h) updating utility asset and connection records

- Has sufficient data been collected for comprehensive investment planning?
- Can service delivery and interaction with customers be improved using approaches such as TQM (Total Quality Management).

**Presence**
When a utility is seeking to improve services and raise tariffs to move towards recovering all costs, it needs to develop trust amongst customers and other key stakeholders. One means of doing this is to improve its' corporate image and presence in the community. Some issues to consider in this regard are as follows:

- Should more local decentralized offices be provided in different parts of the city to make it easy for customers to make requests, enquiries and complaints?
- Should customer services offices be designed to be 'one-stop' offices so that customers do not need to go to a number of offices for different issues?

- How can a utility develop a better understanding with customers about what services the utility should provide and what are the customer's obligations? For example, should a customer charter be developed or improved?

- Can the utility's image and presence be enhanced by having a clear logo and utility name on vehicles, letter heads, uniforms etc?

Many of these issues need to be addressed in an integrated way and are discussed further in the next section on Customer Relations Management. Box 8.5 highlights some of the customer care initiatives introduced by Hyderabad Metro Water and Sanitation Board in India that have led to an enhancement in its' corporate image and presence, despite severe water resource problems in the city.

### Box 8.5. Hyderabad Metro Water Board's Customer Care Initiatives

There has been continuing improvement in Hyderabad Metro Water and Sanitation Board's customer care arrangements over a number of years, that have led to an enhancement in its corporate image, despite severe water resource problems in the city. Examples of customer care initiatives include:

a. Development of the Metro Customer Care Centre which includes:
   - phone hotline that can be dialled from anywhere in the city,
   - speedy complaint redressal with problems referred to the appropriate general manager,
   - integration and co-ordination with revenue and billing departments,
   - developing and distributing promotional material explaining the Merto Customer Care system,
   - informing the customer after suitable action is taken.

b. The creation of 'one stop' or 'single window' customer care centres so that all customer enquiries, complaints and requests can be dealt with at the same locations.

c. Sanctions of new connections within 15 days. What does sanctions mean in this context?

d. The development of a customer charter that explains; what services the utility should provide; what are its key procedures and what are the customer's obligations.

e. Encouraging rainwater harvesting measures for buildings, in order to recharge groundwater levels in the city.

f. Participation in joint utility computerised payment centres, where people can go along and pay a number of utility bills at the same time.

g. The utility has held regular consultation meetings, particularly in poorly served areas, to discuss issues such as piped water supply timings and the timing of the arrival of water tankers, in order to minimize inconvenience.

h. Slum residents are given the option of paying connection charges by instalments, and standposts are being converted to group connections (5 households).

In developing the marketing strategies through frameworks such as the 7 P's, it is important for a utility to create a competitive advantage within the target market segments, compared with alternative suppliers such as vendors or consumer organized options such as individual borewells.
8.3 Improved Customer Relations Management

**Developing CRM strategies**

Successful companies, including those in the water sector, have found that a key to success is having a clear customer focus and by striving to provide good quality services. In the urban water sector, good customer relations management has even more relevance in developing countries, than in richer countries, because there are more alternative water supply providers within their urban areas.

Paying attention to improved customer relations is particularly important where new areas are being served or new water service/payment options are being offered as part of a marketing approach. Unless these issues are dealt with comprehensively, there may be only limited take up of service options and the predicted revenues will not be forthcoming. Serving unplanned areas and poorer communities requires a utility to be more flexible in response to problems and preferences expressed by such consumer groups.

One of the major reasons why a water utility should improve its customer relations management is to increase customer satisfaction. Satisfied customers become more loyal to the water utility. The customer loyalty creates a 'ripple effect' in the utility's revenue collection. Figure 8.3 illustrates the power of existing satisfied customers and the positive feedback loop that it generates.

More satisfied customers also means that a greater willingness to sustain payment exists amongst those customers, which amounts to greater income potential for the utility. A win-win situation, satisfying both the needs of the utility and the demands of the customer, can then develop.

---

**Figure 8.3. The positive effect of customer satisfactions**

More satisfied customers attract more customers, through word of mouth, leading to increased business, higher revenue, and ultimately new customers who are satisfied.
In order to cultivate customer orientation within the organizational culture, senior management should take the lead, by demonstrating their involvement in terms of time, effort, commitment, persistence and visibility. Senior management should ensure that improvement of customer relations management is part of the corporate mission. The staff should be involved in the formulation of the mission statement and CRM strategy. Box 8.6 shows an example of a mission statement for a water utility where a customer-focused philosophy is being emphasized.

**Box 8.6. Durban Metro Water Department Mission Statement**

To provide a constant supply of water, and services related to provision of that water to the satisfaction of consumers in the Durban Metropolitan Area.

**PHILOSOPHIES**

- Good governance and honest administration is the foundation of Metro Water. Customer care is the cornerstone of our organization.
- We provide a service that is central to every household and therefore go to great lengths to solve problems speedily and effectively.
- Our staff members are central to our organization and it is our responsibility to train, motivate and challenge them, so that each realizes their full potential.
- We promote innovation by continually questioning what we do with a view to improving our service.


The CRM strategy should encompass all areas of the organization’s activities that impact on the customer, such as the following issues:

- Creation of a customer-focused organizational structure with a given level of delegation, responsiveness, and flexibility.
- Redesign of job descriptions that ensure customer satisfaction at the primary customer interface.
- Instituting customer-focused systems that rely, to a great extent, on the decision-making capacity of the staff at the primary customer interface.
- Taking advantage of advancements in information technology, for the benefit of improved customer relations.
- Simple, short and positively-worded operating procedures that are focused on the priorities.
- A staff recruitment system that recognizes individual differences in people’s skills and personality characteristics, and therefore be able to identify people who have a high customer service orientation.
- A system that recognizes and rewards staff based on their contribution to customer satisfaction.
- A staff development program geared towards improved customer relations management.
- Establishment of one-stop customer centres with a pleasant environment.
- Development of a communication strategy that encompasses a service orientation message into all organizational activities.
- Engendering the internal customer philosophy within the organization, to ensure that staff at each level are motivated and customer conscious.

Box 8.7 and Box 8.8 show examples of elements of CRM strategies undertaken by some water utilities.

**Box 8.7. Simplifying procedures in Chennai to improve CRM**

**CHENNAI METROPOLITAN WATER SUPPLY AND SEWERAGE BOARD**

**INTRODUCTION OF SIMPLIFIED PROCEDURE FOR OBTAINING WATER AND SEWER HOUSE SERVICE CONNECTIONS**

Through introduction of a free, simple two page water and sewer connection application forms in which the applicant himself [or herself] can calculate the charges to be paid (similar to Income Tax return), the entire complicated procedures were straightened and simplified. This exercise, although, resulted in a direct loss of Rs. 6 lakhs, it was decided to follow this procedure since it introduces greater transparency in operations and greatly simplifies the existing procedures.


**Box 8.8. Investing in technology in order to improve CRM**

NWSC, Uganda have introduced the ‘Custima’ system, a powerful computerized programme that streamlines customer billing.

Bangalore Water Supply and Sewerage Board (BWSSB), India, promotes its activities on the web (www.virtualbangalore.com).

Hyderabad Metro Water & Sewerage Board in India invested in modern technology to improve the speed of response to customer complaints in the Metro Customer Care (MCC) Centre.

RAND Water, South Africa, is preparing for involvement in management contracts with local authorities by adopting a more customer orientated approach. Investment in state of the art technology will link phones, voice mail, e-mail, faxes and the internet together, to provide residents with a single point of contact into the organization.

**The internal customer and interdepartmental collaboration**

The internal marketing concept holds that the employees are the first market of the organization. The main objective of the internal marketing function is to ensure motivated and customer conscious staff at each level (Ewing & Caruana, 1999). In internal marketing, staff are viewed as internal customers and jobs as internal products. Similarly, Kotler (1994) defined internal marketing as the task of successfully hiring, training, and motivating staff in order for them to serve external customers well. The quality of customer care delivered to external customers is often determined by the quality of service that internal customers, i.e. employees, provide each other.
If the quality of internal customer service is poor, the collaboration between various departments will be low. Research carried out in services management (Jaworski and Kohli, 1993; Slater and Narver, 1994) found that increased collaboration between various departments increased the level of customer service offered by an organization.

In a water utility, there is need for the following departments or sections to collaborate closely, in order for the staff at the primary customer interface to provide quality customer services:

- Customer relations and complaints
- Billing, collection and connection fees
- Meter reading
- Financial management
- Operation, and maintenance
- Major repairs
- New water and sewerage connections
- Illegal connections
- Water conservation, etc.

Achieving improvements in the management of the above utility functions, and the subsequent services provided to the customer, involves more than one department or section in a utility. Traditionally incremental improvements and cross-departmental collaboration is determined through referral to senior management. However this results in top heavy management. Those at the top invest more time on operational issues and less on strategic management. Increasingly in modern utilities, there is a greater emphasis on delegating more responsibilities and authority to lower levels and encouraging inter-departmental collaboration as part of a Total Quality Management (TQM) approach. Flatter styles of communication are preferred so that decisions can be made closer to the issue. Prevailing 'vertical hold' practices concerned with 'keeping the boss happy' are replaced by an emphasis on 'horizontal hold' that maximizes co-operation between different sections in an organization. This involves repeatedly asking two questions of employees from other departments:

- What can I do for you to improve customer services and services to the poor?
- What can you do for me to improve customer services and services to the poor?

Joint planning and implementation of viable solutions to these questions can then take place. This 'internal customer' approach requires more flexibility, good staff communication skills and effective planning; but it has demonstrated significant cost effective service improvements. Internal customers are therefore as valuable as external customers.

‘If the company doesn't care about me, why should I care about the customer?’
- Employee
The 'horizontal hold' concept is particularly relevant when dealing with services in poorer communities, where greater flexibility is required. It will not be practical to refer every decision up to senior management. This implies that authority to make decisions is delegated down to people in the utility who are interacting with community groups and other stakeholders.

**Customer charters**
A water utility should introduce a water charter that explains in simple language what the customers should expect from the utility, and what the utility expects in return. Typical aspects to be covered in the charter are:

- The objectives of the water authority
- The service and payment options offered by the utility
- A description of procedures for matters such as new connections, payment of bills, provision of meters and complaints
- The customer's obligations
- Details of any compensation entitlements for the affected customers, where the authority does not meet its obligations for certain aspects, including the associated procedures.

In developing a customer charter a utility should seek to be informative but it needs to feel confident that it can meet its commitments. By clearly describing the roles, obligations and entitlements of utility and customers in such a document and publicizing it widely, it offers a number of potential benefits:

- there is a reduced risk of misunderstandings and dissatisfaction arising
- the utility obligations can act as targets and motivating factors for their staff
- the relationship with the customer can become more of a 'beneficial exchange relationship' where mutual respect can develop.

It is worth consulting with key stakeholders such as customer representative committees, before finalizing the charter. For further information on improving customer services for water utilities refer to Coates S., Sansom K.R. and Kayaga S.M, *Customer relations management: Part A: Introduction for urban water and sewerage authorities in developing countries*, WELL paper, (task no. 514a), WEDC, 2001.

**8.4 Supporting service, payment and management options**
In order for the strategic marketing plans to take effect, the utility needs to institute systems that will support the various options of service, management and bill payment. The nature and extent of support mechanism depends on the type of options being offered to the consumers. There are however some basic systems that should be in place. The systems could be to support all the marketing systems, or to support service, payment or management options individually. Some typical examples are set out below:

**General Support**
1. A section of the utility should be designated the responsibility of customer satisfaction management by carrying out periodic research on customer satisfaction,
analysing the data, making recommendations, and evaluating the impact of improvements.

2. Services should be decentralized as much as possible. In big cities, zone offices should be set up in different locations, in order to provide services as close to the consumers as possible. The zones should have responsible officers who have delegated authority and responsibilities in their zones. This requires empowerment of the responsible officers. Different functions should be reflected at zone levels. This is particularly helpful for working in informal settlements.

3. A quality assurance system should be put in place to evaluate the level of service based on consumer surveys, and identify gaps for further improvement.

4. A community liaison section can be set up in the water utility to spearhead partnerships with different stakeholders for better service provision.

5. Standards and regulations may need to be amended to allow for more flexibility in service options.

6. The tariff structure should be reviewed by concerned authorities to enable pricing differentiation, depending on the different service levels.

7. Utilities should improve the office environment such as office location, space, accessibility, parking etc.

8. A training program should be instituted for all staff, specifically for those at the customer interface, in customer relations management.

9. Where resources allow, there should be a customer relations management (CRM) team that works on a 24-hour basis to provide customer care to consumers and manage the complaint monitoring system. The CRM should have computerised information systems preferably linked up with other major service units.

10. The water utility should put in place a technical emergency team to support the CRM team in handling complaints concerned with technical issues.

**Support for Service Options**
The same section responsible for customer satisfaction management should take responsibility of mapping out the appropriate market segmentation, in conjunction with other departments. In addition a selected team or working group can be established to look at service options that are suitable in the various market segments. This section should be responsible for identifying, piloting, developing, testing and commissioning the new or adapted service options, based on consumer surveys and demand assessment and ongoing dialogue with community groups.

**Support for Payment Options**
Some ideas for potential payment options are included in section 3.3. The basic aim of introducing payment options is to make it easier and more convenient for customers to pay, fitting in with their lifestyles, so that people pay more promptly and regularly. For middle and high income households, innovative payment options can be explored such as:

- At a bank
- By direct debit
At a payment point
At a post office
By post
At a building society
Telephone banking
Via the utility web-site
Or a Watercard
Joint utility internet payment centres

The selection of appropriate options for specific cities and towns will be dependent on trends in other sectors and available information technology support.

A well designed computerised billing management and payments has many advantages, including: speed, less staff required and instantaneous updates of payment records at customer service desks. It can be introduced through a local network system to all the zones. Box 8.9 illustrates a good example.

Box 8.9. Computer billing systems

Prior to the use of CUSTIMA in its billing database, National Water & Sewerage Corporation (NWSC) of Uganda used to experience many complaints from customers whose accounts were not being reconciled in time. This resulted into double-billing of the customers. Since the introduction of CUSTIMA software in the billing section, complaints have dramatically reduced, as the billing database is linked up with cash payment points, through computer local area networking.

Currently, NWSC is planning to extend the sphere of CUSTIMA software to customer relations management and network maintenance.

For lower income consumers, ideas for potential payment options should come from the problems and coping strategies that emerged from consumer surveys and focus group discussions. A common problem for people who work in the informal economy is they have very limited savings and their preference for paying for small amounts by containers, or they seek free water sources that may have questionable water quality. Potential options to assist people in these circumstances are:

- Group connections where people can develop their own payment mechanisms, such as one household pays the water bills and then on-sells water per container to their neighbours;
- Community managed water kiosks or regulated private kiosks that ensure kiosk water prices do not fluctuate too much;
- Local utility payment and customer service offices near to poorer communities, perhaps offering more flexible payment terms;
- Smart card prepayment systems that ensure people never spend more than they can afford;
• Offer gradual payment mechanisms for new connections;
• Allow people to contribute their labour to reduce costs for new connections.

Whatever potential options emerge it is important to maintain dialogue especially with poorer community representatives. It may be necessary to use NGOs or consultants to facilitate this process, or capable in-house staff. New options should be piloted in some areas to check for feasibility and the need to adapt the payment system before scaling up to larger areas.

Support for shared management options
Following the consumer surveys and discussions with various partners in stages 1 and 2, the best possibilities for developing shared management arrangements either with community groups or small scale providers should emerge. Examples of successful cases of such collaborations are given in section 4.4. Such arrangements are likely to be more beneficial in areas where the utility is not able to provide services in the short to medium term.

The water utility should provide a conducive environment for creating equitable partnerships in order to enhance such shared management arrangements. This is likely to entail having full time utility staff with good communication skills who can collaborate with the various partners such as CBOs and small scale provider associations. NGOs who are active in the city can play a useful role as facilitators in the process of partnership development. Training should be provided to utility staff on how best to communicate and collaborate with community groups.

Again piloting these approaches in a few areas is probably the best strategy, in order to learn lessons before any scaling up.

8.5 Utility institutional improvements

The utility will need to develop institutional development plans based on the areas for improvement identified in the stage 1 situation analysis. It will also need to consider what are the institutional requirements that are necessary to provide the target service levels for all market segments that are set out in the proposed investment/marketing plan. The plans should be comprehensive including all the key elements of institutional development (ID), that were mentioned in section 6.4 and are:

• Structural and Organizational Adjustment
• Agreeing roles, policies, objectives and performance targets
• Human Resource Management
• Management Development
• Systems and Procedures Development
• Physical and Financial Resources

It may be necessary to consider fundamental organizational changes such as providing the utility with more autonomy or using private operators, in order to achieve the proposed performance levels, particularly where there is a lack of flexibility to introduce
institutional changes in the utility. All the above key elements of ID need to be considered in any service improvement programme.

A sensible starting point is developing the right policies for serving poor areas. In Lusaka a policy document for serving peri-urban areas has been developed in response to national policy. The key components of that document are set out in Box 8.10.

---

**Box 8.10. Lusaka’s evolving policy on water and sanitation in peri-urban areas**

Lusaka Water and Sewerage Company (LWSC) have developed a document that sets out its policy on water and sanitation in peri-urban areas, settlements or 'compounds' which are categorized as low-income and having high density conditions. They were no doubt encouraged to do so by the agreement of the national strategy on the same subject. The stated rationale of the LWSC document is as follows:

"Due to the multiplicity of public and private agencies, as well as the presence of numerous donors and NGOs, co-ordination of water & sanitation services is required to derive the greatest benefits from limited budgets in an area where the challenges are very great. The LWSC is one of the major actors in this field, and it has therefore taken the initiative in preparing this document'.

The key areas covered by the document are set out below:

**Statutory legal responsibilities of LWSC** - including the provision of water & sewerage services in the area of jurisdiction of Lusaka city council and to exercise control over water sources

**The institutional framework** - including:

- the specified wards where peri-urban informal settlements are located
- agreed ToR for resident development committees (water committees)
- listing of the peri-urban areas and their legal status
- listing of the water and sanitation service providers in Lusaka
- summary of the roles that LWSC will undertake, including: O&M of water distribution up to the meters, collaboration with community groups, bulk supply of water to edge of some peri-urban areas, training of plumbers for community management of water distribution etc
- the roles of other institutions such as the city council who deal with sanitation aspects other than sewerage
- Options for service provision

---

In terms of an appropriate organizational culture, water utilities need to espouse customer orientation as the guiding business philosophy. Having evolved from a traditional civil service foundation, many water utilities in low and middle-income countries are still governed by a supply driven product/production orientation. Such water utilities therefore need to change their organizational culture. This requires senior management to champion pro-active change programmes, including the need for all employees to understand and commit to a customer focused service philosophy. Basically customer care should be built into all the tasks and actions undertaken in the water utility on a day to day basis. This can only be achieved through on-going awareness raising and the use of pro-customer business strategies. Refer to boxes 8.11 and 8.12 for examples of such strategies.
After analysing the existing situation in the organization, senior management should set corporate objectives centred on the need for change, which will bring about enhancement of customer orientation, on a continuous basis. The objectives should be SMART: **Specific, Measurable, Achievable, Realistic and Timely**. Having SMART targets will enable management and importantly employees to measure progress. It is advisable to map out short-, medium- and long-term objectives, which can be reviewed periodically.

**Box 8.11. Change management and customer orientation in NWSC, Uganda**

The National Water & Sewerage Corporation (NWSC), Uganda has instituted various internal change management programmes since 1999. The major objectives of these initiatives is to enhance service delivery in such a way that customers will be satisfied with the quality of services and therefore have a higher level of willingness-to-pay for the services provided.

In February 1999, NWSC instituted a programme code-named the “100-Days Programme”. This programme was closely followed by a one-year programme that sought to consolidate the achievements of the “100-Days Programme”, code-named “The Service and Revenue Enhancement Programme”, SEREP in short.

These programmes were carried out under normal budgetary provisions. However using the tool of performance management, change was spearheaded by three-tier staff committees in the areas of water production and sewerage services, water distribution services, revenue generation, customer care and cost reduction measures. Final evaluation of the programmes showed a substantial improvement in the general performance of NWSC.


Figure 8.4 contrasts a management orientated organization with customer orientated organization, where senior and middle management support front line staff in providing better services to customers.

For a water utility to carry out a strategic marketing process effectively, it needs to undergo further institutional changes as shown below:

1. Setting up an effective marketing information system to which all departments of the utility contribute and through which they share information with others. This process of sharing information will enhance departmental interconnectedness.
2. Setting up a human resource development policy that is geared towards enhancing customer relations management; e.g.

- recruitment of customer interface staff basing on their interpersonal skills and ability to deliver services
- continuous training programs for all staff in customer service
- induction of new staff in customer orientation philosophy
- basing rewards/disincentives criteria on customer service enhancement
3. Setting up a section in the utility that handles issues concerned with supply of water services to low-income communities, but has good collaboration with other departments. An example of such a unit has been established in Lusaka, refer to box 8.13.

Box 8.13. Establishment of a peri-urban unit in Lusaka

The Lusaka Water and Sewerage Company (LWSC) is a water company wholly owned by Lusaka City Council. In addition to the general mandate of supply water and sanitation services to residents of Lusaka, LWSC is specifically charged with supplying water to all peri-urban areas of Lusaka. To achieve its objective, LWSC has developed a peri-urban unit for serving the poor, headed by a senior manager. This unit collaborates with other stakeholders such as NGOs, in the provision of water services in the peri-urban areas.


As a utility considers plans for institutional improvement it is useful to form and develop working groups from different departments (with the aid of consultants where appropriate). These groups can then develop or commission a number of proposals addressing key areas for improvement that are identified in the situation analysis. The proposals need to be costed then assessed and prioritized before moving to the implementation phase. Note the projected costs for institutional improvements need to be incorporated in to strategic marketing/investment plans, to ensure sufficient funds are provided for these important aspects.

It is generally better to pilot new approaches or systems before scaling up across the utility. This enables staff in the organization, as well as its partners, to learn lessons from the pilots so that they can proceed more confidently in utility wide improvements.


8.6 Evaluation of benefits and risks

Evaluation of Financial Benefits

Benefits from improved service coverage can broadly be classified into two main categories: financial benefits, and economic benefits. The financial benefits from carrying out a strategic marketing planning include improved profitability. The role of Strategic Marketing Plan can be illustrated using a flow diagram, as shown in Figure 8.5.

The financial viability of the strategic marketing plan can best be quantitatively assessed using a financial benefit cost analysis, adopted from the Asian Development Bank, as follows:

Project Revenues

Determine annual water sales revenue on a with-project and without-project basis. This could be categorized according to the different groups of users. The with-project sales should take into consideration revenues from the projected network expansion, at
suggested tariff rates. The project revenues are the difference between revenue for the with-project and the without-project sales. These revenues should be worked out over the project period at the prevailing discount rate.

**Project Costs**
The project costs are worked out by computing the difference between the without-project costs and the with-project costs of the following items on a discounted basis:

- Real investments to cater for both foreign and local costs
- Operation and Maintenance; future O & M costs could be estimated based on the historical costs as a percentage of investment costs, or as related to the volume of water produced and/or distributed. Elements of O & M may include labour, electricity, chemicals, materials, overhead costs, raw water charges, insurance etc.
- Reinvestments, i.e. to cater for need for replacement of different investment assets, at different times of the project cycle, depending on the lifetimes.
- Residual values of the project assets at the end of the project life.
Net Financial Benefits

The Project Net Benefit is the difference between the project revenues and the project costs, and is sometimes referred to as Net Cash Flow. For further details on how to obtain the Financial Internal Rate of Return, refer to the Handbook for the Economic Analysis of Water Supply Projects, published by Asian Development Bank, (1999) which is available online at URL: http://www.adb.org/publications/online/water/.

Assessment of Risks

The strategic marketing plan is based on forecasts of quantifiable variables such as demand, costs, water availability, institutional capacity, and an enabling macro-environment. The values of variables in the strategic marketing plan are estimated based on the most probable forecasts that cover a long period of time. However, a great number of factors may act to influence the outcome scenario. Risk assessment is a management tool that is used to make informed decisions about the magnitude of the risks involved, which would, if need be, lead to risk management. Figure 8.6. is a framework of steps leading to risk management.

![Figure 8.6. Steps leading to risk management](image)

Risk assessment using a framework shown in Figure 8.6. would lead to a qualitative estimation of risks into one of the categories shown in Table 8.1.

<table>
<thead>
<tr>
<th>Probability</th>
<th>Magnitude of Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Severe</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Low</td>
<td>High/medium</td>
</tr>
<tr>
<td>Negligible</td>
<td>High/medium/low</td>
</tr>
</tbody>
</table>


The variables that are considered important for consideration in risk analysis are categorized as follows:

- **Management risks.** These risks include resistance to organizational cultural change to embrace a marketing orientation; non-supportive organizational structure; inadequate technical and financial management capacity to manage the strategic marketing planning project; over-ambitious and inflexible project planning; absence of incentives for satisfactory performance; etc.

- **Financing risks,** such as failure to re-schedule loan repayment, leading to failure to liberate funds to carry out investments early in the project life.

- **Social risks,** such as low level of embracing the project and poor participation by different market segments.

- **Economic risks,** such as low economic growth; deflated income levels of consumers; high inflation rates etc.

- **Political risks;** such as political instability; delay in legislation procedures; adverse changes in legal status of the utility.

- **Construction risks,** such as delays in construction periods.

- **Environmental risks,** such as increased pollution rates of the raw water source, leading to higher production costs; drying up of raw water sources.

- **Other risks** that generally apply to institutional strengthening projects.

During the implementation of the programme, specific risks should be identified, and mitigation measures taken to reduce the extent of uncertainty surrounding these variables, wherever possible. This may require remedial action at the corporate, sector or national level. The following are some of the measures that could be taken to mitigate risks (DFID Technical Note No. 12, pp 15-16, available at http://152.60.200.132/vs3_intranet/procedures/TN12.htm):
• Use of trials and pilot projects to test alternative approaches on a small scale before adopting them into full-scale projects.

• Use of a process approach to finding the optimum route to project implementation.

• Clear specification of objectives and of success criteria.

• Identification and assessment of all project 'stakeholders' with respect to their interests, motives, incentives, and abilities to make the project succeed or fail.

• Transferring responsibility for handling risky outcomes to agents with the greatest risk-bearing capacity.

• Building in the project design performance measures and incentives - relying where possible on market incentives - to achieve project objectives.

• Ensuring that all agents concerned with the project are thoroughly informed about the objectives and their role in fulfilling them.

8.7 PPP options and serving the poor

Many people would argue that the private sector are best placed to implement the required commercial and customer orientated approaches because they have the required autonomy, flexibility and incentives to improve services, provided the PPP contracts are well designed. But if public sector organizations are given sufficient autonomy and flexibility to manage with appropriate tariffs, there is no reason why they cannot make substantial improvements to services to all consumer groups, as many public utilities have done throughout the world.

For those organizations contemplating private sector participation, they can refer to the World Bank 'Toolkits for Private Sector Participation in Water and Sanitation', 1997, which provides comprehensive guidance on the range of PSP contracts. For those utilities or municipalities contemplating smaller Service and Management contracts, the 'Contracting Out Water and Sanitation Services - Guidance Notes for Service and Management Contracts in Developing Countries, by Sansom, K.R., Franceys, R., Njiru, C. and Morales-Reyes, J., 2003 provides practical information on contract development and monitoring.

There are four key areas where serving the poor through PPP contracts can be addressed (Brocklehurst and Evans, WSP-SA, 2001):

1. Pay attention to process

Consultations with the poor and their representatives can be carried out to find out their preferences for service options and other aspects of the services. NGOs and CBOs who work with these groups can be useful partners in data collection, or in some cases they can represent the views of communities.

2. Get the policy environment right

Translating government policies on serving the poor into practice requires careful policy development amending regulations where appropriate. For example dealing with issues such as flexible design standards, fair tariff policies and land tenure issues.
3. Use the contract

General targets for aspects such as increases in coverage or connections are not usually helpful, as reasons can always be found by the operator for not to include hard to reach areas. Targets for improved service levels based on geographical areas in places where many poor people live in well defined areas, can be more successful.

4. Establish robust regulatory structures that are pro-poor

Regulation can be pro-poor through such measures as not allowing private operators exclusive rights to provide water services to particular areas. Small scale providers can therefore continue to provide services to poorly served areas. Operators can also be encouraged to offer different service options in poor areas such as water kiosks, group connections and yard connections. Encouraging city-wide consultation forums can also deal with problems that arise for all consumer groups.

Selecting appropriate indicators for serving the poor is key to good performance measurement and regulation of PPP contracts. 'It is important to link incentive payments to the achievement of targets related to the provision of services to the poor, for lease and concession contracts (WSP and PPIAF, 2002). Specific 'serving the poor' indicators that could be used for incentive and penalty payments in comprehensive contracts such as lease and concession contracts could include:

- Increase in the number (or percentage) of active (in-house, yard and kiosk) connections in defined low income areas.
- Increase in the percentage of water sales in defined low income areas.

Unless the indicators relate to specific service levels in defined low-income areas, then it will be difficult to hold the operator accountable for service improvements. The use of such indicators does of course need to be backed up by appropriate investments and obligations in the contract for the operator. The broad aim for serving the poor should be to ensure that there are sufficient incentives in the contract for the operator to substantially improve services in informal settlements.

Refer to Table 8.2 for an example format of water supply frequency using market segments based on type of building.

The disparity in service levels between the different consumer groups is apparent from the above table. Such information can be used as a baseline for monitoring improvements in poorer areas. It is also beneficial to collect and present data by geographical area, although care is needed because there can be substantially different experiences in water services within the same area. Using such information for regulation would require regular independent consumer surveys as part of comprehensive performance measurement, which is discussed in section 6.4.

Specific guidance on how to improve service to poor communities through PPP contracts is given in the Water and Sanitation Program (WSP) and PPIAF, (2002) New Designs for Water and Sanitation Transactions - Making Private Sector Participation Work for the Poor, WSP, Washington D.C., USA. A series of publications on 'PPP and the Poor' that are edited by M.Sohail are available on the WEDC web-site.
8.8 Strategic marketing or investment plans

The strategic marketing plans (SMPs) or investment plans should summarize the key aspects of data collected, analysis and proposals derived from the 3 stages described in chapters 6, 7 and 8. The precise structure of the document will depend on the main areas for improvement being proposed and the requirements of potential financiers. Example draft strategic marketing plans and summaries for Mombasa, Kampala and Guntur, which were developed as part of the research programme, are provided on the WEDC web-site.

In order to benefit from the ideas and experience of key stakeholders including staff, it is beneficial to ensure that there has been adequate consultation in developing an SMP. This has the added benefit of generating more commitment for the proposals, even if it takes longer to reach agreement. It is also important that SMPs or investment plans are drafted and structured in a way that present a convincing argument for support from potential financiers.

8.9 Ensuring success

A variety of suggested frameworks, processes and principles are included in this document to aid planning for sustainable water services for all consumer groups. But utility staff and partners need to try new ideas and approaches that make sense to them, learning lessons from their own experience and elsewhere.

Adopting new approaches to serve poor areas and incorporating marketing approaches into all aspects of a utility's activities takes time, effort and good leadership, in order to overcome people's reluctance to change. Staff invariably need to experiment with new approaches before they consider them valid, adapting them to suite the local situation. This process is illustrated in Figure 8.7 and emphasizes the need to plan for sufficient time and support, so that this learning process can take place.
Staff will not always have the requisite knowledge and skills but if they have appropriate attitudes then much can be done. Examples of helpful staff attitudes include:

- A commitment to continuous improvement
- A willingness to adopt more commercial and consumer orientated approaches
- A willingness to learn from their own experiences and elsewhere
- A willingness to work in or for informal settlements
- A willingness to work productively with people from other disciplines and organizations
- A willingness to think broadly linking technical, financial, social and institutional issues.

For more information on implementing new approaches and improvement in services, refer to good publications on marketing, change management, human resources management, total quality management (TQM) and other conventional business manuals. This publication can assist in translating appropriate ideas both to the urban water sector and to the local situation in low and middle-income countries.