



RESEARCH NOTE

Effective Strategic Planning for Urban Sanitation Services

Fundamentals of good practice

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photo: Faisalabad Area Upgrading Project

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Preface

This note is one of the outputs of a research project funded by the UK Government Department for International Development (DFID), as part of its Engineering Knowledge and Research (KaR) programme entitled 'Institutionalisation of Strategic Sanitation Practice (R7387)'. The findings were also based on a previous DFID-funded research project entitled 'Practical Development of Strategic Sanitation Concepts (R6875)'. The research centred on South Asia, in particular India, but the findings have a wider relevance.

DFID's KaR programme aims to contribute to the objectives of DFID by providing technical, managerial and policy solutions to issues in the infrastructure and urban development fields in developing countries. DFID aims to encourage the development of innovative and appropriate ideas relating to the water sector and identify and address key requirements for knowledge related to water resources and sanitation issues.

The purpose of the research is to explore options for institutionalising strategic approaches to sanitation provision in urban areas, building on previous research into the practical development of strategic sanitation concepts. The recommendations in this note are based on the research findings which explored the practical application of the Water and Sanitation Program's Strategic Sanitation Approach (SSA) as described by Wright (1997). The principles of the SSA are discussed in detail by Saywell and Cotton (1998) in relation to examples where SSA ideas have been applied in practice.

While the research confirmed the validity of many of the SSA's principle, this note highlights the importance of developing a strategic approach in all aspects of urban infrastructure planning and management. In particular, there is a lack of a planning culture within traditional urban administration systems, and many projects fail to respond to the existing situation and do not take into account the available resources of locally-based initiatives.

Acknowledgements

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1

Introduction

1.1 Subject and scope

Many rapidly growing towns and cities throughout the developing world face chronic sanitation problems. This note analyses and proposes a strategic approach to deal with these problems and it emphasises the need to be concerned with services, rather than facilities alone. This approach is evident from the definition of 'sanitation' used - covering excreta disposal, sullage and stormwater drainage and solid waste management.

The term 'strategic' is discussed in detail in Section 3, but in essence it is about achieving urban sanitation plans that lead to changes at the level of a city as a whole rather than to create isolated pockets of good practice. Also, a strategy should be concerned with the way in which a desired outcome is to be achieved as much as with the outcome itself .

1.2 Target audience

The note is aimed at decision-makers at international, national, state/provincial and municipal levels, some of whom will be concerned mainly with sanitation, while for others, sanitation will be one concern among many.

Sanitation is just one of the issues that vie for the attention of politicians and other decision-makers. The aim is to convince them of the benefits of a strategic approach to sanitation planning which takes into account constraints, available resources and recognises the information relevant to decision-making.

1.3 Structure of the note

Section 2 provides brief statements of the problems to be addressed, the reasons why these problems are important and the inadequacy of existing responses to those problems.

Section 3 starts with an explanation of what we mean by strategic planning and continues with an exploration of the factors that determine whether or not a strategy will be effective in meeting its objectives.

Section 4 is concerned with the application of a strategic approach in individual towns and cities, drawing on the experience of implementing a pilot strategic planning process in Bharatpur, a town in Rajasthan, India with a population of approximately a quarter of a million people.

Section 5 explores the ways in which a more supportive policy context can be achieved to promote an effective enabling environment to promote strategic initiatives in towns and cities.

2

Urban Sanitation - a problem that matters

2.1 The problem

Rapid urbanisation is occurring throughout the developing world, creating a demand for housing, infrastructure and services. Sanitation services present a particular problem, especially in the informal areas – those built outside formal rules and regulations - in which most poor people live and work. The World Bank estimates that almost 26% of the global urban population, over 400 million people, lack access to the simplest latrines (World Bank 2000).

At the same time, many low-income settlements lack adequate drainage and solid waste collection services. This lack of services, serious as it is, represents only one aspect of the challenge faced by policy makers and practitioners. A combination of poor planning and design, poor operation and inadequate maintenance means that the services that do exist are often of poor quality. Local sanitation problems are often solved at the expense of the wider environment as untreated urban wastes pollute groundwater and surface waters (see Figure 1).



photo: GHK

Figure 1.

Investments in household sanitation often fail to improve environmental health conditions

Unfortunately, acceptance that sanitation is important does not necessarily lead to improved services. Despite investments in sanitation, the number of urban dwellers with inadequate sanitation is actually increasing.

2.2 Why is sanitation important?

Several answers to this question are suggested below:

Health. Good sanitation is a prerequisite for healthy cities, protecting people from a range of excreta-related diseases, likely to be chronic in some areas and have the potential to reach epidemic proportions in the absence of adequate arrangements for household waste disposal. The health risks of poor sanitation are likely to be higher in densely populated low-income urban areas (See Figure 2).

Convenience and privacy. People living in unserved or poorly served areas are likely to value the increased convenience and privacy associated with improved sanitation. Women in particular, are likely to value access to private toilet facilities close to their homes at any time of the day.

Livelihoods. Healthy people are stronger and less likely to be absent from work because of sickness, and therefore benefit from increased earnings and reduced expenditure on health care.



Figure 2

Children are at high risk where sanitation facilities are inadequate.

They are especially prone to illness and diseases associated with poor sanitation as they often play in streets where there is a lack of adequate drainage of polluted wastewater.

photo: GHK

The environment. Discharge of untreated excreta into the environment causes widespread pollution. A failure to develop effective solutions to excreta disposal stores up massive environmental problems for the future which, once started, are difficult and expensive to reverse.

The economy. The positive impacts of improved sanitation on individual livelihoods and the environment are likely to feed through to the wider economy.

Equity. Disparities in health and cleanliness are widely acknowledged as a critical measure of inequality.

2.3 Alternative approaches to sanitation provision and their limitations

In the past, efforts to improve sanitation have tended to focus on ambitious master plans which require large investments in trunk sewerage, stormwater drainage systems and equipment for solid waste collection and disposal. These master plans have paid insufficient attention to financial and institutional constraints, and have tended to ignore what sanitation users actually want and what they are willing and able to pay for. As a result, 'official' facilities and services extend only to the rich, leaving the poor to provide for their sanitation needs in a piecemeal and generally unsatisfactory manner. Formal efforts to improve infrastructure services in low-income areas have often been one-off projects, which have had no significant impact on mainstream practice. Both master plans and area-specific projects have focused on new facilities, paying little attention to their subsequent operation and maintenance and to the need for and scope of upgrading schemes that are less disruptive .

As described by McGranahan *et al* (2001), different groups have responded to this situation in different ways. Those who advocate a **market-based approach** argue that since people are consumers of sanitation services, the market should be able to provide them with the services that they want at a price that they are willing to pay. Others advocate a **collective action model**, in which improved facilities are provided through the efforts of voluntary associations.

Both these approaches reduce the direct burden on the state and hence allow limited resources to go further. However, both also have their limitations, insofar as they assume that sanitation is a private or at best a communal good, ignoring the fact that individual households and communities can solve their immediate sanitation problems at the expense of their neighbours and the environment as a whole. This means that exclusive reliance on the market and the efforts of individuals and communities inevitably leads to piecemeal initiatives that cannot solve the sanitation problems of rapidly expanding cities.

This brief review suggests that no single approach to sanitation provision, whether it is based on planning, the market or local collective action, can tackle all aspects of those problems. The issue is not which is the best model but rather how to combine planning, engagement with the market and local initiatives into strategies that take what is best from all three.

Good practice derived in this manner needs to be repeated and absorbed into the operations of mainstream government agencies. In other words, positive lessons must be *institutionalised*, so that the approach they embody becomes normal practice rather than an occasional occurrence.

3

A Strategic Approach to Sanitation Planning

3.1 What we mean by strategic planning

To avoid confusion when we talk about strategic planning, it is useful to define what we mean by the terms 'strategic' and 'planning'. A *strategy* may be defined as *a systematic way of tackling a problem or working towards an objective* (Kneeland, 1999). The term is equally relevant to a 'high level' task such as deciding to involve the private sector in aspects of infrastructure provision and a relatively 'low level' task such as planning for improved sanitation and drainage in a local neighbourhood.

In essence, to plan is to think ahead about a problem and the way in which it is to be tackled. Therefore, a strategic plan should look ahead to considering a range of actions to achieve overall goals in accordance with relevant policies. Equally important are the ways in which goals and the actions are designed.

Cities are complex and changing entities and many decisions regarding development issues have to be made on the basis of incomplete information. In such circumstances, a 'blueprint' approach in which all aspects of the actions that are to be undertaken and objectives that are to be achieved are set out from the beginning will almost certainly fail. Rather, the need is for a flexible approach, which allows plans to be adapted to suit changing circumstances and the availability of improved information. Rondinelli (1993) suggests that strategic planning in such circumstances should '*start with what is known and attempt to broaden the base of knowledge and to formulate alternative interventions that will set other changes in motion*'. He contrasts this approach with attempts to bring about sweeping and comprehensive reforms, the effectiveness of which cannot be predicted.

This 'adaptive' approach to strategic planning underlies the thinking set out in this note. Acceptance of it leads to recognition that longer-term actions and programmes will usually have to be modified in the light of the experience gained from their shorter-term counterparts. Acceptance of the approach also has implications for thinking about where strategic processes can be initiated and who should be responsible for them. In contrast to 'blueprint' plans, which are invariably prepared by professionals on behalf of government, adaptive planning processes to build on experience from a variety of sources. While senior public officials are likely to be involved in developing strategic plans, effective strategies require involvement by non-government stakeholders who often have better links with communities.

3.2 Three questions that provide the framework for strategic planning

Three basic questions define the framework for strategic planning:

- What is the current situation or *where are we now?*
- What are the objectives of the planning process or *where do we want to go?*
- What options are available for moving from the first to the second or *how do we get from here to there?*

Where are we now? (Grounding plans in the current situation)

To be grounded in the existing situation, a sanitation plan or programme must:

- *Take account of what already exists*, recognising that existing facilities, including those provided by individual householders, community groups and the private sector, represent a considerable investment
- *Respond to actual problems and deficiencies*, recognising that sanitation problems are as likely to stem from management deficiencies, inadequate operation and maintenance and poor coordination between stakeholders as from an absolute lack of facilities.
- *Take account of the ways in which people think* and institutions operate. (Carley *et al* 2001).

Where do we want to go?

This question can be answered at several levels, depending on how we define objectives. At the most basic level, it is useful to develop a shared vision of the future sanitation situation in the town or city as a whole. This vision should ensure that sanitation services are:

- *Equitable* in that it is concerned with the needs of all, including the urban poor;
- *Environmentally acceptable* in that solutions to local problems do not cause deterioration of the wider environment or use resources that cannot be replaced;
- *Operationally sustainable* in that they continue to address needs over time, focusing on their subsequent operation and maintenance requirements.

There may sometimes have to be short-term trade-offs between solutions to people's more immediate needs and a concern with the environment as a whole. However, sanitation planners should be aware of these trade-offs and look for solutions to problems that minimise adverse environmental impacts.

While a vision provides guidance on the general direction to be taken, it does not define verifiable objectives and indeed may say little about the forms those objectives might take. These more concrete goals will normally be difficult to define at the beginning of the planning process, particularly when information is limited. This is not necessarily a problem, provided that the strategy has an explicit commitment to define them over time.

Also, each situation should determine exactly how wide-ranging or limited goals should be. There are likely to be situations in which resource limitations mean that change at the level of the city as a whole will be unattainable. In other situations, it may be that an individual or group has a strategic vision but no remit to work beyond a particular locality. In both of these situations, immediate objectives may need to be defined in relation to a particular area, but it will be important to ensure that the approach adopted can be scaled up to cover other similar areas at a later date.

Getting from here to there – how to move towards objectives

If a strategy is essentially a way of tackling a problem, what makes for a successful strategic plan? The answer to this question has two aspects. The first concerns the process to be followed to arrive at a strategic plan and the second is about the principles that underlie the plan.

Strategic plans need to be flexible and adaptable, with later interventions influenced by the outcomes of earlier activities. This suggests the need for a stepwise approach to setting, refining and working towards objectives. Early activities provide opportunities to gain an improved understanding of problems and possibilities, allowing intermediate objectives to be defined and/or refined.

As the process develops, the overall vision can be developed into a more concrete set of goals. Even after the individual components of the strategic plan have been decided, there will be a need to review longer term actions and objectives in the light of the experience gained as the plan unfolds. The practical implications of this adaptive approach will be set out in more detail in Section 4.

The problem with this adaptive approach is that it will sometimes be difficult to determine whether a particular action will take us where we want to go. To overcome this problem, it is necessary to identify the fundamental principles that must be respected if efforts to improve sanitation services are to achieve overall objectives and thus be truly strategic in nature.

3.3 Principles for effective strategic planning

Principle 1 Respond to informed demand

Recent thinking on service provision stresses that infrastructure schemes must respond to user demand by providing what potential users want and are willing to pay for. This 'demand-responsive' approach has replaced the old emphasis on supplying what professionals think is good for users, regardless of whether the users want what is supplied or are willing to pay for it.

While clearly an improvement on the old supply driven approach, the pure demand-responsive approach is also deficient in a number of respects:

- It is based on what intended service users know, possibly limiting scope for change and innovation through new approaches.
- It ignores the fact that service users are likely to be concerned only with their immediate surroundings, so that demand for local improvements may be at the expense of the wider environment.

- In equating demand with willingness to pay, it perhaps overlooks the fact that the main problem may be either that sanitation providers are unwilling to charge users for the full cost of services, or that poor people are unable to pay for the full cost of the services.
- It fails to pay sufficient attention to the capacity of service deliverers to respond to demand. This is a particularly important point where existing service delivery systems are weak.

Therefore, a strategic approach to service provision must consider both supply and demand. It must first *establish* demand for improved services, then *inform* it, in terms of what is possible and what is needed to bring about real change, and finally *respond* to the informed demand in an effective way. The last will often require capacity building, together with efforts to convince government officials and politicians of the need to recover costs from service users.

Principle 2 Focus on sound finances

Expansion of sanitation systems will not be possible unless an institution or group of individuals, preferably the intended users, is willing to pay for the new facilities required. Even when facilities have been provided, they will fail sooner or later unless funds are available to cover their ongoing operation and maintenance costs. So, it will be impossible to first provide and then sustain services to cities as a whole unless the finances of those who are responsible for providing and managing them are sound.

Progress towards achieving sound finances can be made by increasing the amount that sanitation users pay for services. However, in low-income areas where people have limited ability to pay for services, it is equally important to consider the ways in which the cost of sanitation services can be reduced.

Options in this respect include:

- *Choose an affordable technology.* In many situations, on-plot or local sanitation facilities will be a lot cheaper to build and operate than centralised sewerage. Experience in Africa has revealed that not all on-plot facilities are equally affordable. For instance, VIP latrines can appear to be an unaffordable luxury to those on low incomes. The experience in Mozambique with pre-cast slabs for simple pit latrines shows that other, more affordable, options can be found (Saywell and Hunt 1999).
- *Select an appropriate level of service.* Urban services need only satisfy the level of service that is appropriate to communities' need and relates to their willingness-to-pay for the service. For instance, stormwater drainage systems need not be sized to drain the largest flood events and may be designed for a six month rather than a ten year return period storm.
- *Select design standards in the light of the local situation.* Design standards should be developed in relation to the function that the facility is intended to perform. For instance, shallow sewers with inspection chambers rather than manholes may be appropriate in areas with narrow access ways that do not carry heavy traffic (See Figure 3).

- *Improve management efficiency.* This may be achieved by encouraging the involvement of private sector and/or civil society organisations in aspects of sanitation provision, thus reducing costs and helping to make services more affordable. Involvement of civil society organisations and local entrepreneurs is likely to be particularly appropriate for local services and we will return to this issue shortly when we consider the options for devolving responsibility for such services.



photo: Paul Dean

Figure 3

Pipe testing for the development of appropriate standards for sewers

Figure 3 shows the testing of the strength of sewer pipes which was used as the basis for the development of recommended standards for the pipes used in community-built sewers financed under the DFID funded Faisalabad Area Upgrading Project.

When setting intermediate objectives, actions appropriate in the local situation need to be considered. The need will usually be for integrated action involving a variety of initiatives. For instance, increased tariffs will tend to exclude the poorest and so there may be a need to explore other ways in which they can be provided with an adequate yet sustainable service.

Principle 3 Develop incentives for good practice

Incentives help to ensure that individuals and organisations act in a way that ensures the ongoing availability of functioning sanitation services. Incentives can take the form of:

- *Rewards for beneficial actions* - for instance, increased funding for municipalities that succeed in implementing effective sanitation programmes and promoting government officials who carry out their duties efficiently and effectively;
- *Sanctions against harmful actions and/or failure to respond to policy* - for instance, a ban, supported by fines, on the use of untreated sewage to irrigate crops.

Incentives will only be effective if there are clear *rules* for implementing them and *referees* to ensure the rules are enforced. Referees, in the form of regulatory bodies, will be particularly important when the private sector is given a large role in sanitation provision. At the local level, informed and organised users may be the best guarantors of effective services.

Incentives can and should be applied at the local level. However, incentive structures are often decided at the 'centre' by higher levels of government and so the development of incentives for strategic planning and action should be viewed as an essential facet of the development of a supportive context. We will return to this issue in Section 5.

Principle 4 Involve stakeholders in appropriate ways

Stakeholders are people, groups and organisations with an interest in some particular subject, in this case sanitation. *Primary stakeholders* will either benefit directly from or be adversely affected by proposed sanitation improvements. *Secondary stakeholders* include all others who may be involved in developing the policy context for sanitation provision, delivering services and acting as intermediaries between service users and service providers. Some aspects of service delivery at the local level may be the responsibility of primary stakeholders and the organisations that represent them.

There are two aspects to stakeholder involvement in sanitation provision. The first relates to the planning process itself. Different stakeholder groups possess different types of knowledge but all can contribute in some way to the planning process (see Figure 4).



photo: GHK

Figure 4

Participatory planning with community members in Faisalabad, Pakistan

The key to successful involvement in planning lies in ensuring that the various stakeholders are involved in ways that are appropriate to their interests and capabilities. For example, members of a particular community are more likely to be interested in discussing options for primary (local) solid waste collection services to their area than they are in the location of the municipal landfill (unless of course the latter is close to where they live).

The second aspect relates to the fact that responsibilities for sanitation provision can be 'unbundled' (divided and devolved) with different stakeholders taking responsibility for services in different areas (horizontal unbundling) and/or at different levels in the service hierarchy (vertical unbundling).

It will be important to match responsibilities to interests and abilities. In practice, this will usually mean the following:

- *Government* will usually have statutory responsibility for sanitation planning and provision and therefore plays an important role in sanitation planning and provision.
- *Community groups and organisations* may take responsibility for providing and managing local services, sometimes with support from *non-government organisations* (see Figure 5). The direct interest of community groups in the functioning of services means that they may carry out these tasks more effectively than would a remote government department. When they pay for services directly, they reduce the financial burden on government departments with limited financial resources, allowing them to focus their efforts on higher-level infrastructure, thus ensuring a more effective use of limited resources. If they are organised

and informed, they play an important role in lobbying for better services and ensuring that service providers fulfil their obligations.

- The *private sector* may take over responsibility for networked services such as sewerage and can also be involved in sanitation provision at the local level. Like the involvement of civil society organisations, private sector participation (PSP) can help to remove resource constraints by providing access to capital and skills that are not available within government. It can also *increase efficiency and cost effectiveness* - because private sector organisations are not subject to the rigid rules that often bind government departments .



Figure 5

Communal toilet facilities in Pune, India

Figure 5 shows a communal toilet block in Pune, India managed by an NGO (Sulabh International). This approach towards provision of urban sanitation services has been replicated and a number of other NGOs have adopted a similar approach. Some of these place greater emphasis on handing over the responsibility for operation and maintenance to the community themselves.

These benefits do not accrue automatically. The possible contribution of civil society and private sector organisations to sanitation provision should therefore be assessed in the light of the local situation. It cannot be assumed that the only potential partners are large multi-national companies. Small to medium scale initiatives, based on partnerships with local companies may be the best way forward .

Unbundling is not something entirely new and it is quite likely that many individuals and groups are already involved in sanitation provision, albeit in some cases informally. The challenge for planners will often be to integrate this informal activity into the mainstream. This will require:

- Recognition of the validity of the efforts of different stakeholders;
- Agreement on roles and responsibilities;
- Changes in legislation and procedures as necessary to formally recognise the agreed roles and responsibilities.

The first will often require major changes in attitude on the part of government officials. There is rarely an easy way of achieving this, although the current emphasis on participatory planning approaches may help to change the climate of opinion. The argument that devolving

responsibilities allows limited government resources to go further may help to convince doubtful officials of the need to integrate stakeholder efforts into strategic plans.

Analysis of the current situation will often reveal poor coordination between the various stakeholders. This is a major issue, full consideration of which is beyond the scope of this note although a possible structure for coordinating the development of a strategic plan is suggested in Section 4. For the moment, the important point to recognise is that, where there is already a de-facto division of responsibilities for sanitation provision, efforts to unbundle stakeholder responsibilities must, at the very least, be matched by efforts to improve coordination between the different stakeholders.

Principle 5 Take a wide view of sanitation

Sanitation strategies should look beyond local solutions to narrowly defined problems to recognise the links between different sanitation services. Excreta disposal, solid waste management and drainage are inter-related (see Figure 6) and the impact of improvements in one will be reduced if carried out without regard to the others. For instance, plans to replace drains with sewers must take account of the fact that existing drains may have a dual role as carriers of both foul and storm water. Uncollected solid waste tends to find its way to drains and sewers, greatly increasing maintenance requirements (see Figure 7). Some excreta disposal methods (for instance pit latrines) may require separate provision for sillage disposal.

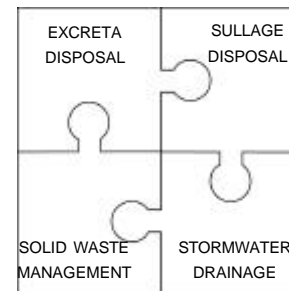


Figure 6

An integrated approach to sanitation

Figure 6 illustrates the linkages between different sanitation-related services and the need to take an integrated approach toward the provision of sanitation services. When developing plans for sanitation improvements, options that the local situation offers for integrated action ought to be explored.

Taking a wide view also implies the need to go beyond local solutions to local problems to consider the wider environmental impacts of proposed initiatives and activities. Where sanitation services at the household level are poor, the first priority of householders will normally be to remove excreta and wastewater from the living area. However, the potential of technologies to have wider environmental impacts should not be ignored. Preference should be give to approaches that achieve local objectives with the minimum possible impact on the wider environment.



photo: GHK

Figure 7

Solid waste blocks drainage system in Kathmandu

Poor management of solid waste blocks drains which can cause flooding of faecally polluted water during the rainy season.

- help to change systems and develop resources in a way that enables more ambitious follow-on steps to be taken in the future.

Keeping these requirements in mind will help to ensure that intermediate objectives are meaningful in the context of the overall strategy.

Principle 6 Take manageable steps towards intermediate objectives

This last principle is derived directly from the incremental approach to the development and implementation of strategies suggested in Section 3.2. Achieving goals of improved sanitation through a small steps approach often provides a more practical way to achieve smaller goals realistically as one builds up to the desired situation. This is illustrated in Figure 8.

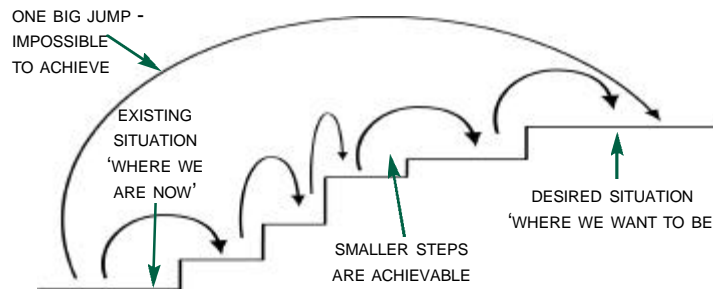


Figure 8

An incremental approach to achieving sanitation improvements - the 'stairs' analogy.

The challenge for planners is to identify manageable steps towards achievable objectives that:

- are consistent with the need to move towards overall objectives;
- are large enough to overcome the fundamental problems that they set out to solve so that they result in sustainable benefits;
- are framed in the light of existing systems and resources ; and

4

Strategic Sanitation Planning in Bharatpur

4.1 A model for municipal strategic sanitation planning

The town of Bharatpur in Rajasthan, India was chosen to pilot a strategic planning process following discussions between the Water and Sanitation Program - South Asia (WSP-SA) and the Bharatpur Municipal Council (BMC). Figure 9 illustrates the stages in the development and implementation of a strategic plan, based on the process followed in Bharatpur.

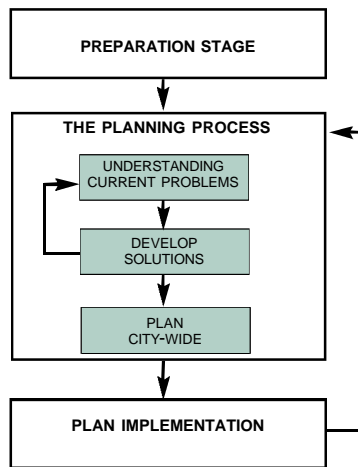


Figure 9

The strategic process at the municipal level

The feedback loops in Figure 9 illustrate the point that analysis of activities can help to create a better understanding of problems and their causes and can thus influence later stages in the planning process.

The various components of a plan do not have to proceed at the same rate. Some activities can be started immediately and completed quickly while others may require a period of preparation and take longer to implement. However, it will always be necessary to match the implementation of plan components to the availability of funds.

The process is compatible with the adaptive approach to strategic planning set out in Section 3. The initial emphasis on understanding problems helps to ensure that the planning process is firmly grounded in the existing situation. The developing solutions stage allows time for information to be gathered and objectives to be decided, allowing the process to proceed in a step-wise manner. The focus on taking account of feedback helps to ensure that the planning process is flexible and can be adapted in the light of changing circumstances and availability of improved information.

The process described here might be seen as an example of the action planning approach (Hamdi and Goethert, 1997), which has been represented in recent years by City Development Strategies and other similar initiatives. These aim to reach consensus on the need for a shared vision for a city and then to develop an immediate action plan to facilitate movement towards the achievement of that vision.

Like action-planning approaches, the approach suggested in this note involves an initial focus on understanding the existing situation, the establishment of an overall vision and a series of actions designed to lead towards the achievement of that vision. It differs from other action planning approaches in its inclusion of a 'developing solutions' stage.

The inclusion of this stage provides time to:

- Extend and deepen the process of identifying the components of the final plan, thus overcoming what has been one of the major drawbacks of the traditional 'project cycle' - the identification of interventions on the basis of insufficient information; and
- Develop the commitment and capacity of the various stakeholders to implement the final plan.

4.2 Preparation stage

Strategic planning must formulate a vision shared by the various organisations with the interest and resources to contribute to the plan. It cannot be the preserve of one individual or organisation. Even if the need for a strategic process is recognised, the challenge is to persuade others to share that vision.

Before starting a strategic planning process, it will therefore be necessary to:

- *Identify potential partners in the planning process* – including both government and non-government organisations, elected representatives and other representatives of low-income communities;
- *Develop consensus on the need to plan* – ideally by exposing local stakeholders to examples of successful strategic planning.
- *Establish a core team from the potential partners to lead the process.*

In Bharatpur, the discussions between Water and Sanitation Program South Asia (WSP-SA) and Bharatpur Municipal Council (BMC) represented the first stage in identifying potential partners and developing consensus on the need to plan. Potential local partners were then identified and efforts were made to develop consensus on the need to plan in order to establish the basis for forming a core team.

Due to the lack of a strategic planning culture in Bharatpur, the process was assisted by an external facilitator to help organise the workshops and to assist the decision-making processes. However, the aim should always be to minimise the need for external inputs and develop local support systems for strategic planning at the earliest possible stage in the process. The municipal authorities with responsibility for sanitation provision should always take a major role in the planning process.

4.3 The planning process

We now turn to the planning process itself, taking the process developed in Bharatpur as a model for the development of strategic plans at the municipal level. As indicated in Figure 9, the Bharatpur process was conceptualised as having three broad stages; firstly, to understand problems, secondly, to develop solutions, and finally, to plan citywide.

Understand problems

This involved initial investigations, intended to develop an overall understanding of the existing situation in order to obtain some idea of priorities for further investigation. The investigations covered existing services, the problems and demands of primary stakeholders, existing human, institutional and financial resources and the ways in which social and physical conditions might affect the approach to sanitation service improvements.

Develop solutions

In Bharatpur, the transition from understanding problems to developing solutions was accomplished through a two day planning workshop at which problems were identified, responses to those problems formulated, responsibilities for those responses assigned and a timetable for completing the tasks agreed. The responses took a number of forms, not all of which involved immediate physical action. Examples of tasks identified in Bharatpur, divided into four basic categories, are listed below in Table 1.

Table 1 Tasks required to understand problems and develop solutions

<i>Improve information base:</i>	Map of the whole town, with particular focus on drainage facilities in order to facilitate drainage planning
<i>Review existing services and programmes</i>	Technical and social review of existing low-cost sanitation initiatives in one ward Review of solid waste collection for town as a whole with particular reference to primary collection services in one ward
<i>Immediate improvements</i>	Introduction of improved procedures for cleaning drains
<i>Prepare pilot proposals</i>	Development of proposals for improved drainage in one ward and house-to-house solid waste collection services in another

The activities undertaken during the developing solutions stage will, of course, depend on the local situation and the priorities of the various stakeholders.

During the planning workshop, a small steering committee was formed to ensure that the various stakeholders carried out the activities agreed at the workshop and continued to co-operate in the development of the strategic plan. The committee members included key municipal officials and representatives of the two NGOs that were active in the town. Subsequent experience suggested that the steering committee would only be effective if it has a clear official status.

Another lesson to emerge from Bharatpur related to the need for capacity building for strategic planning and working with the community. With regard to the first, there was only limited awareness among local stakeholders of the importance of some of the key principles identified in Section 3. For instance, existing low-cost sanitation services in Bharatpur were heavily subsidised and so demand and willingness to pay were not really meaningful concepts for government stakeholders. Efforts to overcome this problem must start from what local stakeholders are likely to be willing to accept and may have to proceed in a step-wise manner.

In Bharatpur, the initial focus was on gaining acceptance of the need to recover part of the cost of latrines provided under the Indian Government's Integrated Low Cost Sanitation (ILCS) programme from users. While theoretically required by the guidelines for the scheme, this had not previously happened in practice. With regard to the second, a key lesson was that even where NGOs are adept at mobilising the community, they are often unclear as to what to do next.

Pilot project proposals may emerge from efforts to improve the information base, review existing services and programmes and identify and implement options for immediate improvements. Pilots are likely to extend beyond the time of the preparation of the citywide strategic plan and may be absorbed into it.

In Bharatpur, developing solutions took about a year although it should be possible to reduce this timescale where there is strong commitment and support from local stakeholders.

Plan citywide

In Bharatpur, the transition from developing solutions to producing a citywide plan took place at a second workshop. The main aim of this workshop was to decide the overall structure and contents of the plan in the light of the lessons learnt from the developing solutions stage. Work then continued on the development of the plan, which included the following:

- A section setting out the overall framework for the plan, including statements of the plan's overall vision, the principles underlying the plan, the roles and responsibilities of the various stakeholders, the proposed financial arrangements for implementing the plan and an assessment of capacity building needs.
- A series of chapters, each of which was devoted to one of the plan components. The Bharatpur plan included proposals for drainage, solid waste management, hygiene promotion and low-cost sanitation. For each component, the document provided a brief statement of the current position and the plan objectives and a summary of the strategy to be adopted to reach those objectives. A workplan was produced for the first year of implementation including a statement of the plan's *overall goal or vision*.

The main plan was supported by a number of annexes covering the composition and responsibility of the Sanitation Coordination Committee, contact details for local agencies working on aspects of sanitation, an inventory of capacity-building needs, a budget for items for which funding was not already available and an annual maintenance plan for drainage.

Once complete, the draft plan was made available for comment by the various stakeholders. Following receipt of their comments, it was amended and the amended version was formally adopted by BMC.

Key points to note regarding the plan include the attention paid to:

- matching proposals to available finances;
- the need to develop capacity for both planning and subsequent implementation;
- the importance of maintenance (as exemplified by the drainage maintenance plan); and
- the need to phase interventions, even when the overall plan for a component must have a citywide focus.

4.4 Implementing the plan

The only useful plan is one that leads to action. The chances of successful implementation will be increased if the plan components are integrated into the plans and budgets of the relevant stakeholder organisations.

Figure 10 illustrates the point that plan implementation should be viewed both as the beginning of the next stage in the cycle of planning with lessons from implementation fed into a regular process of plan review and updating. It also illustrates the need to monitor and evaluate the implementation of plan components so as to provide information to be used as a basis for regular review and amendment of the plan. Municipalities are likely to need specialised assistance in developing effective monitoring and evaluation systems.

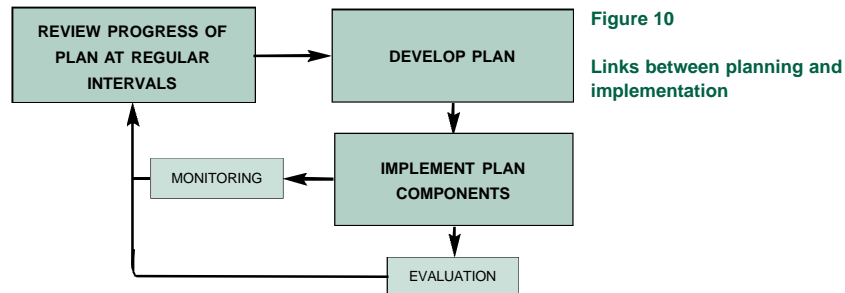


Figure 10
Links between planning and implementation

4.5 Moving beyond individual municipalities

Until this point, we have been concerned with the implementation of a strategic sanitation initiative in a single town. The steps described below suggest a possible process for moving from a successful initiative in one municipality to the general introduction of strategic planning processes at the municipal level. The process is based on the assumption that strategic planning efforts in individual municipalities can be used to develop experience of strategic planning and spread information on the approach. Four steps are needed to achieve this:

- Implement strategic planning process in pilot municipality
- Disseminate results (through workshops, publications, exchange visits etc.)
- Introduce changes in legislation and procedures
- Replicate planning process at the state/ provincial level

The process suggested in Figure 10 will only be possible if the policy context is supportive to strategic planning. The development of a supportive policy context is very important and we turn to this in the last section of this note.

5

Developing a Supportive Context

One of the key findings of the research was that widespread adoption of strategic approaches at the municipal level is unlikely to occur unless the policy context is supportive to such approaches.

5.1 Municipal planning and its context

Two important points emerged from the experience in Bharatpur. The first was that prevailing attitudes and assumptions may place constraints on what is practically feasible. Efforts to increase the priority given to sanitation and to introduce strategic planning will often have to start with efforts to change attitudes and assumptions within the organisations and agencies that are responsible for sanitation provision. In particular, there is a need for efforts to encourage movement away from reliance on master plans to the development of a strategic planning 'culture'.

The second point concerns the influence of the policy environment on the approach to planning taken by municipal officials. By policy environment, we mean not just policies themselves but also the laws, procedures and programmes that support them. In Bharatpur, there was a strong emphasis on following the rules and procedures set by the Rajasthan State Government. Indeed, experience elsewhere suggests that most government systems contain implicit and explicit incentives that discourage municipal officials from diverging from existing rules and procedures in any way. Figure 11 illustrates these points diagrammatically.

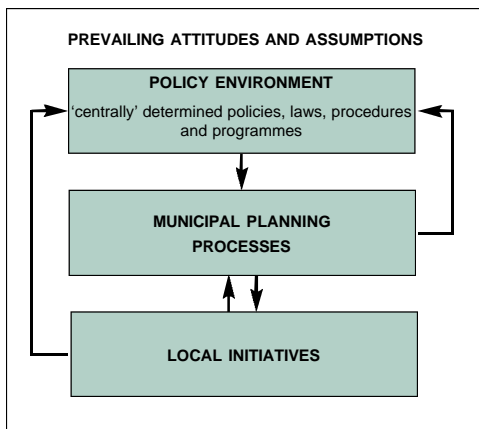


Figure 11

Municipal planning in context

A key challenge is to accommodate diverse views. NGOs and other civil society organisations working at the local level may have developed ways of thinking about sanitation problems that are very different from the views of senior politicians and government officials.

Champions for changing existing procedures within the official system can also provide a starting point for changes in attitudes and assumptions. External organisations and agencies can play an important role in supporting such champions and also in introducing new ideas. However, it should be recognised that the role of external organisations should always be to assist rather than to lead the process of development.

Bearing these points in mind, we now turn to the options for developing an overall context that is more conducive to strategic planning.

5.2 Overcoming barriers to strategic planning

It is possible to identify at least four barriers to improved sanitation. These are shown in Table 2, together with the action that is required to overcome them.

Table 2 Requirements for widespread adoption of strategic planning

	Barrier	Action
1	Importance of urban sanitation not recognised	Raise profile of sanitation amongst decision-makers
2	Lack of strategic planning culture	Develop commitment to strategic planning
3	Policy context does not support strategic planning	Ensure that policies, rules and procedures support strategic planning
4	Lack of capacity to develop and implement strategic plans	Improve capacity to implement plans

The first two barriers relate to existing attitudes and assumptions. The third relates explicitly to the policy environment and in particular to the need to encourage those responsible for municipal sanitation planners to think and act more strategically. Even when decision-makers and planners are well informed, motivated and working in a supportive policy context, they will make little impact unless they know what to do and have the capacity to do it. With this in mind, the fourth barrier, relates to the lack of capacity to develop and implement strategic sanitation plans.

All these barriers require action at the centre, which will either be at the national or the state/provincial level of government. Committed leaders at the municipal level can take action to overcome these barriers, at least temporarily, within their own towns and cities. Indeed, the feedback loops in Figure 11 indicate that activities at the local and municipal levels can influence the policy environment. Nevertheless, it is unlikely that strategic approaches to sanitation planning will be widely adopted unless action is taken at the 'centre' to promote and support them.

5.3 Raising the profile of sanitation

Without recognition of the importance of good sanitation, there can be no concerted effort to provide improved services. Therefore, initiatives will continue to be isolated and insufficient in scope to make a real difference to urban sanitation conditions. This suggests a need to spread awareness of the importance of sanitation among all the stakeholders and particularly among decision-makers, using the arguments already given in section 2.2 of this note. A person's options will depend to a large extent on his or her situation and power; but all can have a role. Possible roles for different stakeholder groups are:

- *Senior officials and politicians* at various levels of government can use their influence with peers to increase awareness of the need to focus on improving sanitation. Those working within central and state/provincial government can use their influence in committees and facilitate action to gather information required to support the case for improved sanitation. Strong leaders at the municipal level can initiate strategic processes in their towns and cities.
- *External agencies* can promote greater awareness of the importance of sanitation through high-level workshops, sponsorship of short training courses and by emphasising the importance of strategic planning during the development of project and programme proposals.
- *Non-government organisations* can play a role by demonstrating effective sanitation approaches at the local level, advocating widespread adoption of such approaches and drawing attention to the needs of the urban poor.

5.4 Developing a strategic planning culture

We have already noted that many municipal officers in Bharatpur viewed strategic processes as a poor substitute for comprehensive plans, despite the fact that the latter were rarely implemented as intended. This theoretical commitment to comprehensive planning contrasted strongly with the reality that most officials worked in a reactive rather than a proactive way, responding to directives from higher levels of government and/or pressure from elected representatives.

Even where the need to plan is accepted in principle, attention is rarely paid to the processes through which plans can be implemented. In such circumstances, action to promote and support an information-based planning culture is required.

The options for addressing this situation are influenced by the strength of vested interests relative to that of change agents. Champions of change within government are more likely to bring about change if they receive support from external agents – which may include international and bilateral development agencies, and international and national NGOs.

Workshops and think tanks offer one possibility for raising awareness of the need for strategic planning. However, they are likely to have a greater impact if they:

- *Impart relatively simple messages* – emphasising that the plan should be information-based and should be adaptable in the light of improved knowledge and changing circumstances; and

- *Provide concrete suggestions* on how participants might act more strategically in their local situations.

Workshops are unlikely to have a long-term effect unless they form part of a wider programme including real examples of strategic planning. External agencies are particularly well-positioned to promote and support such activities. There is much to be said for bilateral agencies encouraging the adoption of strategic approaches on a pilot scale. This relatively small-scale action can pave the way for the development banks to support more ambitious programmes, which will have more chance of success once capacity and willingness to plan has been developed. External agencies should avoid undermining the development of a strategic planning culture by promoting 'quick-fix' solutions to development problems. They should also heed the lessons referred to earlier about the importance of building commitment to strategic processes with stakeholders in communities, local and other levels of government and the private sector.

5.5 Developing an effective policy context

Policies and the rules and procedures that flow from them provide the framework within which sanitation initiatives take place. In particular, they can provide strong incentives to ensure that stakeholders treat sanitation as an important issue and respond to sanitation needs in a strategic way. To do this, they must clearly set out overall objectives, in terms of sanitation coverage and the quality of service to be provided. However, policies must also be concerned with how those overall objectives will be achieved and should support adoption of strategic planning approaches in accordance with the principles set out in Section 3 and elaborated in Section 4.

In particular, policies should state the importance of involving a wide range of stakeholders in the planning process, responding to informed demand, considering services rather than facilities and taking a wide view of sanitation. The emphasis on services rather than facilities should lead to policies that focus as much on the operation and maintenance of services as on their supply.

Policies must be backed by rules and procedures that provide a supportive environment for their implementation. In some cases, new legislation will be required, explicitly designed to encourage the adoption of a strategic approach. In others, it will be sufficient to issue new guidelines to municipalities on what constitutes acceptable practice. The possibility of different organisations taking responsibility for sanitation provision in different areas and at different levels within hierarchically organised systems must become accepted as the norm if there is to be any real chance of involving all the stakeholders.

Financial arrangements should provide support for such systems, where possible decentralising control over finances. Where this is not possible, there must be clear guidelines on the allocation of resources and the way in which they are channelled to the various organisations with responsibility for aspects of sanitation provision.

Guidance may be required on the appropriate design standards and procedures, with the overall aim of developing a range of standards and specifications appropriate to the range of

conditions likely to be encountered, for instance relating the permissible minimum depth of a sewer to the likely traffic loading.

In order to bridge differences in opinion between different stakeholders, there may be a need to test a range of possible standards and demonstrate the viability of those that are found to be satisfactory. The findings of this programme can then be built into official guidelines and widely publicised to ensure that information on appropriate standards and specifications is available to those working in both the government and non-government sectors.

5.6 Developing capacity for strategic planning

The most obvious focus for efforts to improve capacity for strategic planning will be on training courses designed to provide the knowledge and skills that are directly relevant to the strategic planning process. These should cover:

- the strategic approach itself, with particular reference to the need to see planning as an information-based process and to follow basic strategic principles;
- the skills required to facilitate strategic processes and the involvement of the various stakeholders in those processes.

This training should ideally be linked to strategic planning activities in the field so that the trainees can see how strategic principles and processes might apply in real situations .

While the introduction of new training materials and courses focusing specifically on aspects of strategic planning will be necessary, it will not be sufficient to ensure the development of capacity to produce and implement strategic plans. There are two issues here. The first is the poor quality and lack of relevance of much of the training that currently takes place. The second is the lack of demand for training, which stems in part from the poor quality of the training that is on offer, but may also reflect the fact that many senior managers do not view staff development as important. This in turn may be affected by the fact that the rules governing promotion often pay more attention to length of service than ability and commitment .

Full consideration of the issues raised by this situation is beyond the scope of this note. However, we would stress that the development of capacity is important and should be given higher priority in the plans and programmes of government. An integrated approach, which focuses attention on ensuring that both demand for training exists and appropriate forms of training are available, is required. The judicious use of external resources to support the development of effective human resource development programmes may be appropriate. However, national organisations and institutions must be closely involved in programme development to ensure local ownership.

Further Information

A more detailed statement of the findings of the research will be published by Intermediate Technology Publishers in 2003 under the title "Urban Sanitation: A Guide to Strategic Planning".

References

- Carley, M., Jenkins, P. and Smith, H. (eds) (2001). *Urban Development and Civil Society: The Role of Communities in Sustainable Cities*. Earthscan, London.
- FAO (1995) .*Water sector policy review and strategy formulation: a general framework*. FAO Land and Water Bulletin No.3, Food and Agriculture Organisation, Rome.
- Hamdi, N. and Goethert, R. (1997). *Action Planning for Cities*. Wiley Publishers, UK.
- Kneeland, S (1999). *Effective problem solving*. How to Books Ltd., Oxford, UK.
- McGranahan, G., Jacobi, P., Songsore, C. and Kjellen, M. (2001). *The Citizens at Risk: From Urban Sanitation to Sustainable Cities*. Earthscan, London.
- Rondinelli, D.A. (1993). *Development Projects as Policy Experiments: an adaptive approach to development administration*. Routledge, London and New York.
- Saywell, D. and Hunt, C. (1999). *Sanitation Programmes Revisited*. WELL Task No.161.
- Saywell, D. and Cotton, A. (1998). Strategic Sanitation Approach - a review of literature. Water, Engineering, and Development Centre (WEDC), Loughborough University, UK
- World Bank (2000). *Entering the 21st Century, World Development Report 1999/2000*. Oxford University Press, New York.
- Wright, A.M. (1997). *Towards a Strategic Sanitation Approach: Improving the Sustainability of Urban Sanitation Planning in Developing Countries*, Water and Sanitation Program, Washington.