

The SCP Source Book Series, Volume 4
Formulating Issue Specific Strategies and
Action Plans

Part A

Introduction and Overview

A1

The SCP Process

The Sustainable Cities Programme (SCP) is a worldwide technical cooperation activity of the United Nations. It works at city level in collaboration with local partners to strengthen their capabilities for environmental planning and management (EPM). Each city-level SCP project is adapted to the particular needs, priorities, and circumstances of that city; nonetheless, all SCP city projects follow the same general approach and all are implemented through the same series of activities known as the SCP Process.

The SCP recognises that cities play a vital role in social and economic development in all countries. Efficient and productive cities are essential for national economic growth and, equally, strong urban economies are essential for generating the resources needed for public and private investments in infrastructure, education and health, improved living conditions, and poverty alleviation.

Unfortunately, the development potential of cities is all too often crippled by environmental deterioration. Aside from its obvious effects on human health and wellbeing (especially of the poor), environmental degradation directly holds back economic development. For development achievements to be truly sustainable, cities must find better ways of balancing the needs and pressures of urban growth and development with the opportunities and constraints of the urban environment.

Environmental deterioration, however, is not inevitable. Although many, perhaps even most, cities are still suffering severe environmental and economic damage, there are encouraging signs. Some cities are learning how to better plan and more effectively manage the process of urban development, avoiding or alleviating environmental problems while realising the positive potentials of city growth and change. The SCP aims to support cities in finding - and managing - development paths which are more effectively fitted to their environmental opportunities and constraints.

Reflecting this background, and reflecting the special characteristics of the Sustainable Cities Programme, there is a *common approach* which is shared by all SCP cities and which holds true across the full, wide range of partner cities:

- central focus on development-environment interactions
- broad-based participation by public, private and community sector groups
- concern for inter-sectoral and inter-organisational aspects
- reliance on bottom-up and demand-led responses
- focus on process: problem-solving and getting things done
- emphasis on local capacity-building.

Similarly, there is a shared *SCP Process* which provides a general framework for city-level project implementation - a framework, moreover, which has been tested, revised, improved and evolved through experience in more than

20 different cities since 1991. The process consists of a sequence of activities which are logically and practically connected, together with a number of specific outputs which are important for the progress of the project. The key point is that by following the SCP Process, the work of implementing an SCP city project will build an effective process of environmental planning and management which is integrated into local society and government.

Naturally, the way in which the SCP process works out *in detail* will be different from one city to another. But the *general* pattern has proved to be useful and effective in cities all across the world. Broadly speaking, there are three general *phases* in the process of SCP project implementation.

The **First Phase** (“*Assessment and Start-Up*”) is a 6 to 9 month initial period which normally includes the following main activities:

- identification and mobilisation of project participants and partners
- familiarisation of project partners with the core EPM concepts and SCP approaches
- preparation of the Environmental Profile and initial identification of priority environmental issues (See Volume 1 of the SCP Source Book series, *Preparing the SCP Environmental Profile*)
- review of available resources, tools, and information and initial design of geographic information systems (GIS) and environmental management information systems (EMIS) specifically adapted to the city’s needs
- working out the organisational structure, work plan, and operational procedures for the project
- organising and holding the City Consultation
- establishing the Issue-Specific Working Groups.

The City Consultation is a major event which brings together the work of Phase One, consolidates social and political participation and support, and launches the SCP project into Phase Two. (Volume 2 of this SCP Source Book Series - *Organising, Conducting and Reporting a City Consultation* - provides detailed guidance.)

The project’s **Second Phase** (“*Strategy & Action Planning*”) is a 15 to 24 month period of intensive analysis, discussion, and negotiation within the Issue-Specific Working Groups. The number, focus, and membership of these Working Groups will change and evolve as the project proceeds, but they will remain the principal feature of the SCP Project. During this period, each of the agreed priority issues will be further elaborated and developed, to reach a consensus on appropriate strategies for that issue. The strategies will then be developed into action plans which can be agreed by the organisations and groups involved in implementation. (See Part B of this Volume.)

It is likely that small-scale demonstration projects will be undertaken to test the approaches developed and to show what can be done through the SCP process. In addition, some of the first action plans will produce investment and/or technical assistance proposals which will be developed into properly-formulated and ‘bankable’ proposals. All of these Phase Two activities of the Working Groups will be gradual, pragmatic and cooperative, reflecting

the real-world conditions for strategy formulation and implementation. Finally, also during this Second Phase, the main project activities aimed at institutional capacity-building and human resource development will be carried out.

The **Third Phase** of work (“*Follow-up & Consolidation*”) is an open-ended follow-up and implementation period, which begins towards the end of Phase Two and carries on for an extended time afterwards. The strategies and action plans coming out of the Working Groups will be further elaborated, especially in order to build toward an overall city-wide environmental management and urban development strategy. Investment proposals will be worked out in detail, subjected to rigorous analysis, and pursued vigorously with funding sources. The task of institutionalising the environmental planning and management (EPM) process, initiated during Phase Two, will be undertaken in earnest (see Volume 5 - *Institutionalising the EPM Process*). In addition, the remaining training and institutional development activities will be implemented. Finally, there will be regional and/or national workshops and meetings, to explore ways of extending SCP activities into other cities, building upon the experience gained in the project.

A2 Issue-Specific Strategies

In Phase Two of an SCP project, the Issue-Specific Working Groups will be the main focus of activity. Their first task will be to clarify the issue which they were given following the City Consultation. Experience has shown that however simple it may appear, an urban environmental issue is almost always much more complicated in reality. There are complex inter-relationships between aspects of the issue and different aspects of development, for instance, as well as difficult linkages with other issues. Scientific expertise cannot resolve or simplify these complexities, moreover, because the issue can only be properly understood in its relevant social, economic, political, governmental, and physical context. In addition, different stakeholders are likely to have different perceptions and views about an issue - and these differences should be brought into the open and fully discussed.

This process of issue clarification - which can be assisted through Mini-Consultations and with additional studies where necessary - is in fact the first step in the process of formulating issue-specific strategies. By systematically exploring the different aspects of an issue and by working toward a consensus understanding of the nature of the issue, the process of negotiating towards a strategy has already begun.

In the SCP project context, issue-specific strategies are formulated through a process of discussion, exchange and negotiation among the key stakeholders, working through the Working Group. (The same strategy formulation process goes on for each of the priority issues for which a Working Group is operating.) Broadly speaking the process involves four steps:

- (i) defining goals and objectives;
- (ii) assessing and negotiating strategy options;
- (iii) considering resource availability and implementation possibilities; and

- (iv) agreeing on strategies and mobilising support.

The work done on analysing and clarifying the issue will have helped the Working Group to move a good way toward defining goals and objectives. This will need to be taken further, of course, so that objectives can be agreed and then converted into concrete targets - such as providing at least primary treatment for one-half of all domestic liquid waste by the year 2003.

The next step is to review and assess the various strategy ideas which have been identified by the Working Group. Typically, various strategy options will have been put forward; many of these will be overlapping, some will be similar, and each may reflect the interests or viewpoints of the organisation putting it forward.. A collective process of examining these and discussing the relative merits will generally lead to a consensus on a preferred strategy or group of related strategies and sub-strategies.

For those strategy options which are identified as most promising, it is still necessary to examine them further - in particular, to assess what finance and other resources are necessary for each strategy or sub-strategy option, and also to examine the full range of implementation approaches which might be undertaken for each. This is a critical aspect - to be realistic and practical, strategies must be carefully considered in relation to costs and in relation to implementation. There is no point in proposing a strategy which requires capital funds far in excess of what is potentially available, just as there is no point in a strategy which requires regulatory enforcement far beyond capabilities.

Once the Working Group has worked through the various strategy options, analysing and examining them in detail, it is likely that only one or a few will remain as preferred alternatives. Because the whole process was conducted by the stakeholders themselves, there should already be a reasonable degree of consensus by the time the final options are settled. Nonetheless, it is important that the chosen strategies also be discussed in a wider forum, to ensure a truly broad-based understanding and support for them. This may involve a Strategy Review Workshop, for example, at which the agreed strategies will be further elaborated, debated, explained, and reviewed. The whole point of this exercise is to ensure that the chosen strategies for that issue are fully understood - and that the key persons, groups and organisations involved in that issue are agreed on the strategies and on the necessary next steps forward.

A 3

Action Plans and Projects

Action Planning is the process through which strategies are converted into concrete programmes of activity for implementation. In an SCP project, this action planning process generally has the following steps:

1. Elaborate alternative courses of action
2. Prepare a brief on the agreed course of action
3. Determine the tasks and the respective actors involved

4. Determine the required resources
5. Identify gaps and weak links
6. Reconfirm commitments
7. Agree on Coordination mechanisms
8. Agree on indicators and monitoring mechanisms.

These steps are followed separately in each of the Working Groups, as action plans will be prepared for each of the various priority issues being dealt with under the SCP project. A key feature throughout this process is the emphasis on full discussion and negotiation among the stakeholders involved, using the Working Group forum. In this way, everyone is kept 'on board' - and thus the Action Plans which result are much more likely to be implemented successfully.

The chosen issue strategies are further elaborated, to make clear the actions and interventions which are needed for implementing them. In many cases, alternative approaches may be possible, and so these will need to be elaborated as well. A considerable amount of detail may be required, in order that the full implications of the activities are understood. This elaboration will allow a systematic assessment of the alternatives, leading to consensus on the preferred course of action. This should then be described in a full write-up so that everyone involved (including those not on the Working Group) can see what has been tentatively agreed.

The agreed course of action needs next to be broken down into the component tasks, with the group or organisation responsible for each task being clearly identified. This is an essential step, for this makes the actions both concrete and specifically assigned to particular actors. By specifying the proposed activities clearly as concrete actions and tasks, it is easier then to estimate what it will cost - what financial resources (and other resources) will be required - as well as easier to see who might actually be responsible or appropriate for undertaking that action. Analysing proposed activities in this way may also help identify gaps - e.g. an action for which there is no appropriate actor, or for which the actor with responsibility does not have the resources or capability. This allows the 'weak links' in the proposal to be identified, so that appropriate steps may be taken, for example to revise the proposal to overcome gaps or to go around weak links.

At this point it is also useful to reconfirm commitment on the part of those stakeholders who must actually undertake the actions agreed. This can be done through a Memorandum of Understanding among the various actors involved, and by ensuring that the Action Plan is incorporated into the departmental and organisational work programmes and budgets. With this in hand, firm agreements for the implementation schedule can be agreed, as can mechanisms for coordinating among the different organisations involved. Finally, it is also crucial to agree on relevant indicators - measures which show progress on implementation - and on formal monitoring systems which will allow all those involved to keep track of how things are going.

Even when resources and finance have been promised by various stakeholders, it is still important to continue working to ensure that the funds and resources are actually provided - and on time. Resource mobilisation thus remains a critical continuing task. The SCP has developed experience

with a number of ways of doing this, ranging from the organisation of donor forums and the procedures for donor involvement, to the active development of community resource contributions and the effective mobilisation of private sector finance.

One central task in this process of resource mobilisation is the formulation of project proposals, especially capital investment proposals. The SCP process has incorporated a number of different procedures and formats for this, within an overall framework of moving from project ideas all the way to fully-detailed 'ready-to-implement' proposals. The process is also one of narrowing down, starting with a wide range of project ideas, which come naturally out of the agreed Action Plan. As alternative investment projects are considered, some will be dropped or put aside and others will be further developed.

An important step is the preparation of Project Profiles for the most promising projects. These Profiles are thorough and systematic, but not yet detailed, and therefore they can be prepared fairly quickly and with relatively little specialist input. The purpose of the Profiles is to provide a complete description of the proposed project, in a standardised format which covers all the various aspects which are relevant to a decision-maker; on this basis, potential funding organisations can choose those projects which are most promising from their point of view. After this initial choice, project proposals proceed to further levels of detailing, first a Pre-Feasibility study and finally a full Feasibility study. This latter step is only taken for projects which are central to the Action Plan - and likely to attract financing, because the proper preparation of a full Feasibility study requires substantial professional expertise and most likely considerable extra data-gathering and special investigations.

Somewhat separate from this systematic process of moving from strategies to action plans to projects to implementation, there is also in the SCP approach a deliberate use of Demonstration Projects. These are relatively self-contained capital investment (or sometimes technical assistance) projects, usually rather small scale, which can be formulated, agreed, and implemented quickly. They address the priority issues, of course, but they do not wait for the working-out of the whole process SCP process. Instead, they are normally projects which do not require heavy capital investment and which can be agreed and approved in a 'fast-track' procedure.

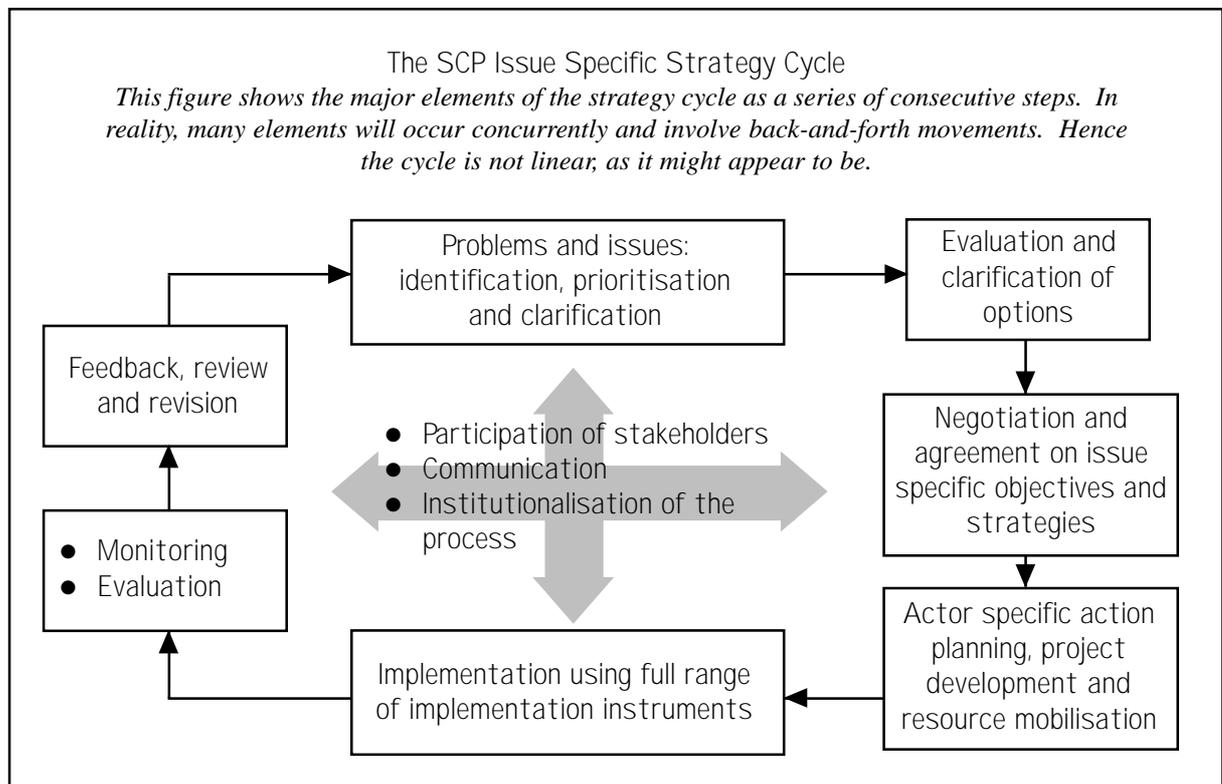
The advantage of such Demonstration Projects is that they show action on the ground: visible action which stakeholders and the public at large can see. This can be a very important factor in maintaining morale and interest, especially when the full SCP process will normally take several years to reach the project implementation stage. Equally important, these projects are intended to 'demonstrate' something, to test a certain approach or a particular type of solution. The process of formulating these Demonstration Projects - normally done through the Working Groups - provides an excellent testing ground for the participatory approaches of the SCP and helps the members of the Working Group to find out how the process works out in reality.

Finally, there is also a stage at which the various issue-specific strategies need to be brought together, to see if they are consistent with each other and consistent with the overall priority goals. Typically, strategies which have

been developed in the context of one single issue may well have overlaps with or partial conflicts with the strategies developed separately for some other issue. This is only to be expected, but these overlaps and conflicts need to be sorted out and reconciled. The process of doing this will also help to build up the linkages and mutual understanding which are needed to ensure proper coordination of the implementation of different strategies.

In addition, when the separate issue-specific strategies are brought together and reconciled, they add up to an important and coherent overall environmental management strategy. Naturally, the issues interact with each other, and with various urban development sectors, in many different ways - and it is the overall, total picture which shows the true situation for urban development and environmental management. Putting the separate strategies together can also help prepare a Strategic Urban Management Framework (SUMF), in which the spatial (geographic) distribution of characteristics, features, risks, pressures, problems etc. can be analysed. This sometimes show, for example, that in certain districts there is a combination of environmental problems which together are much more serious than any one individually - 'hot spots' which call for urgent attention and action. Equally, the SUMF can indicate which geographical areas of the city are under greatest development pressure - and which ones are least able to stand up to such pressures because of environmental sensitivities and fragility.

This whole process of formulating issue-specific strategies and action plans is indeed central to the SCP process. It is the "heart" of that process. The success of the SCP in materially improving urban environmental management will depend upon the success of the Working Groups in properly formulating strategies and converting them into agreed action plans which lead to real implementation.



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Part B

The Guide: Issue Specific Strategies and Action Plans

B1

Conceptual Clarity: What is What?

Trying precisely to define concepts such as vision, strategy, goals, or objectives is difficult and can easily become bogged down in semantics. “Asking a management theorist to define strategy is rather like asking a philosopher to define truth”, as The Economist magazine put it. The two major topics of this Source Book, strategy and action plans, are discussed here only to provide a generally agreeable meaning which can be used for explanation. It is neither useful nor necessary to open a lengthy debate about definitions, and questions of conceptual rigour and purity are of no significance in the context of this Source Book.

B1.1 What is a Strategy?

Strategy is basically about two things: where you want to go, and how to get there. It is a long term vision, concerning broad goals and general directions.

‘Strategy planning’ as a modern day notion is more often associated with business and industry. A strategy in business, it is claimed, enables a company to anticipate and respond to market trends and position itself to seize opportunities and remain competitive. With today’s fast changing world of technology and international markets, lengthy engagements in strategy debate are not feasible; nonetheless, no serious business can remain successful without some sort of guiding vision and strategy. Strategic thinking and strategy guidance in the case of environmental management, are equally essential, because environmental issues are complex, rapidly changing, and dynamic. Environmental issues:

- can easily transcend immediate geographic boundaries;
- have complex long-term as well as short-term impacts;
- cut across normal organisational and sectoral boundaries and responsibilities;
- involve many different stakeholders and actors; and
- involve significant conflicts of interest and trade-offs of costs and benefits.

The purpose of a strategy is therefore to provide general guidance, with a long term perspective, which allows environmental issues to be better understood and more coherently addressed. It provides a framework within which the actions and interests of different stakeholders can be brought together. What is achieved through formulation of strategies is not a dramatic turn of events, but a common vision and orientation that makes *increments* of action by various stakeholders **consistent and compatible** with the desired long term objectives of sustainable development.

B1.2 What is an Action Plan?

An action plan is different from, but linked to, a strategy:

- A strategy provides an agreed set of principles and a policy framework which guide all actors and stakeholders, whereas action plans translate this broad guidance into concrete commitments for action.
- Whilst issues are the reference points for strategy, actors (stakeholders) are the reference points for action plan.
- Strategies cut across actors and interests, while action plans operationalise strategies in relation to each actor.
- Although action plans should be coordinated across actors, implementation of action plan rests upon the competence and authority of the various actors in the public, private and community sectors.
- Strategies provide medium and long-term guidance, while action plans concentrate on activities in the immediate and short-term future.

Action plans are also different from ordinary statutory development plans (Master Plans):

- Statutory development plans are prepared through the bureaucratic machinery and follow established administrative procedures: they conform to top-down planning methodologies and rely on legal powers of enforcement. Action plans, on the other hand, can be initiated, prepared, and implemented from the bottom-up by actors who have the will and the necessary resources.
- Statutory plans aim to influence economic activities and investment patterns taking place in the private and popular sectors through controls and regulatory instruments. Action plans in contrast involve concerned actors from the public, private and popular sectors in their formulation and implementation, with success hingeing on the level of commitment secured from the different actors.
- Statutory plans strictly follow existing administrative territorial divisions and traditional sectoral lines. Action plans on the other hand can be prepared for different geographic locations and scales, as well as for combinations of sectors and administrative territories - so long as the subscribers to an action plan are addressing a common concern and are committed to implementing the plans.

Action plans can thus be characterised as being:

- *purpose-specific*: there is a problem of common concern to be addressed;
- *actor-specific*: commitments and responsibilities of implementation are clearly spelled out;
- *area specific*: there is a clearly-defined geographic territory to deal with;
- *time-specific*: actions are not open ended but are tightly programmed to be delivered in a fixed time frame;
- *resource-specific*: an action plan is fully costed and based on

commitment of existing resources - it does not hinge on resources yet to be mobilised; and

- *measurable*: progress in implementation, increments of change, and impacts can be clearly tracked and monitored.

Box 1: Extracts from City Strategy Statements

Ismailia (Urban Growth)

- Directing the future growth of the city to east of the Suez Canal; the availability of land and the development prospects of the region warrant this growth scenario;
- Capitalising on its locational advantages and potential in agriculture, and through expanding and improving the existing transport infrastructure, transforming Ismailia to an export market outlet of agricultural and agro-industrial products to Europe and the middle east countries;
- Attracting , through the creation of enabling environment (simplified licensing, one-stop service, etc..) and concerted promotional activities, private investment into agro-based industries and export activities;
- Increasing the carrying capacity of the city by improving the infrastructure and services in sparsely populated areas, informal settlements and outskirts of the city;
- Preserving the historic and green areas, and restoring the ecological balance of "Lake Timsah" and thereby maintaining the cultural heritage and image of the city;
- Increasing the supply of affordable houses through innovative application of cross-subsidy practices, and creation of policy environment and construction standards that would enable the poor sections of the society take part in the housing and land market.

Accra (improving waste management)

- Improving funding of sanitation activities through mobilising resources both from local and external sources;
- Introducing sanitation fund and levy, imposition of fines on sanitation offenders and using the revenue for expanding sanitation services;
- Improving linkages and coordination between all stakeholders including associations and groups representing consumers , industry and trade.
- Strengthening institutions involved in waste management and sanitation services, by organising training, mobilising resources and improving their equipment;
- Facilitating the participation of the private and the informal sectors in waste collection and disposal activities;
- Expanding the sewer network and connecting marginalised settlements to the existing public sewer system.

B2 Getting Focused

In the SCP context, strategy planning is focused on specific urban environmental issues. Experience has shown that interests, implementation instruments, and institutional responsibilities are clearer and more readily coordinated at the level of concrete issues. Elaborate comprehensive planning frameworks fail to encompass the complex stakeholder interactions and overlaps/conflicts of interest which take in and around specific issues in specific places. Focusing separately on carefully prioritised issues is therefore the most realistic and effective approach for dealing with the very complex problems of urban development and environment at a manageable scale and scope.

There are sound reasons for working with specific urban environmental issues as the basis of strategy formulation and action planning:

- Experience shows that the interests of the various stakeholders, the key implementation instruments, and the roles and responsibilities of the different actors are all clearer and more easily defined at the level of specific issues;
- More importantly, issues can be prioritised as well as sharply defined, so that attention can be focused on those perceived to be most crucial. By focusing on specific priority issues, it is possible to more effectively mobilise resources and apply them systematically; it also allows issues to be addressed sequentially in an orderly way which makes the tasks more manageable.

In any city the number of environmental and development issues which could be taken up is vast - far greater than the available financial and managerial and human resources can deal with. Prioritising issues allows effort to be focused on those which are of primary concern, thus concentrating limited resources on well-focused interventions related to these specific issues.

Thus, in the SCP context, there are three general rules which should be followed in relation to identifying urban environmental issues:

1. Apply an objective set of criteria for prioritising issues.

Criteria for prioritising issues should derive from the general objectives and rationale for sound environmental planning and management and should concern economic growth, equity, and social wellbeing together with the requirements for environmentally sustainable development patterns. However, priorities will always reflect local perceptions and values - and will inevitably include a variety of 'subjective' factors as well as the 'objective'. Possible criteria might include the following:

- The magnitude of health impacts associated with the problem (many health problems in cities originate from the pollution of water, air and food);
- The size of urban productivity loss caused by the problem (since the urban economy relies on the natural resource base, problems that

would degrade air, water and land resources will jeopardise the urban economy);

- The relative impact of the problem on the urban poor (who are generally the most heavily exposed to environmental hazards and least able to act to reduce their vulnerability);
- The degree to which the problem will result in unsustainable consumption of resources (for example, a shortage of cooking and heating fuel could stimulate unsustainable harvesting of firewood and cause serious damage to forests); and
- Whether or not the problem leads to an irreversible outcome (beyond a certain point, pollution of a lake can lead to irreversible loss of its fish resources and permanent damage to whole ecosystems).

2. ***Limit the number of issues to be addressed at one time, so that focus can be maintained and resources concentrated.***

Ambitious and ‘comprehensive’ problem-solving attempts have consistently failed in the past and there is no reason to believe they can be made to succeed now. The reality of urban politics, society and management is far too complex and dynamic, and resources are far too limited, for any effort to succeed which attempts to deal simultaneously with everything. Using a step-by-step approach which begins with a few issues and only later expands, building on initial successes, the SCP city demonstration project has shown the importance of this focus on key issues.

3. ***Within the small number of priority issues chosen, it is often effective to focus on certain critical aspects of the issues or on particular geographic areas.***

Many issues are broad in scope and impact, with many different aspects (or sub-issues); this makes it difficult sometimes to deal effectively with them and to focus effort on manageable components. By concentrating on particular aspects (or sub-issues), focus and concentration of effort can be regained. Equally, it is often useful to focus on particular geographical areas in which the issue (or sub-issue) is particularly significant, rather than necessarily focusing right away on the whole city.

Table 1: Initial Priority Issues in SCP Cities

City	Number of issues	Initial Issues
Accra (Ghana)	2	pollution of Korle Lagoon; waste management.
Chennai (India)	3	waterways pollution; traffic and air quality; sanitation in low-income areas
Concepcion (Chile)	5	industrial risk; urban lakes; urban land use; poverty (in two geographic areas)
Dakar (Senegal)	2	industrial risk; integrated management of Hann Bay
Dar es Salaam (Tanzania)	9	solid waste; liquid waste; open spaces; petty trading; air pollution; coastal areas; environmental hazards & urban agriculture; sand mining; unserviced settlements
Ibadan (Nigeria)	2	water supply; sanitation
Ismailia (Egypt)	4	urban lake pollution; agriculture & land reclamation; industrial development; urban expansion
Katowice (Poland)	2	water pollution; land degradation and land use.
Lusaka (Zambia)	2	water and sanitation; solid waste management (both focused on peri-urban areas)
Shenyang (China)	3	water pollution and water supply; air pollution; domestic waste management
<p>In many cases, additional issues were subsequently added, either by disaggregating the initial issues or bringing in wholly new issues.</p>		

Box 2: Priority Issues in SCP Cities - Overview

As can be seen from Table 1, most SCP city projects began by focusing on a small number of priority issues. Only in Dar es Salaam (the very first SCP demonstration project) was a large number of issues put forward at the beginning; significantly, one of the “lessons” from the experience of the Sustainable Dar es Salaam Project (identified by both internal and external evaluations) is that indeed too many different issues were taken up in the initial phase. Other projects have been more careful to retain a limited focus on only a few issues.

However, the number of issues may not necessarily indicate a narrow focus. In many cases, the ‘issue’ as originally defined was still very broad in scope. For example, in Katowice the purpose of the initial stages of work was precisely to better define the sub-issues under the two general headings of water and land; once this was done, Working Groups were set up for six much more tightly-defined sub-issues (still under the general heading of land or water). This reflects the continuing need to ensure a tight focus and concentration of effort on well-defined (and limited) issues.

In many SCP cities it was also decided to focus initially on particular issues in very specifically-defined areas. For instance, Accra, Concepcion, Dakar, and Ismailia looked at water pollution in specific urban lakes/bays. Chennai, Dar es Salaam and Lusaka focused on sanitation issues in low-income settlements. Chennai and Katowice focused on water pollution in particular rivers or waterways. This experience underpins the need to define issues sharply and to focus on a few geographically defined areas or critical aspects of the problem, in order to better mobilise stakeholders, resources, and actions - and to make tangible impacts.

Looking across SCP cities in general, issues related to water (pollution, supply) have been the most commonly identified - every city shown in Table 1 has identified a water-related issue. The second most common issue has been sanitation (sewerage and/or solid waste), which again shows up in almost all the cities of Table 1. Of course, the nature and scope of these water and sanitation issues varies considerably, but the consistency of their appearance is striking. Land use and urban development issues were also considered a priority in many SCP cities, in particular in relation to low-income settlements, unserved areas, and peripheral areas. Of course, there is also much overlap among issues in this regard, for example with the problems of water supply and sanitation in low-income areas. It is interesting that only a minority of SCP cities have taken up air pollution as a priority issue, and these have in general been the more industrialised cities (Shenyang, Katowice).

B 3 Clarifying Issues

The complex nature of development issues, the diverse background of stakeholders, and the various interests they represent, make it essential to properly clarify environmental issues and build a common understanding and information base. In the SCP context, issue clarification is much more than a technical exercise of problem analysis or situation assessment; it also involves understanding the diverse interests and perspectives of stakeholders and the creation of a common 'meeting ground' where all those whose participation in the strategy negotiation process is required can effectively work together. Though this is not a stage separated from the strategy negotiation exercise as a whole, it forms an important foundation for it. This chapter highlights the steps and tools involved in clarifying issues.

There are two main reasons why clarification of issues is such a critical activity during the process of formulating strategies:

1. Experience has shown that however simple and straightforward issues may appear, they are invariably much more complicated in reality, involving different layers, linkages and aspects that need to be understood prior to considering possible responses. Most environmental issues are explained by a complex chain of cause-effect relationships and manifest a strong element of inter-sectoral connectedness that need to be understood in a holistic manner. Scientific and technical explanations are seldom unambiguous and are in any case not useful except in the relevant social, economic, political, governmental and physical context.
2. The different stakeholders are likely to have different perceptions of each issue, partly due to differences in situation and background, and partly due to the particular organisational or personal interests and concerns each may have. This also makes clarifying an issue a fundamental task, necessary to create a common understanding and to stimulate the full and constructive participation of all stakeholders.

Clarifying an urban environment issue involves diagnosing and establishing the following:

- the nature of the problem: what kind of a problem is it and what are its dimensions? Managerial, technological, financial, institutional, social, etc? Is it a transient phenomenon or a long term problem? Is it a structural or cyclical problem? etc;
- the impact and scale of the problem: social and economic and direct and indirect costs resulting from the problem, and long term consequences that may not be captured in monetary terms;
- the urgency of the problem; how serious the problem is and how soon actions are required;
- the causes of the problem: what are the different underlying causes and what are the various factors which influence how the problem is manifested?;

- who are the stakeholders at the political, managerial and technical levels, what role can they play or what implementation instruments do they possess?

Experience from SCP cities shows that the following tools and procedures can be useful in clarifying issues:

1. Issue-Specific Mini-Consultations;
2. Making maximum use of the *Environmental Profile*;
3. Supporting the process with base line surveys and issue-specific profiles; and
4. Applying simple analytical techniques.

1. Issue-Specific Mini-Consultations

A Mini-Consultation differs from the main City Consultation in two ways: one, it is substantive and specific to one issue, and therefore highly focused; two, it is smaller in size and involves only stakeholders whose role is directly relevant to addressing a particular issue. A Mini-Consultation typically lasts two days, with at least half of the time being dedicated to group discussions with participants working in tightly structured sessions designed to achieve concrete outputs. Mini-Consultations have proven useful for three purposes: first, elaborating and clarifying issues; second, reviewing and refining draft strategies; and third, agreeing on modalities to ensure implementation of the strategies

A Proposition Paper will normally provide the framework and key content for discussions at a Mini-Consultation. The Proposition Paper is a background paper that highlights and analyses the issue - its institutional, technical and financial aspects - and then proposes and reviews the main strategy options that need to be explored; it also poses the central questions that need to be discussed. It is neither prescriptive nor technically detailed; but instead is a context-setting paper which helps to inform, focus and direct the discussion. (See Part C for an example from Dar es Salaam.)

Based on experience from SCP cities, a number of useful pointers can be given, indicating steps which can be taken to help ensure the success of the Mini Consultation as platform for clarifying issues.

1. Take considerable care to identify an able and reliable resource person to write the proposition paper and to guide and moderate the Mini-Consultation itself. Sometimes it may be possible to find a resource person from within the working group.
2. However, you must provide a detailed outline for the proposition paper writer, together with clear Terms of Reference, and the writing of the proposition paper should be closely supervised - to ensure that the paper is what the Mini-Consultation needs and not what the writer wishes to write.
3. Establish a group of knowledgeable people who will advise on the preparation of the outline and Terms of Reference for the proposition paper writer and will help in reviewing the drafts. Review the proposition paper first at the level of 'annotated outline' and later at the level of 'final draft'. You need to ensure that the proposition paper is substantive, comprehensive, intelligible and forward looking.

4. Carefully identify the stakeholders who should participate in the Mini-Consultation (those with a clear and direct role); inform them well in advance and get their commitment for participation early.
5. In identifying participants for the Mini-Consultation, try to determine what role some of them could play, for instance chairing group discussions, reporting of group discussions to plenary, serving as discussants at the plenary, etc. This will help you to make best use of their participation - and help strengthen their commitment to the Mini-Consultation and the whole SCP process.
6. Ask key stakeholders to come with prepared discussion papers (not more than 10 minutes); these are short contributions which follow the structure or main points raised by the proposition paper but which emphasise the perspective of a particular stakeholder group. The discussion papers therefore illuminate the interest, concern and stance of the stakeholders and set the stage for constructive dialogue and negotiation.

2. Making maximum use of the Environmental Profile

The *Environmental Profile* is a very useful information tool which provides an overview of development activities in a city and their interactions with environmental resources and hazards, put in the context of urban management systems and situations. Because of its focus on systematically analysing the linkages and interactions between development and environment, the *Environmental Profile* provides a powerful means of giving a sound understanding of and a common perspective on issues. (See the SCP Source Book Volume 1 on *Preparing the SCP Environmental Profile*.) In the process of clarifying issues, therefore, the information contained in the profile can be used in a number of ways:

- establishing the base line situation of the issue;
- understanding and analysing the interactions of the issue with other environmental issues and development sectors; and
- understanding the role of different stakeholders in relation to the issue.

To stimulate the maximum use of the *Environmental Profile*, it may be useful to prepare a set of issue-specific extracts which can then be circulated to Working Group members and to those preparing for and participating in Mini-Consultations. For example, the pages of the *Environmental Profile* which are relevant to the particular issue can be separated out, photocopied, and bound together in a spring file - along with a one-page table of contents prepared for this selection of pages. This can be usefully supplemented with a short note (one or two pages) highlighting the key facts and conclusions about the base line situation, trends, sectoral linkages and institutional structures - as derived from the information contained in the special file. This special 'Issue File' can then be distributed to members of the relevant Working Group(s) as well as to other stakeholders who are actively involved, perhaps with a cover memo explaining its purpose. Finally, it would be helpful to also ask the Working Group Coordinator to update the information in the file, based on the continuing work of the Group.

3. Supporting the issue clarification process with base line surveys and issue-specific profiles

As an information source, the *Environmental Profile* is designed to provide general basic information and to provide an analytical overview. Hence, additional information and details that might be required for clarifying issues must be collected through other means, for instance through the Working Group. Depending on the type of information required and available resources, special surveys can be undertaken, either to generate new primary data or to extract the relevant information from secondary sources. These could be organised into an issue-specific Profile, following the general model of the *SCP Environmental Profile* and supplementing the information available there.

4. Applying simple analytical techniques

Issues can also be further analysed using simple analytical tools. Two of the techniques which have been used in SCP cities are problem tree analysis and problem mapping.

Problem Tree Technique: The ‘problem tree’ technique allows the cause-effect relationships associated with an issue to be systematically considered and analysed. By navigating through the different layers or chains of problems and sifting them by level of importance and degree of correlation to the issue at hand, the root or underlying problems can be identified. The reverse of this exercise is to consider what can be done to address each of the problems captured through the ‘problem tree’, and this leads to the generation of layers of solutions, i.e. the ‘*objective tree*’. Whilst the ‘problem tree’ starts with the issue and goes downstream searching for its causes, the ‘objective tree’ begins with asking what to do with the root causes (the last layer from the top on the ‘problem tree’) and proceeds upstream, applying the same question, to the more obvious and manifesting ones. (An example of the problem tree approach, as used in Ismailia, is given in Part C of this Source Book.)

Mapping: Mapping as a tool in issue clarification has two special advantages. Firstly, it enables the translation of a complex set of data into geographic features and attributes which stakeholders can understand and interpret. This is especially valuable in identifying spatial overlaps and inter-relations of different problems and aspects. Secondly, in terms of visual presentation of information, maps are eye-catching and effective in communicating with stakeholders.

The end result of the issue clarification or problem analysis is a succinct problem statement which captures the essence of the issue or the problem. A typical problem statement highlights the scale of the problem, the major effects of the problem and the principle causes or sources of the problem, both in quantity and quality terms. The following example which was taken from Shenyang, China (although lacking the quantitative figures) illustrates a ‘problem statement’ well.

‘Shenyang has a serious water resource problem. Supply has not satisfied demand for many years, resulting in serious ground water over-abstraction as well as escalating costs in providing a piped water distribution system. Discharged effluents continue to pollute the rivers,

primarily from industrial but increasingly from domestic and agricultural sources, conflicting with both short and long term water supply systems and proposals. This pollution drastically reduces the water quality and increases its cost (by requiring more expensive treatment, as well as the tapping of sources far away); it also limits other development opportunities, especially in recreation. Moreover, these additional costs (and lost development opportunities) are not faced by those who actually cause the problem; instead these costs are borne by other stakeholders in the city. The situation is made worse by seasonal fluctuations in the water flows of the main rivers.'

Box 3: Clarifying an Issue - An Example from Dar es Salaam

The issue of managing sand extraction in Dar es Salaam shows how issues, when examined closely, may turn out to be more complex than they at first glance appear to be; this in turn shows how crucial it is to clarify issues from different perspectives.

In 1992 the expansion of sand extraction in the river and stream beds in and around the city was identified as having serious environmental consequences such as altering water courses, rapid beach erosion, destruction of fragile terrestrial and marine ecosystems, damage to property, increasing flood and pollution hazards, and even loss of life. This led to the establishment of a cross-sectoral Working Group to address the problem.

The extensive deliberations of the Working Group, which included representatives of the miners as well as the authorities involved in land allocation and issuance of mining rights, led to a new and better understanding of the problem, which in fact changed the perspective of many of the participants. Information was collected which clarified the existing rate of extraction and the nature and extent of environmental damage caused. But it also brought to light how important this sector is both to the city's construction sector and to employment and income. As much as 7-10 percent of informal employment was estimated to be generated in sand extraction. In just one unofficial site 500 men, women and children were making their livelihood in the sand extraction business. Moreover, it was realised that sand as building material for the informal housing sector (which covers 65 percent of settlements in Dar es Salaam) comes from these informal sources at a much more affordable price than is available from large-scale official sources.

Certainly, the environmental consequences and long term costs of these informal activities were clearly understood and taken quite seriously. Nonetheless, the economic potential and growth opportunities of the sector were also considered carefully. This comprehensive understanding of the problem and appreciation of 'connectivities' encouraged the parties involved in the process to search for solutions that could better manage existing sites and open up new, less risky areas, instead of simply opting for forcible closure and heavy handed policing.

Box 4: Meeting Information Needs: The Experience of SCP Cities

Base line surveys, issue-specific profiles, and other special information activities have become useful tools clarifying issues, as can be seen from these examples.

Concepcion (Chile): Undertaking base line surveys and preparing issue-specific profiles has become a routine practice of the Working Groups in Concepcion. Since the profiles are prepared through the participation of the stakeholders and are customised to their specific information needs, they are quite well used. Examples include the 'Lota Poverty Profile' and the 'Profile Of the Urban Economy'.

Ibadan (Nigeria): Ibadan city falls under the administration of eleven local governments which do not have a single coordinating body. The SCP Working Groups recognised the importance of this institutional issue and wanted to learn more about the development perspective, revenue base and administrative structure of each of the eleven local governments. Since the Environmental Profile did not have sufficient information on these issues, the SCP project team commissioned its own study, which resulted in a now routinely used 'Institutional Profile'.

Ismailia (Egypt): One of Ismailia's main concerns was attracting investment and creating new jobs. In fact, originally the issues were more about spurring growth than controlling development or managing the environment. Although this fervour for growth was later tempered, the push for investment and job creation remained an important segment of the development agenda. Hence the Governorate of Ismailia in its expanded second phase of the programme incorporated the preparation of an 'Investment Profile', as one of the expected outputs.

B 4 Formulating Strategies

Strategy is about two things: where you want to go and how to reach there. To effectively deal with urban environmental issues, which are generally complex and transcend immediate geographic and administrative boundaries and time-frames, well-designed long-term strategies are needed. The process of formulating strategies is described in this chapter. The process of strategy formulation and the stages discussed in this and the subsequent chapters should not, however, be perceived as linear and rigidly sequential; the process is rather an iterative one with back and forth movements, feedback and adjustments.

In the SCP context, strategies are formulated through a process of negotiation among the concerned stakeholders, and the process involves the following steps:

1. defining goals and objectives;
2. assessing and negotiating strategies;
3. considering resources and implementation options; and
4. agreeing on strategies and mobilising support.

B4.1 Where to go? - Defining goals and objectives

The essence of strategic planning is deciding where to go and how to reach there. Strategic planning seeks to direct effort and resources towards clearly understood and agreed goals and objectives. In the SCP context, having been through the situation assessment and issue clarification phases, the stakeholders will understand that the situation must be changed - and they will be asking 'what can we do?' Strategic goals and objectives are therefore needed, to guide their responses and ensure that actions are coordinated and focused on the same tasks.

Goals express the desired future state - what do we wish the situation to become? In terms of environmental concerns, for example, the overall goal may be 'achieving sustainability'. But that is a broad and general objective - it does not provide strategic guidance. Much more concrete objectives need to be developed, objectives that are realistic enough to be readily understood but ambitious enough to be a challenge and to represent a significant improvement. Specific objectives are formulated on the basis of a sound evaluation of the existing situation, both in terms of the seriousness of the problem (urgency and scale) and in terms of possible capacities for change (realism), and will have a defined time frame (usually medium- and long-term). Examples of such objectives could be: restoring by 2004 the water quality in a river to the standards measured in 1994; providing at least primary treatment for one-half of all domestic liquid waste by the year 2005; or removing two-thirds of all domestic solid waste within three years.

Establishing specific objectives therefore require three things: **one**, careful assessment of the situation or problem analysis (which is done during the assessment and issue-clarification stages); **two**, determining indicators (what

are the appropriate measures); and **three**, determining the (quantitative) target(s) we aim to achieve by a given future date or time. Once the objectives are clearly articulated in specific terms of targets and time frame, benchmarks along the time path can also be identified, for monitoring purposes.

Agreeing on goals and objectives is not, however, a simple task, for several reasons:

Trade-offs: Certain goals can be in conflict with other goals (rapid reduction of pollution for example may be in conflict with economic development goals);

Uncertainties: The future always brings uncertainties: - technological changes, social transformations, institutional development, etc. which could have a bearing on how things actually turn out, changing the basis on which objectives were originally set.

Nonetheless, in most cases, especially with regard to environmental issues, it is possible to formulate and agree on objectives and targets, so long as this is done sensible and methodically - and in a participatory way. The growing awareness of environmental risks and problems, and the growing demands for action to solve them, make it easier to mobilise the political and social support necessary for reaching agreement on objectives. The emphasis of the SCP process on focusing on narrowly-defined specific issues also facilitates the task of objective-setting.

B4.2 Negotiating Strategies

In the SCP context, we deliberately talk of '**negotiating**' strategies, to emphasise the direct involvement of the stakeholders in formulating and shaping strategies. This is quite important, as it represents a fundamental key methodological shift away from the top-down technocratic approach of traditional strategic planning. Indeed, the formulation of goals and objectives itself (above) is also a process of negotiation, as the stakeholders should in principle agree 'where to go' (goals and objectives) before deliberating on 'how to reach there' (strategies of intervention).

The key process is the systematic identification, review and evaluation of strategy options. Indeed, one of the aims of an issue-clarifying Mini-Consultation (see Chapter B3) is precisely to do this; the Proposition Paper of the Mini Consultation will have a special section which highlights and elaborates the various strategy options. At the Mini-Consultation and in subsequent working group sessions, these options will have to be further discussed and assessed.

In reality, various strategy options will usually be seen to overlap one with another, and different components of different options may be combined in numerous ways. What is required for effective urban environmental management is normally the coordinated use of a range of interventions which demand the use of various policy instruments, rather than a choice of one single option. Thus, an obvious advantage of having all stakeholders involved in the strategic planning exercise is being able to work out many different mixes of options and components, drawing upon and mobilising the full range of implementation instruments at the disposal of the different

stakeholders. The focus of the strategy formulation exercise could therefore be on creating 'synergy' between the strategy interventions of the different actors than trying to find one single 'best' strategy intervention.

In many SCP cities, the strategy formulation exercise has been structured around the different components of an issue, thereby allowing different entry points and leading to consideration of a full range of possible strategies and sub-strategies. As the table below highlights, for example, the solid waste management issue, when analysed during the issue clarification or problem analysis stage, was subdivided into collection, recycling, and disposal aspects, and strategies were negotiated for each component through correspondingly established sub-Working Groups.

But strategic planning by its nature often questions many commonly-held assumptions and poses powerful challenges to accepted ways of doing things. In some situations, change and improvement may not come easily except through radical policy shifts and innovative institutional approaches. Thus, imaginative and creative formulation of options will be necessary. In other cases, severe resource constraints may demand strict prioritising and/or phasing of different strategy interventions, set within a clear time frame. This in spatial terms may mean focusing first on some geographic areas for strategic reasons. In all these circumstances, where different strategy options have to be evaluated and reformulated, the Working Groups should deliberate very carefully and systematically so that all options - including the less-obvious as well as the difficult options - are fully and openly assessed.

Possible interventions: Waste Collection	Possible interventions: Recycling	Possible interventions: Waste Disposal
start privatising waste collection; establish separate collection companies	Develop household waste separation scheme, starting in one pilot area	strengthen sanitary landfill site development, including mobilisation of resources and detailed technical studies on ground water and other environmental impacts
develop neighbourhood organisations to organise and support local collection	Develop specialised waste separation schemes for hotels, restaurants and other institutions	review the role of other potential technologies (especially for hazardous wastes)
rationalise and strengthen transfer stations and storage facilities	Strengthen and support existing formal and informal recycling activities at transfer stations, disposal sites and elsewhere	develop terminal facilities for separation, for recycling and for treatment of hazardous wastes
institute or strengthen system of charges for collection, and also enforcement system		introduce disposal charges, together with system for controlling illegal dumping
launch public awareness campaign		promote joint ventures and new recycling technologies

Strategies should never be chosen simply because they are proposals which have been around for a long time and are familiar!

The following are some of the questions against which the different options should be scrutinised or evaluated:

- How effective is the option in achieving the strategy objectives?
- Was this option tried before? and if yes, what was the experience?
- Has this approach failed in the past? If yes, what factors made it fail and have these factors changed since then, and in what ways?
- If the option has not been tried before, what are its technological and managerial requirements and how do these compare to present capabilities?
- Does it require new institutional structures, and legislative or policy changes? If yes, is that feasible and in what time frame?
- How long will it take to implement? How soon can the impact begin to be seen? How certain are these changes and impacts?
- Exactly how will these changes be measured - and what different goals (efficiency, equity, quality of service, reduction of environmental damage, etc.) will be affected, and in what ways?
- How costly is the option, and can resources be mobilised?
- Is this strategy option in conflict with other sectoral and national policy objectives and priorities?

Options should be evaluated against the goals and objectives which were agreed at the issue clarification or problem analysis stage, and should be checked for their consistency with other broad policy objectives (such as the ones related to equity and efficiency) and cost effectiveness. A *goal-options matrix* can be used for this purpose. The purpose of the matrix is to provide a common framework or reference for selecting the best or the right mix of options. For example the Goal-options matrix taken from Dar es Salaam Traffic Management Working Group (reproduced below) highlights the evaluation of different options suggested to achieve a smooth and faster flow of traffic within the Central Business District Area. In this case, the chosen option was the introduction of a 'one way street system' which was found to be not only an effective way to deliver the desired outcome, but also to be cheaper and easier to implement. (In fact, the scheme was implemented and proved to be quite successful.)

For issues related to the provision of urban services (water supply for instance) strategy options should be considered against full cost recovery and consumers' preference and affordability; these are crucial for sustained provision of urban services. Their proper evaluation requires household surveys and a thorough analysis of the underlying institutional, economic and political factors. Often the choice of the consumers for one or the other type of service and their willingness to pay for it could be influenced by their perception and past experience. The frequent breakdowns and unreliability of a public-run service experienced in a particular city or neighbourhood may, for instance, cause a deep mistrust of government resulting in unwillingness to pay for the service, or hesitation to contribute to the initial capital investment. In other situations, people may prefer the service provision

Figure 1: The Goal-Options Matrix

Choosing the best option for achieving smooth and faster traffic flow in the Central Business District (CBD) of Dar es Salaam

GOALS OPTIONS	Effectiveness in achieving the strategy objective: smooth and faster flow of traffic (ranked from most effective to least effective)	Consistency with other development & sectoral objectives: (ranked from highly consistent to inconsistent)	Cost: ranked from least to most expensive
One-way street system			
Restricting entry to CBD by type of vehicle and time			
Charging vehicles for entry into CBD zone during peak hours			
Mounting traffic light(s)			

Fill in each of these boxes the contribution of each option towards the achievement of each goal and, if possible, quantify these contributions to allow comparisons between them and among the options

1 For a case study from Nigeria which highlights interesting findings along this line read The World Bank urban development Working Paper, 'Cost Recovery Strategy for Rural Water Delivery in Nigeria' by D. Whittington, A. Okorafor, A. Okore and A. McPhail (1990).

modality which gives them flexibility and control in terms of payment and access. Hence for instance, contrary to what would seem to be the obvious choice, people in a poor peri-urban neighbourhood, with irregular cashflows and weary of emergencies, may prefer to fetch water from nearby kiosks (whenever they want) rather than have private pipe line connections where payment is regular and based on the metered consumption of water.¹

But options are not evaluated in a vacuum; they must be considered within the existing realities - capacities and internal and external environment - of the institutions concerned. In other words strategies should not only be challenging, but also realistic enough to be implemented. In a strategic planning exercise, not only the possibilities and opportunities, but also the limits and constraints anticipated to be encountered should be thoroughly assessed. When we say strategies are about asking what *can* be done, we are emphasising this sense of realism. To assess the situation on the ground and to accordingly calibrate the strategies, working groups in SCP cities apply the following two tools:

SWOT Analysis: As the name implies SWOT analysis focuses on listing and assessing Strengths, Weaknesses, Opportunities and Threats prevailing in and around the institution(s) concerned. Whilst strengths and weaknesses refer to internal capacities and comparative advantages of the institution(s) concerned, opportunities and threats refer to the outside environment facing the institution(s). The overall thrust of a SWOT analysis is to capitalise on

the strength factors, to seize the opportunities, to overcome the weaknesses and to allay the threats.

Force Field Analysis: Force Field Analysis is similar in essence to SWOT analysis. But Force Field Analysis focuses on the *tensions* between restraining forces which try to sustain the status quo and the driving forces which are pro change and hence facilitate the realisation of the objectives. This tool will allow stakeholders therefore to flag out both groups of forces - driving and restraining - and subsequently to map out strategies. The strategies can focus on one or a mix of three types of measures: one, adding driving forces; two, removing restraining forces; and three, adding driving forces and removing restraining forces.

One important aspect to be considered when evaluating different strategy options is the likelihood for all or most of the stakeholders to benefit from it. The stakeholder approach is most effective in strategic planning when the stakeholders indeed can see tangible benefits accruing from the implementation of a particular strategy or strategies. The choice of strategy option has therefore to be dictated by this aspect as well. In practical terms this means looking for the best **'entry points'** - entry points that would promote a convergence of interest among stakeholders. For natural resources where different stakeholders have different uses, and hence conflicts of interest, strategies focused on health concerns, for example, may be a good common ground for rallying support from all stakeholders.

In certain cases, such as conflicts between up- and downstream water users, or between tourism operators on coastal areas and industries polluting the waterways, conflicts of interest can be sharp and divisive, and hence would require innovative approaches and strategies that take into account the different costs and benefits to different stakeholders.

Box 5: Considering Strategy Options: Example from Dar es Salaam

The privatisation of solid waste collection in Dar es Salaam was a radically new strategy which was driven by the catastrophic failure of the existing municipal system and resulted from a critical review and evaluation of the different options potentially available. Considering the failures and break down of the municipal collection system, but mindful of the weaknesses of the private sector, the chosen strategy underlined complementary roles for the city council, the private sector, and communities. The increased collection rate and efficiency gains achieved after embarking on partial privatisation has vindicated the correctness of this move. The productivity per person and per vehicle in the private collection sector was eight times higher than it had been when it was directly operated by the city council. While this was quite an achievement on its own right, the most important impact of the initiative was the attitudinal and institutional breakthrough that made acceptable the idea of private sector participation in urban management - for long a 'taboo' topic.

B4.3 Considering resources and implementation options

Experience has shown the grave dangers of formulating strategies without adequate regard to implementation modalities and options - and resources. When available implementation instruments, resource constraints, capacity

bottlenecks, legislative and institutional difficulties, etc. are carefully considered as part of the assessment of strategic options, then the strategies are likely to be much more realistic and therefore more likely to be successfully implemented.

In relation to implementation, the strategic options should particularly be considered against the following key aspects:

Efficacy of implementation instruments: The effectiveness of various implementation instruments should be evaluated carefully. Setting rigorous standards for pollution may mean nothing, for example, if in reality the regulations are not enforced because of weaknesses in the enforcement mechanisms and regulatory institutions. Or for instance, application of economic instruments to induce change in behaviour may not bring the intended results if other policy interventions and market distortions work against it.

Availability of resources: *strategy planning without due consideration of the availability of resources is pointless, however elegantly the strategies are formulated.* A rough estimate of the cost of implementing the various strategy options should be made and carefully weighed against the likely available resources. (Estimates of available resources should always be based on realistic, not optimistic, assumptions.) Formulating strategies must always be based on a reasonable understanding of availability and sources of resources. One should never choose a strategy and then go looking for resources: that is a common - and commonly unsuccessful - approach.

This has been confirmed by the experience of many SCP cities. After going through a long process of strategy formulation, and in some cases even carrying this forward to detailed formulation of investment projects, implementation did not follow as expected because resources were not forthcoming. Given the long period of time typically required for resource mobilisation, a more realistic approach would have linked strategy formulation with aggressive mobilisation of resources at a much earlier stage. But because they failed to establish the linkages early on and postponed the resource mobilisation campaign until the strategies and projects had been formulated, a long time gap between strategy formulation and implementation was created. This can easily lead to frustration and dissipation of interest on the part of the various stakeholders who were eager to see changes actually taking place.

Absorption capacity: even if resources are available, the implementation capacity may not be sufficient. Shortages in skills and personnel, institutional weaknesses, lack of proper management mechanisms and experience - all these typical difficulties in local government systems may mean that the potentially available resources cannot be actually utilised effectively. In such cases, the strategies should accordingly be less ambitious or should be modified to accommodate capacity problems and also phased to allow longer time frame.

B4.4 Agreeing on strategies and mobilising support

To be effective, strategies require firm and lasting commitments at the policy decision-making level, and therefore the Working Groups during their deliberations on strategies should ensure the participation of appropriate decision-makers. This might be done, for instance, by inviting them to a special session of the Working Group when a synthesised evaluation of strategy options will be presented and discussed; another approach would be to circulate a draft strategy paper, as discussed and agreed in the Working Groups, among key decision makers and soliciting their comments on a one-by-one basis.

Box 6: Key Implementation Issues of Privatisation in Dar es Salaam

Some of the problems that could affect the privatisation of solid waste collection in Dar es Salaam were anticipated and analysed earlier. To start with, there was no experience of privatisation, and working out the necessary legal and institutional procedures was a daunting task. Secondly, there was concern for how to ensure the quality and efficiency of the service and the affordability of the fees. Thirdly, the crisis situation of the refuse collection breakdown was demanding urgent actions even before embarking on privatisation. Fourth, the decrepit state of the city council's equipment and collection infrastructure was a serious handicap which could greatly undermine the bargaining position of the city council during privatisation.

These various constraints and concerns were analysed by the Working Group, and as a result a number of guiding principles were agreed:

- an emergency clean-up campaign should be organised and carried out until privatisation takes place;
- the service should not be monopolised by one operator; competition between different operators should be encouraged to stimulate efficiency;
- the city should be divided into collection areas, with a view to balancing commercial feasibility and cross-subsidy between the high and low income areas.

A lease system and contract that would allow the city council to generate revenue and to focus on commercially unviable areas was adopted. The need for strengthening the supervision functions of the city council was underlined, and fair profit margins and collection fees were estimated. It was agreed that the revenue generated through privatisation would be recycled back into the system to revamp the collection infrastructure. More importantly, in view of the complexity of the process and dearth of experienced waste management operators in the private sector, the process of privatisation was carefully phased to start with the city centre and gradually expand outwards to other areas. Setting the legal and institutional framework and privatising the first ten wards (of fifty two) took two years, and three years later this was expanded to a total of twenty three wards.

However, all did not go well. A key difficulty was the system of fees collection: although it was assumed that the service beneficiaries in the Central Business District would pay the refuse collection fees together with their trade licence renewal fees, the city council had not negotiated with the Ministry of Trade and had not worked out the details as to how this would be enforced. When the planned fees collection mechanism failed to materialise, it seriously affected the cash flow of the private contractors and created serious legal wrangling and setbacks. This specific case of Dar es Salaam underlines the importance of considering all issues and options which pertain to the effective implementation of a strategy.

Strategy formulation, in the SCP context, should also be seen as a consensus-building process, in which agreement on, commitments to, and ownership of strategies by the participating stakeholders is constantly sought and reinforced. This process of continuous ‘give and take’ is intended to produce genuine negotiation and reconciliation of difference and conflicts. Only by constantly keeping the relevant stakeholders ‘on board’ can the resulting strategy be both appropriate and implementable.

SCP city experience has shown that even after being drafted by Working Groups through a participatory process, strategies should still be discussed further, in larger audiences such as Mini-Consultations or Strategy Review Workshops. (An aide-memoire on the Environmental Strategies Review Workshop in Ismailia is included as an Annex in Part C of this Source Book.) These activities would have the following purposes:

- solicit reactions and inputs from additional diverse sources;
- expand the range of interested persons and groups;
- clarify the strategies and how they relate to other policies and plans;
- secure a wider base of public support and commitment; and
- publicise the strategies more widely.

The success of a Mini-Consultation or Strategy Review Workshops in achieving these purposes depends on various factors including the following:

1. The quality of the draft strategies and the clarity of their presentation of: (a) the full dimensions of the problem (human, technical, institutional, financial), including opportunities and constraints; (b) the involved actors and stakeholders and which role each plays; (c) the considered policy and implementation options and an assessment of the advantages and disadvantages of each; and (d) the proposed strategies and objectives and justifications for them.
2. The composition of participants: it is crucial to involve a good mix of appropriate persons, including key policy-makers and politicians, senior public and private sector managers, community and opinion leaders, media, university and technical specialists, etc.
3. The degree of careful advance preparation for the meeting and the capability of the facilitator(s) in guiding the discussions and systematically leading toward concrete conclusions. Experience shows that unstructured or ‘unguided’ discussions are much less productive; equally, hierarchically-run formal meetings do not achieve the objectives. Good structure, good preparation, and good facilitation make a very big difference.
4. The establishment of a clear procedure on how to proceed from the meeting. It is crucial to have an explicit understanding, clearly articulated during the meeting, about what steps will be taken next, and by whom. At the end of the meeting, there should be a ‘rounding off’ which includes a summary of what has been agreed, by whom, and what will in fact be done next. This is important not only to ensure broad-based support for the strategies, but also to provide the foundation for proceeding to the concrete details of implementation.

B5 Action Planning

*Whilst strategy planning is about what **can** be done, action planning is about what **will** be done. Action plans, in the SCP context, are issue-focused, result oriented, actor-specific and time bound. In action planning costs, resource commitments, actors and time-frame are definitive and detailed. Strategic goals and objectives can be attained only through a long process of incremental changes, and those increments are mediated through realistic action plans. In this chapter the different steps involved in action planning and the basic features of an action plan are described*

Action planning in the SCP context involves the following steps:

1. Elaborating and analysing courses of action;
2. Preparing a brief on the agreed course of action;
3. Determining the tasks and the respective actors involved;
4. Determining the required resources;
5. Identifying possible gaps and weak links;
6. Reconfirming commitments;
7. Agreeing on coordination mechanisms; and
8. Agreeing on indicators and monitoring mechanisms.

B5.1 Elaborating and analysing courses of action

Even though strategic objectives and options will have been defined at the strategy formulation stage, further elaboration and consideration of options is usually necessary. This is because the options articulated thus far - being broad and at policy level - will normally not be detailed or concrete enough for implementation. Thus, the chosen option(s) will have to be further elaborated and analysed. For instance the implementation of a one-way traffic system in the Central Business District of Dar es Salaam which was highlighted in Chapter 5, would require identifying the roads where one-way traffic system can be introduced (using maps and physical inspections), analysing the traffic load, type and flow, simulating the results and possible consequences of a one-way traffic system and considering possible traffic design alternatives. The key principle will be to design the courses of action in a such a way that, given the constraints, the agreed objectives are maximised. The strategies define the functional relationships and principles but do not provide the design of the complete model; that comes in the realm of operational planning or action planning. Building the model and solving it would require preparing the necessary institutional and technical specifications, exploring the means and ways for optimal use of resources and providing a framework or structure that would sequence and link the body of actions entailed by the various strategies.

Also, for most city-wide issues there are a number of components (collection, transport and transfer, recycling, and disposal for example in the case of solid waste management), in which case the action planning exercise will have to further break down the broader components into specific sub-

components, priority areas (spatially or thematically) and do-able programmes, and demonstrative initiatives.

B5.2 Preparing a brief on the agreed courses of action

As courses of action (interventions) become clear, it will be useful to prepare a brief description or 'Action Profile' for each intervention or element. An action profile (AP) should be about two pages long and could contain the following information:

- objective or purpose of courses of action;
- description of the courses of action;
- expected impacts in terms of physical changes (such as improvements in pollution levels) and of economic efficiency and social equity;
- identification of direct and indirect beneficiaries, as well as those bearing any costs;
- estimate of required resources (see also below); and
- supporting implementation instruments required.

If the action is primarily a capital investment project, which does not involve many actors or the application of other implementation instruments, a 'Project Profile' can be prepared. This is a simplified but multidimensional analysis of the proposed investment, which can subsequently be developed into a feasibility study (see Chapter B7).

B5.3 Determining the tasks and the respective actors

The next important step is to determine the specific tasks involved in realising the chosen course of action: what needs to be done and by whom. Any course of action is made up of various tasks which may be carried out by different actors (stakeholders), and each task has its own requirements for resources and competence. Disaggregating each course of action into its constituent tasks is therefore quite important, because it makes it possible to determine what has to be done - and with what resources. (The sub-activities or tasks within a course of action can sometimes be quite complicated and numerous.) An inventory of relevant potential actors can then be taken to see who might offer what, individually and collectively, towards implementation of the action plan.

The following questions might help when collecting information about potential actors:

- Who are the potential actors, looking at local as well as regional and national levels, and looking across the public, the private and the community sectors?
- What implementation instruments (legislative, educational, regulatory, economic, financial, technical, etc) and resources (finance, information, legal authority, human resources, etc) do each of them have or control?
- Who among them are the 'lead' actors in regard to this issue - i.e., which have a major stake or mandate, or control the resources, or possess the most effective implementation instruments, or have most influence on political and social attitudes and decisions?

- How interested or supportive will they be in the implementation of the initiative(s) under consideration?

The separate tasks at this level of action planning should not be too detailed, as the detailed work programme will have to be developed later by each actor or partner. However the tasks need to be well structured and clearly spelled out, to show the internal logic and connections, possible interactions, and expected end results.

It is possible to analyse these task/actor relationships with a systematic matrix. This was done in Dar es Salaam, for the traffic improvement option, as shown below. One advantage of this approach is that it quickly identifies actions for which there is no clear ‘lead’ stakeholder - as well as actions for which more than one actor could work in concert.

*The Task-Actor Matrix
Improving the traffic flow in the CBD of Dar es Salaam*

	Dar es Salaam City Council	Traffic Police	Taxi owners association	Press & media	CBD Business operators
Issuing bye-laws	<p><i>Insert in each of these boxes what the respective stakeholder is supposed to do in order to carry out the corresponding task. The stakeholder should commit or confirm that this task shall be funded from their own budget. The focus should be on integrating the tasks into the work programmes and budgets of the respective stakeholders</i></p>				
Informing the Public					
Mounting traffic signs					
Enforcing compliance					
Monitoring impact					

B5.4 Determining the required resources

Obviously, however brilliant a strategy may be, without the financial and other resources required for its implementation, it is pointless. To have any realistic chance of bringing about a desired change, action plans must be integrated with the determination and commitment of resources.

At this stage, a rough estimation of costs should be made for each specific action proposal (each task or sub-task). This does not yet need to be done with precision, but a rough estimate is required, separated for both capital costs (investments) and for non-capital costs (e.g. staff, equipment, other operating costs). In addition to financial costs (money), it is also important to indicate, where appropriate, the requirements for other resources - for instance, skilled human resources or specialised equipment or institutional capabilities. Then, when actors are associated with tasks, it is possible to see what might be the total resources called for from each particular participant. This then will provide the basis for bilateral and multilateral

negotiation and other necessary discussions about sources of funds and other inputs. This also gives the basis on which each actor will be able to decide how the tasks fit with their own resource availabilities and priorities.

Before obtaining firm commitment from the key actors, there will naturally be an extended process of negotiation and discussion. In addition, it must be expected that these discussions will highlight resource shortfalls, as when the resources required for a particular task are not forthcoming from the appropriate actors - or are not available within the necessary time-frame. This is the point at which the commitment of actors to a course of action is truly 'tested' - and this is the point at which creativity, patience, skill at consensus-building, and goodwill are required.

For example, if funding, or other resource shortfalls, are thus identified, then the group negotiations among the various stakeholders may also be focused on alternative ways of overcoming the resource shortage. This might include special campaigns to secure funds from other sources, down scaling or re-phasing of activities to match current capacities, and modifying tasks and activities to broaden the opportunities for collaboration with other partners or actors who might bring their resources to bear.

B5.5 Determining gaps and weakest links

The work of the preceding stages should therefore identify possible gaps and weak links, such as:

- tasks for which no clear 'lead' actor is identified;
- financial costs for which funding cannot be identified;
- other resource requirements which cannot be mobilised;
- capacity limitations (institutional, organisational); and
- difficulty in obtaining serious commitment from particular actors.

The process of action planning itself requires time and resources and therefore it cannot, realistically, be continued too long or carried out in too great detail. To keep the process within reasonable bounds (of time and cost), it is useful to move fairly quickly through the initial stages and then to focus particularly upon the gaps and weak points identified. Special effort will be needed to analyse, discuss and negotiate possible ways around or responses to the gaps and weak points; creative energy should be focused on this and negotiations should be concentrated here. A resolution of these bottlenecks is required, so that a decision may be made about proceeding with the proposed course of action. If the gaps and weakness *cannot* be adequately resolved, it will be necessary to go back and reconsider, to come up with an alternative course of action.

B5.6 Reconfirming commitment

When the Action Plan has successfully been formulated, with agreement from actors on resources, roles, and activities, it is important to formalise their commitments. This can be done in a number of different ways; the following approaches have proven useful in the experience of SCP cities:

Memorandum of Understanding (MoU): An MoU is a signed document which summarises the agreed actions, roles, timings, resource inputs, and responsibilities of the various partners who are voluntarily entering into the agreement. In the SCP action planning context, a simple common MoU document can usually be prepared and signed by all concerned parties, unless the action plan involves a complex set of **layers** of collaboration among the different actors in which case a series of two-party MoUs may be necessary. Alternatively, key actors can be requested to submit a ‘letter of intent’ (a kind of promissory note) which outlines what they intend to do within the framework of the agreed action plan.

Action Plan Workshop: In some circumstances, it is useful for a comprehensive and pre-negotiated action plan to be presented and deliberated at a joint consultative meeting or workshop, leading to an open and informed consensus and formal endorsement by all key stakeholders. But for this approach to be effective, bilateral negotiations, at least on major aspects, and with key actors, should be concluded *prior* to the workshop, and the workshop should have a limited attendance, including especially those senior managers and leaders who can represent the different stakeholders at the decision making level.

Sectoral Work Programme: The central instrument for action planning, however, will be the *work programmes* of the different actors themselves. Part of the final negotiation of the Action Plan should include a clear programming of activities - who does what, when, and with what inputs? This common programme of activities, which is the detailed Action Plan, must then be reflected in the corresponding work programmes of those organisations and groups who are parties to the Action Plan. This will make clear, for example, exactly which departments or institutions will be responsible for which aspects of the Action Plan. Also, by having the requirements of the Action Plan incorporated into the organisation’s own internal work programming, this means that the Action Plan activities will be properly internalised and committed - which is essential if the work is actually to go ahead as agreed.

B5.7 Agreeing on a mechanism of how to coordinate implementation of the activities

An integral part of the Action Plan should be an agreed mechanism for coordinating the separate actions of the various parties in the Plan. Especially when there are several different stakeholders involved in the implementation, it is crucial to have a mechanism in place which will provide the necessary coordination. For instance, if for whatever reasons one actor is delayed in implementing a critical part of the Action Plan, then consequent adjustments will have to be made by others, to avoid the danger of the whole thing collapsing in confusion. There are many ways this might be done, for instance by agreeing that the SCP Working Group will maintain the coordinating role, with a commitment to certain regular meetings for this purpose. Whatever is decided, however, it must be clear and explicit. Also, the coordinating mechanism must be well integrated with the monitoring mechanism (see below), which provides essential information for the coordination function.

B5.8 Agreeing on indicators and a monitoring mechanism

An impressive looking Action Plan can easily go wrong during the course of implementation; there are always uncertainties and unpredictable factors, and even 'good faith' commitments can sometimes fail to materialise. Equally, the activities undertaken may turn out to have different consequences from those originally foreseen. For these and other reasons, it is essential to have the Action Plan backed up by a proper **monitoring** mechanism. The key ingredient to be agreed on at the outset is a set of indicators - things which can be measured and kept track of as implementation proceeds. Although the monitoring system needs to be intelligently designed, it need not be complicated or difficult. On the contrary, the most effective monitoring systems are often those which are simple and easy to operate, with indicators that are easy to collect and analyse. Indicators should look at both inputs (what the partners of the Action Plan are doing) but also outputs or results, to measure the impact or consequences of what is being done. The purpose of monitoring is to provide information for managing the whole process, and so the monitoring system must be closely integrated with the agreed coordination mechanism (see above). This will allow the stakeholders in the Action Plan to react promptly and sensibly to difficulties and unforeseen problems.

For most Action Plans, it is useful to monitor progress in three basic dimensions: first, indicators which show the progress of agreed inputs (e.g., installation of piping, digging of drainage cuts, community information and education activities, etc.); second, indicators which look at the delivery of expected physical outputs (e.g. water supplied, surface water drained, community use of facilities, etc.); and third, indicators measuring the economic, social and environmental impact of the physical outputs (e.g. reduced disease, decreased flooding, improved hygiene, etc).

Box 7: Summary of Characteristics of an Action Plan

A good Action Plan should....

- be derived from and consistent with an agreed strategy
- contribute directly to the achievement of strategic objectives and goals
- be compatible with broader policy goals, sectoral strategies and established norms
- be realistic and attainable
- have a clear and very specific time frame for all actions
- indicate financial and other resource implications, by action and by actor
- be detailed for each specific organisation or group (actor) involved
- be genuinely agreed by all those whose implementation support is required
- incorporate an agreed coordination mechanism together with an agreed system of monitoring and indicators.

Box 8: Using the Full Range of Implementation Instruments: The Case of Concepcion

The issue-specific Working Groups in Concepcion (Chile) have applied a wide mix of instruments for implementing the issue-specific strategies:

Education and research

Cleaning the polluted urban lakes was accompanied by a public awareness campaign, which particularly focused on school children. The university was encouraged to initiate and promote case studies on the problems associated with the lakes, and this led to a research programme, financed by the university itself. The educational establishments who sponsored visits by school children to the lakes later decided to introduce environmental education into their curricula, building on the lessons and experience they gained from the field.

Public information and awareness campaign

The key component of the 'Technology Emergency Plan' prepared by the Working Groups on industrial Risk Management was the establishment of an Information Centre and a database designed to be accessed by potential users: chemical industries, chemical transport operators and the Fire Department. The database included descriptions of hazard prone chemical elements and compounds, risks associated with them, and safety precautions required to be observed during transportation, storage and industrial processing.

Institutional reform

An institutional vacuum was identified as a constraint for managing urban lakes and for operationalising the city's land use plan in a development-friendly way. In the latter case, the problem was how to reconcile the objectives of the traditional Master Plan with the day-to-day development needs and dynamics of change on the ground. In the case of urban lakes, the responsibility of management was entrusted to the municipality, while in the land use planning case, it was decided to establish a new Urban Development Agency, with a mandate to facilitate the implementation of the existing plan by accommodating necessary changes and emerging development needs. This was a new perspective to development planning, which none of the existing institutions was equipped to execute, so that a new entity was required.

Capacity building

The infrastructure improvement public works programme implemented in one of the poorest settlements (Pueblo Hundido) was supported by community capacity building activities. The community established three Working Groups, to explore development opportunities in tourism, small businesses, and fishing. The groups were the spring board for capacity building activities. In view of the dying coal mining industry which for generations had been the major source of livelihood in the area, the community has been awakened and encouraged to look into alternative economic opportunities and to adapt and adjust to the changing economic reality. Non governmental organisations (NGOs) engaged in community development programmes were drawn into the area to assist in developing new skills and raising awareness. The process also helped to bring these fundamental development concerns to the attention of the municipality. As a result, the municipality negotiated with the neighbouring municipality, where there was a shortage of blue collar workers, to facilitate labour mobility.

Box 9: The Action Plan to Better Manage Sand Extraction, Limestone Mining and Lime Making in Dar es Salaam

The Action Plan developed by the Sustainable Dar es Salaam Working Group on sand extraction, limestone mining and lime making illustrates some of the basic features of an Action Plan discussed in this chapter.

The plan documented in a synthesised way the potentials of the informal sand extraction and limestone mining activities and their contribution to the city's economy; at the same time it highlighted the looming dangers and long term environmental costs associated with its spontaneous and informal expansion in and around the city. It then proposed an eighteen-point Action Plan, which featured the following characteristics:

Commitment

For each action, the plan identified four to five key organisational actors (government agency and department or mining association), but also where necessary identified individuals, such as the city engineer.

Activities and the full range of implementation instruments

Actions of all dimensions and aspects such as technical (survey and designation of new areas), investment (constructing access roads, providing basic services and facilities in mining zones), institutional (enforcing legal agreements), financial (access and collection fees, compensating communities in mining areas), public awareness, etc., were identified and described clearly who was to do what.

Investment and costing

The plan incorporated investment projects estimated to cost US 3.1 million dollars.

Geographic specificity

The Action Plan, based on extensive research and an opinion survey of both miners and experts, provided maps which indicated locations of existing mining that need to be closed and rehabilitated, and proposed new sites that could be opened up for mining.

Time frame

The plan anticipated a six-month time frame of implementation, which was over-optimistic.

B6

Resource Generation and Mobilisation: An Integral Part of Action Planning

The experience of thirty years of technical cooperation has clearly confirmed that the key bottleneck impeding development and change is not technology or even resources but poor governance and lack of management capacity. Nonetheless, the shortage of resources - especially finance - remains a core problem for development in general and certainly for most cities in developing countries. With huge unmet demands for urban services and infrastructure, and usually with rapidly growing urban populations, the difficulties of mobilising development resources remain enormous. This chapter uses city experiences to show how resource mobilisation can be integrated into the overall strategic planning and action planning process - and how it can be successful.

However good an Action Plan may be, without the finance and other resources needed for implementation, it will remain on the drawing board. Even if costs are initially taken into account, as time passes by the cost estimates and other resource assumptions which were built into the Action Plan will change - almost always for the worse. Furthermore, implementation delays - all too common even with the best of plans - will not only result in cost over-runs but will also dissipate the interest and enthusiasm of the potential partners, particularly the beneficiaries. The question of resources (financial and other) is therefore an issue that must be addressed from the beginning - and throughout the process of action planning and implementation. During each stage of the strategy planning and action planning process, the sources and availability of resources should be among the factors to be carefully considered:

- at the strategy assessment stage, a rough estimation of cost and indications of available resources are required;
- at the action planning stage, a somewhat more well-considered estimation of financial and other resource requirements is required, with separate estimates for each activity and for each key actor; and
- at the project formulation stage, detailed cost estimates by type of input and by year are required, including clear specification of sources of resources including where appropriate the financing terms, disbursement conditions, etc.

In general, there are five main types of source of finance and other resources:

- government (local, provincial/regional, national);
- private sector (both formal and informal);
- households and communities;
- NGOs, voluntary organisations, charities, etc; and
- external organisations (international).

All of these types of potential funding and resource partners should be involved, from the beginning, in the whole strategic planning and action

planning process. Based on SCP city experience, the following approaches can be useful for involving such stakeholders and mobilising resource commitments from them.

1. Improving the revenue base of municipalities and their capacity for financing capital expenditures.
2. Incorporating action plans and projects into government capital budgets and public works programmes.
3. Enhancing the role of private sector finance.
4. Strengthening the role of communities in financial and resource support.
5. Developing projects and action plans to professionally accepted standards
6. Involving donors at an early stage.
7. Linking new initiatives with ongoing ones.

B6.1 Improving the revenue base of municipalities and their capacity for financing capital expenditures

Improvements in service delivery increases willingness to pay on the part of the beneficiaries and the public at large, and the underlying goal of the SCP city initiative is to build municipal capacity for better living environment and services. In many instances, the projects and action plans prepared by the SCP working groups, when implemented, have the capacity to generate additional revenue for the municipal authorities. For instance, among the projects proposed by the working groups in Dar es Salaam, the privatisation of solid waste collection and parking spaces had the potential for generating revenue for the city council. Municipal finance can also be improved through better revenue collection and financial management. Again Dar es Salaam provides a good example here: the Dar es Salaam City Commission, which in July 1996 temporarily took over the city management from the city council, succeeded, in less than two years, in increasing the municipal revenue collection from 900 million Tanzanian shillings to 6 billion Tanzanian shillings. Subsequently, the City Commission was not only able to allocate more funds for capital expenditure, but also could contribute, for the first time ever since the start-up of the project, 55 million shillings to the Sustainable Dar es Salaam Project (SDP), and even pledged another 165 million shillings.

B6.2 Incorporating action plans and projects into government capital budgets and public work programmes

Although the level of per capita government capital expenditure is often quite low, (especially in Africa), the public sector budgets are still key elements in infrastructure service provision. In the long run, government capital budgets will remain a key instrument of resource allocation and channel for public investment. Therefore, it is still important to work with the relevant local government bodies (which often means working with the City Treasurer and the municipal budget committee, not just the sectoral departments) to promote the incorporation of action plans and projects into the capital budgeting process. This process often has long lead-times, and works to fixed-date cycles, so it is valuable to begin as soon as possible.

Box 10: Concepcion: Project Financing through Public Works Programmes

The infrastructure improvement and capacity building project implemented in the poor communities of Pueblo Hundido, which benefited 200 households, were financed, among others, through a public works programme. The project had three components: entrepreneurship development; improvement of infrastructure, water and sanitation facilities; and infrastructure for better commercial and business activities. Implementation of this multi-sector initiative was made possible because the SCP city initiative through the EPM process could bring on board a number of actors from different sectors including the Ministry of Lands, the Ministry of Urban Development, Governorate, the Regional Government, the Ministry of Tourism, the University of Concepcion, the Water and Sanitation Utilities, the Social Fund for Solidarity and Investment Foundations. As a result, over 1.3 million US dollars was mobilised, with the Ministry of Urban Development and the Ministry of Public Works each contributing US 400,000. The number and composition of actors is impressive and underscores the SCP's stakeholder approach. Also the visible involvement of the Ministry of Public Works (apart from the Ministry of Urban Development) is striking and highlights one of the best ways where large scale public works investments could be linked to environmental improvement and poverty alleviation initiatives.

Box 11: Ismailia: Project Financing through Government Budgets - Learning the Hard Way

Probably due to the relative visibility of aid money in Egypt, and particularly in the Ismailia region, the expectations of external funding were initially quite high. This preoccupation with one source, however, turned out to be a wrong approach. Making it worse, the external funding agencies were not drawn in to the strategic planning or action planning or project preparation process, but were simply presented with the final draft form of the proposed projects *after* 18 months of preparation. This approach failed to attract donor interest, almost certainly because they were not involved in the work which underpinned and led to the draft proposals. In addition, even if donor interest had been generated, coming at such a late stage it would have required another 18 months or so before anything could begin - making for a very long lead-time.

Fortunately, the slowness and uncertainties associated with external sourcing were recognised, and the SCP project initiated a multi-track financing campaign which especially targeted government budgets and other domestic sources. The results have been encouraging. The rehabilitation and partial replacement of covered drains, which was budgeted at 6.2 million LE was implemented with resources from Public Works (LE 5 million) and Tourism Ministry (LE 1.2 million). A common wastewater treatment plant for the industrial zone with a cost of LE 1.8 million was implemented through the National Organisation for Water and Sanitary Drainage. Learning from experience, the Ismailia SCP project has followed a multi-track approach which relies more on government and other domestic sources while still pursuing external funding.

B6.3 Enhancing the role of private sector finance

The participation of the private sector in urban infrastructure and environment-related investments has in the past been quite limited in most countries; fortunately, the situation has been changing in recent years, often dramatically. The potential of private sector participation is very substantial, and although still under-utilised, it could be mobilised much more effectively. The SCP process endeavours to bring in private sector interests (from both the formal and the informal segments), involving them from the very beginning in the strategic planning and action planning process. In partnership with the public sector and the community sector, private interests can become very important providers, not only of finance but also of other scarce resources, such as management capability. Some of the ways in which private sector resources have been promoted and mobilised by SCP cities include the following:

- Involving the private sector in urban infrastructure development and service delivery initiatives through public-private partnership arrangements such as Operation and Maintenance contracts, leases and concessions, Build, Operate and Transfer contracts and other privatisation modalities. Public-private partnerships are particularly useful when private capital and management expertise can be joined with public sector responsibilities and development powers.
- Providing detailed information on sites and projects, and in some cases offering specific financial incentives or providing basic infrastructure (e.g. roads) to attract private developers and investment to priority areas.
- Incorporating issues that directly affect private sector development and investment (e.g. industrial zone development, small business promotion, industrial waste management, etc) in the list of priority issues.
- Emphasising environmental management strategies which generate business opportunities that are affordable and fundable (solid waste composting and waste recycling are good examples).
- Promoting the establishment of private sector trust funds which will be accessed for projects and action plans supporting sustainable development, especially for initiatives which find it difficult to access private capital or public sector budgets.

B6.4 Strengthening the role of communities in financial and resource support

Contrary to what many people perceive, neighbourhoods and communities - even very low-income ones - can and will make significant contributions to development initiatives. For this to occur, the initiative must be a top priority for the people, they must be involved in a meaningful way in the planning and implementation, and they must believe that a reliable and useful service or output will result. This important potential role of community groups and associations is visible and vibrant in many cities, which over the years have built a strong tradition of community self-help, development and participation. The widespread awareness that government is not able readily to provide services, free or otherwise, and a growing desire to have more direct control over one's own destiny, have also contributed to increased interest in community participation in development.

Box 12: The Sustainable Ibadan Trust Fund

In Ibadan (Nigeria), government development budgets have been shrinking progressively while, until mid-1999, external funding was virtually nonexistent. Although low-income communities had the enthusiasm to initiate projects, their resources, unless augmented, were often not sufficient to carry through these initiatives. Reflecting on this situation, a local business leader and philanthropist, together with the project team of the Sustainable Ibadan Project, developed the idea of a charitable fund, to be financed by well-to-do private sector leaders and used to support small-scale community initiatives. The Sustainable Ibadan Project Trust Fund (SIPTF) was duly organised and legally established, with an initial capital, later expanded, of Naira 650,000 (US\$8,000). The SIPTF operates as a revolving fund, with assistance typically being 70% loan and 30% grant and normally going to projects for which the local community also raises funds of their own. The focus of SIPTF is on community-based initiatives which grow out of the work of the Sustainable Ibadan Project, and it looks in particular at projects which are feasible in terms of revenue generation and/or community management.

In 1998 the SIPTF provided the critical finance which helped the Bodija Market community group develop a borehole for local water supply in the market. The water from the borehole is sold to market traders and residents, yielding a revenue stream which allows loan repayment and provides for system maintenance and up-grading. Although hampered by limited funds, the SIPTF has already shown the potential for strategically applied financial assistance which such a fund can provide flexibly and quickly.

City experiences have repeatedly shown that, if sensibly done, it is certainly possible to mobilise the enthusiastic participation of local communities - including financial participation as well as provision of other valuable resources. The following approaches have been used in SCP cities.

Cost Sharing: Provided planned projects coincide with their own priority needs, and provided the design of projects has taken into account the key issues of their concern, communities can often share the cost of investment. In one of the SCP cities (Ibadan), for example, a 50/50 cost sharing between government and communities was frequently used in local community projects. When local community financial resources are too limited to make a substantial cash contribution, it is often possible to utilise community labour and other in-kind contributions, as was done in Hanna Nassif upgrading in Dar es Salaam.

Recovering investment costs: In situations where innovative payment mechanisms and practices are applied, community-based projects can be self financing. Ismailia for example has successful experience of urban upgrading, which has been financed through land sales which recapture some of the increase in land value that resulted from upgrading. By applying differentiated land pricing, and by ploughing the revenue from land sales back to the development of the area, the city authorities effectively subsidised the poor sections of the society and achieved the goals of expanding and improving services in informal settlements without additional budgetary outlays.

Paying for operation and maintenance: However little or big the contributions of community groups in initial investment might be, communities are increasingly aware of the need to pay the economic price for the services

provided through those investments. There are abundant city experiences confirming people's willingness to pay for services to which they attach high value and priority. There is also plentiful experience of communities taking responsibility and bearing the cost of operation and maintenance of installed facilities by paying for services received, and sometimes by contributing a certain percentage of investment cost. (In Dar es Salaam communities benefiting from the World Bank upgrading project have agreed to pay 5% of the total investment cost, to help cover operation and maintenance expenses.). In some instances, the initial investment cost (or at least part of it) can be carefully discounted (over a long time-period) and internalised into the service charges and thereby slowly recovered.

B6.5 Developing projects and action plans to professionally accepted standards

The action plan, and especially the investment projects which are part of it, should always be prepared in a professional manner. This means, prepared in a way which is clear, well-documented, analytically sound, and well-argued. For most initial purposes, investment projects can be prepared to a simplified 'Project Profile' level, which for instance does not have a full financial or economic feasibility analysis. (Formats and procedures for such 'Project Profiles' have been developed by the SCP core team, based on city experience.) However, even at this level, the presentation must be properly done to an acceptable professional standard.

It is usually not necessary to proceed to a full economic and financial feasibility study of projects until a later stage; as specialised financing agencies often have their own particular requirements for project preparation, it is better to proceed to the detailed technical levels of preparation after the likely funding source and organisation will have become involved. Sometimes such agencies will help finance the technical assistance needed to prepare project proposals to the final levels of technical analysis. In any event, two points should be kept in mind: first, securing funds, whether for feasibility studies or for the investments themselves, is a long and often slow process, and therefore contacts and exchange of information with potential funding and specialised agencies should start at an early stage; and second, until the likely funding source is reasonably firmly committed, it is premature to spend much money and effort on detailed preparation of project proposals.

B6.6 Involving donors at an early stage

Although the magnitude of external development assistance in some countries is substantial, its over all share in development finance is generally small, and therefore aid money should be considered as a *catalytic* resource to be utilised for strategic interventions that are not easily financed from domestic sources. Accessing external aid money is not easy, however: allocation of aid money within a country is often dictated by a national policy of sectoral and regional preferences, and in any case, negotiating and securing funds is a long and complicated process. From this perspective, it is strongly advisable to identify early on the potential donors that might be interested in funding projects and activities generated through the SCP process and to establish and maintain contacts. They should be brought on board right from the beginning, so they can understand the SCP process and how it leads to

strategies and plans and projects, which will make them more prepared to support projects and activities that come out of the process. The following ways and channels could be used to constantly involve and keep donors informed.

- Systematically survey potential sources of funds, both external and domestic, with particular emphasis on identifying those most likely to be interested, perhaps because of their particular focus of activity, and obtain information about their procedures, activities, policies, etc. (The SCP project in Katowice used a national consultant to compile a register of potential funding sources.)
- Set up regular briefing or information meetings at which a group of relevant aid organisations can be given information; this may usefully be organised through the country office of the UNDP, a good source of contacts in the development community.
- Organise field visits to potential project areas, or to communities where activities are being formulated, as a way of further stimulating the interest of potential donors; this is usually best done on a one-by-one basis.
- Invite representatives from donor organisations to the City Consultation, to Mini-Consultations, and to relevant Workshops and Seminars; these could be timed to coincide with local field visits and/or briefing meetings.
- Keep potential donors and agencies on an updated mailing list and sending them newsletters, Environmental Profiles, reports, and other materials.
- Send Project Profiles and outlines of Action Plans, carefully selected to fit the known or expected interests of the particular agencies.
- When a donor has shown sufficient interest in a particular project or plan, open a special dossier of updates and information exchanges on that specific project, and at a later stage, formally submit a request and initiate negotiations.

B6.7 Linking new initiatives with ongoing ones

Sometimes, there may be ongoing projects which, with minor design changes or marginal increments of investments, could achieve the desired objectives of new initiatives generated through the SCP process. By linking proposed new projects with ongoing ones, a considerable cost saving could well be made. In the SCP city of Ismailia, for example, a waste water reuse project which was conceptualised by the Working Groups was easily linked to an ongoing large scale waste treatment project which was fully funded by USAID. Such opportunities where higher economic returns and social benefits may be reaped through complementary capital improvements and incremental investments should be explored and exploited.

Box 13: Mobilising External Resources: The Case of Dar es Salaam

When the SCP project was initiated in Dar es Salaam, the city was confronted by a variety of grave environmental problems, including a public health crisis of uncollected solid waste piled into rotting heaps in the city centre. Although projects addressing the city's environmental problems were anticipated to be developed following the normal strategy formulation and action planning process, the urgency to do something about the solid waste problem could not allow such an orderly but time-consuming process. This illustrates that the sequencing of the SCP strategy planning activities should not be applied rigidly; in this case, there was no time to wait - action was of the essence.

A quick survey of the situation and current possibilities by the Working Groups identified privatisation of solid waste collection in the commercial and core residential areas as the only realistic option. Although the strategy was accepted (reluctantly) by the city authorities, the legal, financial and administrative procedures required to implement the privatisation programme had to be formulated and put in place - a daunting and time-consuming task. Meanwhile, urgent actions were required to remove the heaps of refuse in the centre of the city. It was therefore agreed to launch a concerted clean-up campaign led by the city council. It was also agreed to equip the city council with the vehicles and equipment needed to undertake the clean-up and kick-start the privatisation through a carefully designed lease system. However, the cash-strapped City Council could not finance the procurement of the equipment so the SCP Working Groups had to approach external donor agencies. The result was impressive; in a short period of time 5 million US dollars were mobilised from some eleven donors in the country. This allowed the clean-up campaign to take place expeditiously and smoothed the transition to a private waste collection system. In this particular case, where quick cash was desperately needed for containing a crisis situation and for 'sweetening' serious institutional reform (prodding the local authorities to privatise a hitherto state-run service system), external funding was the best option.

B7 Formulating Projects as Part of Action Planning

Action Plans are implemented in a variety of ways - the SCP process emphasises the importance of applying the full range of implementation instruments - but capital investment projects (and technical assistance projects) remain the single most important means of taking action. In the SCP process, there are various stages in the preparation of projects, leading to progressive refinement and elaboration as the projects are prioritised and narrowed down in number and focus. The steps involved in developing projects and the different levels of project preparation are highlighted in this chapter.

The Action Plans formulated to implement the chosen strategies will comprise a variety of different interventions, utilising the full range of implementation instruments; indeed, in many cases it will be managerial and institutional aspects which will be the most important. Nonetheless, projects remain a central focus of action, being widely recognised as key instruments for implementation.

In general, when speaking of projects in this context, it means time-bound actions which are funded in a single project budget and managed as a unit. Broadly speaking, there are two main types of project:

- technical assistance projects; and
- capital investment projects.

B7.1 Technical Assistance Projects (TAPs):

Technical Assistance Projects are aimed at improving and strengthening capacities (managerial, technical, organisational, etc.). TAPs deal with people and institutions and are concerned with transfer of technology, professional upgrading, stimulation of new ideas, and development of new ways of doing things. The main elements of cost in a TAP are human resources and training, rather than equipment or capital goods.

TAPs are generally medium- or long-term undertakings, as institutional change and upgrading is necessarily a slow and time-consuming task which requires a steady but sustained input of technical support, training, information, guidance, etc. Because the inputs in a technical assistance projects are usually labour cost related, and kept up over an extended period, the financing of a technical assistance project requires a budget which can be maintained over a period of years - it is not spent all at once or in large lumps (as is the case for most capital investment projects).

TAPs can also be designed as a direct complement to a capital investment project. For example, if a solid waste separation plant is being built (as a capital investment project), it will almost certainly be necessary to have a substantial technical assistance project (or component) which can provide the required technical training to operators of the new plant and also provide

managerial guidance and training for the collection system which is essential for the proper functioning of the plant.

Because of the well-documented focus of most governments (and many international funding agencies) on capital investment projects, there has long been an unfortunate under-emphasis on the crucial technical assistance components of development. This has led to innumerable examples of wasted capital - capital investments which are grossly under-utilised and are often run down or abandoned far too early. (As was the case in Dar es Salaam - as mentioned in previous chapters - and in many other cities, purchases of expensive solid waste collection vehicles often turned out to be futile, as within a few years scarcely any of them were still operable.) This is also why the SCP Action Planning process emphasises the need to use the “full range of implementation instruments” - and thus there will be many occasions when it is appropriate to package together as a technical assistance project a variety of organisational reform, capacity-building, technical strengthening, and related interventions.

Considerable care needs to be taken when formulating a technical assistance project. The whole package of actions should be clearly articulated, logically organised, and fully explained and justified. For example, to follow the general framework used by the UNDP (and also embodied in Logical Frameworks of other funding bodies), the technical assistance project proposal should include the following elements:

- the development ‘situation’ - the nature of the problem;
- the need for (justification for) the proposed intervention;
- expected outcomes, and beneficiaries (target groups);
- the ultimate objectives of the proposal;
- the immediate objectives to be achieved by the project;
- the outputs which will achieve those objectives;
- the activities which will produce those outputs;
- the inputs necessary to sustain those activities;
- the budget required to provide those inputs;
- the organisational and implementation arrangements for the project;
- indicators for measuring progress (success criteria); and
- time-frame and work-programme.

B7.2 Capital Investment Projects (CIPs):

Capital Investment Projects are the most familiar project activity; they involve the building of a physical facility and/or the acquisition of equipment. CIPs usually result in visible things like roads, water mains, sewer lines, harbours, factories, etc. CIPs also include what is called *capital equipment*, for instance pumps for a water system, compactor trucks for solid waste collection, a laboratory for pollution monitoring, etc.

Basically, capital investment projects are undertaken because the return on the investment is judged to be worthwhile; spending money now (making the investment now) produces useful goods and services in the future.

Investing in a water supply system now produces a flow of water in the future; buying specialised vehicles now means that solid waste can be reliably removed and transported in the future. In other words, a capital investment is made in order to achieve some desired future result - and hence it is in these terms that a project proposal should be formulated and justified.

The basic principles and procedures of justifying and assessing capital investment projects are the same whether it is a private investment, a public investment, or a household investment, although the criteria applied may be different. For purely private commercial investments, the financial value of the future outputs is the key basis for deciding whether to proceed. Clearly, it makes no sense for a factory owner to buy an expensive piece of machinery, for instance, if the extra output produced by it is lower in value than the cost of the machinery. For public (or mixed public-private) capital investments, however, the criteria for decision can be modified. For example, with flood control investments there is no 'output' which can be priced and charged for; nonetheless, a calculation can be made of the damage forestalled by the investments and that can be compared to the investment cost. In other cases, the financial returns from selling future outputs may be combined with non-financial returns, such as improved public health, and the total of these benefits can be compared to the costs. (These techniques of assessment are well developed and can be applied by properly trained professionals, but do not need to be discussed further at this point.)

In the context of the SCP process, a number of different levels of analysis and assessment of projects can usefully be applied, at different stages in the process. These are described as follows.

1. Long Listing: The sky is the limit

This involves thinking about possible projects in a sort of 'brain storming' approach, and this will typically be done by a Working Group at the time of looking at various problem responses or strategic options. Although some, or even most, of the project ideas brought forward at this stage will not pass through the succeeding stages of assessment, it is helpful to begin with a wide-open array of possibilities. And even when project ideas fail to pass various of the subsequent 'filters', it is sensible to keep a record of them so that a full list of original possibilities is available, in case circumstances change and there is need for a reconsideration.

2. Undertaking 'opportunity studies'

Opportunity studies explore and review different options and opportunities with respect to a particular issue. They provide a quick overview and preliminary judgement, to act as a first 'filter' through which the long list of project ideas can be narrowed down. For example, an opportunity study on waste management carried out in the SCP project in Accra proposed five geographic areas to focus on and provided preliminary information covering supply and demand, cost and optimal scale, which highlighted the relative potential of projects such as producing biogas from food market waste, briquetting of sawdust and generating fuel from waste oil; this provided the basis for focusing down onto the best prospects. (Extracts from these opportunity studies in Accra are included in Part C of this Source Book.)

3. *Screening and prioritising*

In addition to the preliminary information collected through opportunity studies, the Working Group will establish the general criteria, acceptable to the stakeholders, which can be applied to further assessment of project possibilities. This should allow for a systematic initial screening - and initial prioritisation - of project proposals.

This screening and prioritisation process should not be detailed or complex; instead, it should use simplified assessment procedures and approximate estimates. Rough costings will be sufficient at this stage, and technical details are not yet required. Rather than full studies, 'informed judgement' from experts and stakeholders will be relied upon heavily at this stage. One of the main ways in which the list will be reduced will be a simple criterion on finance: roughly how much resources are likely to be available, and how much will the various projects under consideration cost?

Box 14: Project Prioritisation - The Experience of Ismailia

The project identification process in Ismailia moved in an orderly fashion from strategy formulation to action planning, which was dominated by capital investment projects. Subsequently, the project formulation exercise eventually produced nine priority project studies, completed to different levels of detail: technical and financial pre-feasibility, technical pre-feasibility, and profile.

The exercise started with a list of over thirty projects, which was then screened and reduced (at the Environmental Strategies Review Workshop) to twenty-six, later being narrowed down to nine priority projects. The final prioritisation was done at a joint session of all issue-specific Working Groups. This session had the objective of ranking project ideas - regardless of the Working Group of origin - and this was to be done by a common assessment process within the context of overall city development needs and funding prospects. It was a collective decision-making exercise, wherein all stakeholders, using the same agreed list of criteria (with a percentage weight attached to each of them) were asked to rank or prioritise the twenty-six projects on the long list. [The criteria and weights applied during this process are included in Part C of this Source Book.]

After each participant had given his/her score of weights (without exceeding the maximum weight), to each of the projects on the list, the results were tabulated, aggregated and announced. On a few projects, for which departmental or locational partisanship seemed to have influenced the ranking, there were differences in assessment, but these were reconciled through subsequent discussions.

4. *Preparing Project Studies*

Once projects are shortlisted and prioritised, the next step will be to progressively develop them, for further discussion, negotiation, funding and implementation. Projects can be developed to different levels of detail, depending on the type of information needed for decisions and the amount of resources that can be allocated for project studies. (Professional inputs are required for cost-benefit analysis, for financial and economic feasibility study, for technical/engineering detailing and costing, etc.) The following are some of the commonly-used types of project studies; they are basically differentiated by the level of detail they contain and the rigour and depth of analysis they are subjected to.

Project Profile: A project profile is a general format for systematically documenting a project idea. It is a preliminary description of a project idea, and although not developed in detail, it should contain basic information on the following:

- Problem Situation (concise description of the problem to be addressed);
- Problem Response (origins of the project idea, how this proposal arose);
- Rationale of the Project (how this project idea addresses the problem);
- Nature of the Project and Project Components (description of the project idea);
- Project Costs (rough estimates, capital and operating costs);
- Project Financing (ideas about how the project will be financed);
- Project Implementation Arrangements (who will implement, and how);
- Operation and Maintenance Costs (estimates of continuing O&M costs);
- Organisational and Financial Arrangements for O&M (who will pay, what are the cost-recovery elements, how will it be organised);
- Next Steps to Implementation (what is planned for taking project further);
- Environmental Aspects (overview of environmental impacts);
- Economic Impact (broader economic impacts, costs/benefits, beneficiaries);
- Financial Analysis (report on financial analysis, if any has been done);
- Special Considerations (identify specific project impacts on the poor, on women, and on the private sector); and
- Descriptive Annexes (location map, statistics, etc).

These categories are taken from the draft Project Profile format developed for the Sustainable Chennai Project; more details of this format are given as an Annex in Part C of this Source Book.

A Project Profile can be modest in length (the Chennai format calls for a maximum of 12 pages) and should not require costly or time-consuming preparatory inputs; the expertise available in the Working Group and the SCP project team should in most cases be sufficient to prepare the Profile. The purpose of the Profile format is to ensure that all of the relevant questions are addressed - but not yet answered in detail - so that further discussion of the project proposal can be informed and productive. Using a standard format is extremely important, because only when the various project ideas are described in a similar way can the process of comparison, ranking and prioritisation take place properly. Also remember that the key purpose of the Project Profile is to start marketing a project idea; it is not intended to be a fully-developed technical project proposal. Once the idea sparks interest among potential financiers, resources can then be mobilised for carrying out more detailed project studies.

Pre-feasibility study: Well-prepared Project Profiles will certainly facilitate the process of review and discussion and negotiation. However, decisions

to proceed with an investment will normally only be made on the basis of detailed information and analysis, and this will typically require a feasibility study. But conducting feasibility studies, particularly for large scale and complex projects, can be costly and time-consuming and therefore is not undertaken unless there is a good chance of securing finance.

The role of a Pre-feasibility Study, which may not be essential in some cases, is to provide an 'in-between' or preliminary level of analysis and information, more detailed than a Project Profile but not as full and rigorous as a Feasibility Study. It is often a useful stage of preparation, allowing negotiations and discussions to proceed to the point of confirming if a full-scale feasibility study is warranted. The principal objectives of a pre-feasibility study are to ascertain

- that the project is viable enough to justify a more detailed analysis;
- whether any aspect of the project is particularly critical to its ultimate feasibility and therefore requires special detailed investigation (e.g. market surveys, laboratory tests, site tests, engineering analysis); and
- if any alternatives or variations on the proposal are suitable for consideration.

Thus, the basic tasks of the Pre-feasibility Study will be to develop further those particular aspects of the project proposal which are critical for the decision about whether to proceed. The length of time, and cost, of pre-feasibility studies is variable, depending upon what critical features require further exploration, and to what detail.

Feasibility Study: A full-scale feasibility study provides much more detailed, and more rigorously formulated, information for decision-making. The rigour of the analysis and the level of detail of information, which includes not only technical, financial and economic, but also environmental and institutional aspects, provides a reliable and exhaustive review of the proposed project.

A Feasibility Study will normally cover the same basic categories of information as were listed above for the Project Profile. The key difference is in the depth, detail, and reliability of information under those headings. For example:

- the **financial analysis** in the Project Profile is normally very rudimentary; but for a feasibility study it will be extensive and rigorous, following accepted professional standards and encompassing calculations such as Internal Rate of Return (IRR) and being subjected to critical variance analysis; detailed studies of potential demand, willingness to pay, and other variables will also be necessary;
- in this connection, the proposed **financing arrangements** need to be more fully detailed - types and sources of funds, their timing, costs of funds, etc;
- the **economic analysis** may include a full social-cost cost-benefit analysis, again done to proper professional standards and therefore requiring the appropriate economics expertise;
- the **engineering studies** will have to be much more fully developed, both to firm up the technical details of the project but also to provide the basis for much more confident and reliable cost estimates, including critical aspects of project life, operation and maintenance costs, etc;

- the **organisational aspects** of project implementation, and especially of the ongoing operation and maintenance of the facility;
- any relevant **community participation** aspects will need to be more clearly defined and analysed, for instance in respect to local cash and in-kind contributions both to construction and to maintenance;
- the potential **environmental consequences**, both positive and negative, and direct and indirect, must be more carefully and fully studied and documented; and
- the project implementation schedule will need to be prepared in detail (an example of this, from UNIDO, is included as an Annex in Part C of this *Source Book*).

It must be appreciated that full-scale feasibility studies can be both expensive and time-consuming. This is why they are undertaken only when there is sufficient agreement at the Project Profile and Pre-Feasibility Study stages to justify the extra expenditures.

Box 15: Evaluating Project Alternatives: An Example from Ismailia

Two of the nine priority projects formulated in Ismailia involved evaluating different project options. One of these was the reusing of waste water. The project idea was triggered by the construction of a new waste water treatment plant with a design capacity of over 100,000 m³ per day. In view of the impending water scarcity and massive agricultural land reclamation plans for the region, the Working Group on agricultural development proposed to make use of this waste water for agriculture. Reclaimable and reclaimed farm lands with water demand adequate enough to absorb the total supply of waste water were located close to the treatment plant. There was no opportunity cost involved; the water, without the proposed project, would only continue to be pumped (a distance of 12 kms) back to Lake Timsah. The project thus had a potential indirect benefits of saving the energy cost of pumping the water to the lake. While everyone agreed on the merits of the project, however, no one was sure what would be the best use of this water. Public health concerns and the cultural values and attitudes resisting reusing of waste water needed careful consideration; if used for agriculture, for which crops (food crops, non-food crops, forestry). These options of waste water use were analysed in a pre-feasibility study.

The other project which called for a comparative investigation of alternatives was solid waste disposal. Although recycling and composting were recognised as environment-friendly ways of waste disposal, their economic feasibility had to be evaluated in comparison to the land fill practice of the past. Here again the pre-feasibility study helped to assess the merits of alternative disposal systems, in the context of Ismailia. The conclusion favoured composting, for which a detailed financial feasibility study was later carried out.

5. *Appraising Projects*

Once projects are formulated, analysed and documented in an appropriate format, they normally go through a formal appraisal process. Project appraisal is a full evaluation of the project proposal and its supporting studies, on the basis of which investment commitments and decision may be made. The exact nature of a Project Appraisal will depend upon which organisation is undertaking it. Different organisations have different requirements and procedures for project appraisal; some, like the World Bank, have quite

rigorous but very particular procedures; others, such as government departments, have less well-defined and often less rigorous procedures. Appraisal may be done by funding organisations themselves, or it may be done independently but using the procedures and criteria of particular organisations.

As a generality, projects are appraised in order to:

- review and assess the underlying assumptions and calculations;
- confirm the project's feasibility in respect to the various criteria applied by the organisation(s) for whom the appraisal is being done;
- evaluate uncertainties and risks, and to identify critical points; and
- ensure that all relevant aspects have been assessed and presented.

Normally, an Appraisal Report will be prepared to summarise the findings of the appraisal process, and this report will be available to all those involved in further negotiation and final decision-making. The basic idea is that at the end of the appraisal process, potential funding agencies will have all the information necessary for a clear decision to be made.

6. Project Packages

The first meaning of 'packaging' in this context refers to the documentation and presentation of project proposals: the need to prepare informative and attractive proposals, to enhance their marketability and attractiveness to potential funding agencies. This is best done by being thorough and systematic - and professional - in the preparatory work described in preceding sections. Well-packaged proposals will:

- conform in format and content to conventional project formulation standards;
- contain a complete and thorough documentation of all relevant aspects, including background material and studies; and
- be well-written, clear and straightforward, with key information readily accessible and understandable.

A second aspect, however, is the preparation of Project 'Packages', which means a grouping of project proposals which have physical and/or operational and/or financial linkages which could make them attractive to be funded as a single 'package'. For instance, separate proposals for water supply, for drainage and flood control, and for domestic sewerage, if all applying to the same geographic area, could well be packaged together as a single set of inter-related projects. In such cases it is sometimes possible to achieve certain economies of investment and/or operating costs by implementing the projects in coordination rather than separately.

Box 16: Packaging Projects in a Mutually Supportive Way - Ismailia

The strategy planning process in Ismailia generated the following nine priority projects (with a total estimated cost of LE 64.5 million):

- Solid waste collection and composting (LE 20 million)
- Establishing a common industrial waste treatment facility (LE 2.0 m.)
- Upgrading of the Kilo 2 informal settlement (LE 7.5 m.)
- Upgrading of the Bahitimi informal settlement (LE 7.5 m.)
- Rehabilitating a covered drain (LE 2.7 m.)
- Reusing treated waste water for agriculture (LE 7.0 m.)
- Constructing a sewerage collection and disposal system for the Nefisha area (LE 8.25 m.)
- Restoring the ecological balance of Lake Timsah (LE 7.85 m.)
- Improving the quality of agro-industrial products (LE 1.7 m.).

A close look at these projects suggests strong inter-linkages between the different projects and possible economic gains from capitalising upon such inter-linkages:

The projects are focused on three areas: waste management, abating the pollution of Lake Timsah, and upgrading of poorly developed areas. These three areas account for over 95 percent of the total proposed investment;

- Liquid waste management has strong linkages with, and impact on, the restoration of the ecological balance of the lake and accounts for 47 percent of the proposed total investments, and even more including the sewage component of the upgrading projects;
- 71% of the investments in liquid waste management have direct impact on abating pollution of Lake Timsah and this also reflects the strategic shift from lake cleaning-up to pollution control at source and watershed management;
- The industrial waste treatment project is key to the viability of the waste water reuse project, while the latter has a direct positive impact on the quality of water in the lake; and
- The waste water reusing project simply capitalises on a 'sunk cost' and captures potential economic benefits through marginal increments of investments.

B 8

Implementing Demonstration Projects

Although projects are considered among the final outcomes of the strategy negotiation and action planning process, there is a strong case and opportunity for initiating 'demonstration projects' at early stage of the process. Apart from catalysing political and popular support and lending credibility to the process, demonstration projects serve as the vehicle for demonstrating new approaches, for building capacities and testing the viability of 'rules' and 'principles' which could later be applied to other geographic areas of larger scale. The rationale behind a demonstration project and the procedures involved in identifying, implementing and replicating demonstration projects are described in this chapter.

A demonstration project, in the SCP context, is a small-scale, area-specific investment (or technical assistance) project which can be implemented quickly, in order to demonstrate new approaches, to catalyse political and popular support, to lend credibility to the process, and to draw lessons of experience which can be applied on a wider scale. A key feature of a demonstration project is that it is a 'fast-track' initiative, which can be swiftly identified, formulated, agreed, organised, and implemented - well ahead of the speed normally imposed by the orderly sequence of the strategic planning and action planning process.

Reasons for initiating demonstration projects include the following:

1. Politicians and the general public wish to see tangible results - visible actions and accomplishments on the ground; technical assistance projects such as the SCP do not directly provide easily-seen physical results and hence demonstration projects provide a valuable opportunity to show at least some concrete outputs. (Experience in SCP cities has shown this to be an extremely important consideration and has confirmed the value of demonstration projects in maintaining public and political support.)
2. Small-scale demonstration projects allow particular approaches to be tested, in practice, and thus provide valuable lessons which can be learned and then applied to the formulation and implementation of projects on a larger scale.
3. Demonstration projects provide opportunities for different partners to work out, in a real-life situation, where and how they best can cooperate in addressing their common concerns. It is particularly useful to be able to do this on a small scale and relatively early in the SCP project, so that difficulties experienced can be resolved before the project proceeds to much larger-scale activities.
4. This use of demonstration projects helps to secure a more solid political support and allows the SCP project to present to decision-makers proposals for desired changes in structure, mandate, and institutional relationships which can be based on actual field experience and tested findings.
5. Being deliberately small in scale and with relatively modest financial

requirements, demonstration projects allow the project to focus on implementation aspects and arrangements, without excess time and energy occupied in securing finance.

6. Because of their small size and relatively narrow focus, demonstration projects are particularly well suited to community-based and local participatory projects, thus allowing the SCP project to move ahead quickly with activities in low-income areas.
7. Formulating and organising demonstration projects stimulates the Working Groups to develop project formulation and implementation procedures, test out approaches and processes, and injects an element of realism into their deliberations.
8. Demonstration projects allow larger-scale action plans to be broken down into small-scale component projects, some of which can be implemented early due to their limited size and resource requirements.
9. Through the demonstration projects an SCP project can learn more about capacity bottlenecks, institutional gaps, managerial difficulties, and other issues which will affect the scaling-up of the demonstration projects to a larger or city-wide scale.
10. The experience of demonstration projects provides a clear test of the ability of the Working Groups to function well, in terms of exchanging information, negotiating rules and procedures, mobilising partner collaboration, coordinating actions and inputs, and pushing forward necessary institutional changes.

Keeping in mind these various features of demonstration projects, they should be identified and formulated quite carefully - and designed accordingly. From this perspective a demonstration project should be one which:

- is 'do-able' - a simple and straightforward project with limited financial or other resource requirements;
- is area-specific and can be applied effectively in a limited geographic scale;
- deals with a priority issue which has wider significance;
- does not require lengthy or sophisticated studies before implementation;
- has the potential for testing approaches and learning lessons which can subsequently be applied on a wider scale; and
- is likely to quickly secure the willing agreement and cooperation of the key stakeholders.

Box 17: Purposes of Demonstration Projects, Sustainable Chennai Project

The basic purpose of these demonstration projects in Chennai (India) was stated as being "to demonstrate - through visible action on the ground - new community-based and participatory approaches to working out and implementing local solutions to local environmental problems, particularly within lower-income neighbourhoods." Within this general purpose a number of additional objectives were identified, including:

- a. to bring direct benefits to the community involved (e.g. amelioration of a particular local environmental problem);
- b. to demonstrate to the involved community the advantages of locally-based and participatory approaches to environmental management;
- c. to demonstrate to the population at large - through publicising the results of the individual demonstration projects - the advantages and potential of the new approaches;
- d. to demonstrate to the public authorities the potential for mobilising and utilising community initiatives and action through partnership approaches;
- e. to help the Sustainable Chennai Project (SChP) and its partners to learn from real-world experience and thus develop newer and more effective approaches to local environmental management;
- f. to use these community-based efforts to explore new approaches to involving the informal sector in urban environmental management;
- g. to point the way toward new models of public-NGO/CBO and public-private collaboration in urban environmental management; and
- h. to raise general public awareness of and support for the activities of the Sustainable Chennai Project (SChP).

Based on experience in SCP cities, there are a number of general procedures and criteria which should be followed in selecting and initiating demonstration projects. For example, general criteria for identifying and selecting demonstration projects should be established early on, through the participation of major stakeholders; this could be done at the City Consultation or through a special meeting shortly afterwards.

In most SCP cities, the Working Groups have been the principal focus for further work on identifying and formulating demonstration projects. This ensures that the major stakeholders for that priority issue are represented - and it also establishes the link between the demonstration project and the wider process of developing strategies and action plans for intervention in respect to that Working Group's issue. It is also an important way of ensuring a good spread of demonstration projects across topics.

The SCP project team should ensure that all of the Working Groups follow the same general criteria for identifying and formulating demonstration projects, following the basic objectives and procedures which were agreed earlier; this is important to establish, as the Working Groups will be proceeding separately. In the case of Chennai, for example, a set of Guidelines for formulating small-scale community-based demonstration projects were prepared and used by the Working Groups and the project team. (These Guidelines are included as an Annex in Part C of this Source Book.) These

guidelines emphasised the importance of stakeholder participation, of carefully setting up the organisational aspects, of insisting on detailed work programmes and schedules of implementation, and of ensuring proper monitoring and control.

One general warning is of the danger of a demonstration project being associated too closely with a single implementing agency; as a pilot project with much broader objectives and city-wide implications, a demonstration project should be 'owned' by all major stakeholders. A second very crucial point is that demonstration projects must be properly monitored: effective monitoring mechanisms, using agreed indicators and measures, must be in place from the beginning so that the lessons of the demonstration project can in fact be drawn, documented, and substantiated. Without monitoring, the demonstration project cannot 'demonstrate' anything! Finally, based on the information drawn from the monitoring process, the SCP project team must quickly document the lessons of experience from the demonstration projects - and promptly disseminate those lessons to Working Group members, other stakeholders, and everyone else concerned with the development process. It is probably a wise idea to hold one or more workshops or seminars specifically to review and assess the lessons of the demonstration projects.

Box 18: A Market Clean-up Campaign: A Demonstration Project in Accra

The Agbogbloshie market is the largest market in Accra and is located in one of the high-density low-income areas of the city. The market generated a vast amount of waste daily, and as the collection service was not adequate, the sanitary conditions were very poor, and in need of urgent action. Early consultations with the Market Women's Association, the Commercial Drivers Association, the Waste Management Department of the Accra Metropolitan Authority, the Ghana National Fire Service, the traditional leaders of Ga Mashie, and members of the city and metro district assemblies resulted in reaching agreement to initiate a cleaning up campaign.

Apart from addressing the waste collection needs of the market, the project was aimed at demonstrating how a sustained waste collection system could be established through the sensitisation and direct involvement of the market operators, especially women. The project was also used to demonstrate how problems such as this could be tackled without special budgetary provisions or complex project studies, but instead by utilising the commitments and resource contributions of different actors from the market and from across different levels of city administration. After a series of negotiations:

- the SCP project agreed to buy and put in the market an adequate number of refuse containers; using government counterpart SCP project funds;
- the Waste Management Department agreed to regularly remove the waste from the centrally located refuse containers; and
- the local market associations agreed to sensitise the traders and carriers to the problem and to exercise their own controls to ensure that waste was disposed of properly in the new containers;

The process culminated in a one-day waste management workshop and market cleaning up campaign, in which all traders operating in the market took part. The key actors have kept their pledges and commitments, as the results of which the designed collection and disposal system was still functioning well one year later after its establishment. The cleaning-up campaign and the procurement of refuse containers cost only Cedi 2,949,500 (equivalent to US 2013 dollars), and was financed through existing local government resources.

Box 19: Mobilising the Informal Sector - A Demonstration Project in Bodija Market, Ibadan (Nigeria)

Bodija market is the largest in Ibadan, serving also as a regional market. Several thousand traders of different scale and type are said to be operating in the market. Despite its important economic and social functions, the market has very poor physical conditions, and suffers from bad drainage, poor waste management, inadequate water supplies and sanitation facilities, limited and unpaved internal roads, and a lack of social and health facilities. As the majority of operators in the market are women, they and their children are the most affected groups.

Furthermore, as the market is situated in a densely built-up part of the city, the problems were not confined to the market place itself but affected a large number of people who lived or work in the immediate area. In addition, the public health risk associated with the unsafe handling, processing and marketing of food, particularly meat and vegetables, was a serious city-wide concern. Indeed, the market was an obvious 'hot spot' which not only required immediate action, but also provided an opportunity to demonstrate how the SCP process could help address such issues through facilitating the activity of key stakeholders, particularly those in the informal sector (who have normally been regarded as having no role to play).

The SCP process helped to bring the issues to sharp focus for all those concerned, particularly the dozens of trade associations representing the small private operators in the market. This has resulted in the establishment of a Working Group composed of traditional chiefs, traders, representatives of the neighbouring residential areas, and retired civil servants. The group, with no substantive outside technical assistance, has developed a portfolio of project proposals which included solid waste collection, road construction, water supply, and sanitation, primarily targeted at food vendors, as well as abattoirs, and child care and health facilities. The total investment cost of the projects was estimated at N 46,345,436 (about US 580,000 dollars). The projects have been prioritised and formulated in full consent with the traders in the market, whose associations agreed to contribute 15 per cent of the investment, hoping to mobilise the balance from the government and external funding agencies. In fact, the water supply project has proceeded, successfully, with the help of the SIP Trust Fund (see Box 12).

Box 20: Infrastructure Improvement in Poor Areas - A Demonstration Project in Concepcion (Chile)

The metropolitan city of Concepcion (Chile) consists of seven municipalities. One of these is Lota Communa, with a population of 50,000 and containing some of the poorest communities in the metropolitan area. These communities have for generations depended on an outmoded and declining coal mining industry, and were unprepared for the changing economic reality and the need to adapt. Hence, with the inevitable decline and closure of the mines, the poverty incidence of the area, which was already high, rose further, putting 60 percent of the inhabitants of these particular communities below the poverty line, of which 20 percent were in the extreme poverty bracket.

The issue was brought up at the first City Consultation, and the SCP process was then used to start a pilot community development demonstration project, initially focused on the most affected neighbourhood (200 households) and with an intention of later replicating the experience in other neighbourhoods. Initial activities included a socio-economic survey, an assessment of problems from the perspective of the community, and strengthening of the existing community organisations. This three-month intensive consultation and work with the community resulted in a better understanding of the socio-economic situation which was documented in 'The Poverty Profile Of Lota' and in the systematic prioritisation of the infrastructure improvement needs of the area.

A Mini-Consultation was then organised, at which the survey findings and priority needs were presented to potential partners. Key development agencies that took part in the Mini-Consultation were asked two basic questions: "do the problems of Lota fit into your institution's development agenda and work programme?", and, "what contributions can your institution make and when?"

The response was impressive. Led by the Ministry of Urban Development and the Ministry of Public Works, which immediately placed Lota on top of its public works programme, a number of institutions mobilised the necessary resources: finance, in-kind contributions, technical support, etc. The community through its association and the three Working Groups (established at the Mini-Consultation) was actively involved in the planning, supervision and implementation of the projects, which included the construction of an access road, the development of children's play ground, and the establishment of fish market outlets.

Box 21: Replication and Up-Scaling of an Upgrading Project in Dar es Salaam

65 per cent of settlements in Dar es Salaam are unplanned or informal; Hanna Nassif with its 2000 inhabitants was typical among these. It developed over the years without any subdivision design or plan to provide basic services. As a result it had serious storm water drainage problems in addition to an unstructured and often impassable road network. Having been approached by the local leaders for technical assistance the Sustainable Dar es Salaam Project (SDP) became involved in Hanna Nassif upgrading activities which had already been initiated, through the support of ILO.

Taking Hanna Nassif as a demonstration project for community upgrading, a number of interventions with a broader community development focus were designed and executed together with ILO and the other partners involved in the project. Such interventions included the following:

- strengthening the status of the community representatives through a non-partisan electoral process;
- establishing a clear legal basis for the Community Based Organisation;
- preparing a preliminary drainage, footpaths and roads improvement design, based on minimum property disturbance;
- securing the necessary technical assistance and development finance support to implement the preliminary design; and
- supporting the CBO in implementing the design through a process of "Community Construction Contracts" which effectively subcontracted the construction work to local residents to improve employment and income generating opportunities, skills training and therefore operations and maintenance sustainability.

A Community Development Committee (CDC) was set up by the CBO whose membership was 60 per cent female. The CDC was registered and opened a bank account established with the locally raised funds of 250,000 TShs. Apart from some US 350,000 dollars of UNDP (SDP, ILO & UNV) technical assistance, the working group also attracted some 200,000 dollars of Ford Foundation grant and US 50,000 of European Union grant as seed capital for materials and labour costs, with community groups contributing unskilled labour inputs. Ten per cent of every community construction contract from this fund was assigned to a separate savings account as seed capital for the purpose of future maintenance activities.

Progress was then steady, with only a few delays and difficulties - the most serious being a split reflecting the reluctance of an established local politician to share power with the newly-elected community council. Work was still progressing in 1999, with continual extensions of the drainage system, and with numerous other community-based activities now arising out of the CBO and assisted by the community centre which had been built with the original project.

Box 21 (Continued): Replication and Up-Scaling of an Upgrading Project in Dar es Salaam

Building on the success and lessons learnt from Hanna Nassif, a Community Infrastructure Programme (CIP) was developed with an investment cost of US\$ 5.5 million to be financed through the World Bank funded Urban Sector Rehabilitation Project (USRP) of Tanzania and through the support of Irish Aid. The programme was designed to eventually cover 12 settlements and to reach 40,000 inhabitants. Implementation has already started in 2 settlements (Tabata and Kijico).

The CIP programme coverage, in terms of population, represents a twentyfold increase over the coverage in the original Hanna Nasif demonstration project. In terms of investment, the CIP was estimated to cost over 6 million US dollars, which was 10 times more than the investment in Hanna Nassif. Whilst the physical improvement work in Hanna Nassif was limited to surface drainage, the CIP covered road, water, sewerage and drainage;

The CIP, however, was not merely a quantitative amplification of the demonstration project: it also involved the practical application of the principles derived from the field experience of Hanna Nasif, especially in selecting, designing and implementing upgrading projects. The key principles that were considered during the design stage of the CIP were the following:

- Upgrading activities should be preceded by carefully designed sensitisation activities combined with revitalisation of community organisations, in order to ensure genuine local ownership and hence sustainability;
- Upgrading activities should be designed on the basis of locally-realistic (and affordable) construction standards, applied in a way to minimise property demolition; rigid application of traditional master plan techniques and standardised building control regulations is quite inappropriate;
- Upgrading areas which are populated by mixed income groups, are willing to contribute to infrastructure improvements, are located in less hazardous areas, are located close to main roads (for bus and truck access), and which have some free land still available in the vicinity, have a better chance of success.

The settlements participating in the CIP were carefully selected using these criteria. Careful consideration was given to the principle of affordability and to the state of the community organisations in each of the upgrading areas. Extensive preparatory organisational work and public awareness campaign was carried out to ensure the full participation of the communities, which, as a requirement, included their commitment to contribute 5 percent of the capital investments - an amount estimated to be required for future maintenance and operation. These approaches have given the CIP a better start-up and initial success than is customary in such upgrading activities.

B 9

Aggregating Issue-Specific Strategies into City-wide Planning Frameworks

As the SCP process continues to address issues and geographic areas on a priority basis, it reaches a point at which it becomes possible and useful to aggregate the issue-specific strategies. This is necessary to assure consistency between strategies, to coordinate their implementation, and to generate an overall framework and structure for guiding future development. This framework, which will be based on carefully analysed environmental and urban development potentials, conflicts and constraints, will provide an information base, which, once developed into a management information system, would support detailed urban planning, land allocation and investment decision-making. This chapter highlights the steps involved in developing such a planning framework which is referred to here as a Strategic Urban Management Framework (SUMF). For a more detailed explanation and step-by-step guide refer to the SCP Source Book series, Volume 7, which deals with 'Building an Environmental Management Information System'.

A Strategic Urban Management Framework (SUMF) is a general development planning and management tools which results from the aggregation and reconciliation of the issue-specific strategies developed through the Working Groups. It results from careful consideration of environmental and urban development conflicts, opportunities, and constraints and an assessment of how they affect future city expansion and growth. The SUMF is not a 'plan' as such - it does not set out a specific growth pattern that should be observed rigidly; instead, it provides options and development 'rules and principles' which need to be taken into account when making project- and site-specific or area-wide investment decisions.

The following four factors underpin the need for aggregating issue-specific strategies and developing an SUMF.

Consistency between strategies: a strategy negotiated to deal with one issue could be in conflict with the strategy of another issue, and such potential conflicts need to be identified and resolved.

Coordinating implementation of strategies: even when strategies are not in conflict, their implementation needs to be coordinated across sectors and geographic areas, to channel investment where it is needed most, to consolidate investments in priority sectors and geographic areas, and to ensure best use of resources.

Identifying hot spots: aggregating issue-specific strategies will bring into sharp focus geographic areas where immediate interventions and actions may be required.

Relating strategies to spatial attributes: implementation of strategies needs to be translated into detailed area-specific 'rules and principles' which can

be applied to decisions pertaining to the selection of sites for a particular project, to the design of projects for a particular site, and to the identification of areas for future development and city expansion.

Aggregating issue-specific strategies and generating a SUMF will perhaps need some professional support in the field of urban planning, mapping and Environmental Management Information Systems. During the initial period of an SCP project, the project technical support team could fulfil this function. After the completion of the SCP project, however, the unit that takes over the coordination and institutionalisation of the EPM approach, which in most cases will be located within the city authority, should be responsible for further preparation and updating of the SUMF.

Box 22: Characteristics of the Merits of the Strategic Urban Management Framework

An SUMF can provide a useful spatial framework for guiding future expansion and development of a city. Its usefulness is enhanced by the following characteristics:

- Its strategic approach and focus, which results in realistic and affordable infrastructure and development proposals based on a clear relation between action plans and resource availability;
- Its consensus orientation, with options and flexible standards which can be applied in the context of rapid urbanisation;
- Its cross-sectoral approach to development issues and its strengthened management capacity, resulting from cross-sectoral coordinating arrangements - which are critical for successful urban and environmental management;
- Its dependence on local human resources, thereby increasing the appreciation of local conditions and strengthening the commitment to implementation by the key agencies involved; and
- Its special attention to environmental issues, emphasising the need for sustainable utilisation of natural resources and management of environmental hazards.

An SUMF will have three major components: spatial analysis; strategies and projects; and institutional arrangements for effective implementation of strategies. Each of these is briefly described below:

a. Spatial Analysis

In the SCP context, spatial analysis refers to a geographic interpretation of issues and strategies in relation to prevailing environmental conditions. By mapping and overlaying the geographic distribution of critical natural resources, environmental hazards and development activities, areas can be classified or ranked by their degree of exposure to environmental risks and thereby by the level of their suitability for the various types of development activities. This categorisation of areas will allow identification of development activities appropriate to specific areas; it would also help to articulate suitable guidelines and principles applicable to development taking place in different areas.

The spatial analysis enables to identify and prioritise environmentally appropriate potential areas for city expansion and growth, helping to

coordinate major investments in infrastructure. The selection of areas for future urban expansion will be based on the analysis of both development (e.g. availability of, and access to, infrastructure and services) and environmental factors prevailing in the different areas of the city.

The spatial analysis makes extensive use of EMIS, which also includes mapping, Geographic Information Systems (GIS) and satellite imagery. For their effective utilisation in supporting the preparation of the SUMF, maps should:

- be consistent and comparable in scale, legend and symbols;
- be regularly updated; and
- be shared with all stakeholders.

As stated above, the key tool in the spatial analysis is an EMIS and the process involves the following steps:

- mobilising the information resource agencies & preparing a basic map;
- preparing thematic maps and developing suitability maps;
- overlaying different maps for analysis;
- developing area-specific rules and principles and applying them to suitability maps;
- aggregating the overlaid maps; and
- identifying the 'hot spots'.

(1) Mobilising the information resource agencies and preparing a basic map

Land suitability and environmental sensitivity analysis requires spatial information, and the starting point is a systematic inventory of existing information available with local and national agencies and institutes (such as survey departments, city planning authorities, physical planning departments, departments of natural resources, departments of remote sensing etc.). Much of this will already have been done during the preparation of the SCP Environmental Profile and through the activities of the various Working Groups. Preparation of a basic map, if not already available, will also be necessary. The first step in the SUMF is therefore to bring such agencies together to discuss and gain their commitment for mobilising and sharing their information and mapping resources. The first map to be prepared is the basic map, which indicates the basic features of the city such as rivers, roads, boundaries and other landmarks. The basic map is used in developing thematic maps.

(2) Preparing thematic maps and suitability maps

Thematic maps assist in analysing the various aspects of issues and in interpreting the existing facts relevant to them. A thematic map on liquid waste management, for instance, may be used to highlight area-specific characteristics such as soil texture, water percolation and ground water table, and knowledge of these characteristics will help in determining the appropriate type of sanitation technologies. Thematic maps therefore provide spatial information which allow the relation of the issue specific strategies to the different geographic areas. The result will be a series of 'suitability and sensitivity maps' which relate the compatibility of particular development

activities or strategic interventions with respect to the different geographic areas and their characteristics. In the case of 'urban agriculture', for example, based on the soil and hydrological characteristics and population density, areas can be differentiated in terms of their suitability for agriculture - from most suitable to least suitable.

(3) Overlaying different maps for analysis

A spatial pattern created by a suitability or sensitivity map of one issue may not fit with - and may well be in conflict with, the suitability map of another issue. Overlaps of conflicting strategies and competing uses will need to be sorted out, to find the best compromise - the land use that best reconciles or accommodates the different issue strategies. For example, the land determined as most suitable for urban agriculture may overlap with land identified as having potential for urban expansion, or land shown as appropriate for housing development may also be land with potential for mining. To make the exercise manageable and to get a sensible result out of it, the overlaying should proceed stage-by-stage and should be confined to the issues and strategies whose combined interpretation is sensibly required. There is no need to overlay everything on everything else.

(4) Developing area-specific rules and principles and applying them to suitability maps

The conflicts of strategies which are revealed through the overlaying of issue-specific strategy maps need to be resolved through the development of area-specific 'rules and principles'. Strategies that were meant for a specific issue and area may need to be modified to take account of such conflicts and overlaps. Furthermore, the overlaying of the different strategies and issues will provide a composite picture which allows the setting of coherent 'rules and principles' (which will be reflected on the suitability maps) for rational and sustainable land use. These 'rules and principles' set development conditions which need to be satisfied in order to ensure the compatibility of different development activities and environmental requirements. These could be technological choices, engineering standards, type and intensity of activities, etc. The aim is not to 'protect' specific areas from development, but to explicitly determine development constraints and environmental conditions that have to be factored-in in development design and decision making.

(5) Aggregating the overlaid maps

This is like overlaying the overlaid maps, so as to generate an aggregate picture of suitability or development priority areas. In a situation where many variables or spatial attributes are involved in determining such an overall suitability map, it might be necessary to attach weights to each of the attributes on a given scale, to allow the generation of a composite result or ranking of areas. As a general rule, areas with many conflicting issues or situations will pose more serious constraints to development and therefore rank lower on the scale of priority among potential development areas and vice versa.

(6) Identifying the hot-spots

As maps capturing different issues and strategies are overlaid on each other, areas where conflicts are sharp, development stresses are heavy, and environmental risks are grave, and which therefore call for immediate interventions, will flag out very clearly. Such areas are where environmental thresholds have been exceeded for so long and where development planning

has been most ineffective. Often times, such areas ('hot spots') coincide with neglected poor neighbourhoods, unplanned settlements, crucial natural resources, and intensive activity areas.

b. Strategies and Projects

The corollary to the spatial interpretation and analysis is the systematic documentation of the issue-specific strategies and projects. Here the priority issues and the agreed strategies will be articulated and elaborated. Also, in summary form, the strategic capital-investment and technical assistance projects (meaning those with perceptible contribution to the strategic vision of future urban growth and development) generated through the process will be highlighted. This comprises a list of priority projects, with brief descriptions or profiles attached, together with estimation of resources required. It will also include indication of potential sources of finance as well as the strategies for mobilising resources and securing commitment from implementing partners. Such documentation of key/strategic project proposals constitutes an important step in the preparation for fund-raising workshops and resource mobilisation campaigns.

c. Institutional Arrangements for Implementation

Perhaps the main drawback of traditional planning is the lack of effective approaches and mechanisms for implementation, which results in a serious mismatch between the desired outcomes of the plan and the reality on the ground. The primary purpose of the bottom-up approach, which emphasises the direct participation of stakeholders and their commitments to negotiated strategies and action plans, is to address this mismatch between planning and implementation.

The basis for this will be the lessons of experience and achievements gained in terms of inter-sectoral coordination, inter-agency collaboration, public-private partnership, community participation etc. In this part of the SUMF, these and other progressive institutional innovations which have been promoted and demonstrated during the project period and beyond will be critically reviewed and elaborated. In a way, this forms the thrust of the SUMF: providing an institutional framework which allows a range of actors and stakeholders to mobilise their commitments and resources for the implementation of agreed strategies and action plans. Key elements to be elaborated will be:

- roles and commitments of all major stakeholders in implementing the strategies;
- demonstrated approaches for promoting public-private partnerships and community participation;
- demonstrated project concepts to be replicated and up-scaled, and institutional responsibilities and resource mobilisation strategies for realising them;
- mechanisms for inter-sectoral and inter-agency coordination; and
- mechanisms and approaches for establishing the necessary EPM functions and support services (including EMIS and GIS) on a routine basis.

Box 23: Area Specific Strategic Development Planning: The Perspective of Accra (Ghana)

The Korle Lagoon was a highly polluted water body in Accra which has resulted in both danger to public health and the loss of valuable development opportunities, notably tourism. The issue was discussed at the City Consultation, and Working Groups were established to consider solutions to two aspects of the problem: one, mitigating the environmental degradation caused so far, and two, reclaiming, developing and using the lagoon as an economic resource. The different Working Groups established to deal with each of these two aspects of the problem coordinated their activities and agreed to formulate a Strategic Development Plan (SDP) covering the catchment area of the lagoon. The SDP was intended to include the following:

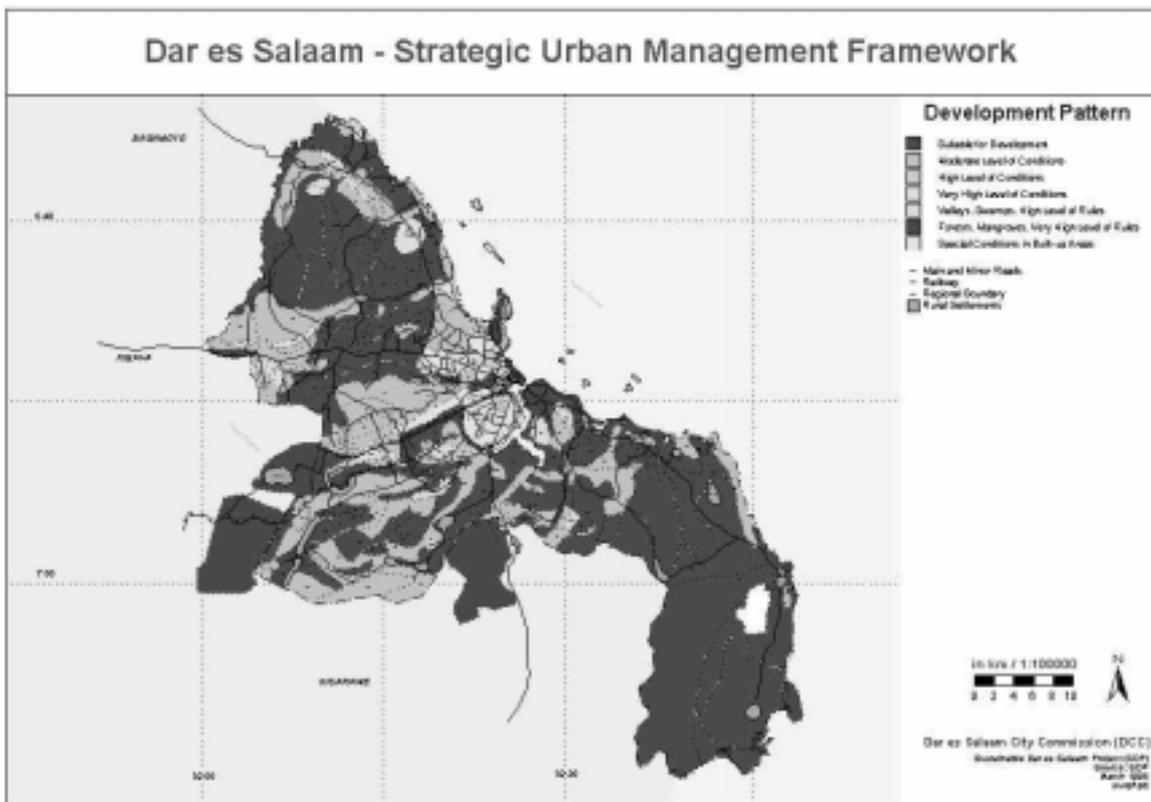
- A pollution abatement strategy and action plan, which was targeted at the industrial and municipal pollution sources;
- A resource development strategy and investment programme, which identified development opportunities in the area and determined the required investment and potential financing sources; and
- A land use plan to guide the development in the catchment area, to ensure that development activities taking place in the area will be compatible with the rules and principles designed to restore and develop the lagoon.

Box 24: The Development of the Strategic Urban Management Framework (SUMF) in Dar es Salaam

Developing a SUMF was among the key objectives of the Sustainable Dar es Salaam project (SDP), reflecting among other things the strong interest of the City Council. The task, however, was quite difficult, not least because Dar es Salaam as the first SCP city could not draw upon the experience of any other cities. Analysing and processing the huge stock of issue-specific information collected through the Working Groups and converting it into spatial terms - areas with varying degrees of suitability for different activities - in order to generate a composite land use pattern developed on the basis of coherent rules and principles was not that simple.

The aggregation of the strategies and the development of the SUMF for Dar es Salaam more or less followed the steps outlined in this chapter.

1. Preparing suitability maps for issues which were pertinent in determining urban expansion and growth in Dar es Salaam. These were urban agriculture, hazard lands, coastal resources, built up areas, transportation networks, and ground water table.
2. Preparing suitability maps which integrate two issues. This was an iterative exercise which involved the above issues and their suitability maps in the following combinations:
 - (a) agriculture with mining (coastal resources);
 - (b) mining with hazard lands;
 - (c) agriculture with built up areas;
 - (d) built up areas with hazard lands;
 - (e) built up areas with mining; and
 - (f) agriculture with hazard lands.
3. Overlaying the above six maps to generate one composite map on which areas were prioritised for development based on the degree of conflicts pertaining to them. For ease of classification, weights were given to degree of conflicts: the higher the number of issues prevailing in an area, the more constrained for development it was and the more rules were required to regulate activities.
4. Overlaying the above composite map on the ground water table map to further prioritise potential development areas with low water table, designated as most suitable for development.
5. Overlaying the composite development priority map resulting from step 4 on existing land use map to exclude areas already developed.
6. Overlaying the map resulting from step 5 (showing land available and suitable for city expansion) on the utilities (power and water) map, and later on the road accessibility map, to further qualify areas with adequate utilities and accessibility as most suitable for city expansion and development. The ranking of areas was based on weights attached to the different levels of adequacy in utilities and accessibility. (The final overall suitability map from Dar es Salaam is reproduced below)
7. Zoning. Once areas were prioritised for city expansion and development, they were then subdivided into zones. The city of Dar es Salaam was divided into 21 zones and 41 sub-zones, which were characterised by the level of services, existing or planned.



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Part C

Examples, Illustrations and Supporting
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C1

Glossary - Explanation of Terms

This Glossary is a list of words or terms, in alphabetical order, with an explanation or elaboration of their meaning. Its purpose is to explain the particular meaning of words or terms *as they are used in the SCP project context*. The listing given here therefore includes only terms and words which are relevant for understanding the SCP process - and in particular, for understanding the process of formulating Issue-Specific Strategies and Action Plans. (Different Glossaries are given in the different SCP Source Book volumes, each focused on terminology related to the subject of that volume.)

In most SCP cities, English is not the mother language for the people working in the SCP project; this is true even in cities where professionals may perhaps use English even on a daily basis in their working lives. For this reason, it is highly recommended that the Glossary is carefully translated into the most appropriate local language(s) and freely distributed, certainly to all those involved in the Working Group process.

Action Plan:

An output-oriented actor-specific plan for achieving the objectives of an issue-specific strategy; it specifies details of inputs and actions by all the various stakeholders, with concrete work programmes, time-schedules, types and timings of financial and other resource commitments; it is keyed to measurable and time-bound schedules of inputs and of outputs; it has been negotiated and agreed by the key stakeholders themselves.

Capital Investment:

Investment, usually large-scale, in physical construction and/or equipment, normally involving engineering and civil works and/or installation of long-lived equipment.

City Consultation:

A crucial event within the SCP project process, the City Consultation takes place at the end of Phase One and brings together and builds on the work done during that Phase; it consolidates social and political participation and support, and launches the SCP project into Phase Two. The City Consultation gives firm approval to the identification of priority issues for which SCP Working Group will subsequently prepare issue-specific strategies and action plans.

Community Based Organisation (CBO):

CBOs are organisations based in and working in one (or sometimes more) local communities (neighbourhoods or districts); they are normally private, non-profit organisations which are run by and for the local community. Typically, they were created in response to some

particular local need or situation - often related to the local environment - and they usually support a variety of specific local improvement actions (for instance, environmental upgrading, youth education, employment promotion, etc.) which are generally undertaken by or with the local people.

Conflicts of Interest:

Conflicts arising between different stakeholders in respect to use of environmental resources (such as land or water) or with respect to the costs and benefits of various courses of action.

Cost-Benefit Analysis (CBA):

An analytical technique of applied or welfare economics, CBA is typically applied to project proposals, to identify and assess the different economic costs and benefits (direct and indirect) which result from a project, including an identification where ever possible of the distribution of costs and benefits among different groups. CBA is useful in understanding whether a project is worthwhile in terms of overall costs and benefits to society - and in understanding who gains and who loses.

Demonstration Project:

A self-contained project (usually capital investment, but sometimes technical assistance) which is deliberately implemented in advance of the normal SCP process timetable (with its orderly sequence from strategies to action plans to projects). Its purpose is to “demonstrate” a particular type of action, to show in practice how a certain problem may be addressed. Demonstration projects are usually “fast-track” in the sense of being agreed and implemented quickly, and they are normally small-scale (often neighbourhood-scale). Demonstration projects help to generate enthusiasm, to mobilise political support, to show visible progress, and to test out new approaches. Demonstration projects are intended to be up-scaled or replicated on a wider scale, based on the experience and lessons learned from the original “demonstration”.

Environmental Management Information System (EMIS):

An EMIS is an organised process through which information relevant for environmental management is identified, generated, and utilised in a routine manner. It is a tool, when it becomes relatively functional, which directs and guides investment and city development along sustainable path. EMIS in the SCP context is developed on the basis of a systematic spatial analysis of specific issues, geographic distribution of resources and related environmental sensitivities. It portrays spatial development options and opportunities which allow the prioritisation of development areas, the guidance and optimisation of investment and the factoring-in of long term environmental costs in development projects. EMIS consists of layers of maps, spatial attributes, criteria for prioritisation; and ‘rules’ and development conditions defined and negotiated by stakeholders to influence the development pattern of a

city.

Environmental Sensitivity Analysis:

Analysis of geographic areas in terms of their key environmental characteristics: use of and potential for environmental resources, actual and potential environmental hazards, degree and type of sensitivity of environmental features to different degrees and types of development activity and use. (A simplified Geographic Information System - GIS - is often used in connection with this analysis.)

Environmental Planning & Management (EPM):

This is a general term which refers to the overall processes through which a city's environment is (or can be) managed. It emphasises the close inter-relationship between urban development and urban environment, and it stresses the crucial roles of economic, political and social processes. In relation to the SCP, the EPM process has been developed into a general methodology for strengthening the ability of cities to effectively manage urban development and the environment. (See also item 1 in the Information Sources, section C2.)

Environmental Profile:

The SCP Environmental Profile provides a systematic overview of the development and environment setting and institutional arrangements of a city, with this information organised and analysed in a very particular manner, which is designed to highlight the development-environment interactions, the critical environmental issues, and the sectors and stakeholders most directly concerned with them. (See Volume 1 of the SCP Source Book series, *Preparing the SCP Environmental Profile*, for details.)

Fast-Track Actions:

Actions which are accelerated in implementation, usually in order to address critical immediate problems and often incorporated as a demonstration project. Normally, in order to achieve agreement which allows an accelerated schedule, the fast-track action will address problems about which there is ready consensus on the need for quick intervention, or problems which are limited in scale and complexity and are thus easier to attract a consensus.

Feasibility Study:

Detailed analysis of a project proposal, utilising a variety of specialist economic and financial and engineering techniques, designed to provide extensive and reliable information about the physical, environmental, financial, economic and social viability of the proposal, this information being a key input to decision-making about the proposals.

Geographic Information System (GIS):

GIS is a general term which refers to an information system in which data is collected, stored and analysed in a spatial (geographical) framework. The GIS is normally a computer-based system; modern off-the-shelf software allow a basic GIS to be run on an ordinary PC. The data compiled and analysed in the GIS is focused specifically on information relevant for physical planning and environmental

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management.

Issue:

A development or environmental problem or group of problems, as identified through the SCP process leading up to and finalised by the stakeholders in the City Consultation. Issues chosen for the SCP process are normally expected to be long-term and recurring in significance, cross-sectoral and cutting across narrow departmental boundaries, and something which affects all or at least large parts of the city. Issues are the topics for which strategies and action plans are formulated.

Logical Framework:

Sometimes called “LogFrame”, logical framework in this context means an analytical framework which is used in formulating and describing technical cooperation projects and programmes. It is a logical system which identifies objectives, outputs, activities, inputs and the various inter-relationships among them. Its exact form will vary, depending upon the organisation for whom the LogFrame is done.

Mini-Consultation:

A reduced-scale version of the City Consultation, generally organised for clarification and elaboration of one specific issue, typically to review options and to agree on issue-specific strategies.

Non-Governmental Organisation (NGO):

The term NGO is applied to a wide range of organisations which are not established by or operated by government. NGOs are usually private, non-profit organisations run by their members. Typically, an NGO is concerned with one particular area of activity: women’s rights, education, environmental protection, employment, etc. Most NGOs are local in scope, but some are regional or national, or even international. NGOs often acquire considerable expertise and experience in their particular areas of activity, and some employ professionals or specialists to manage their work.

Overlaying Technique:

A mapping technique wherein different thematic maps will be laid over one another (either physically, with maps, or electronically in a GIS), in order to aggregate information; this is typically used to explore the spatial inter-relationships of different issue-specific strategies and of different key environmental or development factors.

Pre-Feasibility Study:

An intermediate level of project analysis which is much less detailed and rigorous than a full Feasibility Study, but which nonetheless covers the same topics and aspects. The purpose of a Pre-Feasibility Study is generally to examine different alternatives (project variations or options), to identify information gaps or topics which require particular specialist studies, and to provide a first-level test of project feasibility

and determine the need for a further, full-scale feasibility study.

Prioritisation:

This normally refers to the process of assessing issues or problems in order to determine which are the most important or which are the most appropriate for addressing first; prioritising issues produces a ranking of issues on the basis of which two or three are normally chosen at the City Consultation. Prioritisation can also be applied to lists of project proposals, to identify those which are considered (for a variety of reasons) to be the most important or the most urgent to be undertaken.

Programme:

An organised package of projects and/or activities all designed to address a particular issue or to achieve some defined objective.

Project Appraisal:

A review of a project proposal and, in particular, of its background studies (pre-feasibility, feasibility, and other), to judge the quality and reliability of the studies and to assess the overall results, from different perspectives, to lead to an appropriate decision about whether to proceed with the proposal.

Project Evaluation:

An assessment of a project, normally undertaken after it has been implemented, designed to gauge whether the project has performed as planned and delivered the outputs specified.

Project Monitoring:

A systematic process of tracking the progress of a project or programme - during its implementation - designed to measure inputs, outputs, activities and impacts. The purpose of monitoring is to provide feedback information with which project management can modify or influence the project to put it back on track or to otherwise modify it as needed.

Scaling-Up:

This refers to the application at a larger scale of a project or intervention which has been tested in a smaller-scale demonstration project. The implementation of the Community Infrastructure Programme (CIP) which is highlighted in this source book (see Box 21 in Chapter B8) is an example of up-scaling. This is similar to (but not exactly the same as) the process of **replication**, which refers to repeating on a wider scale a process which has been demonstrated. (For example, the SCP city project has been replicated in Tanzania by being applied to a number of additional cities, based on the original “demonstration” city project in Dar es Salaam; these replication projects do not represent up-scaling, however, for each of them, being in a smaller city, is a self-contained project on a smaller scale than the original Dar es Salaam project.)

Stakeholder:

In the context of the SCP, this word is applied to groups, organisations and individuals who have an important “stake” in the process of urban environmental management - regardless of what their particular “stake” may be. Equally, the terms stakeholders includes both formal and informal organisations and groups, and covers groups in the public sector but also in the private sector and in the community (or popular) sector. Stakeholders are also sometimes referred to as “actors” in the local EPM process.

Strategic Urban Management Framework (SUMF):

In the SCP context this refers to a large-scale, usually city-wide, planning framework which evolves from the incremental aggregation and reconciliation of issue-specific strategies and from the accumulation of lessons of experience gained in demonstration projects.

Sustainable Cities Programme (SCP):

The Sustainable Cities Programme (SCP) is a global programme of the United Nations Centre for Human Settlements (UNCHS - Habitat) and the United Nations Environment Programme (UNEP). It is the leading technical cooperation programme in the field of urban environmental planning and management, and it is the principal activity of the United Nations system for operationalising sustainable urban development. (See also section C3 in this Source Book volume for a more detailed explanation.)

Technical Assistance Project:

This refers to projects (self-contained sets of activities) which are primarily concerned with technology and knowledge transfer and/or with management and technical support; in a technical assistance project, the principal inputs are expertise, information, specialist knowledge, training, and small-scale equipment.

Working Group:

An SCP issue-specific Working Group is a small body of stakeholder representatives who come together to address a crosscutting issue of their common concern. The members possess mutually complementing information, expertise, policy and implementation instruments and resources, which they bring together within the framework of the SCP process.

C2

Information Sources

The following publications are important sources for understanding environmental planning and management in general - and for understanding the SCP process in particular. All staff concerned with an SCP city project - and all persons concerned with the formulation of Issue-Specific Strategies and Action Plans, **most especially the Working Group members and Coordinators** - should read and make use of these documents. Indeed, copies should be readily available in the SCP project office and every effort made to have them read and consulted by the members of the project team, Working Group Coordinators, and others.

Key EPM & SCP Documents

Sustainable Cities and Local Governance: The Sustainable Cities Programme

Written and published by the United Nations Centre for Human Settlements (Habitat) and the United Nations Environment Programme (UNEP), Nairobi, Kenya, 1997

The SCP Process Activities: A Snapshot of what they are and how they are implemented

Written and published by the United Nations Centre for Human Settlements (Habitat) and the United Nations Environment Programme (UNEP), Nairobi, Kenya, 1998

The Sustainable Cities Programme: Approach and Implementation

Written and published by the United Nations Centre for Human Settlements (Habitat), Nairobi, Kenya, 2nd edition 1998

The SCP Source Book Series

Written and published by the United Nations Centre for Human Settlements (Habitat) and the United Nations Environment Programme (UNEP), Nairobi, Kenya, 1999

The Environmental Planning and Management (EPM) Source Book.

Volume 1: Implementing the Urban Environment Agenda

Volume 2: City Experiences and International Support

Volume 3: The UEF Directory

Written and published by the United Nations Centre for Human Settlements (Habitat) and the United Nations Environment Programme (UNEP), Nairobi, Kenya, 1997

Towards Environmental Strategies for Cities: Policy Considerations for Urban Environmental Management in Developing Countries.

Carl Bartone, Janis Bernstein, Josef Leitmann and Jochen Eigen
Published for the Urban Management Programme by the World Bank,

Washington, D.C., USA, 1994

Environmental Guidelines for Settlements Planning and Management:

Volume 1: Institutionalising Environmental Planning and Management for Settlements Development

Volume 2: Environmental Considerations in Metropolitan Planning and Management

Volume 3: Environmental Considerations in Regional Planning and Management

Prepared and published by the United Nations Centre for Human Settlements (Habitat), and United Nations Environment Programme (UNEP), Nairobi, Kenya, 1987

UNCHS (Habitat) and UNEP Join Forces on Urban Environment

Briefing Note prepared for the United Nations Commission on Human Settlements (CHS15) and the Governing Council of UNEP (GC18)

Prepared by the United Nations Centre for Human Settlements (UNCHS), Nairobi, Kenya, 1995

Other Important Documents

World Development Report 1992: Development and the Environment

Prepared and published by the World Bank, Washington, D.C., USA, 1992

Sustainable Human Settlements Development: Implementing Agenda 21

Prepared by the United Nations Centre for Human Settlements, for the United Nations Commission on Sustainable Development, Nairobi, Kenya, 1994

An Urbanising World: Global Report on Human Settlements

Prepared by the United Nations Centre for Human Settlements. Published by Oxford University Press, 1996

World Resources 1996-97: The Urban Environment

Prepared by the World Resources Institute. Published by Oxford University Press, 1996

World Without End: Economics, Environment and Sustainable Development

David W. Pearce and Jeremy J. Warford

Published by Oxford University Press, for the World Bank, 1993

The Habitat Agenda: Goals and Principles, Commitments, and Global Plan of Action

Agreed at the United Nations Conference on Human Settlements (Habitat II), Istanbul, Turkey, June 1996

The Human Face of the Urban Environment: Proceedings of the Second Annual World Bank Conference on Environmentally Sustainable Development.

Ismail Serageldin, Michael A. Cohen, and K.C. Sivaramakrishnan,

Editors

Published by The World Bank, Washington, D.C., USA, 1995

C3

The Global Sustainable Cities Programme: Lessons of Experience

BACKGROUND

Perhaps the greatest challenge for urban development policy-makers and practitioners is to ensure that our growing cities and towns remain economically, socially and environmentally sustainable. In most countries, rapid urban expansion has been accompanied by growing environmental problems, which not only seriously damage health and wellbeing (especially of the poor) but also damage the urban economy and threaten the sustainability of development gains.

Although urban expansion is commonly seen as the “cause” of environmental (and other) problems, experience and research alike show that the real causes are deeper. According to research from the Urban Management Programme,¹ for example, the underlying causes of environmental degradation can be traced to “...inappropriate economic policies, inadequate investment in pollution control, deficient regulatory and institutional frameworks, weak management capacities, inadequate cost recovery, and insufficient political will and public awareness.”

In other words, it is **not** urban growth itself that “causes” environmental problems; instead, it is a series of policy and management weaknesses which mean that cities are generally not able to cope adequately with the physical and environmental consequences of growth and change.

In response to this situation, the United Nations Centre for Human Settlements (UNCHS)² in 1991 launched the global **Sustainable Cities Programme** (SCP), with the aim of helping city governments and their partners in the public, private and community sectors to develop the improved environmental planning and management capacities which they require in order to deal more effectively with the process of urban growth.

The Sustainable Cities Programme initiative was given a tremendous boost by the “Earth Summit” - the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. The “Earth Summit” focused the world’s attention on the crucial importance of environment for social and economic development and resulted in widespread adoption of the famous *Agenda 21*. *Agenda 21* articulated a range of desirable policies and concepts, including an emphasis on cross-sectoral coordination, decentralisation of decision-making, and broad-based participatory approaches to development management. The potential of the SCP as a vehicle for implementing *Agenda 21* at the city level was recognised - and supported - immediately, with this role being further strengthened at the “City Summit” in Istanbul in 1996 (the Second United Nations Conference on Human Settlements - Habitat II) and through the *Habitat Agenda* which was then adopted.

1. The Urban Management Programme (UMP) is a joint effort of UNCHS (Habitat), UNDP, and the World Bank. The Sustainable Cities Programme became the main operational arm of the UMP, which was otherwise focused on research, networking and information dissemination.

2. UNCHS is the specialised agency of the United Nations with specific responsibility for housing, planning, and urban development matters. Its mandate covers execution of technical cooperation projects in the field, as well as research. UNCHS was established as a result of the First United Nations Conference on Human Settlements (Habitat I) in Vancouver in 1976. Its headquarters are in Nairobi, Kenya, supported by regional offices in Asia (Japan) and Latin America (Brazil).

In 1995, the governing bodies of UNCHS and of UNEP (United Nations Environment Programme) decided to make the Sustainable Cities Programme a **joint facility**, thereby pooling the mandates, resources, and capabilities of the two agencies and providing an even broader and more solid foundation for the work of the SCP. In 1996 and 1997, the SCP became the spearhead of the two agencies in operationalising a new development cooperation paradigm which is centred on partnership, mutual learning and mutual assistance, sharing of experience, with primary reliance on local resources supported by international programmes in the role of facilitator.³

THE SUSTAINABLE CITIES PROGRAMME TODAY

Since its inception, the SCP has grown from a very modest \$100,000 per year initiative to a \$30 million global programme which mobilising support from a wide variety of sources including UNCHS, UNEP, UNDP, WHO, ILO, World Bank, the Netherlands, Denmark, Canada, France, Italy, the United Kingdom, and others.

The primary focus of the Sustainable Cities Programme, however, remains firmly at the **city level**; in its initial five years more than 95% of the resources mobilised for the SCP have been applied to city-level activities. The first SCP city demonstration project began in January 1992 in Dar es Salaam (Tanzania), and others soon followed: Accra (Ghana), Cagayan de Oro, Tagbilaran, and Lipa (Philippines), Concepcion (Chile), Dakar (Senegal), La Habana (Cuba), Ibadan (Nigeria), Ismailia (Egypt), Katowice (Poland), Lusaka (Zambia), Madras (India), Maputo & Nampula (Mozambique), Moscow & St Petersburg (Russia), Shenyang & Wuhan (China), and Tunis (Tunisia). In addition, numerous other cities are in various stages of preparing for and developing SCP demonstration projects, for example, Amman (Jordan), Asuncion (Paraguay), Belo Horizonte (Brazil), Gaza (Palestine), Harare (Zimbabwe), and Kampala (Uganda).

In Tanzania, the experience of the Dar es Salaam project is being extended to a variety of secondary cities (Dodoma, Moshi, Zanzibar, etc.) each of which is now initiating its own SCP project. In Egypt and in Chile, similar initiatives to replicate the SCP process in other cities are being developed. In the Philippines, the programme focuses initially upon SCP projects in three secondary cities, but a regionally-based replication process is built in so the SCP process can be extended to other cities.

The Sustainable Cities Programme is therefore global in scope but still firmly local in focus. Moreover, this large “family” of SCP project cities gives the SCP a tremendous foundation of “real-world” experiences through which the SCP approach and methodology is continuously tested, adapted, revised, and enhanced.⁴ Indeed, this is perhaps the greatest strength of the SCP approach: it is a robust general methodology which has been adapted to local circumstances and successfully applied in many different cities, each of which not only benefits from and learns from the SCP approach but also contributes directly to the further evolution and strengthening of the SCP concepts.

To supplement and support this energetic and growing base of participant cities, the Sustainable Cities Programme has more recently been developing

3. This is in contrast to the older development assistance paradigm, which centres on top-down expert-determined solutions, typically technology or investment driven, and often relying on outdated and inappropriate master-planning approaches.

4. The most recent Annual Meetings of the Sustainable Cities Programme, held in Shenyang (China) in Sept/Oct 1997 and in Moscow (Russia) in June 1998, each brought together 125-150 people representing more than 30 cities for three days of intensive discussion and exchange of experience.

its activities at the **regional** and global levels. At the regional level, efforts are underway to develop networks and mechanisms for sharing experiences, pooling resources and expertise, and developing regional information bases. This has progressed furthest in the Africa region, but initiatives are also underway for similar activities in North Africa and the Middle East. At the **global** level there is even greater recent progress; the SCP has mobilised substantial resources⁵ to increase the capacity of the SCP core team and its partners to:

- more effectively back-stop city projects and related activities at the city, national, and regional levels
- develop and support networks and activities for sharing experiences and for mutual learning
- capture lessons of experience, document good practices, and develop other means of systematically learning from the SCP family of cities
- develop a variety of “tools” and guidelines to support the broader replication of the SCP process.

Because it provides a locally-adapted general framework for new approaches to urban environmental management, the SCP has proved in practice to be an ideal attraction for and vehicle for **inter-agency cooperation**. The flexibility of the SCP approach makes it possible to accommodate a wide variety of support interventions, while the operational structure of an SCP city project provides a good basis for proper coordination of efforts at the local level. As a result, the SCP is already collaborating with nearly 20 different international support programmes,⁶ as well as with national and international NGOs and associations of local government, in the implementation of the various city demonstration projects. In addition to the extremely valuable extra support it gives - directly and indirectly - to SCP project implementation, this broad base of inter-agency cooperation provides an important stimulus to the mobilisation of follow-up resources, especially funds for priority capital investments.

SOME KEY CHARACTERISTICS OF THE SUSTAINABLE CITIES PROGRAMME

As emphasised earlier, the SCP does **not** view environmental deterioration as a necessary or inevitable consequence of rapid urban growth; equally, the SCP does **not** consider financial resource constraints to be the primary cause of environmental problems. Instead, the SCP considers environmental deterioration to be primarily caused by:

- inappropriate urban development policies and policy implementation;
- poorly planned and managed urban growth which does not adequately consider the constraints (and opportunities) of the natural environment;
- inadequate and inappropriate urban infrastructure, both in terms of investment and especially operations, maintenance and management; and
- lack of coordination and cooperation among key institutions and groups.

Accordingly, the SCP focuses very explicitly on **urban environmental planning and management (EPM)**; it works directly with local governments and their partners to develop and nurture local capacities, system-wide, for more effective and responsive local governance, highlighting:

5. Special mention should be given to the generous support from the Netherlands and from Denmark.

6. Numerous UN-related programmes are active partners, such as UNEP's International Environmental Technology Centre (IETC), the Awareness and Preparedness for Emergencies at Local Level (APELL) programme, WHO's Healthy Cities Programme, the Urban Management Programme (UMP), the LIFE programme of UNDP, the UNEP/GRID programme, etc.

- more relevant and more appropriately utilised environmental information and technical expertise
- better identification and understanding of priority environmental issues, leading to more soundly-based decision-making about urban development and environment
- improved processes and mechanisms for formulating coordinated environmental strategies and for implementing them effectively
- enhanced and institutionalised managerial capacities in the public, private and community sector partners
- more effective mobilisation and use of available technical and financial resources.

Similarly, the SCP is essentially concerned with the *process* of environmental planning and management - certainly **not** concerned with the production of plans and technical report and studies. Most cities are already well-endowed with master plans of various types, as well as numerous technical studies, often produced at great expense; but in most cities, these plans have had little effect on the reality of urban growth and development! Even in those few cases where such plans and reports have been (usually only partially) implemented, very often the consequences are quite different from what was originally foreseen or intended.

A key characteristic of the SCP is its emphasis on understanding the *two-way relationship between environment and development*:

- urban development affects the environment (air pollution, exhaustion of ground water supplies, draining of wetlands, etc.); *but*
- the environment in turn affects urban development (water supply shortages, flooding, land subsidence, etc.).

The SCP also emphasises understanding the *long-term implications* of the environment-development relationships. Often, severe and lasting (perhaps even permanent) damage is done to the environment simply because the long-term consequences are not properly appreciated and are not properly incorporated into the planning and decision-making processes. This is particularly true when the short-term actions are taken in isolation by one activity sector (e.g. filling in marshes and wetlands for urban development) while the longer-term consequences are felt later by other activity sectors (flooding from water displaced to other areas, loss of wildlife, increased land erosion, etc.).

Almost everywhere in the world, urban government systems are organised in traditional hierarchical bureaucracies with vertical lines of communication and responsibility and fragmented into highly-compartmentalised departments and sections, themselves often separated by rigid sectoral and professional/technical boundaries. These local government structures basically evolved for simple forms of administration and service delivery and are generally narrow and short-term in focus. This traditional type of government structure, however, is very poorly suited to the complex demands of urban development and environmental management in the modern world. Environmental issues generally cut across departmental and sector and professional boundaries, having complicated sets of short-term and especially long-term interactions in a wide variety of realms; these interactions, moreover, are often very inadequately understood. Hence, the development and strengthening of

cross-sectoral and inter-institutional connectivity is a central feature of every SCP city project.

The Sustainable Cities Programme also has a central commitment to the **widest possible range of participation** in urban environmental planning and management. This commitment is not based on theory or ideology - but on the practical reality that effective and sustainable environmental management requires the active and meaningful involvement of all those different groups and organisations and interests whose cooperation is necessary for successful action and implementation. Environmental planning and management is **not** a task which can be accomplished by 'government' alone. On the contrary, ultimate success depends on proper involvement of:

- **the Public Sector** - focused particularly on the local or metropolitan level and including all the relevant agencies, departments, authorities, etc. - and involving politicians as well as officials;
- **the Private Sector** - the economic sectors (trade, business, industry), both large-scale modern participants and those in the "informal" sector; and
- **the Community Sector** - Non-Government Organisations, both local and national, Community Based Organisations, Private Voluntary Organisations, special environmental interest groups, etc.

The SCP approach accepts the reality that there are many different and often conflicting interests with respect to any particular environmental or development question. Indeed, the very existence, and the nature and severity, of environmental problems depends upon whose point of view - whose interest - is being adopted. One person's environmental opportunity (filling in a marsh for building land) is another person's environmental danger (displaced flooding). It is therefore quite unrealistic to search for "neutral" or purely "technical" solutions. It is much more important to understand the full range of costs and benefits, of advantages and disadvantages, and especially the distribution of likely gains and losses attached to alternative courses of action (or inaction).

For this reason, concerning any particular environmental issue the SCP approach insists that the **full range of "stakeholders"** (interested parties or groups) should be identified and incorporated properly into the environmental planning and management process. The range of stakeholders - from the public, private or community sectors - should include:

- those possess relevant information, knowledge, or expertise concerning the environmental issue
- those who control or influence relevant instruments for intervention and implementation
- those whose interests are directly affected by, or whose activities affect, the particular environmental issue.

Finally, it is quite clear, from long and varied experience, that the SCP approach requires sustained and long-term commitment to change. There are no "easy answers" to urban environmental problems - deep-seated and structural difficulties are not resolved by extra dollops of capital investment or by discovery of a shiny new technology. The basic task is one of changing the ways in which people and organisations go about the business of urban

development management. This can only be a slow, difficult, and challenging task.

The SCP approach is therefore flexible, pragmatic, and responsive. It is based on the premise that the environment is a critical ingredient for the success or failure of urban development, and that participatory management is the most effective response to environmental concerns. The SCP introduces a management approach that seeks to involve and reconcile, rather than exclude and restrict, the various stakeholders in urban development. Most important, the SCP is a general approach which is always adapted in application to the particular local circumstances.

THE SCP PROCESS IN SUMMARY

The SCP process has evolved through application and development in a wide variety of cities, and it is still changing in response to new knowledge, new experience. However, the basic approach of the Sustainable Cities Programme in a city-level demonstration project retains the same general form, which can be briefly summarised. Each SCP project typically passes through three broad, and typically overlapping, phases:

- a six to nine month *Start-Up Phase*;
- a *Strategy and Action Planning Phase* of 15 to 24 months; and
- an open-ended *Follow-up and Consolidation Phase*.

During the *Start-up Phase* the foundations for the whole SCP project are laid, and therefore considerable effort goes into ensuring this is done carefully and successfully. The key activities during this phase are:

- establishing and organising the project team
- identifying and clarifying environmental issues
- assembling and analysing relevant information
- identifying and mobilising key stakeholders
- agreeing priority environmental issues to be taken up
- confirming broad-based support for the approach and the project.

Identifying and clarifying urban environmental issues, for example, is much more complex and difficult than it seems. To assist in this process, an SCP project will normally prepare an Environmental Profile, which is a special way of organising information to highlight environment-development interactions as well as illustrate critical management aspects. To assist in organising the necessary information (both for phase one and, especially, for phase two) it is common to establish a simplified GIS/EMIS system. Another critical task is the identification and the mobilisation and involvement of relevant stakeholders. Extra effort is required to ensure that stakeholders who have not traditionally been involved can become active participants.

Phase One is normally concluded with a large-scale City Consultation, a three to five day workshop with 150 to 300+ people attending. At this Consultation, carefully structured review and discussion of the main environmental issues will lead to agreement on which are the priority issues to be taken up by the SCP project. In addition, the Consultation will confirm political support and consolidate stakeholder participation, as well as agree

the institutional arrangements for the remainder of project activities, including the establishment of broad-based cross-sectoral Working Groups.

The *Second Phase* encompasses the main work period of the project, and in general it will involve the following activities:

- further clarification and assessment of environmental issues and sub-issues
- negotiation of agreed issue-specific environmental management strategies
- aggregating across issue for an overall environmental strategy
- developing agreed issue-specific environmental action plans
- working out collaboration with other projects and programmes
- agreeing and establishing monitoring systems
- initiating capacity-building and institutional development
- formulating capital investment and technical support project proposals.

At the City Consultation, Working Groups will have been set up for the agreed priority issues; there may be several topic-specific Working Groups in relation to each main issue.⁷ Each of these Working Groups will comprise members from the important stakeholders, for example from all the different municipal departments and agencies relevant for the topic and from private sector and NGO groups as well. The key point is that the Working Groups are issue-specific, rather than general, so as to encourage cross-sectoral cooperation on a more pragmatic “problem-solving” basis. These various Working Groups, supported by the SCP project team and aided by specialist resources made available through the project, carry out the main work of the SCP project.

These Working Groups will then undertake a variety of tasks. Reviewing the information available on the environmental issue and especially on the studies, strategies, and plans which have previously been prepared or considered, the Working Group will further clarify the issue and assess the various implications of alternative interventions. Out of this process will come a negotiated consensus on the basic environmental management strategies to be adopted for that particular issue. This will almost certainly differ from earlier strategies, because under the SCP this will have been done through a broad-based cross-sectoral forum through which differing interests and viewpoints can be discussed and reconciled.

Probably working through a special Coordinating Working Group, the SCP project will also work to aggregate the several issue-specific strategies into an overall environmental management strategy, through which the crucial inter-linkages among environmental issues can be taken into account. This will also provide a basis for a framework environmental management plan, as well as a foundation for developing a Local Agenda 21.

The Working Groups will also work on the translation of the agreed strategies into environmental action plans, embodying agreed time-schedules, resource commitments, coordination mechanisms, respective responsibilities, etc. Utilising the broad base of representation in the Working Groups, these action plans will develop packages of mutually supporting interventions using a full range of implementation instruments, together with agreed institutional plans

7. The number of Working Groups varies greatly, from one SCP project to another - and even within one SCP project from one time to another. Typically, SCP projects will begin with a modest number, perhaps 4 or 5, and then expand to 8 or 10 or more as the project matures and gains experience. At one time, the Dar es Salaam project had over 25. In some cities, main issues have been broken down into sub-issues and into geographic sub-areas. There is no standard pattern.

8. It should be emphasised that the Working Groups do not take formal or legal responsibility for interventions; this rests firmly, as it must, with the institutions which are represented on the Working Group. The Working Group acts as the forum through which institutions agree and coordinate actions, working through their representatives.

to support implementation.⁸ At this point, the great advantage of broad-based Working Groups becomes more apparent, because it is then possible to mobilise support from private sector groups, NGOs, CBOs, and public sector departments not traditionally involved in decisions about this particular environmental issue.

Implementation of agreed action plans, including initiation of supporting implementation actions (such as policy and regulatory reforms, economic instruments, etc.), should also begin during Phase Two.⁹ Typically this will occur in a phased manner, with some issues or sub-issues reaching this stage before others, depending upon local circumstances. Also, as Phase Two proceeds, it is likely that additional priority issues will be taken up: as the SCP project matures and gains experience, the capacity to handle additional issues will be built up, and in any case, over the life of the project priorities are likely to change.

To support the Working Groups - and the stakeholder organisations from which they draw their representation - a variety of training, awareness-raising and capacity-building activities will be undertaken.

Derived from the action plans and strategies there will be a number of capital investment and technical cooperation project proposals, collected into mutually-supporting “packages” where possible; these will be identified, agreed, and developed upon to “bankable” status and negotiations will be initiated with potential funding sources.

The *Final Phase* of the SCP project (which will overlap with some activities of the Second Phase) will include a number of activities:

- initiation of priority capital investment and technical support project
- consolidation and extension of capacity-building initiatives
- institutionalisation of SCP procedures and approaches
- extension of monitoring systems and initiation of evaluation
- initiation of steps for replicating the SCP process in other cities.

The capital investment and technical support projects which were formulated should be taken through to funding and implementation on the ground (although with the typical lead-times for funding agencies this typically only begins well into the Final Phase). The coordination and monitoring systems set up through the SCP project will be valuable here, to help promote not only effective investment implementation but also to provide back-up support for the essential operations, maintenance and management aspects.

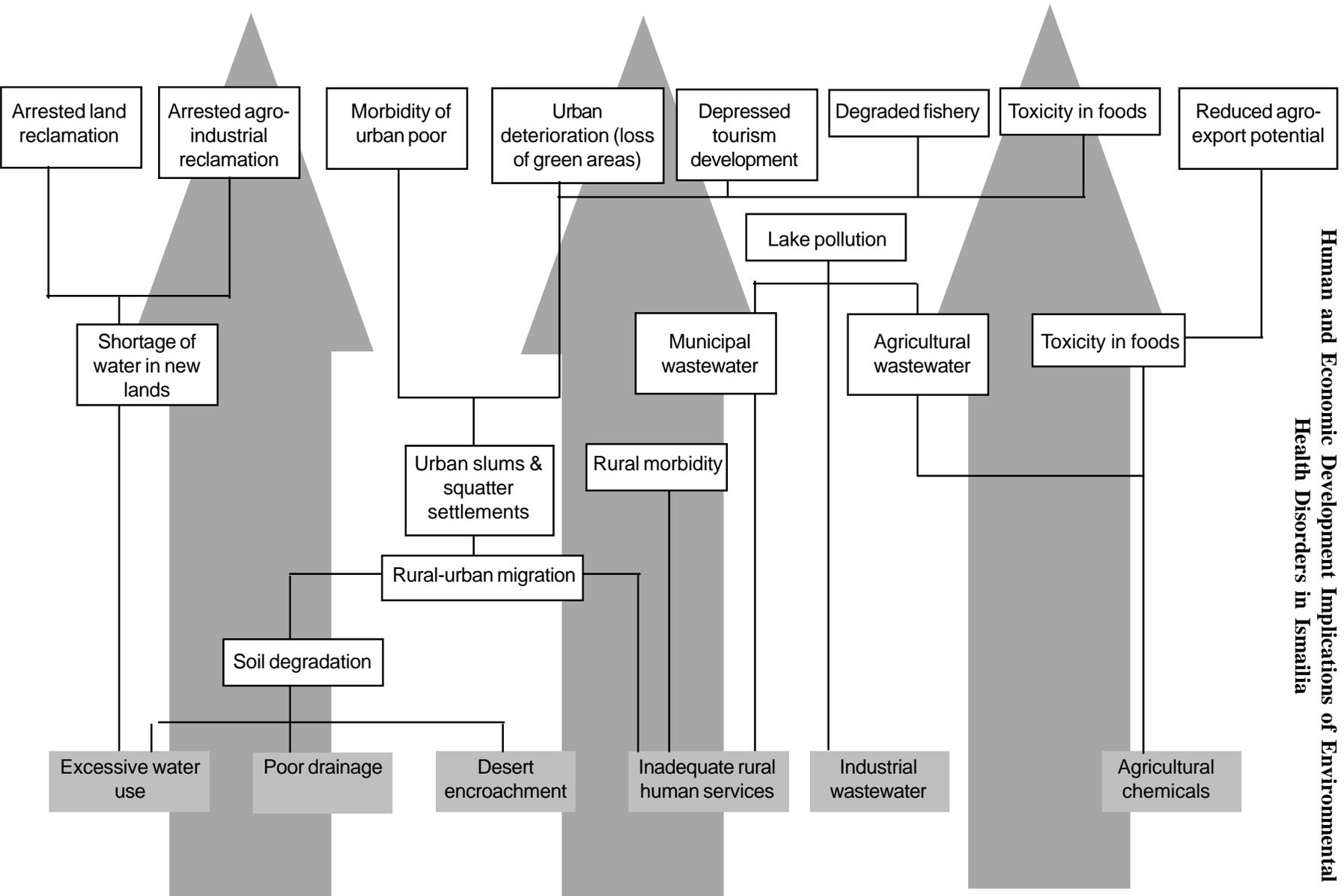
Through the activities of the different Working Groups, and supported through the different capacity-building undertakings, the experience of doing the SCP project will allow these new capabilities to be firmly rooted in the various local institutions. In this way, the SCP capabilities will be institutionalised in a lasting way.

Finally, through the capturing of lessons of experience of the SCP city project, supported by its monitoring mechanisms, and through the personal and institutional capabilities established through the project activities, the resources will be available for replication of the SCP process and its extension to other cities.

9. It is the experience of many SCP cities that the Working Groups and their activities provide a natural focus for collaboration with other special projects or programmes, and in many cases substantial other donor assistance has been channelled through or closely coordinated with the SCP Working Groups.

Example of a Problem Tree (Ismailia, Egypt)

Human and Economic Development Implications of Environmental Health Disorders in Ismailia



C5

Framework for Issue Specific Proposition Paper

The following is a framework or skeletal outline for preparing a ‘Proposition Paper’ which will be presented at **issue specific mini-consultations**. Preparation of a ‘Proposition Paper’ can take place under two different conditions:

1. *The Technical Support Unit (TSU) may decide to establish an issue specific working group on a strong foundation and in this instance it may assign a selected author to present a ‘Proposition Paper’ to a mini-consultation attended by major stakeholders. The working group will then be established at the end of such a mini-consultation from among the active participants at the mini-consultation. Here the idea is to make the working group hit the ground running.*

2. *A working group, after working on an issue for quite some time, can present (it could also be assisted by a resource person) the initial draft strategies and conclusions to other stakeholders in a mini-consultation in order to solicit inputs and finalise them before going to the city-wide Environmental Strategies Review Workshop (ESRW). In both cases, the skeletal outline presented below can be adapted, elaborated and used.*

A. Justification for doing something:

The consequences of the problem have become too much to bear; we are approaching the threshold; there is urgency for arresting and reversing the trends.

B. Problem restated:

Scale of the problem, causes, and key components that need to be addressed.

C. Goals and objectives:

Where do we want to reach?

D. No more business as usual:

Past interventions and approaches did not work for discernible reasons (state them); or what has been done was too little and too late; but most importantly although a number of positive interventions were made in the past they were not coordinated and hence could not bring about the desired impact.

E. The challenge:

As we are resolved to confront the issue through better ways and approaches, we need to review and appraise our strengths and weaknesses, and also we need to carefully examine the opportunities and obstacles we face (a kind of SWOT analysis). The challenge is to overcome weaknesses and obstacles, and to capitalise on our strengths and opportunities. How?

F. The way forward:

This would open up a range of possibilities for addressing the issue: give an overview of such options and appraise each one of them in connection to the goals and objectives and realities in the city. In most cases the issue is

one of combining different interventions, structuring them in various components, sequencing and phasing.

G. Resources:

Strategies for mobilising resources with a focus on local and national sources, but also considering external funding opportunities. Often there are a number of ongoing and pipeline initiatives which provide best starting points and links. A review of good practices in public-private partnerships, community participation, cost-recovery schemes, etc. would provide interesting leads. A resource leveraging strategies which allow small amount of funding to trigger large scale investments are very much encouraged. Demonstration-replication and up-scaling is one good generic model for promoting the strategy concept of 'leveraging resources'.

H. What Next?

Contentious issues to debate; information gaps to fill; options to evaluate; stakeholders to include; adjustments to make in working groups composition, method and programme of work, etc. Be concrete!

C6

Aide Memoire for Environmental Strategies Review Workshop

Aide Memoire for Environmental Strategies Review Workshop of(Put the city's name here)

A. Background

The City Consultation which was held onwas a turning point in the city's recent history of consultative initiatives for improved Environmental Planning and Management. The consultation was attended by over....stakeholders from the public, private and popular sectors. The ...days of deliberations have resulted in a renewed commitment and consensus to confront the priority issues of the city which were identified at the city consultation. These were (**list the priority issues**)

More importantly, stakeholders at the consultation, were convinced of processes and practices that would allow them to continue working together in a coordinated and concerted fashion. Consequently, participants at the consultation had mandated the Sustainable City Programme Team of the city which was behind the organising the City Consultation to establish and support stakeholder working groups whose task would be to negotiate and formulate strategies and action plans for the agreed priority issues.

Soon after that event (**number**) working groups, one for each priority issue, were established and for the (**time period**) they were working hard collecting information, clarifying the respective issues, evaluating strategy options, negotiating strategies and preparing action plans. During this period (**number**) working groups meetings involving over (**number**) person hours have taken place. In addition, a range of technical support inputs in the area of Environmental Planning and Management (EPM), mapping, Environmental Information Management System (EMIS), project development and (**add any other**) were organised and provided to the working groups through the Technical Support Unit (TSU) of the City's SCP Project. More over selected small and fast track initiatives designed to demonstrate the action orientation of this new approach have been successfully implemented. These were (**list them**).

The results of all these efforts are now prepared in the form of draft strategy and action plan documents and highlights of the lessons of experience of the entire process, for review, discussion and adoption by the major stakeholders. This is planned to take place at the Environmental Strategies Review Workshop (ESRW) scheduled to take place from (**date**) to (**date**) at (**venue**). The ESRW will follow a format similar to that of the City Consultation where by small group meetings and worksheets (highlighting agreed key discussion points) will be used for focused discussions and contributions. At the closing of each day group work results will be presented to and synthesised in a plenary. An experienced facilitator will be assigned for the purpose.

B. Purpose of ESRW

i. Learning and stock taking:

- Review and stock take (**number**) months after the City Consultation, agree upon necessary adjustment for continuation;
- Review lessons of experience gained in applying new approaches to EPM and agree on ways and means for integrating new tools and practices into the day to day development management of the city, and for replicating and up-scaling demonstrated approaches and initiatives at the local, regional and national level

ii. Reviewing and adopting strategies

- Review and adopt with necessary improvements draft strategies and action plans; decide on the status of the strategy documents; examine the links of the strategies to other existing urban development and sector strategies; address conflicts if any between the draft issue specific strategies and existing urban development and sector strategies

iii. Next Steps:

- Advise the TSU and working groups on priorities of investment and technical assistance projects and programmes from among those presented in the strategy and action plan documents
- Agree on the process and methods of building the overall City-wide Management Framework through the systematic aggregation and reconciliation of the issue specific strategies; discuss the overall content of such a framework and mechanisms for future updating; discuss the role of mapping and Environmental Management Information System (EMIS) in this exercise and suggest institutional mechanisms needed for building and routinely using mapping and EMIS capabilities
- Consider ways and means as to how the evolving City- wide Management Framework will be kept updated and how it links to existing development planning instruments

C. Participants

(**number**) participants are expected to attend the ESRW. The expected composition of participants is as follows (*the structure below can be detailed and modified depending on the situation in your city and on which stakeholders you would like to highlight most*):

- Local Government :
- Central Government:
- Private Sector:
- Popular sector (NGOs and CBOs)
- Researchers:

D. Documents

The following documents which are now available for distribution will be sent (**or** are being sent) to participants. Participants are advised to thoroughly read these documents and take note of queries, comments and inputs they may have in advance of coming to the workshop so that the limited time available for covering a vast scope of issues can be effectively utilised. (*List the documents below by title, draft date and language*)

E. Programme Framework

(*This can be modified depending on the number of days a city wants to spare, and depending on the focus and scope*)

	Day 1	Day 2	Day 3
	Stock taking	Strategies	Next Steps
Morning	Opening	Review: Strategies	Building City Wide Management Framework (CMF) and EMIS
	Stock taking		
Afternoon	Lessons of Experience	Review: Action Plans	CMF and EMIS..contd.
			Summary and closing
Focus	Tools and their future use, demonstrations and their replications and up-scaling	Conflicts and links with devt. and sector strategies; implementation Priorities; status of strategies	Content and functions of CMF; future updating; methods and tools; Coordination mechanisms; public-private partnerships; renewed commitments

C7

Table of Contents for an Opportunity Study: Waste Management in Accra, Ghana

CONTENTS

- 1. Introduction**
- 2. Focus of Study**
- 3. Issues and Trends in Waste management and Sanitation as of February 1995**
- 4. The Specific Options**
 - 4.1 Waste minimisation and recycling
 - 4.2 Waste to energy
 - 4.2.1 Large scale biogas facility for treatment of municipal organic waste
 - 4.2.2 Sawdust briquetting
 - 4.2.3 Waste oil from Odawna Motor Mechanics as fuel
 - 4.3 Sanitary improvements
 - 4.3.1 Model sanitary case in James Town
 - 4.3.2 Low cost sewer connections in James Town
 - 4.3.3 Decentralised low cost waste water treatment
 - 4.3.4 Agbgloshie market
 - 4.4 Business involvement
 - 4.4.1 National production of standard domestic waste container
 - 4.4.2 Entrepreneurship training
 - 4.4.3 Development of standard contracts and bidding procedure
 - 4.4.4 Financing of entrepreneurs and small scale business in the environmental sector
- 5. Conclusions**
 - Annexe 1 List of Persons/Organisations visited (Accra)
 - Annexe 2 Overview of waste management studies in Accra during the last 10 years
 - Annexe 3 Large scale biogas facility for treatment of municipal organic waste in Accra
 - Annexe 4 Sawdust briquetting
 - Annexe 5 Model sanitary case in James Town
 - Annexe 6 Decentralised low cost waste water treatment

C8
Criteria and Relative Weights for Prioritising
Projects (Ismailia, Egypt)

	Relative Weight	
CRITERIA		
Environmental	20	
1. To achieve a net positive environmental impact in the short term		
2. To achieve a net positive environmental impact in the long term		12
Economic		
3. To achieve a high increase to the 'added value' in an economic sector, and to have 'export potential'		8
4. To generate other new projects (forward and backward linkages)	26	8
5. To depend basically on Ismailia's comparative advantages		8
6. Less capital intensive and minimum initial investment		4
7. To enable improved capacity utilisation of existing firms		4
Social		
8. To generate large volume of job opportunities, direct and indirect		2
9. To allow for a large base of beneficiaries - direct or indirect	28	12
10. To target the most deprived social groups as the main beneficiaries		10
11. To contribute positively to social and cultural development		4
Institutional and Organisational	26	
12. To complement and supplement on-going projects and activities		4
13. To represent a successful experimental model for future dissemination and replication		2
14. To reach consensus and acceptance by all - or most - stakeholders and interest groups		6

C9

Project Profile Format (Chennai, India)

The following is intended as a *general format* for the description of individual projects, whether capital investment projects or technical assistance projects, whether proposed or already implemented. The purpose is to provide a *common framework for documentation* of diverse project proposals.

The **Project Profile** should provide the basic information which is necessary for an interested reader to gain an informed understanding of the project. It should have sufficient information, for example, to allow an agency or organisation to form an impression of whether the project is potentially interested to them for funding or other participation.

It does *not* require, however, detailed technical or financial analysis; that is premature at this stage - and can be added subsequently, for selected projects, in a manner which fits the needs of the particular agency or organisation. (Each is likely to have its own approvals criteria, as well as its own methodologies for instance for estimating IRR or assessing environmental impacts).

Of course, different project proposals will have different amounts of detail to describe under the various headings in this format. Each proposal, however, should be able to provide *some* information under most, if not all, of the headings. The objective of using this format is ensure that all of the project descriptions provide at least a certain *minimum* of relevant information - and do so in a consistent manner.

The suggested format comprises a standard front page, with certain summary information categories to be filled in for all projects; these will provide a consistent one-page introduction which will be similar for all projects. This is followed by the main body of the Profile, which has a series of headings under which information will be organised. The amount of detail to be given under the different headings will vary from one project to another; the minimum amount of information may be determined by what is available, but the maximum length of each section must be constrained and therefore guidelines are given.

**Sustainable Chennai Project
PROJECT PROFILE**

Short Title: *(maximum 15 words)*

Location: *(city - district - neighbourhood)*

Total Cost: *(total cost, from all sources, for all components, in Rupees)*

Funding Agency(ies): *(list those providing finance, with % of the amount each is providing - but only if known and agreed)*

Implementing Agency(ies): *(list by name all those directly involved in implementation - but only if known and agreed)*

Associated Organisation(s): *(list other organisations with significant roles)*

Promoting Organisation(s): *(who has prepared or promoted the project?)*

Date of Information: *(date of information contained in this profile)*

Implementation Date: *(actual or proposed date, if known)*

Estimated Project Period: *(estimated time needed for project construction or implementation)*

Summary Description of Project: *(as noted in box)*

This summary will briefly identify the problem being addressed and then describe briefly the project activities which are proposed for dealing with the identified problem.

This description should be clear and simple, without detail or complication.

Keep it Brief!!

(There is plenty of space for a fuller description in the main body of the Profile)

Project Profile: *(Short Title)*

1. Problem Situation

- Explain - briefly and in summary form - the nature of the problem which has been identified and which the project is intended to address.
- *Be specific* and use quantitative descriptions where possible.
- However, only summary data and tables should be presented, with fuller statistics coming in the Annexes.
- Describe separately problem aspects or sub-problems which are significant.

Maximum length: 1 page

2. Problem Response: Origins of the Project

- Explain briefly how the project idea arose.
- What was the process which led from problem identification to proposed solution? What organisations or groups were involved, in what ways, and at what stages in the process?
- What were the steps and activities in this participation process?
- What strategies or sub-strategies does this project relate to?
- What technical analysis was applied?
- What stages of formulation, review and approval has the project gone through? Be specific and give dates.

Maximum length: 2 pages

3. Rationale of the Project

- Explain how the analysis of the problem has led to the particular project being proposed.
- What are the logical and technical linkages which show why this project approach was decided upon and which show how the proposed project will address the identified problem?
- If this project is related to other proposed projects, or to particular plans and policies, that should be pointed out.

Maximum length: 2 pages

4. Nature of the Project and Project Components

- Describe the project: what will it be - what things will be built and/or done, and how will these be built or done?
- Describe separately all major project components, if applicable.
- If available, sufficient technical detail should be given to allow an informed understanding of the technical aspects of the proposed works.
- In this description, be as specific and quantitative as possible.
- Use simple drawings if necessary, and refer to maps in Annex One.
- Indicate the estimated construction time and the expected life of the project.

Maximum length: 2 pages

5. Project Costs

- Give the best available estimate of project costs, broken down by component and where possible by cost element: materials, labour, professional fees, equipment, other costs, etc.
- If costs are not estimated quantitatively for certain categories, at least identify those categories and suggest their relative magnitudes.
- Give the date to which the costs estimates refer.

Maximum length: 1 page

6. Project Financing

- How is it proposed that the project will be financed? Be as specific as possible and include details, if appropriate, of types of potential funding sources, cost-sharing, cost-recovery, combinations of loans and grants, in-kind contributions, etc.
- If no firm funding arrangements have been worked out, then specify what general approaches are proposed.
- In particular, identify any funds contributions which require to come from public agencies and sources.

Maximum length: 2 pages

7. Project Implementation Arrangements

- Describe the proposed arrangements for implementing the project: who will be responsible for mobilising and administering funds, who will do the contracting, who will supervise, who will construct, who will be involved in accounting etc.?
- Be sure to mention all the organisations, especially public agencies, which will be involved.
- What procedures are proposed for coordination, at all relevant levels?
- What arrangements have been made or are proposed for *monitoring*?
- Be specific about organisational responsibilities and authorities.

Maximum length: 2 pages

8. Operation and Maintenance Costs

- Once the initial project works are completed, what will be the regular costs of operating and maintaining them?
- Give estimates of likely annual costs of operation and of both routine maintenance and periodic replacement of parts.
- Break down these cost estimates as far as possible, and show clearly the basis on which costs are estimated (e.g. tonnes of solid waste, number of users, etc...)

Maximum length: 2 pages

9. Organisational & Financial Arrangements for Operation & Maintenance

- What arrangements are proposed for operation and maintenance?
- What elements of *cost-recovery* are included, and how will these be organised and implemented?
- Where will other funds - if required - come from, and how?
- In particular, what will be the demands on funds from public sector bodies?
- What are the organisational responsibilities?
- Who will supervise and monitor, in what ways, and to whom and through what channels will operations be accountable?

Maximum length: 1 page

10. Next Steps to Implementation

- What are the key steps to be taken to prepare for or initiate implementation?
- Do public agency budget lines have to be secured - and if so, which ones?
- Are specific approvals and sanctions required - if so, which ones and how is this being done?
- Are any new regulations or ordinances required?
- What coordinating mechanisms and procedures have to be established?
- Which organisations or agencies have to take which actions in what sequence?
- What are critical dates?
- What is proposed for facilitating or expediting the project?

Maximum length: 2 pages

11. Environmental Aspects

- What are the foreseeable environmental impacts of the project, both positive and negative, both long-term and short-term?
- Be specific, and deal with both direct and indirect impacts and consequences.
- What environmental monitoring procedures are proposed?

Maximum length: 2 pages

12. Economic Impact

- What is the expected economic impact of the project, in the short-run and in the longer-term?
- What are the main categories of economic benefit, and to whom will these benefits accrue?
- What categories of economic cost can be foreseen, and who will bear these costs?
- Even if quantitative information is not available, indicate if possible the likely scale of costs and benefits.

Maximum length: 2 pages

13. Financial Analysis

- What financial appraisal, if any, has been done?
- Is there information on Internal Rate of Return or other financial analysis?
- Is there any concrete information on the estimated schedule, by year, of financial costs and revenues?

Maximum length: 1 page

14. Special Considerations

- What will be the specific impacts of the project on **the poor**, in improving their economic situation and/or in terms improving their quality of life; this should deal with poor groups in general but also with attention to the

disabled, ethnic minorities, and other disadvantaged groups.

- Highlight also the impact of the project on **women**: to what extent will the benefits and costs fall upon women, and in what ways?
- In addition, indicate clearly the extent to which the project will involve and/or impact on **the private sector**, both the larger-scale formal private sector and the “informal” sector, being as specific as possible.

Maximum length: 1 page

Annexes

Annex One: a location map (locating the project within the city or region)

Annex Two: site map(s) which indicates the works being proposed under the project and shows their physical location and configuration

Annex Three: statistical tables giving fuller information on points raised in the main text sections (if necessary)

Annex Four: fuller details of costs (if necessary and available)

Annex Five: fuller details of financing arrangements (if available)

Annex Six: full names with postal address for the organisation(s) which is(are) primarily responsible for the project proposal, including the names and telephone, fax, and e-mail numbers of specific contact persons to whom reference may be made for further information.

C10
Criteria for Demonstration Projects
(Chennai/Madras, India)

**PROPOSAL FOR ORGANISING THE
COMMUNITY-BASED DEMONSTRATION PROJECTS
[Extracts] (March 1996)**

Summary. As emphasised in the "Aide-Memoire" of the November 1995 UNCHS mission, an important element of the Sustainable Madras Project (SMP) is its provision for supporting small-scale projects (especially in lower-income areas) to demonstrate community-based solutions to priority urban environmental problems. It is vital that the SMP move ahead quickly to organise these activities; the purpose of this "Proposal" is to sketch out how this might be done. It should be taken as a matter of **urgency** for the SMP Project Team - together with the Support Project - to discuss this Proposal in detail, to agree a final set of organisational procedures, and swiftly to initiate the whole process, aiming to have the first demonstration projects underway by mid-summer 1996.

1. *Basic Purposes.* The basic purpose of these projects is to demonstrate - through visible action "on the ground" - new community-based and participatory approaches to working out and implementing local solutions to local environmental problems, particularly within lower-income neighbourhoods. Within this general purpose there are additional objectives to be achieved, including:

- (a) to bring direct benefits to the community involved (e.g. amelioration of a particular local environmental problem);
- (b) to demonstrate to the involved community the advantages of locally-based and participatory approaches to environmental management;
- (c) to demonstrate to the population at large - through publicising the results of the individual demonstration projects - the advantages and potential of the new approaches;
- (d) to demonstrate to the public authorities the potential for mobilising and utilising community initiatives and action through partnership approaches;
- (e) to help the SMP and its partners to learn from real-world experience and thus develop newer and more effective approaches to local environmental management;
- (f) to use these community-based efforts to explore new approaches to involving the "informal sector" in urban environmental management;
- (g) to point the way toward new models of public-NGO/CBO and public-private collaboration in urban environmental management; and
- (h) to raise general public awareness of and support for the activities of the SMP.

2. Scale of the Demonstration Project Programme. Although not separately specified, a sum of about US \$96,500 was added to the Sub-Contracts budget line (21.01) of the UN (\$) budget of the Project Document to cover the community-based demonstration projects. (The remaining \$65,000 in that budget line is accounted for by the five subcontracts detailed in Annex Five.) It is specified that the maximum grant assistance for any one demonstration project is Rs 100,000, which is roughly \$2,750. Thus, the total number of demonstration projects fundable under this provision (grants plus implementation costs) could be 20 to 25.

- This is a large number of separate projects to be organised, implemented and supervised.
- The total amount of money involved is quite large, amounting to 16% of the total UN (\$) budget for the SMP.

3. Basic Approach to be Taken. To make the task manageable, to keep procedures as simple as possible, and to avoid crippling delays, it is recommended that the demonstration projects be implemented through a series of subcontracts let to large, well-established NGOs. This would work roughly as follows, for each of five or six separate subcontracts:

- the identified NGO would sign a sub-contract (authorised by UNCHS and issued by UNDP) for a fixed sum, perhaps \$17,000 - \$18,000, which would commit them to bringing forward and helping implement five (5) separate demonstration projects;
- this NGO/contractor would be responsible for identifying, perhaps within a fixed geographical area, a number of communities/neighbourhoods which might be able to generate suitable demonstration project proposals;
- the NGO would directly assist the local community in the task of articulating their proposal, and especially in documenting it in a form sufficient for consideration by the SMP;
- the proposals brought forward would be assessed by a special SMP/SMSP review group, which would approve those which meet certain general criteria of relevance and feasibility and determine the level of financial assistance to be offered;
- the NGO would assist, in collaboration with the SMP committee, in further elaborating or clarifying proposals where necessary;
- the NGO would directly disburse the financial grant assistance to the approved demonstration projects and provide training in basic book-keeping so that they can adequately account for the funds;
- the NGO would provide "back-up" support to the demonstration, but only in an "arms-length" manner, so that the project remains genuinely "bottom-up and locally-implemented";
- the NGO would be responsible for ensuring adequate documentation (especially photographic and video) on a "before"/"during"/"after" basis;
- the NGO would be responsible for simple monitoring and for reporting at regular intervals to the SMP; and
- the NGO would be required to submit brief final reports on each demonstration project.

4. The Use of Sub-Contracts. By using this approach of subcontracting, the whole procedure is greatly simplified and the managerial and administrative burden on the SMP is kept within reasonable limits. The financial provision is already embedded in the budget line for subcontracts; moreover, under the letter of

agreement with MMDA, the UNCHS as Cooperating Agency is responsible for technical approval of subcontracts. Hence, once suitable Terms of Reference have been drawn and a suitable contractor identified and approved, UNCHS can immediately instruct UNDP to issue a contract, which will be paid directly via UNDP in New Delhi.

5. Terms of Reference. The activities to be undertaken by the NGO/contractor (as noted in broad terms in para 3 above) will be spelled out in detail in the Terms of Reference which will form the basis for the contract which will be issued. For the most part, the Terms of Reference for each of these subcontracts will be the same - because each NGO/contractor is expected to identify, mobilise and support demonstration projects in the same way. A "model" Terms of Reference can be drafted (by the UNCHS international consultant) to provide a standard basis for the various subcontracts.

6. Financial Aspects. The value of the subcontract will be a fixed lump-sum, calculated on the basis of five grants to demonstration projects (maximum of \$2750 each) plus an element to compensate the NGO/contractor for its direct costs of executing the subcontract: i.e. its staff and other expenditures in fulfilling the various tasks called for under the subcontract (basically those indicated in para 3 above). The amount to be allocated for these expenditures will depend, of course, on how demanding are the requirements written into the Terms of Reference. If we estimate roughly \$750 - \$1000 of "support costs" for each of the five demonstration projects, the total for a subcontract would be roughly \$17,500 to \$18,750. (The realism of these estimates will have to be tested subsequently with more careful investigations.) Because the subcontract is a fixed lump-sum payment in return for a specified schedule of services, financial administration of the actual grants to the local demonstration projects will be the responsibility of the NGO/contractor. In this way, the SMP will be freed from the work involved in disbursing or controlling money passed over to the demonstration projects. This will enormously simplify procedures, and allow the demonstration projects to proceed expeditiously, as well as protect the SMP from an heavy administrative burden.

7. Demonstration Projects Review Group within the SMP. In general, the demonstration project subcontracts with the NGOs will be supervised in the same way as any other subcontract: directly by the Project Manager and/or his senior staff, who will have reference to the agreed Terms of Reference and who will have "back up" assistance from UNCHS available. However, because of the special needs of this Demonstration Project programme, there should be a Demonstration Projects review group within the Project Team, which will have the role of assessing project proposals and deciding upon which applicants should be approved; in doing this, the review group will make decisions based upon explicit criteria (as in '8 below). The review group should remain small and operate in a relatively informal manner, with minimal procedures and paperwork. It should be internal to the SMP/ SMSP and might best be constituted as follows: Project Manager, Senior Strategic Planner, another SMP staff member (one with special concern for or experience with NGOs/CBOs), Support Project Coordinator, and Support Project Advisor.

If the project currently has an NGO/CBO specialist under contract (as short-term consultant), that person may be invited to attend in order to tap his/her expertise. In addition, a representative of the NGO/contractor for the subcontract may be invited to attend some meetings, in order better to explain and elaborate the proposals

which have been put forward. If present in Madras, the UNCHS International Consultant may be invited to join as well.

It is important that the Committee be kept small and internal to SMP, so that its activities and deliberations can be expeditious, professional, and related clearly to the core activities of the SMP. Decisions of the Committee will be reported to the Project Director for confirmation, but no further reference to other person or outside parties is necessary.

8. *Criteria for Selection.* Demonstration projects will be selected on the basis of an agreed set of criteria, an initial list of which can be specified as follows:

- (a) *Subject: Focus on Environmental Management.* The activity proposed must have a clear relationship to urban environmental management; it must be visibly related to improving the local environment and/or to enhancing the ability of the local community to actively participate in environmental planning and management. In other words, the proposed activity must have a clear relationship to the overall objectives and purposes of the SMP itself. (Proposals which may be worthy in their own right, but which do not clearly relate to environmental management would not qualify.)
- (b) *Genuine Local Origin and Priority.* The activity proposed must actually come from the local community (although the articulation of the proposal may be assisted by the NGO/contractor); the proposal must be genuinely "bottom up" and reflect real local needs and priorities. Projects which have been externally generated and/or "imposed" on local communities, or which reflect the priorities and concerns of outsiders or experts rather than those of the community itself, would not qualify.
- (c) *Genuine Local Leadership and Implementation.* The proposed project must be one which is led by, and will be implemented by, the local people; some degree of external "help" can be accepted, of course, but the main leadership and responsibility must lie with - and be accepted by - the local people. The proposal must be genuinely "bottom up", because the purpose is to demonstrate the capabilities and potentials of communities to become constructively involved in managing their own environments.
- (d) *Matching Inputs from the Local Community.* The proposed project must be one which involves primarily locally-organised inputs, so that the support grant (maximum Rs 100,000) is not the main element in the project. For example, mobilisation of local human resources, with tools and materials bought through the support grant money, might be a reasonable combination. Equally, it might involve purchase or building of some facility (using the grant) which is then maintained and operated by the local community at its own cost.
- (e) *Realistic Proposals.* The proposed project should be feasible, or at least there should be a reasonable degree of likelihood that the project can be accomplished. This judgment should be made internally by the Demonstration Project review group - an external "feasibility study" or similar review is definitely not necessary.
- (f) *Promotion of "New" Approaches.* The review group should approve projects which are innovative, which undertake some new task or do it in a new way -

even though this will involve some degree of “risk”. After all, it is the purpose of this programme to demonstrate **new** approaches, and new approaches cannot be developed without accepting some degree of risk. *It must be understood that some of the demonstration projects may not succeed fully*; but the Project can learn from such failures.

- (g) *No Duplication of Existing Programmes.* Demonstration projects should not duplicate or repeat activities which are already supporting under existing government programmes or schemes. Thus, demonstration projects which simply repeat or extend existing government activities would not qualify.
- (h) *Short-Term Impact.* The projects should have a relatively short time-frame: results should become visible within months of initiating activities. It is important to have quick impact - visible results which can encourage the local community, provide a positive example for other communities, and allow the SMP to learn from the experience.
- (i) *Partnership Element.* There should be a preference for demonstration projects which include an element of partnership: perhaps between neighbouring communities, or between the local residents and local economic activities, or between the local community and a particular public service agency.
- (j) *Need for Broad-Based Stakeholder Involvement.* There should be a clear element of broad-based stakeholder involvement: raising awareness among the local people, giving them opportunity and experience in active participation. We are not interested in projects which are devised and run by a small clique of local “leaders”.
- (k) *Focus on Lower-Income Areas.* Although the primary emphasis should be on lower-income communities (EWS, LIG), the full range of demonstration projects should also include some in other areas (MIG), in order to be more broadly representative.
- (l) *Geographic Spread of Projects.* Although any one NGO/subcontract may concentrate on demonstration projects within a specific geographic area, taken together the total of demonstration projects should show a reasonable geographic spread: north, south, west, and central Madras, as well as in the outer Metropolitan area.
- (m) *Range of Environmental Settings.* So far as possible, the demonstration projects should in total represent a variety of local environmental settings and problems.

9. *Supervision and Guidance.* Supervision of the demonstration projects should be at “arms length” - and as limited as possible. Direct supervision is the responsibility of the NGO/contractor, who in turn is supervised by the SMP. The staff of the SMP/SMSP should resist the temptation to “micro-manage” the activities of the demonstration projects; their role is only to provide overall guidance to the NGO/contractor. It is not the purpose of the SMP (or of the NGO/contractor) to intervene in order to ensure success; that would defeat the very purpose of having “demonstration” projects! Indeed, the SMP should actively protect the communities undertaking demonstration projects from outside interventions.

10. Use of Additional Specialist Resources. Both the SMP and the Support Project have resources available and earmarked for assistance to NGO/CBO participation in the urban environmental management process: both have provision for national consultancies in this area, as well as provision for training, education and general support activities. It is important that these additional specialist resources be used, whenever appropriate, to supplement and assist and advise the SMP and SMSMP staff. Such specialist resources could be used (see '11 below) to assist in monitoring and evaluation, or to assist the NGO/contractor in providing appropriate training and community development assistance. Always remember, however, that the role of these specialists is to observe and advise - not to take over and substitute their skills for what should be developed and utilised from the community itself.

11. Supplementary Documentation, Monitoring and Evaluation. Because these are “demonstration” projects, it is absolutely essential that a clear and effective process of documentation, monitoring and evaluation be put in place and systematically followed through. Coordinating these activities is an appropriate role for the SMP/SMSMP, for it is they who will eventually have to utilise the information and lessons of the demonstration projects. A minimum requirement for basic documentation will be written into the Terms of Reference for the subcontracts. However, the SMP may wish to select some of the demonstration projects for more intensive documentation: photographic, video, extensive household surveys, etc. The monitoring process is crucial; again, some basic monitoring information will be forthcoming from the NGO/contractors as a condition of their subcontracts. However, this is minimum information, and it will be the responsibility of diverse NGO/contractors. The SMP therefore will need to develop (perhaps with specialist advice) general procedures and formats for monitoring, which can be utilised by all of the NGO/contractors in order to ensure comparability. The SMP Demonstration Project review group would be the appropriate forum for coordinating these activities. But the monitoring requirements and process must be worked out and put in place before the actual demonstration projects begin.

The SMP should consider the possibility of coordinating with the proposed research/monitoring project which is currently being developed (by the Royal Danish Academy, with Danida financial support); this research/monitoring proposal would involve activities in Dar es Salaam, Tanzania, and in Madras (the two Sustainable City programmes) and be carried out by the Royal Danish Academy and local academic or research institutions. It could be useful for the SMP to utilise the potential of this long-term research/monitoring project as a complement and supplement to (but not as a substitute for) its own internal monitoring activities.

12. Additional Considerations. The “demonstration project” programme could become one of the most important activities of the whole SMP, and if properly done it will provide a body of field-level experience which is unequalled anywhere else. It will be a very valuable body of knowledge, not only for Madras, but for India in general and for the Sustainable Cities Programme worldwide.

But to succeed in this endeavour, the basic objectives of “demonstration projects” (as listed above in '1) must always be kept in mind: these are the purposes which must be served, and the demonstration projects must not be diverted from them. The single most critical element for success will be to keep the whole process as simple and un-bureaucratic as possible. The SMP's demonstration project activities must be kept out of “normal” administrative and procedural systems, because the

“normal” bureaucratic complexity and delay will destroy the whole undertaking. The whole demonstration project programme will succeed only if it can be implemented quickly and simply. This must be the overriding concern of the SMP in its supervising role: to keep things simple and fast.

13. *Sequence of Demonstration Project Implementation.* It is strongly recommended that the Demonstration Projects be implemented in a series of subcontracts, spread over the remaining months of 1996. In particular, it is recommended that the first subcontract (covering the first 4 or 5 individual Demonstration Projects) be initiated in March/April 1996. The second subcontract, involving a different NGO/subcontractor with a further 4 or 5 individual projects, would then be negotiated and initiated in perhaps May/June. The third subcontract “cycle” would begin in July/August, the fourth in September/October, and the fifth in November/December. In this way, there will be an order sequence of subcontracts - and of Demonstration Projects - spread fairly evenly over the time available. This would be of great benefit to the SMP, especially in terms of supervision and control. It would also help maximize the impact of the scheme, by providing a continuous flow of new Demonstration Project activities.

Another advantage is that this sequential arrangement would allow the SMP/SMSP review group to constantly assess the overall procedures for the subcontracts, making changes where appropriate in future subcontracts based upon experience gained in earlier subcontracts. (For instance, if it seems that the first two subcontracts have been hindered by the Rs 100,000 limit, the review group could consider the possibility of raising the limit to Rs 150,000 or even Rs 200,000.)

C11
Summary Action Plan for Air Quality
Improvement (Shenyang, China)

No.	Project	Item & Standard	Progress Schedule	Key Actor	Cooperating Actor
1	Make emissions from major industrial pollution sources meet the standards	36 enterprises to be made meet acceptable standards	completion date: 31 December 2000	Municipal Environment Bureau (SEPB)	Municipal Economic & Trade Commission; district governments
2	Control coal quality	1. Coal with +0.8% sulfur and +20% dust forbidden 2. Keep sulfur below 0.6% and dust below 20% in coal-using plants such as Shenyang and Shenhai Thermal Electrical Plants	1. Begin May 5, 1999 2. Begin May 1999	Coal management office; district government Municipal Environment Protection Bureau	Municipal Environmental Protection Bureau Technological Supervision Bureau Estates Bureau; Industrial and Trade Bureau
3	Popularise the distribution of clean coal	Use clean coal with energy saving rate >10%, sulfur rate < 40%, dust reduction >30% in industrial field and heating systems	Boilers use 3 million tonnes clean coal in 1999	Municipal Materials Bureau; SEPB, Estates Bureau, district governments	Municipal Economic & Trade Commission
4	Upscale clean fuel	Crude fuel must be replaced by clean fuel in boilers below 0.7MW	From 1 Oct 1999	District governments	SEPB, Industrial and Trade Bureau, Construction Engineering Bureau
5	Eliminate outmoded equipment	Phase out below-standard boilers	40% completion before 1999, 100% by 2000	Municipal Economic & Trade Commissions, district governments	Municipal Labour Bureau, SEPB, Estates Bureau
6	Tyre burning in boilers	Tyre burning used in boilers of 1.4MW	Completed 1 Oct 1999	Municipal Economic & Trade Commissions, Estates Bureau, district governments	Municipal Labour Bureau, SEPB
7	Continuous heating supply in low temperature conditions	Upscale continuous heating supply during low temperature conditions on all boilers within 2nd Ring Road	Start 1 November 1999	Municipal Estates Bureau, district governments	Municipal Environment Protection Bureau (SEPB)
8	Cleaner production	Set up clean production auditing and carry out accounting on thermal balance in enterprises with boilers over 7MW	End 1999	SEPB, Municipal Economic and Trade Commissions	District governments

No.	Project	Item & Standard	Progress Schedule	Key Actor	Cooperating Actor
9	Boiler worker training	Offer excellent training and operation with certificates	Start 1 November 1999	Municipal Estates Bureau, district governments	SEPB; Economic & Trade Commission
10	Expand central heating system to full use for current facilities	replace separate and temporary heating system with central heating system	By 1999 heating season	Municipal Estates Bureau, district governments	SEPB
11	Control dust-raising by wind	<ol style="list-style-type: none"> 1. Take effective measures to control dust-raising of powdered materials in open air within 2nd Ring Road 2. Ban dry street cleaning 3. Control construction sites 	5 May 1999	<ol style="list-style-type: none"> 1. District governments 2. Municipal Construction Bureau 3. Municipal Construction Engineering Bureau, Urban Construction Bureau, Estate Bureau, District government 	SEPB
12	Control exhaust emission	<ol style="list-style-type: none"> 1. Motor vehicle exhaust emissions must meet state standards. Vehicles not meeting standards must be repaired, or if this is not possible, scrapped 2. Discarded vehicles may not be sold on 3. Environmental Agencies to test vehicles appealing against scrapping 4. Vehicles sold in Shenyang must satisfy exhaust emission standards, all cars must be equipped with electronic rejection system and 3-way emission control system 5. Car manufacturers are responsible for establishment of exhaust emission control centres or they will lose their certification 6. Maintenance and repair must use approved parts and be checked for emissions after repair 	Begin 5 May 1999	<ol style="list-style-type: none"> 1. Municipal Public Security 2. Municipal Public Security 3. Municipal Public Security 4. Municipal Public Security 5. SEPB 6. Municipal Transportation Bureau 	<ol style="list-style-type: none"> 1. SEPB, district government 2. SEPB 3. SEPB 4. SEPB 5. SEPB 6. SEPB, Municipal Public Security
13	Forbid outdoor barbeque	forbid food stalls which occupy roads, violate food health regulations and damage the environment	Begin 5 May 1999	District governments	
14	Forecast air quality	Provide periodical air reports, correct forecasting and warning	Begin 5 May 1999	SEPB	Municipal Meteorological Bureau
15	Propaganda & education	Media to encourage general public to take active and responsible part in air quality initiative	Begin 5 May 1999	SEPB	Related Media Unit