



TRAINING MANUAL 1 INTEGRATED SOLID WASTE MANAGEMENT PLANNING

Module 1-1: Overview of SWM Planning

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Why Plan ?

- MSWM is a key municipal responsibility
- Quantities of waste increasing
- Space is running out
- Often consumes 10-20% of operational budget
- Perhaps only 50% of people receive services
- Existing service standards & performance often low
- Adverse impacts on health, safety & environment

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Waste management has become a progressively more difficult issue in most transition countries over recent years. Service providers are often struggling to keep pace with demographic growth, economic and social developments. There is more and more research taking place underlining the link between insufficient refuse collection, treatment and disposal, quality of water, air, soil, and through these agents on our health.

The existing standards often do not meet basic requirements and/or environmental standards. As economies grow, consumption of products increases, and the waste management problem becomes more serious. The sheer impact of population growth, urbanisation and economic development on the quantity and complexity of waste can have significant implications for the quality of life in a city. Maybe land is becoming scarce, and finding sites to dump waste is becoming more and more difficult.

Waste management also often consumes 10-20% of the municipal budget. In many cases the figures are higher but due to bad accounting practices and cross-financing of services, the true cost of SWM is often not known.

As a result of these factors waste management has risen to the top of the political agenda in many countries, with regional and local governments being placed under increasing pressure to provide more effective services with very limited municipal land and resources. Service providers can become caught in a downward spiral of development, with low levels of investment and service performance affecting public satisfaction and cost recovery, and the capacity to re-invest.

The limited technical and management resources available for MSWM are often focused on 'fire-fighting', ie on the day-to-day problems of providing a service. Whereas immediate action, such as buying more collection vehicles, cleaning up certain areas or resolving land issues surrounding dump sites can relieve pressure on the authorities, improperly coordinated actions can easily push the problem elsewhere or obscure more fundamental causes of the problem.

The real solution is to search for sustainable solutions; to take a strategic view of the situation, and plan the most cost-effective response in an integrated way. Strategic planning offers an opportunity to do this; to look for ways of turning things around and delivering sustainable improvements to local waste management practices.



Benefits of Planning

- Ensure services:
 - meet demand
 - are appropriate
 - are cost-effective
- Improve sustainability
- Allow improvement / extension of services
- Enable public health, safety and environmental benefits.....

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Strategic planning is a method of ensuring that MSWM services keep pace with demand, are appropriate to needs, and are cost-effective. A participatory approach i.e. engaging all stakeholders throughout the entire planning process, helps ensure that demand for services is both mapped and met.

Planning is a process and not an event; the performance of a plan in meeting its objectives must be evaluated and taken forward as an input into further planning cycles. Thus, strategic planning intends to inspire a continuous cycle of improvement, enabling step-by-step improvements to service coverage and standards.

A key to success is to focus on improving the efficiency and effectiveness in providing waste collection and street sweeping services, so as to free up resources to extend service coverage and to begin to improve the standards of waste disposal.

As mentioned before, the link between insufficient waste management and its negative impact on the environment has been well documented. Through improved and extended services these negative effects can be reduced, promoting quality of life, environmental protection, health, jobs and economic development.



The Technical Approach to SWM Planning

The problem?

- what facilities to build?
- where and when to build them?
- how big?

The solution?

- mathematical modelling
- optimise costs



During the 1970s, efforts addressing the waste problem in Europe and elsewhere focused on designing and financing waste disposal and treatment facilities. The technical approach asked questions of how much and what kind of waste we have and where should we put it. Decision-makers were primarily concerned about the number of facilities required and where these facilities should be built.

Mathematical modelling was introduced as a planning tool. The model was allocating wastes from 'sources' to 'sites' using linear programming but could not offer practical solutions to the academic problem.

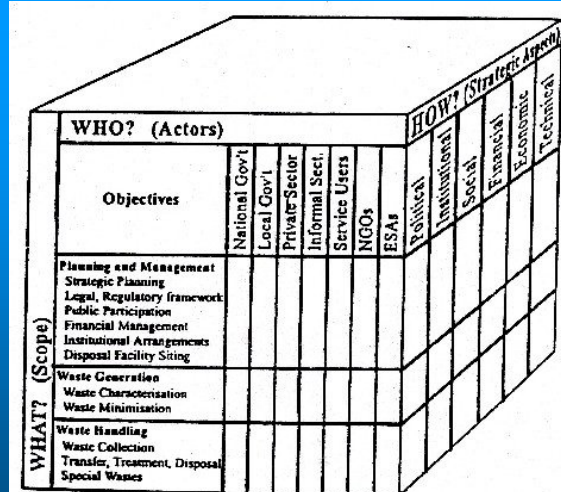
On the financial side, optimising costs and getting the best value for your money in terms of waste disposal were key concerns in decision-making. However, it soon was realised that technical elements were only one part of the full solution. There was then a search for an alternative to this purely technical approach?

Conceptual Framework for Integrated Solid Waste Management

Stakeholders
actors?

Elements
what?

Aspects
how?



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The need for a more integrated approach to waste management was gradually developed during the 1980s and 1990s. In order to foster strategic planning a Collaborative Working Group (CWG) on MSWM was established: a joint undertaking of international and bilateral agencies, professional associations, NGOs and leading specialists under the technical guidance of the World Bank and with the financial support of the Swiss Agency for Development and Co-operation (SDC) and the UK Department for International Development (DFID).

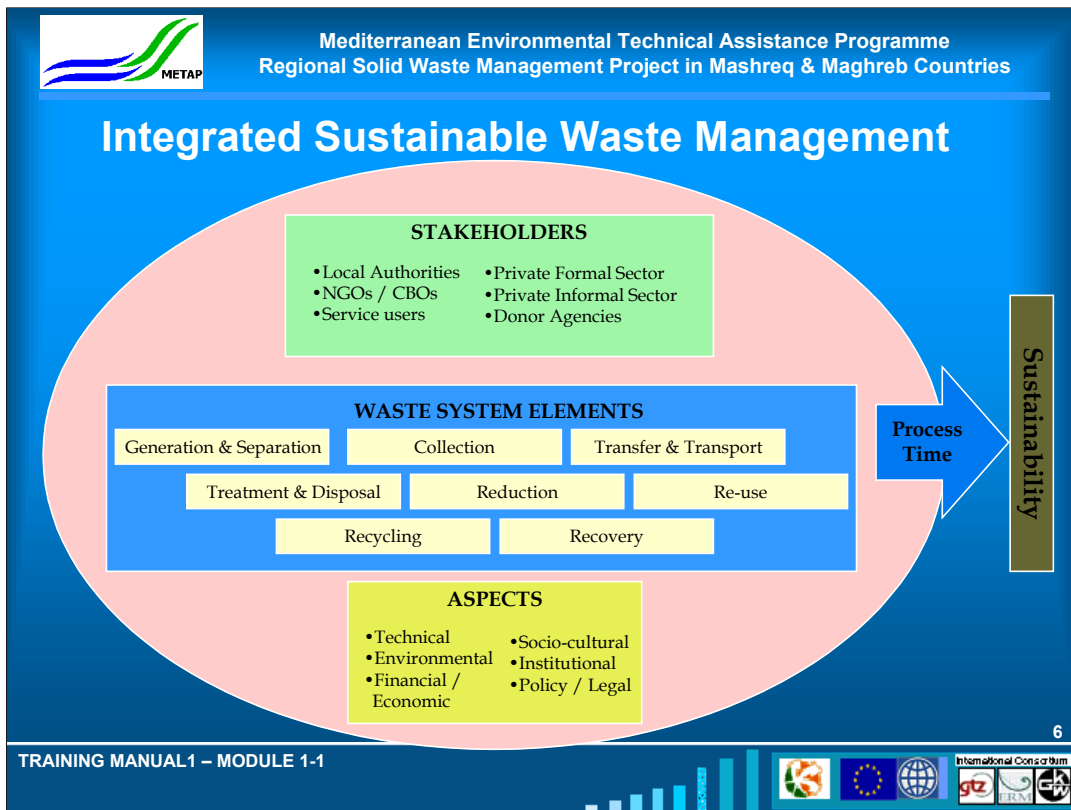
As a result of work at the CWG a conceptual framework for MSW was prepared and published in 1996 (Schubeler, P. et al. "Conceptual Framework for Municipal Solid Waste Management in Low-Income Countries." Urban Management Programme Working Paper No. 9, World Bank, August 1996.

The Conceptual Framework is structured along three 'principle dimensions' as the cube shown on the slide shows. Its three faces present alternative ways of developing and implementing policies. To be effective the system must cover all three elements including the actors, the scope and the strategic aspects.

Actors: Who are the main public and private sector actors concerned with MSWM as service providers, users, regulators and facilitators; what are their respective interests and capacities? Actors and their involvement should be identified. All stakeholders must play an active part in developing and implementing waste management strategies. The needs of the various actors must all be addressed. *Module 6* will elaborate further on how to engage stakeholders and participatory planning.

Scope: What is the scope of MSWM; what functions, tasks and activities are involved? What parts of the services need to change? *Module 3* will provide further insight into the identification and evaluation of the various waste management options.

Aspects: How should strategies for MSWM be conceived; what specific objectives and issues does it pursue and what issues must be addressed regarding the main strategic aspects? How to achieve the changes through regulations, education, new facilities etc?



The Conceptual Framework was further elaborated and in 2001 the 'Integrated Sustainable Waste Management - the Concept' was published [1]. The Concept also revolves along the three principal dimensions i.e. stakeholders (actors), waste system elements (scope) and aspects.

Stakeholders including any person or organisation interested and/or involved in or affected by waste management must be identified and then engaged in the planning process. Stakeholders have very different roles and interests but they can co-operate and work towards a common goal. The stakeholder box provides examples of typical actors.

Waste system elements are various stages of the entire waste flow from generation through transportation, processing to final treatment and disposal.

ISWM aspects, as "lenses through which the existing waste system can be assessed". These include:

The **technical aspects** of the waste solutions must be as detailed as possible starting from estimating waste quantities, characterization of the various waste types, scooping as well as analysis of the various treatment and disposal options.

Political considerations focus on questions like what are the political priorities and issues regarding waste management and how to gain political support and commitment? Political support and goodwill is crucial to the ultimate success of the Strategic MSWM Plan. Ensure broad based and cross-party support

Institutions - no waste management plan can be successful if the necessary institutions and expertise for the design, legislation, implementation and enforcement are not in place.

The **social aspects** i.e. the health, well-being and livelihood of the residents affected by the waste problem. How can the new system improve these conditions?

Financial concerns regarding the costs, the means of raising the necessary funds, the design of various cost-recovery policies, the willingness of the population and industry to pay for the services, are vital in the feasibility of a strategic plan.

In addition to financial concerns, **economic considerations** also look at how the new system affects economic development. Will it create new jobs? Can it trigger local economic growth?

[1] van d Klundert, A; Muller M, Scheinberg, A; Dulac, N; Anschutz, J and Hoffman, L (2001).) *Integrated Sustainable Waste Management. A Set of 5 Tools for Decision-Makers* WASTE, UWEP, Gouda (available on CD and www.waste.keysheets.net)

The Planning Hierarchy



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The Planning Hierarchy on this slide illustrates the conceptual separation of different outputs necessary in development and implementation of improved waste management practices.

The hierarchy places Strategic Planning within its middle band. Strategic MSWM Planning can be defined as:

'the process of determining needs and priorities, and necessary actions to be taken to develop waste management practices'

Many countries have, or are in the process of developing, national policies and sector strategies on waste management. These national strategies establish the institutional/legal framework, needs and priorities, planning goals and sectoral targets, cost recovery norms and the framework for regional/local Strategic MSWM Plans. See *RSWMP-Regional guidelines, Volume 6 Case Studies* on regional experience in the preparation of national solid waste management strategies in various countries of the region including Egypt and Algeria. The 'Methodological Guidelines for Sectoral Analysis' in SW can also provide a good basis for developing national strategies.

Once the Strategic Plan has been established, further work will be required to establish the precise arrangements for its implementation. This is referred to as Operational Planning, and can be visualised as the project management of the implementation process – establishing, adjusting and refining SWM practices on the ground.



The Strategic MSWM Plan

Strategy

Overall vision and objectives

Action Plan

Implementation arrangements

Decision-making milestones

Together, they form the **Strategic MSWM Plan**

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The strategic plan itself can be further sub-divided into two steps – Strategy and Action Plan.

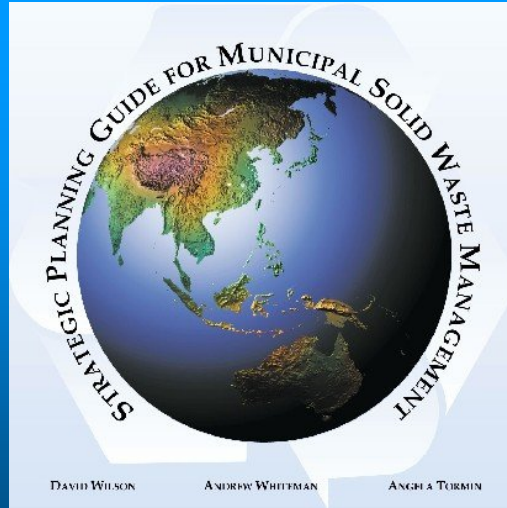
The `Strategy` sets out the overall framework under which MSWM systems and standards are to be developed. It comprises the vision of how the system will develop over say 15-25 years.

The `Action Plan` details the specific options that are to be pursued to implement the requirements of the Strategy. The Action Plan sets out the specific steps to be taken over a period of two to five years, and may include investment projects. It also outlines the key decision-making milestones, designed as indicators for project management.

In addition, it may be desirable to prepare an `Immediate Action Plan`, covering the detailed programme and flow of actions over the first year or two.



The Strategic Planning Guide



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Under the framework of the Collaborative Working Group (GWG) on MSWM, a team of specialists under the consultancy firm ERM was commissioned by the World Bank to prepare a strategic planning guide for municipal solid waste management.

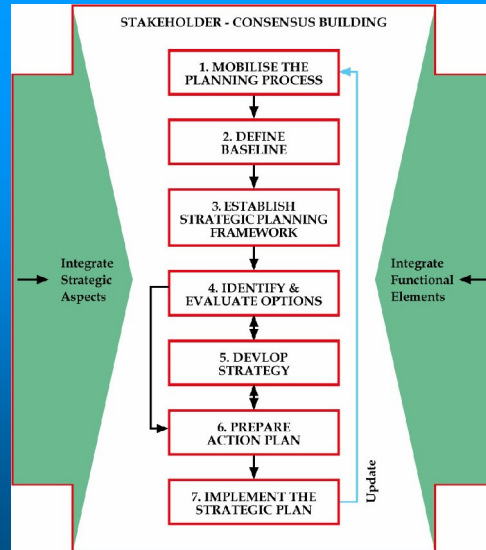
The aim of the SPG was to provide a methodology for strategic planning, and within this to provide a comprehensive synopsis of experiences in developing MWSM services and standards across the world. The purpose was to contribute significantly to increasing the knowledge, skills and the promotion of sustainable waste management practices.

An initial draft document was presented at a peer review workshop in Dhaka in 1997. The Draft Guide was prepared the following year and then put to test in Vietnam and Lima. Finally the completed document (in the form of an interactive CD prepared by the NGO wasteaware) was launched at a workshop in Manila. The Planning Guide is available from the World Bank infoshop and also on-line (see references at the beginning of this Module).

The Planning Guide is structured to facilitate easy use and contains a vast amount of information, guidance and tools to assist you.

Trainers are encouraged to familiarise themselves with the SPG as this module draws its structure and much source material from it.

Strategic planning methodology



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Strategic planning has been defined as a seven-step approach. This slide shows the 7 steps.

Step 1 (Mobilising the Planning Process) is concerned with how to get started with the strategic planning process.

Step 2 (Define Baseline) is focused on understanding the baseline situation and likely future requirements for MSWM in your city.

Step 3 (Establishing the Planning Framework) covers the range of issues that need to be established at the outset of the planning process to determine the framework for the Strategic MSWM Plan.

Step 4 is identifying and evaluating options required to address the key issues being faced.

Step 5 (Develop Strategy) leads to the development of the Strategy, which must be agreed and accepted by all stakeholders.

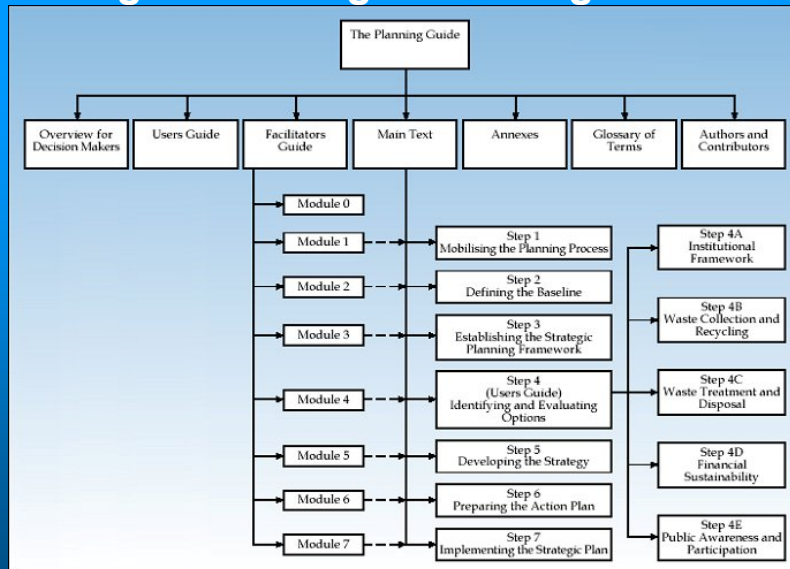
Step 6 develops the Action Plan required to turn the Strategy into practical reality.

Finally, during Step 7 (Implementing the Strategic Plan) the agreed plan must be effectively implemented.

There are interactive links between the various stages, which stress the need for feedbacks, revaluations and update as well as the integrations of the various strategic aspects, and all the functional elements.

The 7 step process should not be seen as a linear progression but more as indicating the need for a spiral of development, where all the experience and progress gained in one cycle is channelled into the next stage.

Using the Strategic Planning Guide



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The materials in the Planning Guide are structured around seven process steps and five content steps. It aims to provide help for the user to visualise and logically 'walk through' the process of strategic MSWM planning. The process is an interactive one, in which all of the major stakeholders need to be actively involved. The guide actively promotes participatory planning involving a series of debates, discussions and informed consultations.

The contents are as follows:

An Overview for decision makers; including two checklists: the 'DOs and DON'Ts' of planning for MSWM and the 'DOs and DON'Ts' of improving MSWM in your city

A User's Guide;

A Facilitator's Guide summarising the key insights and experiences contained in the Planning Guide, a useful starting point for those wishing to specialise in this aspect;

Separate chapters on each of the seven process steps and five content steps. Each step summarises up front the 'key messages', which address both the process and the content of the strategic MSWM plan, then proceeds into detailed presentations and discussions.

A series of *Annexes*, linked to each of the steps and sub-steps, providing supporting tools and information to assist in undertaking specific tasks within the overall planning process.

A host of other guidance documents prepared under the framework of the Collaborative Working Group.

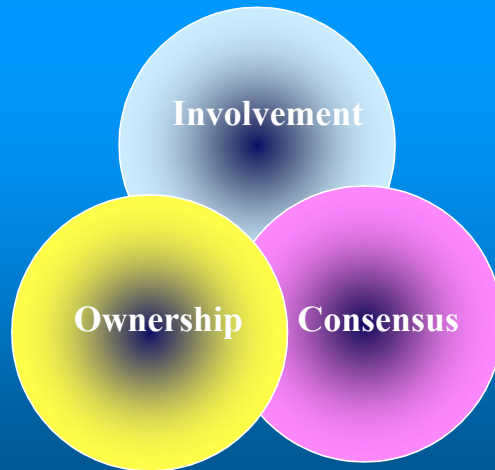
The main navigational tool for the Strategic Planning Guide CD is a *matrix* which contains links to all documents and files.

This is your Guide, please use it!. The Guide is widely available on line <http://wbln0018.worldbank.org/External/Urban/UrbanDev.nsf/Urban+Waste+Management/349F2CDAE6E96C6285256B3A007DB3D1?OpenDocument> but also from the World Bank's infoshop (infoshop@worldbank.org) in CD-Rom format.

There have been a number of projects aiming at testing and improving the document and its key principles. The outcome is a set of SPG Guide Practical key sheets discussing available and new tools on each planning step. These documents are also available on CD and on line (www.waste.keysheets.net).

The trainer is encouraged to show how to use the SPG on the computer. At the end of the presentation students should be encouraged to try and familiarise themselves with the Guide.

Participatory Planning



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It is important to keep in mind that both the planning and implementation of MSWM is not primarily a technical issue, but is much more concerned with the organisation and management of relationships between all of the key actors or stakeholders.

Involving key stakeholders in an inclusive participatory planning process will provide a greater quality output, and more assurance that actions will be effectively implemented. Those involved should include political leaders, department heads, department officials, waste managers, specialists, the private sector and NGOs/community organisations.

It is important to ensure continuing stakeholder participation throughout the implementation process. A strong leadership role must be maintained by those government departments responsible for overseeing implementation of the Strategic Plan, but other stakeholders will be essentially responsible for many implementation actions.

For more details and a review of regional literature on public awareness and community participation see Volume 5: *Literature Review, Public Awareness & Community Participation Guidelines & Aids to Implementation of RSWMP Regional Guidelines. Module 6 on Working with Stakeholders/Participatory Planning* will provide more detail discussion on this topic. Also look at Key sheets No. KS1_02 MoU-on Developing a formal commitment to the strategic planning process, and KS1_03 on Forming and Strengthening the Steering Committee. (SPG Guide Practical key sheets. available on CD and www.waste.keysheets.net)



The Role of the Facilitator

- Establish Methodology
- Assist management
- Assist and inspire debates
- Communicate experiences
- Help secure consensus on key issues
- Draft written outputs

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For the planning process to be effectively managed and balanced there is a need for active contribution of key stakeholders, most of whom have limited time availability. This introduces a key role for 'facilitators' to help structure, guide and manage the process, maximise contributions and work to secure consensus on key issues and strategic planning proposals.

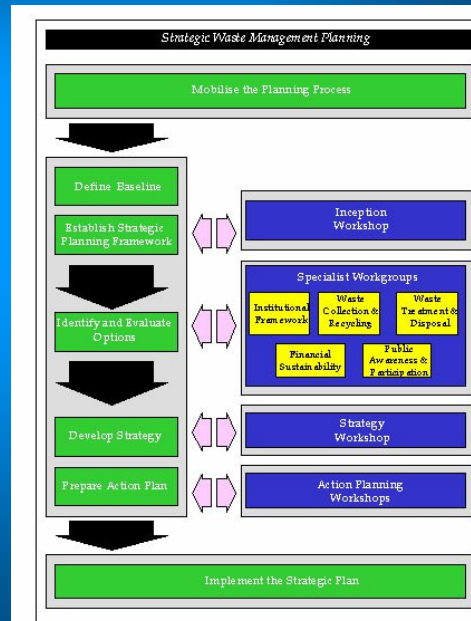
The role of the facilitator is to catalyse debates, contribute specialist knowledge and work to achieve consensus on key issues. Facilitators must develop a good understanding of local waste management issues, and use communication skills to navigate through wide-ranging and sometimes difficult debates. Facilitators play a critical role in ensuring that a plan is both comprehensive and well targeted, and will be implemented in practice.

The role of the facilitator is to:

- Establish the ISWM planning methodology
- Coordinate workshops on each stage in the process
- Assist in project management
- Assist and inspire debates
- Communicate experiences to all stakeholders
- Help secure consensus on key issues
- Draft written outputs

For a more detailed guide on the role of the facilitator see the Facilitators' Guide in Wilson, DC; Whiteman AD and Tormin AC (2001) *Strategic Planning Guide for Municipal Solid Waste Management*. Also have a look at Key sheets No. KS1_02 MoU-on Developing a formal commitment to the strategic planning process and KS1_03 on Forming and Strengthening the Steering Committee. (SPG Guide Practical key sheets. available on CD and www.waste.keysheets.net). Module 2 on Establishing the Planning Framework will more elaborate on the role of the facilitator.

Participatory Planning Methodology



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The central focus of the participatory planning methodology is to facilitate workshops at each stage of the process. The participatory planning process needs to be carefully structured to provide maximum continuity and contribution from the participants.

There is no one correct methodology for participatory planning. The process and the participants to be invited needs to be determined by a Steering Committee. The SPG, however, offers one potential methodology which was established and successfully used during the field testing of the SPG in Vietnam.

The inception workshop aims at establishing the methodology and obtain general consensus about the key milestones and objectives. The key at this stage is to open up active debates on the shortfalls and constraints in the MSWM system, and to ensure that all participants have the opportunity to speak-up on issues that are of particular concern to them.

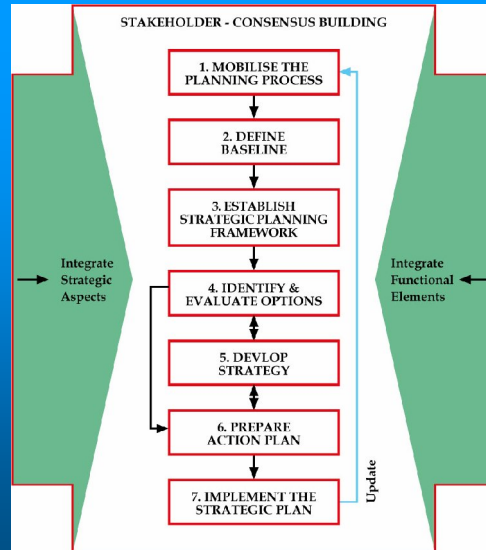
At the evaluation stage, discussions and meetings should be organised in specialist workgroups focusing on certain elements of the plans such as institutional framework or waste treatment and disposal. These workgroups will provide an opportunity for further, more detailed, discussion of key issues and strategic responses.

A Strategy Workshop can then be held to provide an opportunity for full discussion of the draft Strategy amongst the wider consultative group. The Workshop can be structured round a similar format to the Inception Workshop, with the aim being to maximise the time for discussion, debate and refinement of strategy proposals. The output from the Strategy Workshop should be a set of requirements and revisions to the draft Strategy.

Once the Strategy is developed and draft action plans have been prepared, these action plans should be offered for discussion in action planning workshops. During the implementation workshops could facilitate the feedback on implementation to the key stakeholders.

Also look at Key sheets No. KS1_02 MoU-on Developing a formal commitment to the strategic planning process, KS1_03 on Forming and Strengthening the Steering Committee and Ks3_1 Developing the Planning Framework. (SPG Guide Practical key sheets. available on CD and www.waste.keysheets.net) Module 2 on Establishing the Planning Framework will more elaborate on the role of the facilitator.

The 7 process step – Steps 1-3



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This slide presents the 7 process step of strategic planning focusing on the first 3 steps to start with.

Step 1 - Mobilising the Planning Process

Step 1 is concerned with how to get started with the strategic planning process. Guidance is structured in two areas, the 'political' mobilising support and the 'functional' organising the work. Step 1 provides the political and operational arrangements for developing the Strategic MSWM Plan.

Step 2 - Defining the Baseline

Step 2 is focused on understanding the baseline situation and likely future requirements for MSWM in your city. Aspects addressed include:

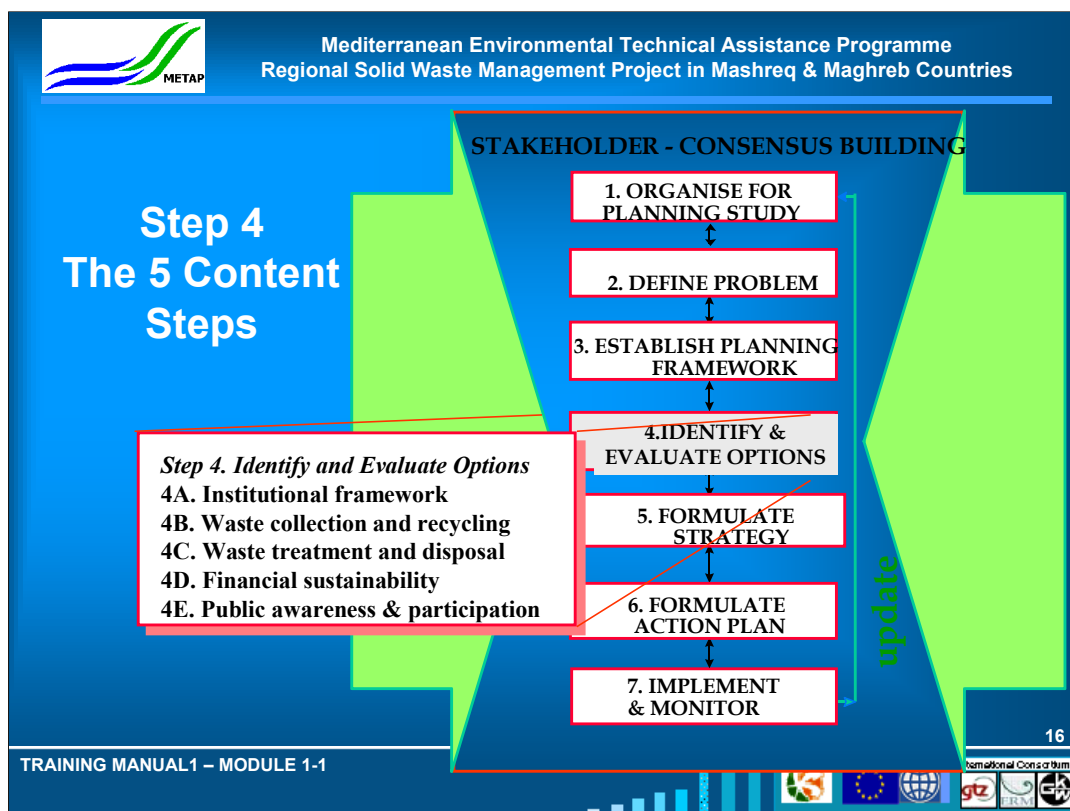
- General guidance on data collection
- Measurement of waste quantities and waste composition
- Reviewing waste management operations
- Predicting future capacity requirements.
- Understanding shortfalls and constraints

Step 3 - Establishing the Strategic Planning Framework

Step 3 covers the range of issues that need to be established at the outset of the planning process to determine the framework for the Strategic MSWM Plan. Aspects addressed include:

- The Inception Workshop
 - Defining the strategic vision
 - Status of the Strategic MSWM Plan
 - Defining the scope of the plan
 - Establishing objectives and targets
- The output of Step 3 is an agreed Strategic Planning Framework.

These 3 steps will be further elaborated in Module 2 on 'Establishing the Planning Framework'.



So far we have discussed the content of each step, the how to do it, with the process of the MSWM strategic plan development (the “how to plan”). Now we are turning to the core of the planning process.

Step 4 - Identifying and Evaluating Options

Here, we are identifying and evaluating options required to address the key issues being faced. The work is divided into five sub-steps:

Step 4a Institutional Framework, Step 4b Waste Collection and Recycling, Step 4c Waste Treatment and Disposal, Step 4d Financial Sustainability, Step 4e Public Awareness and Participation

Institutional Framework

In order to secure effective organisation and management, institutional responsibilities must be clearly defined, and institutions must be both sufficiently resourced and accountable for their performance. In addition, the opportunities for private sector participation should also be considered.

Waste Collection and Recycling

Although collection and recycling are technical in focus, they also provides guidance on some of the ‘software’ issues influencing standards and coverage of waste collection services. Wherever possible, we must build on the existing informal recycling systems. Engaging micro-enterprise and community involvement in both primary collection and recycling must also be encouraged.

Waste Treatment and Disposal

It is of primary concern to phase out uncontrolled dumping and to institute environmentally sound disposal practices. The focus should be on reducing waste quantities, increasing recycling and developing environmentally sound treatment methods as an alternative to final disposal. Keep the waste hierarchy in mind.

Financial Sustainability

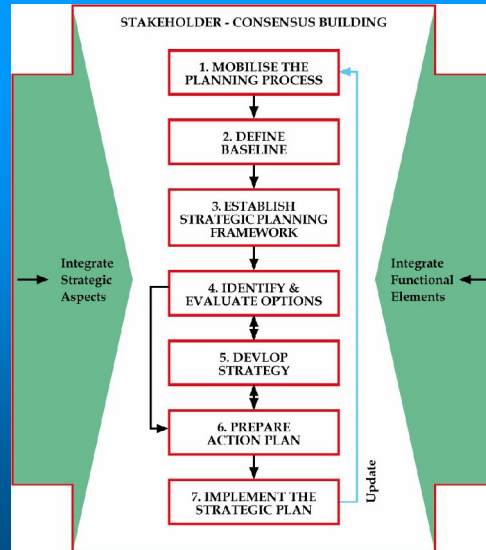
The financial sustainability of the new waste management system must be ensured. A financial policy framework based on sound financial and economic analysis of alternative options must be developed. The key focus is the need to collect a greater proportion of revenue from the ‘customers’ of the municipal waste service. The polluter-pays-principle must prevail.

Public Awareness and Participation

A range of ideas and options for improving levels of public awareness of waste related issues and public participation must be considered and a detailed action plan developed.

The range of options available and methods of evaluating them will be amplified in Module 4 – Identifying and Evaluating Options.

The 7 process step – Steps 5-7



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By this stage of the planning process an agreed Strategic Planning Framework and a set of key issues have been established. The purpose of the Strategy is to establish the strategic response requires addressing the key issues in a consultative and responsive manner. Key insights contained in Step 4 should be used in developing the strategy. The focus of Step 5 should be on discussing and agreeing high level issues of importance to improving MSWM practices.

Step 5 - Developing the Strategy

Step 5 provides the 'umbrella' under which to progress with the more detailed work required for the Action Plan. It is critical to ensure that the Strategy is agreed and Step 5 provides the 'umbrella' under which to progress with the more detailed work required for the Action Plan. It is critical to ensure that the Strategy is agreed and owned by all key stakeholders. Participatory workshops, involving all key stakeholders, are therefore strongly encouraged as the forum in which to develop the Strategy. Defining the Strategy will involve an initial evaluation of options required to address key issues. Aspects addressed include:

Nature of the Strategy, Building consensus and ownership

Defining the Strategy, Preparing and finalising the Strategy

The output is a Strategy that has been agreed by all key stakeholders and can act as a 'framework' for preparation of the Action Plan.

Step 6 - Preparing the Action Plan

Step 6 develops the Action Plan required to turn the Strategy into practical reality. The Action Plan will involve detailed evaluation and selection of options to be pursued. Aspects covered include:

Nature of the Action Plan, Pre-feasibility studie, Preparing an Immediate Action Plan, Preparing an Investment Plan, Gaining formal approval

The outputs of Step 6 will be an Action Plan, Immediate Action Plan and Investment Plan, which combined with the Strategy (Step 5) will form the Strategic MSWM Plan.

Step 7 - Implementing the Strategic Plan

Step 7 must not be seen as an end in itself. The agreed plan must be effectively implemented. Three aspects are addressed:

Moving from planning to implementation

Revising and updating the plan

Performance monitoring

Training Module 4 on How to Develop Strategic Plans and Action Plans and Module 7 on Implementing Strategic and Action Plans will further discuss activities and outputs of the above steps.

Establishing credibility

- Municipality needs to win trust
- DO SOMETHING NOW
- Show commitment
- Implement early improvements

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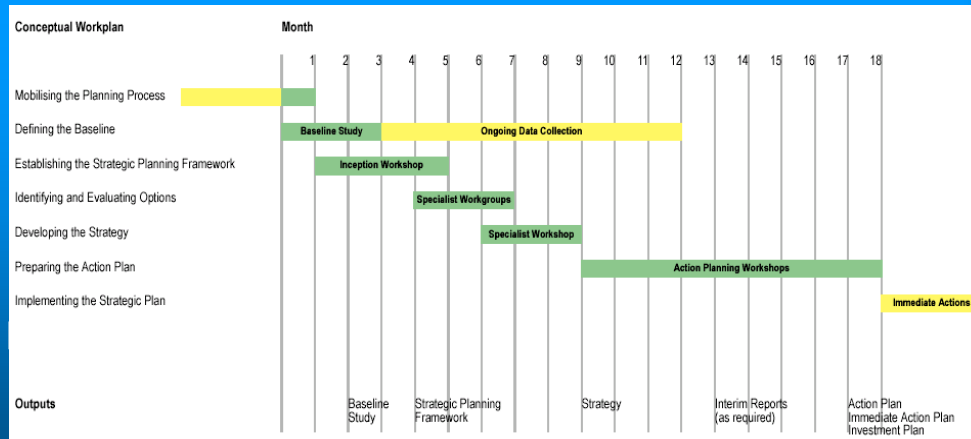
It is important to re-emphasise that the purpose of strategic planning is not to produce a Strategic Plan that is going to sit on the shelf gathering dust, but rather to provide a well focused plan which will make a difference when it is implemented.

Both the public and many other stakeholders in MSWM are likely to regard the municipal authorities as part of the problem in MSWM, as well as part of the solution. The municipality needs to win trust: trust of the public as well as the politicians.

In order to win trust from the public and other stakeholders, relatively small, simple and low cost measures can be implemented. Such measures will raise the profile of waste management and demonstrate the commitment of the municipality to improving its services. These measures can even happen already while the plan is still under preparation.

It is an essential parallel activity during these early stages of plan implementation is to set in motion the ongoing public awareness and education programme, both to communicate the Strategic Plan to the general public and mobilise their support and cooperation. A key point of the participatory approach is broad-based participation in plan formulation, not just telling people how to co-operate in its implementation!

Time plan



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This slide offers an example of timing the strategic planning process. The planning process is likely to take 1- 1.5 years to complete (6-9 months to develop the Strategy and a further 6-9 months to prepare the Action Plan). This can vary according to the size of the city, the political climate in the city and range of waste related issues and encountered during the planning process. With strong political support, the time period may be compressed into a shorter period of time.

The time necessary to complete Step 1 will depend very much on the cultural and organisational conditions in each municipality but it may take 3-6 months, depending on the ease of mobilising both political support and funding..

Depending on the availability of existing information and the complexity of the existing system/study area, the Baseline study (Step 2) can take anything from one to three months.

Step 3 should take between one to two months with the Inception Workshop being the key output.

Step 4 is divided into 5 sub-steps. Re-definition of institutional relationships requires careful thought, clear justification, much stakeholder consultation and strong political backing (underpinned by the necessary legislation). Identification and evaluation of these options can, however, be carried out over a period of 3-6 months. Development of waste collection, recycling as well as treatment and disposal facilities on the other hand is an ongoing process. Financial/economic issues covered in Step 4D will need to be addressed during preparation of both the Strategy and Action Plan. The preparation of the complete public awareness and education programme contained within Step 6, however, is likely to take around 2-3 months to complete within the action planning phase.

The foundations for the Strategy will have been built through Steps 1-3 of the planning process. Step 5 represents the end point of the Strategy process rather than the beginning. The overall process of developing the Strategy (Steps 1-5) may take 6-9 months. The specific actions contained within Step 5, however, are likely to take around 2-4 months to complete.

The Action Plan may take 6-9 months to complete. Again, this may be compressed into a shorter timeframe where there is a good level of stakeholder consensus and political support. Detailed implementation planning, including detailed feasibility studies and pilot projects for selected options should proceed following political approval, and are likely to take a further 1-2 years.

Finally, Step 7 is an ongoing process and never completed in this sense, as implementation as well as monitoring of MSWM services should be ongoing alongside service delivery for the whole period of Strategic Plan implementation.

The amount of time needed to mobilise the planning process should not be underestimated. It is important to ensure that there is sufficient time available to reach an agreed consensus on the strategy and properly address these issues in the Action Plan.



Key messages of Strategic Planning for SWM

- Vision and path
- Step-by-step
- Integrated approach (ISWM)
- Participatory planning
- Sustainability
- Continuous feedback and learning

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