

# Implementation and Replication of the Sustainable Cities Programme Process at City and National Level

Case studies from nine cities



**Working Paper No. 2**  
Urban Environment Unit  
Sustainable Cities Programme  
March 2001

**Sustainable Cities Programme (SCP)**

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## Foreword

The case studies drawn together in this Working Paper were presented at the annual meeting of the Sustainable Cities Programme and Localising Agenda 21 Programme (SCP/LA21 2000) which took place in Cape Town, South Africa, in September 2000. Together, the programmes share over fifteen years of experience in city level urban environmental planning and management activities. This Working Paper, the second in the Sustainable Cities Programme Working Paper series, is designed to capture and document these important lessons of experience, and to provide a resource for urban practitioners around the world.

The SCP/LA21 annual meeting brings together cities from all over the world who share the ideals and practices promoted by the two urban environment programmes. They promote management practices which are grounded in local consensus building and the Environmental Planning and Management (EPM) framework. The programmes provide a framework for linking local actions and innovations to activities at the national, regional, and global levels, through which lessons learned in individual city experiences can be shared, analysed, synthesised and discussed widely. This operational link serves to make global strategies more responsive to local needs and opportunities and, conversely, helps to implement global strategies and agreements at the local level. As global programmes, SCP and LA21 promote the sharing of know-how among cities in different regions of the world. The annual meetings are one of the means available for realising this.

Both SCP and LA21 promote demonstration projects as a means to learn what works best in tackling different priority environmental issues, replicating lessons learned locally and citywide, and eventually leading towards broader city development strategies. Outputs include environmental management strategies, action plans, and priority technical cooperation and capital investment projects. Currently some 40 to 50 cities around the world participate in the programmes, and today, several of them are undertaking national replication programmes which cover a number of municipalities. The theme of the annual meeting for 2000, 'Implementation and Replication at City and National Level' was chosen to allow an examination and assessment of what kind of instruments (through demonstrations, policies, investments) have helped to implement projects at the city level, and in turn to initiate a new way of planning and managing the urban environment, upscaled and institutionalised at the national level.

# Introduction

The inadequacies of conventional management approaches and planning practices in dealing with complex urban environmental problems is now widely recognized. In the same breath, the advantages of bottom-up, stakeholder based and cross-sectoral approaches are widely acknowledged. What was missing however, were effective mechanisms and tools that allow cities to operationalise these principles and approaches. The Sustainable Cities Programme (SCP) is one, among many, which offers such a mechanism for dealing with priority urban environmental issues. Its strength lies in providing an operational framework for urban Environmental Planning and Management (EPM) with a focus on "action" and result, and orientation towards national replication of city demonstrations.

The SCP Annual Meeting 2000, which was held from 22-24 September in Cape Town, South Africa was specially focused on the implementation and replication aspects of the programme. Participants who came from over 30 cities were asked to share their experiences in terms of actual implementation resulting from the EPM process. In addition, those countries which have moved to or are intending to move to national replication, were asked to share their experience in the demonstration-replication trajectory. Cities contributions to the meeting were made in the form of case studies, discussant inputs and participation in working group discussions. In this second SCP working paper, we have compiled the city and country case studies which were presented during the meeting.

The case studies fall into three categories: the first three reflect cities' experience in implementing small demonstration projects, the next three case studies focus on investment projects and policy initiatives and the last three present country papers highlighting experience in replicating EPM at a national level.

The three case studies on demonstration projects come from Colombo, Sri Lanka, Ibadan, Nigeria and Lusaka, Zambia. Whilst each case study provides a wealth of experience in a particular and different context, they all share common features and lessons of experience. All three demonstration projects are focused in water and sanitation sectors and on poor and low income areas. The case studies highlight that the SCP-EPM process has created a platform for relevant public sector actors and community groups and beneficiaries to work together to improve basic urban service delivery in water supply (Colombo, Ibadan and Lusaka) and solid waste collection (Lusaka). The deliberate targeting of poor communities featuring in all three case studies underlines the potential of the SCP approach to address poverty issues through improved environmental management. The case studies also touch on sustainability aspects of such projects and highlight concrete steps such as ensuring that community targeted service delivery systems are affordable, and setting up of community based management structure which also takes care of operation and maintenance of the service. In the case of Lusaka (solid waste collection), and also in Ibadan (waste composting), it is argued that demonstration projects provide income and livelihood opportunities while addressing environmental issues. Summing up, the message is clear: while demonstration projects are invariably small in size, they are less capital intensive and more doable, and are instrumental in modeling and popularizing effective local solutions and generating multi-faceted benefits.

The case studies on capital investments and policy initiatives come from the first two SCP cities Dar es Salaam, Tanzania and Ismailia, Egypt and from Shenyang, China. The case study from Dar es Salaam reflects on the city experience in

capital investment and policy initiatives in two areas: solid waste management and physical upgrading. The case on solid waste management profiles the genesis and evolution of privatization in waste collection in Dar es Salaam, and highlights the necessary institutional and legislative conditions that have to be there in order to reap the full benefits of privatization. The paper also highlights the experience on community based collection system which in Dar es Salaam, is encouraged to operate in the informal and inaccessible part of the city. The case study from Ismailia on the other hand focuses on capital investments generated through the EPM process. The paper outlines the project cycle activities carried out and the criteria which underpinned the ranking and prioritization of the projects, some of which are already implemented or being implemented. This is a documentation of a participatory process which has led to the development of project proposals with an estimated investment cost of over 20 million US Dollars. Seen in the context of existing local capacity in capital budgeting and project development, this is a considerable achievement made possible by Ismailia's commitment to the process. The case study from Shenyang, deals with their experience in reducing air pollution by focusing on power plants and by making use of standards and regulations, including banning of coal use with sulphur content beyond a given threshold level, and also by using public awareness campaigns, and by introducing cost effective and energy-efficient technologies.

The final part of this compilation brings together three case studies – from Nigeria, Philippines and Tanzania – on national replication of the EPM. Each case is different from the others in its political, institutional and administrative context, and in the scale and level of replication that it is going through at the moment. Having built on achievements made through the Sustainable Dar es Salaam Project, Tanzania has already moved to full scale national replication covering all municipalities in the country. Given the size and federal arrangement of the country, replication in Nigeria has gradually moved from one city to three cities each located in the different regions of the country. Once this is consolidated, it is hoped that the replication in Nigeria will gain further momentum by including about six more cities, again with a fair geographic spread to the different regions of the country. Philippines on the other hand started the SCP initiative, not with one, but with three cities, and with the National Department of Environment and Natural Resources (DENR) and the National League of Local Authorities taking an active role right from the beginning. Despite these differences in local contexts and evolution to national replication however, all three experiences and perspectives confirm one thing very strongly. That is the need for policy and political support, and more importantly the need for an institutional framework that provides technical support to municipalities participating in the replication programme. Building on its own experience, each case study profiles the institutional framework that suits the local situation and outlines the support functions such a framework should provide.

# Colombo, Sri Lanka - Implementing and replicating environmental improvement demonstration projects

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## The City of Colombo

Colombo is the financial and commercial centre of Sri Lanka and its local authority, Colombo Municipal Council (CMC) caters to the needs of a resident population of approximately 800,000 and a further floating population of over 400,000. 3731 hectares in extent, it has a housing stock of over 100,000 of which 52% are under-served settlements consisting of slums, shanties and tenements. In other words, half of the population in the City is living in underserved settlements.

The majority of the underserved settlements, i.e. 71% in the city of Colombo, fall under the category of slums. These are defined as deteriorated old residential quarters owned by private individuals and now abandoned. Shanties are defined as temporary structures built with improvised materials and are mostly located in government reservation lands (railway and canal reservation) and on low lying swampy lands.

Slums and shanties both do not have adequate housing amenities and lack services such as water supply and sanitation as well as liquid and solid waste management.

Slums and shanties are located in clusters, called "Wattes" or gardens. Each garden may have 10 – 300 of these slums/shanties. There are over 1200 gardens in the City and each garden has a Community Development Council (CDC) comprising representatives of the slum and shanties. These CDCs are fairly well organised.

Discussion on their needs and problems such as water supply, sanitation facilities, health, safety, security and welfare takes place at CDC meetings where the citizens, official and elected members participate. These discussions create a great awareness among the community and give an opportunity for them to actively participate.

## Location

The neighbourhood chosen for the case study is Garden or 'watte' No. 197, W. A. Silva Mawatha. It consists of 52 housing units and houses a population of 270 persons which includes 60 children. They are low income dwellers.

Due to the poor economic situation faced by them, their housing is very congested as there is a limited space availability in the garden. 2-3 families living in a single housing unit is a common sight and apart from the main access way to the garden, all other access routes within the garden are of a width less than 3-4 feet.



## Subject area

At the Sanitation City Consultation held, two main issues, solid waste management and water supply and sanitation, were discussed and one of the main findings was the lack of water supply to the under-served settlements. There are many reasons for this.

In an attempt to provide this basic need, a scheme was introduced many years ago to provide these gardens or slum areas with common water taps also known as 'stand posts'. Accordingly, depending on the number of housing units, such stand posts were provided.

Therefore water required for their sanitation/washing requirements is met through stand posts provided by the CMC with water supplied by the National Water Supply & Drainage Board (NWS & DB). Due to the lack of individual responsibility towards the stand posts, they are often left open and unattended. The flow of excess water along roads clogged with uncollected solid waste give rise to stagnant pools of water surrounding the already congested environment.

This factor, along with the lack of a suitable drainage system, led to several problems faced by the community. They are:

- Common ownership of stand posts and the lack of regular cleaning leading to the immediate environment surrounding the stand posts being unhygienic.
- Lack of suitable drainage system, leading to the free flow of wastewater directly to nearby low-level lands and the formation of water pools, resulting in the movement of garbage from dumps in the vicinity.
- Breeding of mosquitoes in such water pools and the wide spread of diseases such a Malaria, Dengue and Encephalitis in a closely-knit community.
- Increase of the flow of non-revenue water from sources such as stand posts which are unattended and left open.
- The unhealthy social impact related to queuing at stand posts which have limited access due to a large number of residents sharing a single stand post.

It was noted that 50% of the water distributed by the Council goes unaccounted for and is not paid for, thus it is identified as Non-Revenue Water, (NRW) which means that only 50% of the water that the Council distributes is paid for by residents and commercial institutions. This caused an acute shortage of available water to the underserved settlements.

## Local origin and priority for leadership and ownership

The community living in the selected neighbourhood faced various problems due to the lack of individual water connections within the garden. Fighting among the residents for water at peak times as well as queueing up for bathing, caused many social problems. In addition the lack of a proper water distribution as well as a waste water and sewerage disposal system was a definite health hazard.

The community raised this issue at CDC meetings, and the community leader promised to raise the issue with the area Member of the Municipal Council (MMC). The MMC would then inform the Projects Division of the CMC who would then prepare a BOQ and give an estimate as to how much the project would cost in total.

In the annual budget of the Council, each area MMC is allocated a sum of Rs. 1.5 million per annum to carry out various development projects in underserved

settlements. However due to the fact that many such underserved gardens are located within each allocation and due to the numerous needs in these settlements it is at times not possible to carry out improvements in every garden within the same financial year. Therefore some projects are halted or do not commence for a long period of time.

## **The partnership element**

The project team identified this major setback within the system and then arranged a meeting with the MMCs and the officials concerned to determine a process to support such projects financially and in a participatory manner, if the proposals were brought forward to them.

Our objective was to ensure a broad based stakeholder involvement by creating awareness among the local people and to develop wherever possible an opportunity for them to actively participate. The MMCs took on the responsibility of bringing the officials and the people in the gardens together.

It was agreed that one third of the finances would be allocated from the MMCs allocation, one third from the SCCPs budget from the CMC and the remaining from the finances allocated through UNDP for neighbourhood based development projects.

The project team would visit each site with the area MMC, Health Education officer, Public Health Inspector (PHI), and Water Works Engineers of the Municipality along with the SCCP Director and Manager to explain to the community what the main objectives of the project are and how we want their support and participation in order to maintain a sustainable water supply system as well as a healthy environment.

With the community having an active part to play in the project they feel empowered and feel responsible for the maintenance of the water supply scheme.

The community as a whole pledged support to carry out excavation work and help the Municipal workers lay pipe lines. 5 community members volunteered to coordinate with the PHI to hand in Application Forms to the Water Works division of the Municipality, and to facilitate the smooth running of the excavation work.

The partnership element of the project demonstrates the involvement of many stake holders. The community participation alone shows that the people of the neighbourhood have identified and understood that they are faced with a water supply problem and if individual connections are given then they would be more responsible for the use of their taps. This along with the fact that they will be educated on how to manage these water supply facilities will give them a sense of participation and responsibility.

## **Size**

The water distribution system will distribute water to approximately 52 Housing Units. There are 52 Housing Units within the garden that are registered with the Municipal Council and pay taxes. Each Housing Unit has to produce a copy of their registration card to apply for a water connection. This is a legal requirement by the CMC in order to authorise a water supply connection.

## **Matching inputs**

This project created an interest among the authorities handling the distribution of water. In fact it resulted in the National Water Supply and Drainage Board (NWS&DB) giving a rebate of 50% on installation charges.

Earlier residents had to pay Rs. 4,000.00 as a down payment for water tap installation, and the remainder to be paid in 3 or 4 instalments. However it is subsidized to Rs. 2,000.00 as the first instalment, with the remainder to be paid in Rs. 100.00 monthly instalments. This method of payment is much more convenient for these residents as they are low wage earners.

We are now in the process of inviting the private sector as well as NGOs to finance this part of the financial input.

## **Up-scaling and geographic spread of projects**

These projects are neither large nor complicated. The financial involvement is also reasonable. Yet the return in changing the environment and obtaining basic needs for the community is quick. Visible results have motivated most other members and the CDCs to adopt this procedure. Hopefully by the end of this year the requests of the CDCs and the MMCs received so far will be acted upon.

## **Sustainability**

Sustainability is an important issue and during the many discussions we had with the community emphasis was placed on the fact that maintenance was their responsibility. Further sustainability is ensured through the CDCs and public health inspectors of the area.

# Ibadan, Nigeria - Experiences in local implementation and replication of demonstration projects

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## Abstract

The Sustainable Ibadan Project (SIP) evolved as a result of the request of Oyo State Government in 1991 to participate in the Sustainable Cities Programme (SCP) of the UNCHS (Habitat). This led to the inclusion of Ibadan City in the initial twelve (12) cities selected all over the world for the demonstration of the Sustainable Cities Programme (SCP).

The implementation of the SIP started in 1994 with the implementation agencies of the project being the eleven (11) Local Governments in Ibadan supported by the Oyo State Government with technical and financial support from UNCHS (Habitat) and UNDP respectively. In fact, UNCHS (Habitat) provided the bulk of the financial support for the implementation of the first phase of SIP.

The Project has both technical and physical outputs with the technical aspect in form of improved capacity for environmental planning and management, while the physical output comprises demonstration projects evolving from the EPM process adopted to address prioritised environmental issues within various local communities in Ibadan. The SIP operate through the activities of a Technical Support Unit (TSU), Working Groups and Consultants. Demonstration projects implemented in Ibadan under the SIP were initiated, planned, designed and executed by the various cross-sectoral Working Groups set-up by the SIP in line with the key priority issues of Waste Management, Water Supply and Institutionalisation of EPM Process, identified at the Ibadan City Consultation.

This case study presentation has focused upon three (3) demonstration projects developed by SIP Working Groups on Waste Management and Water Supply drawing out various aspects of their implementation strategies that would no doubt help others to learn from.

In summary, this presentation has succinctly documented useful information on the SIP experience at implementing Demonstration Projects in the following areas:

- Activities of SIP Working Groups set-up to address prioritised environmental issues of concern identified during the Ibadan City Consultation.
- Strategies and Action Plans developed by Working Groups on Waste Management and Water Supply.
- Mobilisation of members of the various communities in Ibadan to deal with environmental problems of concern to them in a purposeful manner.
- Diversification of sources of implementation resources for environmental policies and projects through the involvement of all Stakeholders (i.e. Community, Government, NGOs, Academics, Public, Private and Popular Sectors) in project implementation.
- Development of Sustainable Community Environmental Project (Demonstration Projects), as well as their replication and up-scaling.

The SIP having successfully demonstrated the concept and underlying principles of the EPM Process through its activities in the last six (6) years, has now reached the stage where it is deemed appropriate to consolidate the successes recorded in the implementation of the project and also concentrate on further institutionalisation of the EPM Process. This is exactly what the SIP is set to accomplish in the next two years of its Extension Phase (2000-2001) funded by the UNDP and the Oyo State Government.

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## Implementing Demonstration Projects: The Sustainable Ibadan (SIP) Experience

### 1.0 Basic purpose of demonstration projects under the Sustainable Ibadan Project (SIP)

The Sustainable Ibadan Project has both technical and physical outputs. The technical output is in the form of improved capacity for Environmental Planning and Management. On the other hand, the physical output comprises various capital development projects, otherwise called Demonstration Projects, being implemented to solve identified prioritised environmental problems of concern in Ibadan City, Nigeria.

The basic purpose of demonstration projects in Ibadan (Nigeria) as facilitated by the Sustainable Ibadan Project is to demonstrate the feasibility of some of the strategies and action plans developed in respect of key environmental issues identified during the Ibadan City Consultation and subsequently worked upon by relevant Working Groups set-up on Water Supply, Waste Management and Market Environmental Improvement among others.

Furthermore, the development of demonstration projects, apart from giving a lot of credence to the Sustainable Ibadan Project and propagating the various tenets of Sustainable Cities Programme, also produces useful physical projects on the ground which people could associate with through a new community-based participatory approach involving all stakeholders jointly working out and implementing local solutions to local environmental problems, particularly within lower income neighbourhoods of the city.

The development of demonstration projects facilitated by the Sustainable Ibadan Project essentially seek to promote the following objectives:

- (a) Creation of a sense of ownership of the environment with emphasis on the involvement of communities in the planning and management of their environment.
- (b) Increasing the number of actors responsible for environmental planning and management of Ibadan City, especially through the involvement of the private sector which hitherto has not been involved in environmental management of the City.
- (c) Fostering strong working relationships between the Local Communities, the Private Sector, the NGO and Local Governments in addressing environmental issues and initiating actions (demonstration projects) to ameliorate them through partnership approaches.

- (d) Diversification of sources of implementation resources for environmental policies and projects which had hitherto been from only a single source-the public sector.
- (e) Demonstrating (through physical projects) to the local communities, public authorities and other stakeholders, the advantages of local initiatives and participatory approaches to environmental management.
- (f) Improvement of the living environment within the local communities where demonstration projects are implemented.
- (g) Facilitating access to technical support programmes and grants which are available in various International Donor Agencies such as UNICEF, WHO, UNDP, UNIDO and ILO to mention a few.
- (h) Re-orientation of public agencies responsible for urban environmental management towards the new order of participatory mechanism and involvement of other stakeholders.
- (i) Eliciting support for the activities of the Sustainable Ibadan Project from all stakeholders and the general public towards the management of the environment in Ibadan City in a sustainable manner.

## 2.0 Criteria for Selection

### 2.1 Subject area

Based on the 'Ibadan Declaration' which represents the mandates of the various representatives of the stakeholders in Ibadan that participated in the City Consultation on Environmental Issues of Concern in Ibadan, held between 23-27 October, 1995, three priority issues were identified for urgent attention. These are:

- Waste Management (focusing on how to improve sanitation and health).
- Water Supply (focusing on how to evaluate and improve access to safe water supply and health of the people).
- Institutionalisation of the EPM Process (focusing on how to improve institutional arrangement for solid waste and water supply management).

In line with the key identified priority issues, relevant cross-sectoral working groups were set up. This more or less formed the basis or criteria for the selection of demonstration projects implemented so far in Ibadan, through the activities of the Working Groups on water supply (Natural Spring Water Development Sub-Working Group and Boreholes and Deep-Wells Sub-Working group) and Waste Management.

Three (3) of the demonstration projects, among others, already implemented in Ibadan through the activities of SIP Working Groups are focused upon in this presentation. These include:

- Organic Fertiliser (Compost) Plant (First in Nigeria);
- Akeu Natural Spring for Potable Water Supply;
- Bodija Market Community Borehole Project.

### 2.2 Local origin and priority for leadership and ownership

The three (3) demonstration projects under consideration in this presentation are all community initiated and therefore have strong local origin and ownership. For instance, the development of Akeu Natural Spring located at Oke-Offa Babasale Community (a degenerated core area of Ibadan City) was initiated by the

Community Development Association (CDA) in the area. The CDA contacted Sustainable Ibadan Project in 1995 for possible assistance in facilitating the development of the age-long Akeu Natural Spring in their community after several attempts to mobilise government financial and technical support had failed. The SIP used this request as an opportunity to intervene in the community through its Sub-Working Group on Natural Spring Water Development.

The case of Bodija Market Borehole Project and Organic Fertiliser (Compost) Plant, both evolved differently but basically out of the activities of the Bodija Market Environmental Improvement Working Group, comprising various stakeholders including members of 42 Trade Associations in the Market and six (6) Associations in the surrounding residential neighbourhoods. The desire of the Bodija Market Community to improve their environment through the strong tradition of community self-help development and participation, coupled with the SIP assistance facilitated the identification of various environmental issues of concern in the Market Community which were addressed and from which the Borehole Project and Organic Fertiliser (Compost) Plant evolved as demonstration projects.

### 2.3 Partnership element / matching inputs

The Ibadan experience with regard to the activities of the Sustainable Ibadan Project at addressing various environmental issues of concern in the local communities has revealed that when people in the communities are involved in a meaningful way in the planning and implementation of environmental projects they make significant contributions to development initiatives. For instance, even prior to the SIP's intervention in the two communities of Oke-Offa Babasale and Bodija Market and Environ where demonstration projects under focus are located, broad based stakeholder involvement through the Community Development Associations has been in existence in the two communities. The SIP subsequently improved upon these and instituted more cross-sectoral Working Groups comprising other stakeholders from the public and organised private sectors, academic and NGOs to address the environmental issues identified from which demonstration projects later on evolved.

Over time, the structure and nature of the SIP Working Groups has fostered inter-governmental and inter-sectoral partnership in the selection, planning and development of demonstration projects. The Akeu Natural Spring Project is a very good example (see Table 1). In this case, contributions by the stakeholders can be categorised into:

- Finance
  - UNICEF
  - Local Government Area
  - Community
- Technical
  - Water and Sanitation (WATSAN) Project
  - Directorate of Food and Rural Infrastructure (DFRI)
  - Private Sector
  - SIP Working Group.
- Political
  - Local Government
  - State Government

Apart from the issue specific Working Groups set-up by the Sustainable Ibadan Project on each identified Environmental Issue of Concern in Ibadan such as Water Supply, Waste Management, Market Area Environmental Improvement

and other various Sub Working Groups under them, several other specific projects/sub issue Working Groups have been set up comprising relevant stakeholders/actors to implement/address area-specific projects or sub issues. For instance, to facilitate the development of the Akeu Natural Spring Water Project at Oke-Offa Babasale Community, the Akeu Spring Water Development Working Group was set-up by the SIP. Table 1 show the composition of the major stakeholders/actors represented in the Working Group, the resources committed by each of the actors as well as the total estimated cost of the demonstration project. Tables 2 and 3 present similar information on Bodija Market Borehole Project and Organic Fertiliser (Compost) Plant Project respectively.

*Table 1: Resource Mobilisation and Inter Agency Cooperation for Project Implementation – Akeu Natural Spring Project*

<b>Project</b>	<b>Actors Involved</b>	<b>Resource Committed by Actors</b>	<b>Total Estimated Cost of Project</b>
1. Odo-Akeu Spring Development	1. State Department of Rural Development	<ul style="list-style-type: none"> <li>• 2 Hand Pumps</li> </ul>	N750,000.00 (\$9,375)
	2. Ibadan North East Local Government.	<ul style="list-style-type: none"> <li>• N100,000.00 (\$1,250)</li> <li>• Building equipment</li> <li>• Labour</li> </ul>	<ul style="list-style-type: none"> <li>• Cash Input N500,000.00 (\$6,250)</li> </ul>
	3. Private (Engineering Consultant) in the community.	<ul style="list-style-type: none"> <li>• Project Design</li> <li>• Construction Supervision</li> <li>• Other technical inputs</li> </ul>	<ul style="list-style-type: none"> <li>• Other inputs estimated at N250,000.00 (\$3,125)</li> </ul>
	4. UNICEF	<ul style="list-style-type: none"> <li>• N350,000.00 (\$4,375)</li> </ul>	
	5. WATSAN (Oyo State Water and Sanitation)	<ul style="list-style-type: none"> <li>• Technical inputs</li> <li>• Community Mobilisation for Sanitation.</li> </ul>	
	6. Odo-Akeu Community	<ul style="list-style-type: none"> <li>• N50,000.00 (\$625)</li> <li>• Labour</li> <li>• Funded Survey of the land</li> </ul>	

*Table 2: Resource Mobilisation and Inter Agency Cooperation for Project Implementation – Bodija Market Borehole Project*

<b>Project</b>	<b>Actors Involved</b>	<b>Resources Committed by Actors</b>	<b>Total Estimated Cost of Project</b>
Borehole Development in Bodija Market	1. SIP Trust Fund	<ul style="list-style-type: none"> <li>• N300,000 (\$3,750)</li> </ul>	N425,000.00 (\$5,312)
	2. UNICEF	<ul style="list-style-type: none"> <li>• Provided the rig, borehole casings, labour and technical know-how</li> </ul>	
	3. Communities	<ul style="list-style-type: none"> <li>• (N125,000.00) (\$1,562)</li> </ul>	



Table 3: Resource Mobilisation and Inter Agency Cooperation for Project Implementation – Organic Fertiliser (Compost) Project

Project	Actors Involved	Resources Committed by Actors	Total Estimated Cost of Project
Development of Organic Waste Conversion (Compost) Plant	1. State Project Coordination Department (World Bank Assisted Project)	<ul style="list-style-type: none"> <li>• N5.5 million (\$68,750)</li> </ul>	Over N7 million (\$87,500)
	2. Ibadan Solid Waste Management Authority	<ul style="list-style-type: none"> <li>• N1.0 million (\$12,500)</li> </ul>	
	3. Ibadan North Local Govt	<ul style="list-style-type: none"> <li>• Land</li> </ul>	
	4. UNICEF	<ul style="list-style-type: none"> <li>• Materials (200 bags of cement, wheel barrows (20), Spades (20), Shovels (20) &amp; 1 borehole (N300,000.00)(\$3,750)</li> <li>• Community training</li> </ul>	
	5. University of Ibadan	<ul style="list-style-type: none"> <li>• Equipment fabrication, training and technical know-how</li> </ul>	
	6. Ministry of Agric & Natural Resources	<ul style="list-style-type: none"> <li>• Political support and product marketing</li> </ul>	
	7. Community Members	<ul style="list-style-type: none"> <li>• Labour</li> <li>• Political and moral support</li> </ul>	

From Tables 1-3, it is interesting to note that most of the inputs expected from identified stakeholders/actors actually materialised. Furthermore, with the exception of inputs from UNICEF, all other inputs are locally based from the public and private sectors as well as the academic and the local communities. It is also interesting to note that though community members in the low income neighbourhoods where the demonstration projects are located are perceived as poor they were able to make financial and material contributions (i.e. land) as well as offer their services (labour) free where required.

## 2.4 Size

Both demonstration projects on potable water supply – the Akeu Natural Spring Water Project at Oke-Offa Babasale Community and the Bodija Market Community Borehole Project – are small in scale with modest cost implications. Furthermore, the technologies involved are simple enough for members of both communities to operate and maintain to ensure sustainability. In fact, the design for both projects occupy limited land space which makes the replication of such demonstration projects more attractive and feasible in low income residential neighbourhoods of Ibadan City where land space to locate projects can be a big problem.

On the other hand, the organic fertiliser plant at Bodija Market, one of the demonstration projects under consideration, is of medium scale accommodating a land space of about 3,000 square metres. The nature of the activities to be

undertaken which required the simple technology of converting organic waste into compost (fertiliser) necessitated this space requirement. Similarly, the cost implication is equally huge. The big size of this organic fertiliser plant was, however, influenced by the volume of waste materials generated from Bodija Market, the main source from which the project gets its raw materials. Replication of the project is, however, possible on a smaller scale.

Efforts towards replication of the three (3) demonstration projects focused upon are currently on-going in other communities of Ibadan facilitated by the SIP Working Groups on Waste Management and Water Supply. (See Table 9)

Furthermore, the area of influence or catchment area of the demonstration projects under focus span beyond the communities where they are located. For instance, beneficiaries of the Akeu Spring come from surrounding communities located 2-3 kilometres away to Oke-Offa Babasale Community where the spring is sited to fetch water. Similarly, farmers come all the way from Kwara State (a distance of over 100 km) to purchase the products of the Organic Fertiliser Plant located in Bodija Market, Ibadan.

## 2.5 Geographic spread of projects

The few demonstration projects successfully implemented in Ibadan have so far given the SIP the opportunity of securing the support and cooperation of both the Government and the general public that had initially been sceptical about the benefits that the Sustainable Cities Programme(SCP) through the innovative EPM Process had to offer.

The selection and implementation of demonstration projects by various SIP Issue Specific Working Groups were generally influenced by the following factors/reasons:

- (a) The need to come up with visible actions and accomplishments on the ground to secure and maintain public and political support in all the eleven (11) Ibadan Local Government Areas.
- (b) Sensitisation of the local community to be actively involved as a major stakeholder in the identification, initiation, planning, designing and implementation of the area specific project within their environment.
- (c) Opportunity to intervene in the low income areas of the city which constitute the greater part of the city and are more prone to various environmental issues of concern.
- (d) Opportunity to allow particular approaches/strategies already developed by the Working Groups to be tested in practice and thus provide valuable lessons vital for replication and upscaling purposes.
- (e) The simplicity of the project in terms of the technology, land-space and financial requirement to implement it.
- (f) Agreement and Cooperation of the key stakeholders involved especially the Community and Local Government concerned.

With respect to the Organic Fertiliser Plant at Bodija Market, the project was selected for urgent intervention because of the high rate at which wastes (raw materials for the plant) were generated. In fact, the volume of waste generated in Bodija Market is the highest compared with any other Market in the City.

Other new initiatives at replication were sponsored by UNICEF and located in different parts of Ibadan. While the existing Bodija Market Organic Fertiliser

(Compost) Plant is located in Ibadan North Local Government Area, the other two (2) new initiatives being located in Ayeye and Eleta communities are in Ibadan North West and South East Local Government Areas respectively. Thus, there is adequate consideration for the geographic spread of demonstration projects in the city to popularise the activities of SIP and consequently the Sustainable Cities Programme. This was done to ensure that the demonstration projects implemented are evenly spread within the eleven (11) Local Government Areas in Ibadan City to encourage all stakeholders, especially the Local Government Authorities, to continue to promote the project.

## 2.6 Sustainability

In all the implemented demonstration projects facilitated by the SIP, the sustainability factor has always been a major consideration from the conception and planning stages through to the implementation stage. For instance, the sustainability of Akeu Spring Project facilitated by the SIP has been ensured through:

- (a) Cost recovery measures put in place by the project management committee with the support of stakeholders involved, especially the community members. These include among others:
  - Introduction of User Charges of about US 5 cents per head when the completed Akeu Spring Project became operational.
  - Imposing a levy of about US 50 cents per dwelling unit (building) in the community on a monthly basis for maintenance purposes.
  - Donations, voluntary contributions and other forms of assistance from Philanthropists, Government, Corporate Bodies, Donor/Development Agencies and NGOs.
- (b) Fostering of a working partnership between the traditional provider and beneficiaries and also between the public and private sectors. In the case of the Akeu Spring Project, public authorities and agencies responsible for the provision of infrastructure such as Ibadan North East Local Government, Water and Sanitation Project worked together with people from Oke-Offa Babasale Community Development Association (CDA) as well as the private sector. This therefore led to:
  - Involvement of those that have a legitimate stake/interest in the project or issue, especially in the decision making process.
  - Creation of a sense of ownership on the part of the community.
- (c) Resource Management Strategies introduced whereby natural resources such as the spring was used.
- (d) Nature of the strategy (short, medium and long term) ensures adequate consideration of present and future generations.

Furthermore, funds generated from the various measures listed above are mostly used to cover operating and maintenance costs and thereby ensure the sustainability of the project. The various measures may not be applicable in all demonstration projects. However, they are particularly true in the cases of Akeu Natural Spring Project at Oke-Offa Babasale Community and Bodija Market Borehole Project. Furthermore, the possibility of using the funds generated to upscale or replicate a demonstration project within the same community cannot be ruled out. For instance, potable water from the Bodija Market Borehole Project was up-scaled when the Management Committee on the Project used proceeds

from it to purchase an Electric Generator and thereby guarantee regular power to the Borehole Project for the 12 hour period of commercial activities at the market everyday.

Another important factor apart from the cost recovery measures is the Management Committee which was put in place to manage a demonstration project after completion. Most often the project specific working Group at the community level such as the Akeu Natural Spring Working Group transforms into the Management Committee with members of the local community playing leading and prominent roles as they are the major stakeholders who own and benefit directly from the completed demonstration project. Through the Management Committee on each demonstration project, these projects are expected to be managed in a sustainable manner. For instance, the Akeu Spring project Management Committee meet regularly and render account on the project to the general body (Oke-Offa Babasale Community Development Association) on a monthly basis.

However, in spite of all the sustainability factors introduced in the implementation and operation of demonstration projects after completion, some still experienced difficulties that threatened their smooth operation and sustainability owing to some underlying problems peculiar to such projects. These experiences with regard to the Akeu Spring Project and the Organic Fertiliser Plant at Bodija Market are discussed below:

- **In the case of the Akeu Spring Project** the youths within the Oke-Offa Babasale community where the project is located revolted against the management committee refusing to pay the agreed user charges to maintain the project and also broke down part of the fence protecting the project. This contributed in no small way to the closing down of the project by the Management Committee until the Ibadan North East Local Government and SIP (TSU) intervened and brokered peace among the various interest groups within the community. The project was subsequently rehabilitated and re-opened for use.
- **The Organic Fertiliser Plant** on the other hand, has the root of its problem in the hijack of the management of the plant by the State Government which is the actor contributing about 75% (\$68,750) of the total estimated cost (\$87,500) of the project. Thus, the jettisoning of the participatory approach in the management of the plant involving all stakeholders in favour of bureaucratic approach soon led to the closing down of the plant. Efforts are however on to resuscitate the plant to provide organic fertiliser as was done in the past. The Oyo State Government has set-up a committee in this regard and key people in the SIP Waste Management Working Group are helping the committee to actualise this aim.

On a general note however, there are more positive results arising out the activities of the SIP Working Groups over the years, the above problems notwithstanding. Prominent among these are:

- The creation of informal bargaining fora (Working Group Sessions) where all stakeholders from the private sector, NGOs, Academic and local communities and Government agencies freely discuss problems with each other to ensure development of demonstration projects in a sustainable manner.
- Increase in the interactive skills of the participants from different sectors

- (Government, Academic, Private, NGO, Popular, Community).
- Changes in the philosophy of management whereby ownership and management of demonstration projects are vested in the hands of the local communities.
- Increased information generation which assists in the necessary replication of projects in other communities/locations in Ibadan City.

### 3.0 Implementation Modality

#### 3.1 SIP Working Groups set-up

The activities of Sustainable Ibadan Project (SIP) took off in 1994 following the signing of the project document by the Military Administrator of Oyo State, representative of the Federal Government of Nigeria and UNCHS (Habitat).

Following the successfully organised Ibadan City Consultation in 1995, the 'Ibadan Declaration' recommended the setting-up of Working Groups to initiate, develop, plan and execute projects on the three (3) priority issues of Solid Waste Management, Water Supply as well as the institutional arrangements for both.

In line with these recommendations, by 1996, a total of sixteen (16) functional Working Groups were established with six (6) of them operating within Bodija Market Community Area and ten (10) other communities within Ibadan with the Coordinating Working Group and the Environmental Planning and Management Working Group being city wide in scope. (Table 4 below provides the list of the Working Groups and the dates they were set-up).

However, at present, the Working Group activities have been streamlined especially in Bodija Market and we now have seven(7) Working Groups in all, while 4 new ones will be set up soon to address other environmental issues of concern.

*Table 4: Working Groups and Take-off Dates*

S/NO	WORKING GROUPS	TAKE OFF DATES
1.	Odo-Akeu Spring Water Development Working Groups	8 <sup>th</sup> June, 1995
2.	Ibadan Water Supply Working Group	17 <sup>th</sup> January, 1996
3.	Deep Wells/Boreholes Development Sub Working Group	8 <sup>th</sup> February, 1996
4.	Mini Water Works Development Sub Working Group	8 <sup>th</sup> February, 1996
5.	Ibadan Spring Water Development Sub Working Group	8 <sup>th</sup> February, 1996
6.	Odo-Ona / Gada Community Water and Sanitation Working Group	6 <sup>th</sup> April, 1996
7.	Ibadan Waste Recycling Working Group	19 <sup>th</sup> January, 1996
8.	Bodija Market Environmental Improvement Working Group	January, 1996
9.	Bodija Market Waste Management Sub Working Group	13 <sup>th</sup> February, 1996

10.	Bodija Market Food Safety Sub Working Group	2 <sup>nd</sup> May, 1996
11.	Bodija Market Women and Children Sub Working Group	9 <sup>th</sup> April, 1996
12.	Bodija Market Toilet Improvement Sub Working Group	13 <sup>th</sup> February, 1996
13.	Bodija Market Water Supply Sub Working Group	13 <sup>th</sup> February, 1996
14.	Bodija Market Road Improvement Sub Working Group	13 <sup>th</sup> February, 1996
15.	Environmental Planning and Management Sub Working Group	14 <sup>th</sup> May, 1996
16.	Co-ordinating Working group	25 <sup>th</sup> April, 1996

The expectation from these Working Groups was very high. They were expected not only to identify environmental issues of concern, but also to initiate, plan, develop and execute projects using the EPM process as the tool for accomplishing their set objectives in line with the goals of SCP. All this was done with little or no provision (within or outside the project document) for the establishment of small implementation funds(seed money) from which demonstration projects can evolve from the activities of the various SIP Working Groups. Similarly, though the SIP Technical Support Unit (TSU) provides some form of guidance and support to the WGs set-up at the initial stage, it was clear that the effort of the SIP-TSU was inadequate because of their small staff strength in comparison to the Working Groups already set-up. Therefore, the need for strong institutional support became imperative.

The SIP-TSU upon realising these two (2) major shortcomings took the following steps in 1996:

- Contracted POLYCONSULT (the consultancy unit of The Polytechnic, Ibadan) to provide Technical Support to all SIP WGs set up to enable them achieve their main objects of project initiation, planning and execution.
- Facilitated the setting-up of Sustainable Ibadan Project Trust Fund (SIPTF) to channel the needed financial resources of the private sectors to fund the demonstration projects evolving from the various activities of the SIP WGs in Ibadan.
- Set-up the Coordinating Working Group to assist in the coordination of the activities of all SIP Working Groups.

### 3.2 Project proposals prepared by SIP Working Groups

From the table below, it is evident that the activities of the various Working Groups set-up as indicated in Table 4 facilitated the development of project proposals as listed. Those projects already implemented or on-going are marked with asterisks in Table 5 below. It is equally important to state further that additional Working Groups and more project proposals have evolved in recent years and more demonstration projects especially on spring development and waste recycling are on-going in various communities in Ibadan which are not included in Table 5.

Table 5: List of Project Proposal Prepared by SIP Established Working Groups

S/NO	WORKING GROUPS	TITLE OF PROJECT PROPOSAL
1.	Bodija Market Environmental Improvement Working Group	<p>(i) Proposal on Water Supply Scheme for Bodija Market and its Environs, July, 1996.</p> <p>(ii) Children and Women in Bodija Market: A Proposal, September, 1996.</p> <p>(iii) Proposal for Technical and Financial Assistance on Provision of Amenities Towards Achieving Food Safety in Bodija Market, Ibadan, Nigeria, July, 1996.</p> <p>(iv) Financial Proposal on Bodija Market and its Environs: Toilet Improvement Project, July, 1996</p> <p>(v) Proposal for Technical and Financial Assistance for the Construction of Roads and Drains in Bodija Market Complex and its Environs, May, 1996.</p> <p>(vi) Waste Management in Bodija Market: A Proposal Submitted by Bodija Market Area Waste Management Working Group and Ibadan Waste Recycling Working Group, July, 1996.</p> <p>(vii) Proposal for Technical and Financial Assistance on the Environmental Development Project for Bodija Market Community Area (Submitted to UNICEF). A Package of Proposals on: (a) Toilet Improvement (b) Water Supply (c) Food Safety and (d) Children and Women within Bodija Market and Environs, September, 1996.</p> <p>(viii) Proposal for Technical and Financial Assistance on the Environmental Development Project for Bodija Market Community Area, Ibadan, August, 1996.</p> <p>(ix) Profile of the Bodija Market Community Area, Ibadan, August, 1996.</p>
2.	Odo-Akeu Spring Water Development Working Group	Proposal for Technical and Financial Assistance for the Development of Odo-Akeu Spring Water at Babasale in Ibadan North-East Local Government of Ibadan, April, 1996.
3.	Ibadan Spring Water Development Sub-Working Group.	Proposal for Technical and Financial Assistance for the Rogan Spring Water at Yemetu (UCH Acquired Land) in Ibadan North Local Government Area of Ibadan, August, 1996.
4.	Odo-Ona/Gada Community Water and Sanitation Working Group	Proposal for Technical and Financial Assistance for the Provision of Boreholes for Gada/Odo-Ona Community in Ibadan South-West Local Government of Ibadan, July, 1996.
5.	Ibadan Mini-Water Works Development Sub-Working Groups.	<p>(i) SIP: Design of Water Supply to Idi-Isin by Mini Water Works Working Group, August, 1996.</p> <p>(ii) SIP: Design of Water Supply to Adegbayi, Ibadan by Mini Water Works Working Group, August, 1996.</p> <p>(iii) SIP: Proposal for Water Supply to Apata Ganga and Gbekuba, Ibadan by Mini-Water Works Working Group, August, 1996.</p>

### 3.3 Profiles of project Working Groups

All the three demonstration projects under focus have actually been successfully implemented. However, to indicate how operationally realistic their proposals were before implementation Tables 1-3 provide information on the profile of the SIP Working Groups/Sub-Working Groups that were involved in the planning, designing and implementation of the three (3) demonstration projects. These profiles reveal the outputs expected, logically phased activities, time frames, inputs required and responsible agencies.

#### 3.3.1 Organic Fertiliser (Compost) Plant

Table 6: Ibadan Waste Recycling Working Group Profile

Name And Location	Composition by Sectors	Goal and Objectives	Activities Undertaken	Constraints
<p><b>Name</b> Ibadan Waste Recycling Programme (IWRP)</p> <p><b>Location</b> JMR Motors Ltd, Bodija Market, Ibadan.</p>	<p>Private 3 Public 4 Academic 4 Community 2 <b>13</b></p>	<p><b>Goal</b> To evolve a sustainable strategic plan to solve the problem of wastes in the city of Ibadan.</p> <p><b>Objectives</b> To make solid waste disposal cost effective and more efficient. To turn waste to assets and revenue yielding. To convert wastes to fertiliser to boost agriculture and biogas for cooking/lighting. To reduce the amount of disposal waste to be transported to landfills. To bring the communities and the Local Governments together to tackle the problems of wastes in Ibadan.</p> <p><b>Desired Outcome</b> To establish compost and biogas plants in strategic neighbourhoods and communities (residential, markets and industrial) in Ibadan including the hinterland.</p> <p><b>Resources Required</b> <b>Financial:</b> (from communities, Local Governments and donor agencies) <b>Material:</b> (community, Local Governments and donors) <b>Labour:</b> (communities) <b>Technical:</b> Community, SIP/ Poly-Consult)</p>	<p>Working Group was inaugurated on 19/01/96. WG meets every fortnight. Bodija market was selected for demonstration project. Mobilisation of Bodija Market and Landlord Association and the Ibadan North Local Govt functionaries. Three parcels of land secured within Bodija Market from Local Govt. for compost and biogas plants. Survey of waste volume, types, composition and spatial distribution in the market and outlying neighbourhoods has been completed.</p> <p><b>April, 1996</b> A detailed technical and financial proposal on project submitted being planned Bodija community and the Ibadan North Local Government mobilised for counterpart funding (50%) Project Implementation Committee (PIC) and Project Management Committee (PMC).</p> <p><b>May, 1996</b> Project execution commenced</p> <p><b>May/June, 1997</b> Project Execution completed. Start to market project output-fertiliser and gas</p> <p><b>July, 1998</b> Identify a new community within the city for project replication.</p> <p><b>1999 – to date</b> Activities to put in place two more functional waste recycling plants in Ibadan City.</p>	<p><b>Constraints</b> WG has no take off grant. Not all members attend meetings all the time. Fuel crisis affects Group meeting and other activities.</p>



### 3.3.2 Akeu Natural Spring For Potable Water Supply

Table 7: Akeu Spring Water Development Working Group Profile

Name And Location	Composition By Sectors	Goal and Objectives	Activities Undertaken
<p><b>Name</b> Akeu Community Spring Water Development Project</p> <p><b>Location</b> CAC School, Irefin Area, Ibadan</p>	<p>Private Sector 1 Public Sector 7 Academic 1 Community 3 <b>12</b></p>	<p><b>Goal</b> To develop the natural spring in Odo-Akeu Community for the supply of hygienic and potable water to the Community.</p> <p><b>Objectives</b> To combat the negative impacts of unhygienic water being drunk in Akeu Community. To reduce the incidence of deadly water borne diseases. Reduce the suffering of women and children in search of water for domestic use. To provide a community- initiated water supply scheme as an alternative to municipal supply which is never available. To provide potable water to members of the Akeu community at an affordable price and on a sustainable basis.</p> <p><b>Desired Outcome</b> Water from the spring source will be piped and channelled to concrete underground tank from which people will draw water unimpeded.</p> <p><b>Resources Required</b> Public title to each of the springs and the space around it. <b>Finance:</b> Contributions from Akeu community, Ibadan North East LG and Donor Agency. <b>Material:</b> From community, and the Local Government. <b>Labour:</b> Community, SIP-PolyConsult and Donor Agency.</p>	<p>Working Group was inaugurated on June 8<sup>th</sup>, 1995. Several meetings have been held within the Ibadan North LG. Premises. Akeu community has surveyed the land covered by the spring and taken title to it. A sketch (engineering) design of the project has been completed. Draft proposal is ready. Project account has been opened with N50,000.00 from Akeu community and N100,000.00 from Ibadan N-East Local Government. Informal discussion held with UNICEF Programme officers in Ibadan and a visit also made to the spring site.</p> <p><b>April, 1996</b> Project proposal submitted to UNICEF. Akeu community and the Ibadan N-East Local Govt. Mobilised for more funds and materials.</p> <p><b>1997</b> Project implementation commenced. Mechanisms for project operation. Project implementation completed and start functioning. Project Management Committee set-up.</p>

### 3.3.3 Bodija Market Community Borehole Project

Table 8: Bodija Market Water Supply Sub-Working Group Profile

Name And Location	Composition By Sectors	Goal and Objective	Activities Undertaken
<p><b>Name</b> Bodija Market Water Supply Project</p> <p><b>Location</b> Bodija Market, Ibadan.</p>	<p>Private 1 Public 3 Academic 3 Community 8 <b>Total 15</b></p>	<p><b>Goal</b> To improve the environmental condition of Bodija Market through regular supply of potable water</p> <p><b>Objectives</b> To ensure adequate and regular supply of potable water within and around the market. To rehabilitate existing wells and provide additional deep wells and boreholes. To enhance the quality of the environment of the abattoir, food canteens and other activity areas requiring heavy water usage. To enable sellers and buyers as well as residents have hygienic water to drink as and when needed To facilitate the proper functioning of toilets and comfort stations being provided in the market.</p> <p><b>Desired Outcome</b> Existing water facilities are to be rehabilitated. Deep wells and boreholes are to be provided (at least four). Efficient management strategy for regular maintenance and replication to be put in place.</p>	<p>Sub-Group set up on Tuesday, February 13, 1996. Several meetings held every two weeks and at times weekly. Type and number of water sources in the project area established. Existing surface water that can or can not be used has been established. Parts of the area where boreholes and deep wells can be installed also determined.</p> <p><b>Dec, 1996</b> Project proposal submitted through the SIP to Donor Agency. Project community mobilised for funds, material and labour.</p> <p><b>1997</b> Project implementation committee set-up. SIP Trust Fund releases fund for project execution.. One borehole drilled and started functioning. Project Management Committee set-up.</p> <p><b>1998 – to date</b> Effort to replicate project in other parts of the Bodija Market community commenced.</p>

The profiles of the Project Working Groups in Tables 6-8 above reveal the key activities undertaken in the cycle of implementing demonstration projects which are largely similar. These include:

- Identification of key actors and implementation resources.
- Defined objectives and outputs or targets.
- Evolved proposals or activities for implementing the solutions.
- Determination of costs and financial inputs/resources required.
- Time schedules for implementation of Demonstration Project.

**(a) Identification of Key Actors and Implementation Resources:**

Appropriately, the first step taken by the SIP Technical Support Unit (TSU) and the relevant SIP Working Group (i.e. Spring Development Working Group or Waste Management Working Group) is to determine and identify those genuine actors and stakeholders whose collaboration is required to ensure the successful implementation of the plan to be prepared, be it at the Local, Regional (State) or National (Federal) levels and/or among the public, private or popular (community) sectors.

It is often necessary to collate and document the various actors and their implementation instruments or resources according to:

- Level of intervention (Local, Regional/State and National/Federal).
- Sector of intervention (public, private, popular, academic).

**(b) Defined Objectives and Outputs or Targets:** The major task here is the translation of the abstract broad goal and objectives of the strategies to short and medium term objectives and targets as was done in the profiles of the Project Working Groups presented in Tables 6-8.

**(c) Evolved Proposals or Activities for Implementing the Solutions:** Efforts at this stage of the plan preparation are concentrated on the following:

- proposals for solving the problems or addressing the identified environmental issue.
- proposals for implementing the solutions.

These proposals are essentially the activities that generate the outputs such as the Environmental Action Plan (EAP) that are useful for the implementation of demonstration projects on spring, borehole and organic fertiliser plant focused upon in this presentation.

Furthermore, because these proposals involve technical, institutional and financial aspects, the support or assistance of Consultants such as POLYCONSULT and several other Consultants contracted at one time or the other to assist all the SIP Working Groups in the preparation of the proposals cannot be underestimated. Their support no doubt contributed immensely to the success recorded in terms of the preparation of feasible proposals that resulted in implementation of demonstration projects such as the three (3) demonstration projects under focus among others.

**(d) Determination of Costs and Financial Inputs/Resources Required:** The next activity in the cycle of implementing the Demonstration Project is to estimate the costs of the activities and explore finance options. The information often generated includes:

- Estimated costs of implementation
- Estimated costs of operation and maintenance after completion of projects.
- Cost recovery approaches
- Securing the commitment of concerned actors.

**(e) Time Schedule for Implementation of Demonstration Project:** A realistic time frame must be prepared for the various implementation activities. This exercise is essential because it will make explicit the phasing and ordering of the actions or implementation activities.

### 3.4 POLYCONSULT and the institutional support provided to SIP

POLYCONSULT, with a total of eighteen (18) Consultants provided the necessary institutional support to assist the SIP WGs in having clear operational procedures through which the local communities being assisted were helped to prepare, review and approve proposals in consultation with SIP-TSU and access funds for implementation from all stakeholders identified. It regularly met with all

the Working Groups as well as the SIP-TSU within the 1 year period(Jan-Dec, 1996) of its contract with SIP.

### **3.5 Sustainable Ibadan Project Trust Fund (SIPTF)**

The Sustainable Ibadan Project Trust Fund (SIPTF) was established to serve as a conduit for channelling financial and technical resources of the private sectors for the development of Ibadan. To achieve this aim, the Trustees were carefully selected. They consisted of successful industrialists and businessmen in Ibadan. Most of them were renowned philanthropists who had individually funded many development projects in various communities in Ibadan. The Trustees had already mobilised financial resources of about US\$ 75,000 for the Trust Fund which are being used to fund projects initiated by the communities through the participatory process of the SIP.

The Trust Fund in 1998 supported two borehole projects at Bodija Market and Odo-Ona/Gada communities in Ibadan with a sum of N350,000.00(US\$ 3,5000). The Bodija Market sustainable community initiated Borehole Project was supported with N170,000.00(US\$ 1,700) from this fund to complete the Project. The remaining N180,000.00 (US\$ 1,800) is to be used to complete the borehole at Odo-Ona/Gada community. The delay in the completion of the latter was due to the failure of the past administrators of Ibadan South-West Local Government to provide appropriate supports to the community to bring the project to fruition. Meanwhile, the present Executive Chairman of Ibadan South-West Local Government who is also the present Project Coordinator has promised to ensure the completion of the Odo-Ona/Gada Borehole Project before the end of this year (2000).

The SIPTF is ready to contribute more to project development under the Sustainable Ibadan Project. The Trustees are prepared to use their socio-economic status and positions in the society to mobilise supports and resources from both the public and private sectors for the SIP.

The Trust Fund has not been duly registered as a corporate body under the appropriate Laws of Nigeria. The SIP will need to facilitate this registration as soon as possible so that the Trust Fund can be accorded the required recognition within and outside Nigeria.

### **3.6 Coordinating Working Group**

By 1997, when POLYCONSULT wound up its activities after the end of its one year institutional support to all the SIP WGs, the Coordinating Working Group comprising the Chairmen and Secretaries of all other WGs took over the various activities carried out by POLYCONSULT. This form of institutional support was, however, done in collaboration with the SIP Technical Support Unit (TSU). In addition, as the need arose, various Consultants were engaged to provide support for SIP overtime, especially in the institutionalisation of EPM Process as well as in the setting-up of new Working Groups on other environmental/development issues of concern such as Poverty Alleviation, Neighbourhood Upgrading and Street Trading among others.

## **4.0 Monitoring and Baseline Indicators**

The scope of the support provided by SIP Technical Support Unit (TSU), coupled with the institutional support provided by POLYCONSULT and other Consultants

subsequently engaged to assist the SIP Working Groups, ensured that there is effective monitoring of the Working Groups activities. This was achieved through the attachment of one or two consultants to each of the SIP Working Groups with a view to monitoring and guiding their activities. The various Working Groups were therefore made to regularly do the following:

- Have proper records of proceeding and attendance at meetings through minutes of meetings held.
- Keep proper records of their finances through simple accounting procedures to ensure transparency.
- Prepare detailed project proposals to attract funds from all identified stakeholders as well as donor agencies.

Notwithstanding the various forms of support provided to ensure smooth operation in the various Working Groups, there are some problems common to the existing Working Groups which had contributed to a few of them performing below expectation which invariably affected the functionality of the demonstration projects in some cases after completion. These include:

- Problems of representation as it relates to the participation of relevant stakeholders in the Working Groups Meetings.
- Difficulties with setting an appropriate agenda which is sharply focused on community prioritised needs.
- Obstacles to joint fact-finding which often arise from lack of commitment on the part of some stakeholders.
- Co-optation owing to differences in power and /or bargaining ability.
- Getting stakeholders to observe their commitments.
- Barriers to monitoring and enforcing negotiated settlements.
- Domination of funding by a single actor in the implementation of the demonstration project leading to the actor hijacking the Project.

As regards baseline indicators to monitor the performance of Demonstration Projects after completion, these have not been developed at present. It is however imperative for this to be undertaken soon to avert other occurrences of breakdown of any of the Demonstration Projects already facilitated by SIP as experienced in the Akeu Spring and Bodija Market Organic Fertiliser Plant.

## **5.0 Reporting and Learning from Lessons**

The demonstration of the EPM Process by Sustainable Ibadan Project (SIP) especially in the aspect of implementation of projects has provided useful learning experience worthy of being shared and disseminated. These lessons especially as they relate to the case studies discussed in this presentation include the following:

### **(a) Partnership for environmental management**

Through the involvement of the stakeholders in the identification, clarification, assessment and prioritisation of environmental issues of concern in Ibadan, it was evident that actors from both the private and popular sectors are prepared (given the chance) to work in partnership with the public sector to find lasting solutions to the environmental problems which affect all of them in one way or another. This experience clearly contradicted the general belief of the

bureaucrats in the public sector that solutions have to be handed down to the users.

This reality has been demonstrated in the setting-up of a number of Working Groups on prioritised issues in the city for the project. The Working Groups are cross sectoral and inter-organisational in nature and composition. Working Groups evolve strategies and prepare proposals to address the prioritised environmental issues of waste management, water supply, neighbourhood upgrading and street trading. Some demonstration projects such as the Organic Fertiliser Plant, the Akeu Natural Spring Project and the Bodija Market Borehole Project under focus were successfully implemented by the relevant Working Groups to demonstrate the practical application of the environmental planning and management process.

### **(b) Accessibility to information**

The benefits of the partnerships were realised during the preparation and implementation of demonstration projects by the various Working Groups preparing Strategy and Action Plans for specific environmental issues being addressed by them. The inter-relationship facilitated easy access to information and data required for effective planning which hitherto had not been possible. The significance of this becomes more appreciated when it is realised that access to information and data has been the bane of environmental policy makers in Ibadan and Nigeria as a whole.

### **(c) Mobilisation of resources for implementation of investment projects**

The initial activities of the SIP have revealed that valuable technical and financial resources are available in reasonable quantities from the private and popular sectors to support community-based and people-centred development. For example, in the area of water supply, resources were mobilised from the community, international agencies and the public to prepare and implement the development of a natural spring and to sink and construct boreholes in the deprived areas of Ibadan. Oyo State Government provided funds to support the traders in the regional market (Bodija Market) to build an organic fertiliser (compost) plant worth over US\$ 87,500.00 (See Table 3).

There is however the need to guard against a single actor or stakeholder dominating the financial and management arrangements in the implementation of any Demonstration Project to prevent the project being hijacked by such an actor in future as happened in the case of the Bodija Market Organic Fertiliser Plant.

The increasing support from external agencies including UNICEF, WHO, World Bank and some International Trust Funds has proved to the policy makers that a transparent participatory mechanism such as that being demonstrated by the SIP can create an efficient platform for intervention by donors within and outside the country.

Increased awareness of the environmental problems and the conviction that solutions can only be sustainable when they are locally operated and resourced, influenced a group of prominent individuals to establish an SIP Trust Fund. The funds are available for supporting investment projects prepared jointly by communities and the Working Groups. The important lesson is that local resources are available when solutions are locally identified, analysed and prepared into people led projects.

#### **(d) Need for seed money for implementation of demo projects**

The possibility of access to local financial resources from public, private, and other sectors to support community based and people centred development notwithstanding, the need for seed money to implement demonstration projects is very vital. Experiences have shown that mobilising financial support could really be problematic, hence the need for small implementation funds for Projects involved in SCP to implement demonstration projects cannot be overemphasised. This no doubt would be a welcome development.

#### **(e) Enhancement of performance of obligation**

The stakeholder mechanism of finding and implementing solutions has been found to be very effective in environmental management activities. For example, the Waste Management Working Group of the SIP which is hosted by Ibadan Solid Waste Management Authority has influenced the way the agency performs its duties. Ibadan Solid Waste Management Authority has performed so much better that it received an award in 1998 as the “Best Parastatal” in Oyo State. It is equally noteworthy to state that the current Chairman and General Manager of Ibadan Waste Management Authority were at one time or the other Chairman and member respectively of SIP WGs on Waste Recycling/Waste Management prior to their new positions.

Furthermore, there is a growing interest in the EPM process by professionals in the public and private sectors who have been participating zealously in the SIP. The approach is being applied by existing environmental planning agencies to carry out their day-to-day obligations.

#### **(f) Required follow-up and consolidation**

Having successfully demonstrated the concept and underlying principles of the EPM process in the early phase of this project, it is now deemed appropriate to concentrate on the institutionalisation of the process. To this end, financial and technical support is required to:

- Further sensitise and mobilise a variety of actors to embrace the process for routine practice in carrying out their responsibilities for managing the sustainable growth and development of Ibadan.
- Ensure the preparation of an implementable and dynamic strategic development plan for Ibadan which will facilitate better co-ordination of development and its impact on environmental resources.
- Enhance the activities of the cross sectoral Working Groups that have been formed so that they can continue to evolve responsive strategies as well as prepare environmental issues-specific Action Plans and Demonstration Projects deemed appropriate.
- Establish an efficient Environmental Management Information System (EMIS) in Ibadan to encourage the gathering and sharing of environmental information and data.
- Establish an institutional framework for effective implementation and co-ordination on environmental planning and management policies and activity citywide.
- Extend the environmental planning and management process of the SIP to other urban centres in Oyo State and possibly other parts of the country.

- Institutionalise budgeting arrangements in the Local Government and Oyo State Government to ensure constant availability of financial resources for environmental planning and management at the Local level.

## 6.0 Replication and Upscaling

Following the successful implementation of a few demonstration projects initially facilitated by the SIP Working Groups especially on Water Supply and Waste Management, several other similar proposals have been prepared with a few already being replicated while replication of others will soon start in other communities /areas in Ibadan based on the EPM participatory approach. Table 9 below gives detailed information on the proposed projects to be or being replicated in other areas of the City.

Table 9: Environmental Planning and Management Projects Initiated through the Participatory Process of the Sustainable Ibadan Project.

Environmental Issues Specific	Projects	Cost	Remarks
<b>Water</b>	<p><b>Spring Development:</b></p> <p>(i) Agbadagbudu (ii) Alaro (iii) Oluyole</p> <p><b>Boreholes:</b></p> <p>(i) Araromi Agodi (ii) Gada/Odo Ona (iii) Ogbere/Olorungbeja (iv) Monantan (v) Bodija Market</p> <p><b>Mini Water Schemes:</b></p> <p>(i) Gbekuba Scheme (ii) Akinyele</p>	<p>N450,000.00 N460,000.00 N380,000.00</p> <p>N548,700.00 N548,700.00 N548,700.00 N548,700.00 N548,700.00</p> <p>N23 million N30 million</p>	<p>Natural Springs located in some communities are being developed to ameliorate the problem of acute shortage of potable water.</p> <p>Sinking of boreholes (with elevated tanks etc.) is proposed as a medium term measure to ensure access to potable water in some areas of the city.</p> <p>Some surface water bodies schemes have been identified as suitable for mini water works or schemes to reduce over concentration on the too large water works.</p>
<b>Waste Management</b>	<p>(i) Ayeye Waste Recycling Plant (ii) Agbadagbudu drainage/toilet (iii) Bodija drainage/toilet</p>	<p>N800,000.00 N289,999.00 N470,000.00</p>	<p>These are initiatives to encourage waste recycling, flood control and environmental sanitation.</p>
<b>Strategic Planning</b>	<p>Preparation of Strategic Action Plan for Water Supply Management in 5 Local Governments of Ibadan</p>	<p>N1,750,000 (N350,000 per Local Govt.)</p>	<p>This particular project is designed to facilitate the preparation of an <b>Urban Strategic Development Plan for Ibadan.</b></p>

All the above Projects are Demonstration Projects to establish the responsiveness of the recently produced Strategic and Action Plan for Water Supply and Waste Management in Ibadan. Most importantly, they are designed to foster a strong working relationship between the public, private and popular sectors.

Furthermore, following the appreciation and principles and intent of the SCP as demonstrated by the SIP, a few other Local Governments in Oyo State outside the eleven (11) Ibadan Local Governments involved in the SIP have shown



intention of replicating the SIP initiative in their own Local Governments. Similarly, many State Governments in Nigeria are yearning to replicate the project in their major cities. The replication of the project in Nigeria has already started this year (2000) in Kano and Enugu Cities.

These two projects (Sustainable Kano and Enugu Projects) are being sponsored by UNDP. According to the Fifth Country Programme of UNDP in Nigeria, the replication of the SIP will be extended to at least 10 cities during the period. Meanwhile, a Sustainable Cities Programme Coordinating Unit has been established in the Federal Ministry of Works and Housing to coordinate the replication and especially, the sustainable development of human settlements in Nigeria.

It must be mentioned also that as a result of the positive impact of the Strategies and Action Plan for Waste Management in Ibadan; developed by the Waste Management Working Group of SIP, UNDP held a nationwide Training of Trainers Workshop on "Planning for Solid Waste Management in Nigerian Cities". The Workshop was organised to acquaint the participants with the Strategic Planning approach of the SIP for solid waste management. Hence, the training programme was based on the application of the participatory EPM Process for developing and implementing Strategies and Action Plan for Solid Waste Management. The key resource persons for the Workshop came from the SIP and it was held between October and November 1999 in Kaduna for the Northern Zone, Owerri for the Eastern Zone and Sango-Otta for the South-Western Zone.

On a final note, the Sustainable Cities Programme (SCP) initiative and the SIP activities have equally positively influenced the curricula of higher institutions offering Urban and Regional Planning as a course in Nigeria with the inclusion of Sustainable Human Settlement as a subject, covering key elements such as Sustainable Development, Environmental Planning and Management, Sustainable Cities Concept, Participatory Methods and Case-Studies on Cities involved in SCP such as Sustainable Ibadan Project among others. In fact, apart from the Town Planning Department of The Polytechnic, Ibadan and the Centre for Urban and Regional Planning of the University of Ibadan which have featured this subject for about 2 academic sessions now, the National Board for Technical Education in collaboration with the Town Planning Registration Council and the Nigerian Institute of Town Planners have concluded arrangements for the subject to feature as a compulsory component of the curricula of all Polytechnics in Nigeria offering Urban and Regional Planning as a course at both the National & Higher National Diploma levels.

This, no doubt, is a great achievement and influence as regards the implementation of Sustainable Cities Programme(SCP) in Nigeria and its integration with the Nigerian Physical Planning/Development System.

# Sustainable Lusaka Project, Zambia - Experiences in peri-urban environmental infrastructure demonstration projects

Mr. Francis Muwowo, Lusaka Town Clerk

## Introduction

Lusaka is the capital city of Zambia and the seat of government. It is estimated that at least 13% of Zambia's population lives in the greater Lusaka urban agglomeration. Like many other urban cities of Africa and the developing world, Lusaka is faced with environmental problems which include air and water pollution, insufficient water resources, ineffective solid waste management, undeveloped water borne sanitation systems, traffic congestion, open quarrying and limited urban planning capacities. The perennial outbreaks of diseases like cholera are constant reminders of the presence of some of these problems in Lusaka.

Lusaka City Council is privileged to host and implement Sustainable Lusaka Programme which aims at supporting long term sustainable growth and development of Lusaka through an integration of environmental planning and management and project implementation activities at community level directed initially at disadvantaged communities in order to reduce poverty and enhance overall economic development.

The programme involves communities and all main stakeholders of Lusaka in the formulation and implementation of issue strategies and action plans resulting in prioritised utilisation of internal and external resources.

In pursuit of the development objectives SLP is supporting measures aimed at poverty reduction in communities of high poverty levels who reside mainly in low income settlements and the promotion of environmentally sustainable socio-economic development in the short, medium and long term in Lusaka.

## Community participatory processes

Lusaka City Council identified the three communities selected for demonstration. Some of the criteria used in the choice was (i) the lack of cooperating partner's intervention; ii) the legal status of the settlements; iii) demand for assistance in solid waste management by the communities. On this basis a process of problem identification through community profiling and establishment of community development structures and consultations was undertaken. Water supply emerged as the first priority and solid waste was just one of the priority issues. A phase of negotiation with the communities to prepare action plans for both water supply and solid waste collection was initiated. At this point other stakeholders who had the capacity to take up other issues that were considered to be of priority were involved in the consultations.

Whilst the programme assisted in installing a water supply scheme costing US \$10,000 it could not go beyond this due to the costs involved in huge water supply schemes. However, through partnerships that have been forged with other actors, other priority issues such as water supply and roads construction have been taken up by CARE PROSPECT and the Japanese International Co-operation Agency respectively.

## Why waste collection and disposal for SLP?

- During the city consultation in March 1997 solid waste management was identified as the priority problem in the city. Hence, in order to link up city level initiatives with community level activities, solid waste management was emphasised.
- Ireland Aid's assistance that came after the consultation was initially directed at solid waste management in high-density settlements.
- Accordingly, funds availed to the programme for project facilitation were minimal as it was envisaged that waste systems from storage, collection and disposal within the communities would not be costly. The local authority would handle the other end of the waste stream.
- More importantly it was further observed that there was potential for entrepreneurship development and employment creation in solid waste collection and disposal at the community level.

## Conceptualisation of community based waste collection and disposal

There were three overriding concepts that the programme was aiming to uphold. These included entrepreneurship development, cost sharing and community contracting. These were new concepts that were being introduced in the local authority which required extensive consultation. Hence the programme has five stages, namely systems identification, training, pre-implementation, implementation and replication.

### (a) Systems identification

SLP initiated solid waste activities in Ng'ombe, Mandevu/Marapodi and Kamanga settlements. Ng'ombe is a former squatter settlement which was legally recognised in 1998. It has an approximate population of 27,000 residents, and is located at a distance of 15km from the central business district. Mandevu/Marapodi is a site and service area which was developed in 1965 and has a population of 35,000 residents (CSO, 1994). The third settlement, Kamanga, is located at a distance of 18 kms from the CBD and has a population of 11,000 residents.

During the consultations in Ng'ombe and Mandevu/Marapodi settlements, it was evident that the major problem of solid waste management was storage, temporary disposal within the settlement and transportation to the final disposal site. Following the community's recommendation, LCC and the community representatives identified disposal sites outside the settlement where midden boxes have been constructed. SLP provided materials for construction of the receptacles and the communities provided the labour. At present 8 secondary midden boxes have been constructed in Mandevu/Marapodi and one was constructed at the market place in Ng'ombe as it was identified as the highest waste generation point. Kamanga constructed one out of the 6 planned for. The remaining midden boxes shall only be constructed upon request by the community-based enterprises, which have been formed. The roles of the three identified actors in the programme are as follows:

- The community-based enterprise is responsible for: collecting solid waste from the household to the secondary midden boxes located outside the settlements; setting and collecting waste fees; conducting education and awareness campaigns.

- The Resident Development Committee is responsible for : monitoring the CBEs; awareness raising; liaising with the local authority.
- The local authority is committed to providing secondary transportation to the final disposal site; monitoring the operations and providing institutional support; in conjunction with SLP, drawing lessons and replicating the model to other settlements including the conventional areas.

## **(b) Training**

Given minimal experience within the country, SLP through the government entered into an agreement with ILO to develop the concepts further. In October, 1999 ILO proposed the following activities that have since been implemented in 3 phases.

- i) The first phase was the development of entrepreneurship training materials for waste collection and training of trainers. 6 local ILO master trainers were trained.
- ii) Using the master trainers, 55 members from each of the 3 settlements attended a two-day Generate Your Business Idea Course. The participants were selected from existing community based organisations in the settlements.
- iii) To attain objectivity the trainers used their screening criteria to select 12 potential entrepreneurs from the 55 in each settlement. These attended an intensive Start and Improve Your Waste Collection Business training which lasted for 8 days. Settlement members were trained separately in order for them to be in the same location.

The exercise of training was completed in May 1999 with a total of 38 participants trained. Lusaka City Council field officers were also trained in order for them to provide institutional support.

## **(c) Pre-implementation stage**

This stage took a period of six months. This was a period of conducting market surveys in order for the trainees to assess their clientele, and assess the range of fees that the community members would be willing to pay. This information was used to prepare business plans. These activities then followed:

- i) The trainees were expected to form enterprises composed of members from their respective Community Based Organisations. What emerged was different in that the trainees grouped themselves and only incorporated a few members from their communities. A total of 6 solid waste community based enterprises have been formed in the 3 demonstration settlements. These comprise 10-12 members each.
- ii) In order to fulfil legal obligations the CBEs formed were then registered as small companies under the Registrar of Societies. In order to obtain a waiver from paying tax the enterprises were in turn registered with the Small Enterprises Development Board.
- iii) A one- day business plan finalisation workshop was held. The trainers provided guidance in order for the members to develop realistic business plans. In the plans the CBEs indicated the initial capital that was to be requested for in form of a loan from SLP.
- iii) Initially ILO/SLP was expected to provide appropriate designs of simple pull or pushcarts and other materials. However, one community devised their own

pushcart, which has been used as a model by the other two communities, which solved the problem.

## Financing mechanisms

The community members initially agreed to pay K500 equivalent to US \$1.28 at a rate of US \$ = K3, 900. However the enterprise raised the fee to a range of K1, 500 – K2, 000. Some of the reasons have been that the CBEs will need to pay for operation and maintenance costs, and in future shall be requested to pay for secondary transportation. Hence the enterprises shall be responsible for collecting waste fees from households and incur all the costs of operations.

During the programming stage ILO recommended the need for start up capital that could be provided as a loan to the CBEs. To qualify for a loan each enterprise was expected to open a bank account and to raise an owner's equity that is 20% of the loan requested. The loans shall be provided and the funds paid back shall be used as a revolving fund to be utilised during the replication phase. The loans to be paid back with a compound interest of 40% and a pay back period of nine months has been agreed upon.

### (d) Implementation

Two enterprises from Ng'ombe settlement used other financial resources from the local authority to finance their activities. This was achieved through their close association with the area Councillors who contracted enterprises to collect waste. The remaining four enterprises have not yet started collecting waste as they are still waiting for the start up capital.

## Contractual arrangements

ILO conducted two community-contracting workshops, to identify the design required. In summary the local authority is expected to sign two contracts, one with the Residents Development Committee as the immediate overseers of the enterprises, and the other with the enterprises. The third contract shall be signed between enterprises and waste generators. Given the legal obligations, all parties are still in discussions.

### (e) Replication

The community-based model has raised interest in most cooperating partners, SLP stakeholders and city residents from other settlements including formal suburbs. One settlement has sourced funding through the community enablement fund administered by SLP and the same model is being used. Cooperating partners such as DANIDA in their assistance to Lusaka City Council have pledged to provide funds for replication. At the national level, one city is planning to use the same model. The model shall eventually be incorporated into the National Solid Waste Programme. The principles in this Programme shall eventually be utilised in the provision of other services in the Peri-Urban areas.

## Lessons learned

- The period between the systems identification and implementation took long due to the lack of clarity and uncertainty in the model being tested.
- The Public Health Department in the local authority showed minimal interest in the programme, and was thus participating without commitment. A technical solution such as provision of garbage collection trucks is seen to be more desirable than a systems approach.

- On the other hand, community members showed great enthusiasm in the programme as it provided them with income generating opportunities.
- The process of consulting the communities was shortened as the community enterprises took up that role. Hence it has been observed that the enterprises can be used as change agents not only for solid waste but any other communication on developmental issues, as they have the privilege of getting in touch with households.

# Sustainable Dar es Salaam Programme, Tanzania - Evolution, development and experiences in implementing environmental strategies through investments and policy initiatives

Mr. Julius Maira, Project Manager, SDP

## Abstract

Sustainable Dar es Salaam Program (SDP) has introduced an innovative and effective approach to the planning and management of Dar es Salaam City. This approach has initiated a number of practices that are typically lacking in traditional urban planning and management. First, SDP has shown that it is feasible to employ a bottom up planning approach to establish priority environmental issues and prioritise and tackle them citywide using the environmental planning and management (EPM) process. Second, it has enabled a diverse range of stakeholders to come together so as to confront common environmental concerns. Third, it has acted as an effective medium for mobilising resources to support project implementation thus bridging the gap between planning and action. Fourth, its planning activities have significantly enhanced the image of Dar es Salaam City Council/Commission (DCC) as a lead partner in city development. Fifth, it has generated substantial information on the environmental status of the city thus laying the foundation for informed decision making.

In spite of its innovations, a central risk of SDP is the delayed integration and slow progress at its operations. In other words, until August 2000 SDP was not an integral part of DCC. If for instance SDP had come to an end after Phase II the gains made through the Environmental Planning and Management (EPM) would be severely eroded. For this reason, integrating SDP into the mainstream of DCC operations got high priority in Phase III. SDP is now a unit in the newly formed Municipalities and the Dar es Salaam City Commission

An important aspect of the integration process is implementation of action plans addressing various environmental issues. One of the action areas is solid waste management focusing on three sub components: privatisation of waste collection, community waste collection, and refuse recycling and composting. The prime objective being to create sustainable capacity in DCC's waste department that will enable it to work in partnership with the private sector, communities, relevant government departments and external organisations. DCC builds on the accomplishment of SDP working groups, and specific areas of emphasis include creating the process that allows implementation through partnerships: promoting privatisation of solid waste collection within the Central District Area (CBD).

Integration can be assessed by a number of success indicators: the establishment of a planning and coordination department in Dar es Salaam authorities with the capacity to build on the EPM process; the setting up, under the overall leadership of DCC, of advisory committees and task forces to deal with substantive EPM issues.

## Introduction

Dar es Salaam was established in 1862 as a port and trading centre to support new caravan routes being opened up into the interior of the African continent. It became the national capital of Tanganyika in 1891, acquired municipality status in 1949, and was raised to city status in 1961. The city lies between 6° and 7° South of the equator, on the East Indian Ocean coastline, enclosing some 1800 square kilometres of land including eight offshore islands. Dar es Salaam City falls under the administrative jurisdiction, which divides the city into the three municipalities of Ilala, Kinondoni and Temeke, embracing 73 wards.

The city is characterised by four distinct land forms, namely the shoreline immediately abutting the sea, the limestone coastal plain extending to the Pugu Hills, steep sided U-shaped valleys which culminate into creeks and mangrove swamps, and steep weathered slopes which rise between 100 and 350 meters above sea level. Dar es Salaam enjoys a tropical coastal climate with a mean annual temperature of 26°C, average humidity of 96% in the morning and 67% in the afternoon and an average annual rainfall of just over 1000 millimetres.

Dar es Salaam is the Primary City and major administrative, commercial, industrial and transportation centre in Tanzania. According to the 1988 census, 36% of the total of 771 industrial manufacturing units in the country were in Dar es Salaam and contributed 41 percent of gross national industrial manufacturing output of 57.6 billion Tanzanian shillings. The estimated population of the City by the year 2000 is about 3 million people and the growth rate is about 8% per annum and constitutes about 30% of the country's urban population: it is one of the fastest growing cities in Sub-Saharan Africa. The high population growth rate, limited public sector financial resources, and inadequate urban management actions to service land have resulted in more than 70% of the city population living in unplanned and unserviced settlements.

The inadequate servicing of the city land has led to a deterioration of the city environment. Therefore, the challenge for Dar es Salaam stakeholders has been to ensure that the city remains both economically and environmentally sustainable. The challenge has been aggravated by ineffective determination of the city's resource base and its exploitation and haphazard and uncoordinated investments in infrastructure on the one hand, and a slow pace of the local government to effectively respond to the demands to plan, coordinate and manage city functions in partnership with other stakeholders, on the other.

### 1.1 The Sustainable Dar es Salaam Project

The main tool to guide development in Dar es Salaam was largely based upon finite long-term master plans. These plans, once legally adopted, formed the basis for public sector infrastructure and services investment and a detailed system of land use regulations and control.

Whilst the Dar es Salaam master plans could provide a useful spatial framework to guide development and growth of the city, their implementation has been limited and frustrated by a number of issues. These include inadequate institutional mechanisms to coordinate the various public, private and popular sector parties involved in managing growth or investing resources and insufficient stakeholder input and contribution and over dependency upon rigid enforcement strategies without clear policy guidelines.



In view of these shortcomings, it was apparent that development of the city was not properly managed, and that the shortcomings of the previous planning approach, are likely to result in a major threat to health, the environment and urban productivity. Recognising the central role of the urban sector, particularly the city of Dar es Salaam, the government of Tanzania adopted the Sustainable Cities Program. The Program was launched in 1992 and became fully operational from November 1993 with the long term goal of promoting environmentally sustainable socio-economic development and growth in the city of Dar es Salaam by:

- (i) enhancing the availability of and promoting the sustainable use of natural resources and reducing exposure to environmental hazards in and around the city of Dar es Salaam, and
- (ii) strengthening local capacities to plan, co-ordinate and manage the city development.

The short-term objectives of the Programme were:

- to define the most pressing environmental issues affecting the city's growth and development,
- establish an environmental planning and management capacity within the city council based upon improved cross-sectoral and multi-institutional co-ordination between local and central government, in partnership with the private and popular sectors,
- to prepare detailed physical, financial and institutional action plans to address the priority environmental issues identified,
- to aggregate the action plans into a dynamic strategic development plan for the city,
- to assist responsible institutions implement the action plans and through them to implement, monitor and adjust the city's strategic development plan,
- to extend the environmental planning and management process to other major centres (municipalities) in the country.

## 2.1 Overview of implementation instruments

In order to achieve its long and short-term objectives, the project adopted a five-stage approach.

**Firstly**, prepared the city environmental profile (1992) which highlights the city's geographical, climatic and socio-economic setting, environmental problems, the natural resource base to support city development and the urban management arrangements that influence city growth and developments.

**Secondly**, the city's most pressing environmental issues were prioritised by public, private and popular sector representatives during the "City Consultation" opened by the then Prime Minister of the Republic of Tanzania and attended by more than 150 participants. The city consultation agreed priority intervention on the following:

- **Improving solid waste management:** Before 1992 less than 3% of the City's wastes were being collected.
- **Upgrading unserviced settlements:** Approximately 75% of all housing units are developed in unplanned and unserviced settlements.

- **Servicing city expansion:** Unplanned densification, further expensive linear expansion of the city without adequate services, inadequate funds and poor co-ordination of sectoral plans were among the problems noted in the consultation.
- **Managing surface waters and liquid waste:** With less than 5% of the city population served by 130 km of sewers, about 1.8 million people rely upon pit latrines and septic tanks.
- **Air quality management and urban transportation:** There was an escalation of car ownership in the city, precipitating an increase in congestion and air pollution.
- **Managing open spaces, recreational areas, hazard lands, green belts and urban agricultural potential:** There was an invasion of public open spaces, recreational areas and flood prone lands.
- **Managing the economy and integrating petty trading:** Trade liberalisation, coupled with high rates of immigration and unemployment resulted in an explosion of uncoordinated informal sector activities.
- **Co-ordinating city centre renewal:** There had been densification and redevelopment of the city centre and Kariakoo without regard to consequential infrastructure and servicing requirements.
- **Managing coastal resources:** Rapid beach erosion and conflicting land use activities along the seashore prompted an environmental concern.

*Thirdly*, a series of "mini-consultations" were held between 1993/97 in order to prioritise the most problems, agree on strategies and actions and formulate, mobilise and launch cross-sectoral and multi-institutional working groups to prepare detailed spatial, financial and institutional action plans for each strategy.

*Fourthly*, action plans were (and continue to be) implemented in partnership as Demonstration Projects in order to strengthen city management functions.

*Fifthly*, to prepare a Strategic Urban Development Plan for the City that integrates the agreed strategies of intervention and provides the co-ordinating mechanism to replicate successful Demonstration Projects citywide.

## 2.2 Sustainable Dar es Salaam institutional set-up 1992

In contrast to traditional urban planning, SDP introduced a bottom up process of environmental planning and management which emphasises participation and the building of partnerships between city authorities and various stakeholders. A principal goal was to develop a sustainable city that is accessible, attractive and conducive for community living through a participatory approach. Environmental planning and management process was thus established at the City council involving the appointment of senior government officers as co-ordinators for each of the nine environmental issues to coordinate strategy and action plan formulation, to address their particular issues, to establish working groups and provide them with technical and logistical support and manage the activities of the working groups. All key ministries, regional administration, services utilities, NGO and local agencies nominated a senior desk officer to the co-ordinating working group.

The desk officers were briefed at least once a month by the co-ordinators, on all working group ideas, action plan proposals and project implementation development and constraints. Members of the coordinating working group were in turn responsible for briefing their senior colleagues, especially Permanent Secretaries and heads of their institutions, obtaining policy guidelines and clarifications and securing technical, logistical and other support for action plan preparation, implementation and monitoring.

There was also a technical co-ordinating committee reporting to a steering committee. The Permanent Secretary from Ministry of Lands/Local Government chaired the steering committee. The role of the steering committee was to monitor project progress, provide policy guidelines, integrate SDP and other donor activities, relieve operational constraints and support project activities with necessary resources.

The City authority played an important role in monitoring, replication and up-scaling activities to provide inputs to policy developments. Cross-sectoral working groups have facilitated a smooth removal of sectoral and intergovernmental planning and implementation boundaries that limits the development of a sustainable city. In this regard SDP has been a practical instrument for policy dialogue. Through the EPM process, private management of utilities and public private partnership were initiated and implemented.

While this institutional arrangement was sound in principle, operations were disappointing in other areas, for instance the technical coordinating committee lacked direction, as the city director did not have time to chair its sessions. It was finally abolished. The national steering committee received little support and soon became moribund.

In contrast, working groups in spite of a number of problems, have played a central role in the operations of SDP. About thirty working groups were active at one time, dealing with various aspects of the nine environmental issues identified at a city consultation. These groups enabled a diverse range of stakeholders to come together to confront common environmental concerns through their action plans. Furthermore, working groups have enabled DCC to leverage substantial additional resources from donors and the wider city community.

In the course of implementation, the city authority pressed ahead with its fundamental review of all services. Each service was examined and the lack of a reliable database was found to be a major obstacle to effective decision making. A team of GIS/EMIS experts was formed and began by establishing a database for each service.

### **2.3 Highlight of demonstration investment projects**

Since November 1993 when the project became fully operational, working groups have been meeting and considerable success has been achieved. Several action plans have been prepared and implemented. Working groups have continuously been generating new ideas and collecting and mapping data as a basis for action planning, purposes. SDP has therefore also developed to become an important resource and information centre for urban environmental management issues in Tanzania and elsewhere in the world.

Main and important achievements of the project are its ability to show that co-ordination and partnership are essential for sustainable urban management. Through the project an operation network of people from different ministries, the private sector, NGOs/CBOs and international agencies that work together with the City authority preparing action plans has developed. Below are examples of how SDP operated in partnerships with different partners.

### **3.0 Policy initiatives**

#### **3.1 Establishment of a long-term institutional framework**

In the course of implementation, the major policy issues addressed were restructuring of the former Dar es Salaam City Council, the reform of service delivery and the economic cost of service provision and who should bear the cost. However the restructuring has been implemented recently (*1<sup>st</sup> of February 2000*) with a complement from the local government reform commission. Restructuring enabled the establishment of the planning and coordination department being a step forward in ensuring coordinated service delivery in the city of Dar es Salaam.

Accordingly, with the City Commission, SDP pushed ahead with areas where reform could be made operational with immediate effect, and with a more fundamental, analytical review of the other services. For example it went ahead with its plans for revenue generation: the refuse collection service was contracted in areas which could sustain the cost of private sector collectors; the traffic system was improved with the introduction of a one way system and on- street parking; pedestrian congestion caused by street traders was resolved by relocating the traders; new health boards were set up to streamline health care service delivery; new schools were built and old ones re-equipped.

The City Commission accepts that the responsibility for service provision must continue to rest with the local authority, but that service delivery should be carried out in the most efficient way possible, either through direct privatisation or contracting out the work. It has shown that it is the most effective way to deliver the service in question. In addition, the Commission is careful not to create a situation where private sectors monopolise. For example, the City Authority declined the offer of an international company to take over the refuse collection and disposal services in the city. The company insisted on a ten-year contract, which would have given it a monopoly and so a free hand to determine fee levels and would have stifled any local companies who wished to break into the market. The question of who should bear the economic cost of services continues to be a difficult policy issue across the globe. It is a particularly difficult issue in Tanzania where urban poverty is so acute.

As an example, we can describe what happened when institutions in public, private and popular sectors have substituted the working groups by establishing real partners in solid waste management and development of infrastructure by involving communities directly.

#### **3.2 Solid waste management**

Between 1991/92, among other critical environmental issues, the city's solid waste situation reached a pathetic state. This called for immediate strategies to revert it. At that time the total refuse collection was only about 3% of the total generated solid waste in the city. The situation was characterised by large

amounts of dumped garbage in public open spaces, on streets and in drains resulting in flooded roads, ground water pollution and escalating outbreaks of cholera and other waste related diseases.

Following the city consultation, which identified solid waste management as one of the priority environmental issues to be addressed, the SDP also agreed to adopt five strategy actions namely:

- Launching of an emergency City Clean up campaign,
- Privatisation of Solid Waste collection.
- Encouragement of community participation in Solid Waste Management and
- Refuse Recycling and
- Improving the management of refuse disposal sites.

The experiences with some of the above-mentioned strategies are highlighted below indicating how the DCC/SDP has been working in partnership with other stakeholders in the City's development.

### 3.2.1 The emergency clean up campaign

#### How did we arrive at the intervention?

The objective of the emergency clean up campaign was to demonstrate the resolution of the city residents to urgently deal with a problem of solid waste management before a sustainable management system was put in place. It was a short term strategy to clear most of the heaps of refuse which had accumulated in different parts of the city including market places, open spaces, along and on the roads and in various other places in the city.

The emergency clean up campaign started in 1992 by the DCC in collaboration with the Prime Minister's Office and the donor community raised US\$ 1.4 million for this exercise. This fund was used to refurbish 30 garbage trucks, create public awareness, open a new dumpsite and facilitate the day to day refuse collection services of the council.

In addition, some dump site management machines were procured with the assistance of the governments of Japan, Italy, Canada and Denmark. The machines included a bulldozer; a wheel loader and a solid cover material track. Also, the political will of the Central Government through then Deputy Prime Minister contributed much to the success of the campaign.

#### What was achieved?

During this campaign which lasted for two years (1992 to 1994) many achievements were realised. Some of the achievements are:

- the City Council is gaining experience on how routine refuse collection could be improved by using its own facilities and personnel or by improving the solid waste management in partnership with all stakeholders.
- an increase in the solid waste collection from 30 tones per day to 400 tones per day which led to reducing the heaps of refuse and improving the city's solid waste situation. This also created a better environment for private refuse contractors to commence their operations in the privatised area.

## 3.2.2 Privatisation of solid waste collection

### How did we arrive at this intervention?

The privatisation of solid waste collection requires the Dar es Salaam DCC to devolve its powers of collecting refuse to capable private firms or individuals. This is achieved by contracting through competitive bidding. The tendering and evaluation process involves the Health Department of the DCC, which has the responsibility of cleaning the city.

As mentioned elsewhere in this paper, the major reasons for the city of Dar es Salaam to allow private firms to participate in solid waste collection included;

- Inadequate capacity in the DCC to operate and manage its solid waste management equipment. In some cases the situation was exacerbated by poor discipline of some of the DCC staff and vandalism.
- Incapability of the DCC to collect revenues accruing from its services to the city residents.

Thus in order to improve and maintain the solid waste collection services, it was agreed that the refuse collection system in the city be privatised in phases so that the experiences of the initial phase are replicated in the phases to follow; at the same time the DCC will learn more from the exercise by taking care of the areas not privatised. But because of the second reason above, the privatisation exercise had to include collection of refuse collection charges (RRCs) from customers. Thus, in order to achieve this the Dar es Salaam City by-laws were revised in 1993 so as to allow private contractors to collect both revenue and refuse.

### Phase 1 of the Privatised Refuse Collection

#### How did we do it?

The first phase of privatised refuse collection started with ten city centre wards namely Ilala, Mchikichini, Jangwani, Kariakoo and Gerezani. After competitive bidding, M/S Multinet Africa Co. Ltd won the tender to clean the ten wards. Because of lack of experience in the area of privatised refuse collection, it was agreed between the DCC and the contractor that a concessionary contract would be awarded, where some of the DCC facilities were leased to the contractor. The contractual period was agreed to be five (5) years. M/S Multinet Africa started operations in November 1994. The refuse collection charges were as per the revised by-laws (and are still valid now though they are undergoing a review).

The RCC tariffs were set after a detailed study and analysis of the solid waste management costs. This tariff system allows for cross – subsidisation between high income and low income earners. Such an arrangement makes the charges affordable by all income levels and at the same time facilitates a homogenous service for all privatised localities from the contractor. However, the contractor is obliged to dispose the collected waste at a DCC owned or approved refuse disposal site where he pays a Refuse Disposal Charge (RDC) which stands at Tanzanian shillings 800 per ton (equivalent to 1 US\$, in 2000). To enable the contractor to perform as required by the contract, the DCC is required to enforce the bylaws, relevant legislation and regulations. This includes taking to task all RCC defaulters after receiving the defaulter list from the contractor.

The supervision of and technical assistance to the privatisation process was continuously provided by SDP through its working group on privatisation of solid waste. In another development, the same working group discussed and deliberated on issues pertinent to the process and functioning of the privatised waste collection. The group worked out plans for implementation so as to achieve the objective of the private sector involvement in the provision of solid waste collection services and advised DCC and the contractor accordingly.

## What did we achieve?

The major achievements realised during November 1994 to January 1997 period include:

- Improved partnership in solid waste management through the multidisciplinary working groups,
- In 1992 about 810 people were employed by DCC in the waste management unit. Today (August 2000) only 129 workers are employed by DCC. This to a great extent is a relief to DCC in terms of personnel and financial management. However most of those retrenched were absorbed in private firms engaged in solid waste management.
- The city's solid waste situation collection improved from 3% in 1992 to about 75% in September 1995 of the total waste generated in the privatised area. Figures declined during October 1995 to June 1996 when some contractual problems persisted between the DCC and the contractor. The DCC withdrew five wards from the contractor but soon after the contractor resumed operations in the five wards which had been withdrawn by the DCC. However, due to contractor's claims of failure to collect the RCCs in November 1996 he stopped services in five wards, which contributed to the decline of refuse collection.
- The first phase's experience has contributed much in the preparations of the second phase of privatisation. A number of jobs have been created with the cleansing contractors and hence the strategy is contributing to solving the unemployment problem.

Experiences also show that with the first phase of privatised refuse collection system, privatisation increases the efficiency in provision of services and collection of revenue but support from municipal authorities is required.

This is clearly justified by the fact that with only 318 workers, contractors managed to collect about 100 tones of refuse per day while 800 DCC employees in the solid waste management unit, collected only between 30 to 60 tones per day (1992).

## Constraints and difficulties encountered

Besides the achievements highlighted above, a number of problems related to the concessionary contract have been experienced.

*The first* problem is related to the mode of payment for the services and facilities. Under the contract the contractor was supposed to pay the Dar es Salaam City Council (DCC) the monthly costs of renting trucks and the lease charges for the depot. On the other hand the DCC was obliged to pay revenue collection services provided by the contractor at DCC owned premises like schools, hospitals, dispensaries and offices.

Unfortunately, for more than a year no party had paid a cent to the other, a situation which made the DCC withdraw its facilities in September 1995. However, the contractor was supposed to procure his own garbage trucks as he collected the refuse revenue something which he had not done by September 1995. Thus in order to continue with his contractual obligations after that date, the contractor hired a small fleet of trucks which was unable to maintain the cleanliness level achieved during the first year of privatisation. Therefore, DCC was forced to reduce the contract area to only five wards in December 1996. These situations led to a decline in refuse collection especially in areas taken care of by the DCC.

The situation was so bad that it had almost reverted to the previous status necessitating a government order from the Prime Minister reminding the authority to keep the city clean. When the DCC could not rectify the situation, in June 1996 the council was dissolved and a commission put in place.

*Secondly*, the cooperation expected from the DCC in prosecuting the defaulters of the refuse collection charges and in assisting the contractor in public health education and in providing public awareness on the concept of privatised refuse collection as per the contract was inadequate. Thus the contractor was unable to collect the RCCs to an acceptable level. This was one of the major reasons for the non-performance of the contractor.

*The third* problem was related to the opening of a DCC/contractor joint account during the commissioning period (that is the first 3 months of the contract). The purpose of such an account was to establish how much revenue the contractor could be expected to collect so as to ascertain the trend of RCC Collection. The account was never opened.

## **How did we deal with the constraints?**

It is interesting to note that efforts of refurbishing DCC trucks and the withdrawal of the five wards from the contractor did not improve the solid waste situation in the city. After the government noticed the weaknesses, the Prime Minister directed the DCC to make sure that the City is clean within six months. To comply with the Prime Minister's directive and in addition to the working group plans which were already underway the following steps were pursued:

- Review of the first contract so as to modify or omit the controversial clauses and renegotiate the contract. It was provided that if the first contractor agreed and proved his ability to manage the original ten wards he should be re-allocated the withdrawn wards;
- Preparation of the start up of the second phase of privatised refuse collection to cover 22 more urban wards whereby the tender specifications were prepared and contractors were invited to bid. In the tendering process four new contractors were selected and allowed to start operating by mid July 1996. But given the limited capacity of contractors, only 13 wards qualified for this phase's service.
- A solid waste management working session was convened to deliberate on what further steps should be taken in order to speed up the improvement of solid waste management in the city. This session drew up a set of strategies, which encompassed speeding up the tendering process of the expanded privatised refuse collection, incorporating the experiences of the first contract. It was agreed that the new contract should not be of the concessionary type and every contractor should have his own refuse management facilities which



have to be physically inspected. The current refuse disposal site be improved by availing on time the funds for the operation and maintenance costs of the dump site, improving the DCC and community support for solid waste management and encouraging refuse recycling.

After the lapse of the six months given by the Prime Minister, most of the strategies had not taken off because of delays and confusion within the City Council where a number of Councillors and Executives were in a panic situation. Thus the Prime Minister dissolved the Council and instead he installed a City Commission headed by a Chairman assisted by Commissioners who were heading the City departments. After the Commission was in place, a lot of issues started to move fast. This included the go ahead for new contractors to commence operations and the returning of the five wards to the first contractor.

## Phase II Privatized Refuse Collection

### How did we do it?

As mentioned in the previous section, the second phase of privatisation started in mid July, 1996 after a process of open tendering whereby four firms qualified to provide refuse collection services to a total of thirteen wards. These new contractors started the Phases with high morale and commitment. The daily refuse collection figures increased in the newly privatised wards and there were signs of a reduction of refuse heaps especially in open spaces, on and along the roads and market places.

### What has been achieved to date?

Unfortunately the rate of refuse collection did not match with the rate of Refuse Collection Charge payments. The new contractors' contribution in refuse collection was much below the expectations. This is better explained in the following table.

Cleansing firm	Number of wards	Quantity of waste in tones		
		Generated	Collected	
			Actual	Expected (75%)
Multinet	5	135	42.2 (31.5%)	101.25
Mazingira 1994	6	420	11.2 (2.7%)	315.00
Kimangere	2	50	5.6 (11.2%)	37.50
Kamp	2	70	0.2 (0.3%)	52.50
Allyson	3	45	8.7 (19.4%)	33.75
DCC	15	750	120.9 (16.1%)	562.50
<b>Total</b>	<b>33</b>	<b>1470</b>	<b>189.0(12.9%)</b>	<b>1102.50</b>

Source: Dar es Salaam City Commission, December 1996.

### Constraints and difficulties encountered

Even with improvements made on the first phase's contract, the new contractors experienced constraints and difficulties as follow:

- Slow or poor response in paying Refuse Collection Charges to contractors. One of the reasons for this is the fact that there had been insufficient preparation to educate people on the new strategies to clean the city which

included the issue of paying RCCs according to tariffs set in the refuse by-laws. Due to the inadequate payment of RCCs all contractors failed to perform to the required level and there is a danger that if the situation persists the contractors will have to stop operations.

- The contracting skill within the DCC to some extent is still inadequate although with time it is improving. It seems that during the new bids evaluation some of the equipment produced by bidders was not the property of the bidding companies. This is evidenced by the reduction of the operating fleet resulting in the small amount of refuse collected.
- Records show that the DCC role of providing an enabling environment to contractors is not adequate. The contractors have not been closely supervised, monitored and supported. However, the situation is now improving due to the City Commission's interventions.

### **How did we address the problems?**

- The City Commission in collaboration with the SDP and JICA is in the process of creating public awareness on health issues by launching cleanliness campaigns and sensitising the Municipalities and ward offices on the issue of keeping the city clean,
- Through the privatisation-working group, a monitoring team has been proposed to closely monitor the DCC and contractors' performance for the purpose of analysing the situation and advising the commission accordingly,
- Discussions on alternative ways of recovering RCCs and other possible modes of paying for contractors' services are underway.
- The 1993 by-laws are undergoing review so as to reflect the current socio-economic situation of Dar es Salaam people.

The city commission privatisation process has started Phase Three effectively utilising views of the working group and the process is smoother.

### **3.2.3 Community involvement in solid waste management**

#### **How did we arrive at this intervention?**

As stated above it is estimated that more than 70% of Dar es Salaam residents live in unplanned and unserved areas. These areas are predominantly inaccessible by car especially big trucks. In view of that, communities in respective areas had to be mobilised so that they take part in planning and implementing the agreed strategies in solving the solid waste problem. Through the EPM process a good number of communities had organised themselves and expressed interest in participating in solid waste management. For example, the Kinondoni Moscow Women Development Association and the Hanna Nassif Women Development Association formerly involved in activities different from refuse management but from 1996 have been removing solid waste from drainage systems and also collecting refuse from a limited number of households using push carts. They bring the refuse to sites from where DCC facilities can transport it to a designated dumping site.

The community-based organisations also have plans to do some refuse composting although they have problems in acquiring space. From the experiences of the relevant working group under the SDP, it has been found that the solid waste management related income generating activities are created for the appropriate communities by putting into practice a manual house to house refuse collection system.

Under such a system, unemployed residents are allowed to collect refuse from inaccessible places to bring such refuse to points accessible to the DCC or contractor's trucks. In this way these manual workers are paid a small amount of money, which assists them to earn a living.

Communities are very crucial in managing and sustaining a clean environment. Thus by using community-based organisations (CBOs) or community representatives, people are being educated on different ways of improving their environment and on the need to cooperate with the DCC, contractors and CBOs. This is achieved by preparing proper public health awareness packages, which are used by ward health officers, community representatives and when resources allow, the use of mass media (radios, TV, Newspapers, exhibitions etc)

### **What has been achieved?**

Through participation in SDP working groups, several CBOs with interest in solid waste management have been formed. Some are responsible for refuse collection from a limited number of households. Other CBOs in addition to collecting waste, conduct public awareness on proper solid waste management practices which include refuse separation (sorting) at source for the purposes of reuse or recycling.

Furthermore, the National Income Generation Programme (NIGP) in cooperation with SDP after realising the importance of community participation in solid waste management, formulated an integrated solid waste management project proposal. Initially there was an indication that the ILO could consider funding the project, but after a long process through the NIGP machinery, the project has been abandoned by the NIGP. However, UNDP and ILO have agreed to support the proposed project through SDP. Through this project, it is expected that more capacity would be built in the DCC and communities in the area of solid waste income generating activities.

### **Constraints and difficulties encountered**

The major barriers to community based waste collection is the inadequacy of resources and facilities to effectively collect and manage the refuse and also the lack of funds to launch effective public awareness campaigns. The other problem in some cases is the lack of transparency within CBOs leading to misunderstandings and chaos. The awareness campaign planned jointly by DCC and JICA is expected to address some of the problems. Poverty issues are also being studied and discussed.

### **3.2.4 Lessons learned**

The emergency clean up campaign of 1992/94 was very successful in cleaning the city. The underlying factor in this success is strong public health awareness and stakeholder/community involvement in developing.

Attending training on waste management in the city recently, private firms involved in waste collection and disposal admitted low turnovers resulting from inadequate preparations and failure to recognise the importance of customer satisfaction. They expressed that most firms coming from fields and professions not related with solid waste management did not know how best to treat customers. Problems arose when most contractors used the same approach of relying on law and regulations that failed the City Council instead of building a better friendly customer-provider relationship. Sharing experience, it became very

clear that most firms realised only half of the expected revenues. The following are key issues of concern:

- Strong public health awareness and community involvement are a prerequisite to the successes of solid waste management in the city,
- Good cooperation between the city authority and contractors is very important for a success of any planned activity,
- Efficient contracting and monitoring the refuse collection contractors is only possible under good governance,
- Enhanced cooperation between different stakeholders in planning conflict resolutions. This idea is incorporated in the new concept of environmental planning and management which has been adopted in all major urban centres in Tanzania.

### 3.3 Community Infrastructure Programme (CIP)

#### How we arrived at this programme

The CIP was initiated in October 1995 with the overall aim to address infrastructure problems by working directly and closely with communities and their organisations (CBO) in order to enhance their capacity to participate and contribute in their development programmes. CIP seeks to improve living conditions of selected local communities in the city through provision of services and infrastructure and in so doing, reduce poverty.

CIP started working in two neighbourhoods namely Tabata (Tabata Development Fund - TDF) and Kijitonyama (Kijitonyama Community Development - KIJICO). The two communities are of mixed low and middle-income group population. The selection of these two demonstration neighbourhoods was based upon:

- track records in community infrastructure provision with good representation at the grass-root level and their financial health
- position, which is adjacent to a well laid out and functioning primary infrastructure and
- a seriously deficiency of basic infrastructure services.

#### How did we do it?

The Sustainable Dar es Salaam Program established two working groups in two communities, each group working in one community. The working group members and program professionals generated ideas that were coordinated and prioritised. Engineers in close collaboration with communities prepared the drawings and bills of quantities. The designs were jointly agreed upon by the contractors.

In order to ensure maximum participation in project planning, implementation, monitoring and evaluation, CBO leaders including a chairperson, secretary and treasure and different CBO committees are involved in the process. The committees include:

- *the executive committee* which monitors and directs the development activities at community level. The committee includes representatives from the community, government, non-governmental organisations and donor agencies,

- *the sector committee* which identifies community needs, approves plans of action, discusses, monitors, and evaluates project implementation. It is composed of local professionals and representatives from government, non-governmental organisations and donor communities.
- *The finance committee* which is responsible for managing the accounts of the CBO. The committee is chaired by the CBO treasurer and is composed of neighbourhood representatives and a CIP accountant as an advisor,
- *The neighbourhood consultative committees* which are responsible for liaison between the CIP and community members. Twenty (20) area members represent each neighbourhood.
- *Neighbourhood committees* composed of area representatives

## What has been achieved?

Through CIP, many achievements have been made. Some of the notable achievements include:

- 34 community based organisations have been identified and each Municipality has a task force for formulating CBO networking
- 17 community profiles have been prepared
- Communities have continued to contribute towards infrastructure upgrading. From 1999 - 2000 about Tsh.23.0 million (appr. U\$ 29,000/=) have been contributed by two communities and used for construction of spine roads in their areas,
- 80 Municipal CBOs have been trained in *participatory rapid appraisal* and data collection
- 40 youth have been trained in tie and dye and carpentry in Kijitonyama community. They are now engaged in various production activities
- 6.2 kilometres of spine roads and main storm water drainage in the two communities of Kijitonyama and Tabata have been constructed
- 15 kilometres of conventional sewerage has been constructed at Kijitonyama
- 42 kilometres of secondary and tertiary access roads in two communities have been constructed
- 2 dip-wells with an output of 10m<sup>3</sup>/hr to cater for 14,000 and 12,000 population in Kijitonyama and Tabata communities have been built.

## Constraints, difficulties and challenges

CIP is currently faced with the following challenges:

- since the development process through participatory approach needs time and patience, CIP is in dilemma on how to adhere to the project implementation schedule without restraining participatory approach planning demands;
- in working with CBOs, conflicts are inevitable because of vested interests among the partners or members of the community. The challenge to CIP is how to prevent, manage and resolve conflicts within the framework of the community participatory approach;
- during the planning and budgeting stage partners often make pledges which they delay to honour or decide to withdraw. The challenge is what to do when a partner does not fulfil his commitment. Furthermore, when planning CIP, it was assumed that support from different donors would take place concurrently, but it has been observed that the schedule of one donor may end before the other donor starts implementing his schedule often without

resource compensation for the change which may have been caused by inflation;

- in some communities there are several CBOs. The question is how to deal with communities which have CBOs with conflicting interests;
- in improving infrastructure, members of the community need to make contributions in order to increase capacity of dealing with the project, ensure sustainability and bring a sense of ownership. CIP experience has shown that most of the time people are not ready or willing to do so. The challenge now is how to internalise the concept of cost sharing for improved infrastructure where no policy or other instruments for ensuring community contribution exist;
- construction activities may involve individuals' house demolition. The challenge is how to deal with compensation issues which are not normally covered by the project funding system;
- infrastructure projects are capital intensive that require mandatory community contribution. However, the community contribution ought to be based on a fixed percentage without due regard to community ability.

## 4.0 Concluding remarks

Dar es Salaam City Commission, residents and friends of the City, started building a process that brings us closer to our common vision. We jointly initiated and implemented the sustainable Dar es Salaam project through the participatory bottom up process of Environmental Planning and Management.

In the process Working Groups were established to develop and negotiate strategies and action plans. The Working groups are issue-specific, cross-sectoral, inter-agency and stakeholder based. Through this process we have also established a dynamic framework in which further strategies and agency-specific activities can be developed and implemented. The framework has enabled the collective preparation of Strategic Urban Development Plan (SUDP) for Dar es Salaam.

The change that needed to take place through the EPM approach is the one from "Planning the City" to a "City that plans" and from product to process. Planners have realised the fact that they cannot create a better world. There are many other forces, which decide upon the speed and direction of urban development: private investors know exactly where and when they want to invest, residents looking for shelter also prefer certain places over others, community groups are perfectly able to manage their own environment and utility agencies and parastatal also mainly follow market demands.

The Sustainable Dar es Salaam Programme through the EPM process has thus built a reliable and permanent bridge between the City government and the City inhabitant, and restored mutual trust which was largely lacking. The process has also created a better balancing mechanism, which is the backbone of any sound steering system.

# Shenyang, China – Implementing environmental strategies through policy initiatives: reduction of air pollution from point sources

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Priorities were established and developed through the Shenyang Environmental Profile and the subsequent Shenyang City Consultation. The Environmental Profile highlighted three major environmental issues, one of them being heavy air pollution. Subsequently, a cross-sectoral and multi-institutional consultative group specific to air pollution control was established in mid 1997, consisting of 16 members from governmental departments, people's congress, political consultative conference, enterprises, institutes and communities. After four months of moderated discussions and investigations, proposal papers on air pollution were drafted for further broad-based discussion. These were reviewed, together with reports on the city's long term sustainable development at the Shenyang City Consultation in May 1998, attended by 300 key stakeholders from Shenyang city, central government, other Chinese cities and delegates from international organizations and cities. The conclusions of the Consultation described the consultative processes involved, the prioritized environmental issues, summarised broad strategies to solve the problems and identified the responsibilities and roles of relevant departments and their follow-up work plan for coordinating activities in cross-sectoral Working Groups. Detail as following:

## Collection of information and working process of the atmosphere section of the profile

Since the negotiation with UNEP and UNCHS on Sustainable Shenyang Project (SSP) in early 1994, we adopted the approach of "walking on two legs" in the whole process of preparing the project. On the one hand, we worked actively with UN and domestic organisations and institutions for earlier settlement of the project; on the other hand, we also actively conducted research work on sustainable development and started to work on Shenyang Environmental Profile Timetable. In January 1996, the first manuscript of Shenyang EP appeared, which not only gave an analysis of main environmental problems facing Shenyang from the perspective of sustainable development, but also showed the decision and action taken for Sustainable Shenyang Project (SSP), which to some extent, pushed forward the settlement of this project. After the project document was formally signed in May 1997, we established a consultative group to discuss the air pollution issue and to update the EP, which provided a solid basis for further activities: to prioritise air pollution as a key environmental issue.

## Prioritizing air-pollution as one of the key environmental issues of Shenyang

Through updating EP and involving a broad spectrum of stakeholders, the air pollution issue was fully discussed / considered by many key stakeholders. In May 1998, the City Consultation was held. It was attended by more than 300 representatives, including representatives from Shenyang Municipal Commission, Municipal People's Congress, Municipal Government, Municipal People's Political Consultative Conference, governmental departments concerned, enterprises, educational and scientific research institutes, news agencies and communities,

representatives from state and relative provincial departments, representatives from UN organisations and representatives from domestic or overseas friendly cities. The representatives discussed 'Air Pollution Prevention Report' submitted by the consultation group. Representatives unanimously agreed that what was brought forth in that proposal was one of the key priority environmental issues of Shenyang at present. Specific opinions were reflected in 'Minute of City Consultation on Sustainable Shenyang Project' after the meeting. With this basis, cross-sectoral communication was established and the Air Pollution Prevention Working Group was set up comprising the consultative group and some persons related to key specific sub-issues.

However, this is not enough. Air pollution covers almost all the aspects relating to air. Some problems were unavoidably not prioritised as when the working group was formed, opinions of only a few people were adopted, which caused imbalance. Enthusiasm of participants was the first precondition in forming working groups, which lacked effective operation mechanisms and representation. Key environmental problems still had constraints. There was also a lack of basic data and research. Some key problems were brought out before support was found. Key environmental problems were covered too extensively at the inception with key points not stressed. Affected by the traditional way of decision-making and management, key environmental problems which were identified were often obstructed by administration. Thus, we realised that it was very necessary to focus on some key specific sub-issues and adjust them during the operating process, in particular in actual situations as in Shenyang. By doing like this, we learned that applying the prioritising principle could ensure the focus of limited resources on fewer key issues, and City Consultation, as a new decision-making and consultation mechanism, has changed the former top-to-bottom management approach.

## **Approach to analyzing issues**

We held various meetings, at which stakeholders present expressed their own opinions and finally reached an agreement. All these played key and active roles in implementation. Normally structures for these meetings complied with Chinese traditional habit, and most of them were shorter than half a day, as the key stakeholders were part-time and could not contribute more time. In the meantime different working groups had addressed the central topic for discussion at the meeting beforehand and made very careful preparation of materials. Thus the time for the meeting expected and its topic were clarified. Promoting opinions of everyone ensured the direction and output of the meeting.

Relative sub-working groups were formed according to specific sub-issues on the basis of general air pollution prevention, such as sub-working groups in charge of spreading the use of non-leaded petrol, strengthening air pollution prevention, environment management within the First Ring and popularising the use of clean and pure coal. The above issues and sub-issues were put forward by key stakeholders. From the perspectives of environment and development, everyone agreed that action should and could be performed immediately. In implementation one or several departments should play important roles. Other departments should participate actively and help to coordinate between them. Of course conflicts also existed between different stakeholders. But from our experience, these conflicts resulted from part or section conservation. For example, the Cleaner Production sub working group. In the past, a large number of enterprises considered cleaner production was only additional work and order in the enterprise therefore they did not participate actively. When they realised cleaner



production could lead to harmony between economic and environmental benefits from demonstrational enterprises, more and more enterprises realised that it was a good approach to save energy, protect environment and increase benefits without large investment. The number of demonstration enterprises was soon raised from the original 6 to more than 100.

## Existing problems

During the prioritisation phase, we encountered problems as follows:

- the approaches and tools in clarifying and analysing the selected issues, organisation and form of workshops still needed to be improved.
- representatives were not fully mobilised. Participants of International meetings spoke enthusiastically whereas at our meetings everyone's participation was inactive. For specific meetings, especially attended by leaders, only leaders spoke at such meetings.
- the setting of priorities and its form lacked control.
- some basic information and research work was still in need of being reinforced.

To summarise, in Shenyang, when we address the air pollution issue, the prioritised aspects are widely adopted before decision-making and cross-sectoral coordination is being accepted by more and more stakeholders to make full use of existing resources, which play an increasingly more important role in practice.

## Reduction of air pollution from point sources

More detailed issue-specific objectives and strategies for achieving Shenyang's long and short-term goals are formulated through broad-based Working Groups. These were established for water resource and water pollution control, air pollution control, and domestic solid waste management. These WGs developed strategies, negotiated action plans and formulated investment project profiles; improved, and through the cross-sectoral process gradually changed, the decision-making and coordination system in government departments. Demonstration projects for water, air and solid waste, and some urban construction and upgrading projects have been successfully conducted based on the work of the WGs. These have improved the environment and strengthened capacities for the sustainable development of Shenyang.

## Strategies adopted in the past

As you know, in the past, China adopted a planned economic mechanism and almost all was determined by top-down decision making. Due to this reason, Shenyang was developed by the state as a key heavy industry base from 1956 onwards. Industrial distribution mixed factories and residential areas, with high sulphur coal providing about 70% of energy consumption. Production facilities and technologies were outdated, technologies for pollution control were limited and there was little investment in environmental protection. Public awareness of environmental protection was low, as were public participation levels, with no proper mechanism to encourage and facilitate them. Cross-sectoral cooperation and coordination was inadequate. One of the major environmental issues facing the city was air pollution caused mainly by coal burning.

## How to formulate strategies that focus on heavy air pollution

Through implementing Sustainable Shenyang Project, we learned the down-top participatory approach. A series of workshops or mini-consultations were held

regularly to involve extensive participation of stakeholders, enabling them to express their views and opinions. Normally around 10 to 20 members of working groups would participate after considering that if too many people participated it would be harder for them to express opinions and reach an agreement. For example, in discussing how to control air pollution from point source, key stakeholders expressed their specific viewpoints. The environmental protection bureau stressed on improving environment quality of the city, but referring to enterprises, they stressed the cost rise for control pollution. Finally after many discussions, a consensus was reached from the perspective of both sustainable development and improving citizen's life quality. Then, the agreement for reducing air pollution from point source was finally reached.

## **How to effectively reduce air pollution from point sources through implementing the agreed strategy**

- (1) Strengthen the monitoring and management of key industrial pollution sources with excessive emission and discharge, to control pollution and meet standards by the set deadlines:
  - For the industrial pollution sources that discharge pollutants exceeding certain standards: according to the Decision on Environmental Protection Problems issued by the state council, ask them to take measures to control pollution and to meet the standards by certain deadlines. Now, we are prompting cleaner production in these industries and the focus of a cleaner production unit is energy saving.
  - For the enterprises that already meet standards: routine management should be enforced and it must be ensured that all treatment facilities are operated normally to avoid any deterioration.
  - For the projects under construction: there should be strict management to prevent new pollution; the responsibility of management should be further advanced and they must comply with relevant regulations when reviewing projects and giving approvals; to enhance process management of "Three Simultaneousness" system and guarantee the realisation of three simultaneousness; to strictly check and accept completed projects and realise the meeting of standards.
  
- (2) Implement the energy control policy and control the total amount of pollutant discharged: Implementing the energy control policy is the first countermeasure for the improvement of ambient air quality. The major measures are:
  - Strictly control sulphur content and dust content of the coal consumed in the city. In January of 1996, a regulation on air pollution control and prevention in Shenyang was issued and enforced, one provision of which is that coal with sulphur content over 1% is banned from being burned directly. This year, a new regulation bans the sale and consumption in urban areas of coal with sulphur content over 0.8% and dust content over 20%. Thermal power plants, such as Shenghai, Shenyang and Huanggu, are asked to use coal with sulphur content and dust content below 0.6% and 20% respectively. At the same time, coal supply businesses are forced to produce and distribute cleaner coals, including briquettes.
  - Popularise cleaner fuels: Since 1997, within the first ring road, boilers with capacities below 1 tone are banned from consuming raw coal, and by the end of 1998, 847 boilers were banned or readjusted to comply with this rule. Since 1999, the forbidden areas of raw coal usage have been

expanded to include all urban areas: all boilers have to use cleaner fuel instead of raw coal.

- (3) Popularise energy-saving and cost-reducing technology by whole-process control: The consumption of coal is huge and the efficiency of coal burning is not as high as it should be. According to statistics, the average thermal efficiency is only about 55 percent, and while some facilities that are banned by relevant state agencies, such as Trade and Economic Commission, due to low efficiencies, are still operational, it is difficult to popularise some new energy-saving technologies encouraged by State Agencies, so there is large potential for energy-saving and cost-reduction.

It is necessary to select advanced technologies that are easily popularised, can be applied widely to easily create benefit, and to choose some receptive businesses to apply these technologies, and later to replicate them citywide.

- **Popularise combustion facility of layer-burning for boilers:** The combustion facility of layer-burning is a key energy-saving technology popularised by central government. Up to now, 200 sets of the facility have been installed in Shenyang. As a result, it reduces coal consumption over 15%, and can recover investment within 3-6 months, with both economic and environmental profits. The replication rate for the technology is expected to reach 80% within two years.
- **Popularise the technology of continuous heating at low temperature:** Right now, most heating boilers in Shenyang supply heat in an intermittent way twice a day in the morning and evening, which consumes more coal and emits black smoke while starting. One of the characteristics of air pollution in the heating season of winter is that the pollution is more serious in the early morning and later afternoon, coinciding with the time the boilers are fired. According to the result of some demonstration cases that carry out continuous heating at low temperature for 24 hours, compared to intermittent heating, per square meter the coal-saving amounts reach 4.8 kg, an energy-saving by 11.5%, and cost-saving 13.6% and the average temperature for the households is raised by 1-2C. The technology offers higher energy efficiency, lower heating cost and air quality improvement in winter mornings and evenings, so it is crucial to promote the adoption of this environmentally sound technology citywide.
- **Polarise the technology of condensed water recovery:** The technology of condensed water recovery has been demonstrated in some workshops that use steam as an indirect heating source as in Snowflakes Brewery and Shenyang Locomotive Vehicle Plant. The results show the technology has a lower consumption of coal and a reduction of pollutant emission, which needs to be applied more widely.

- (4) Conduct comprehensive management, to abate pollution from sources on ground surface: According to the statistics and analysis from environmental monitoring institutes, the contribution of polluting sources of ground or near-ground surface reach 70% of total ambient air quality. It is critical to strictly control polluting sources at high-altitudes and those on ground surface or near-ground surface simultaneously in order to significantly reduce total pollution. The major countermeasures for this are:

- **Suppress some small size, single and temporary boilers and maximise the capability of central heating facilities:** There is huge heating potential in some cogeneration power plants, such as Shenhai, Shenyang, Huanggu and New-Northern-Station to be explored further,

and also there is some potential in the central heating boilers to expand their heating areas, while some small, scattered and temporary boilers being operated within the areas can be serviced by the central heating systems. So it is necessary to force some small and temporary boilers to stop operation and to connect some scattered boilers to central heating networks. It is an important way to reduce polluting sources and pollutants.

- **Take comprehensive measures to control dust pollution caused by wind:** 50% of TSP in the air is caused by flying-dust from wind, especially in the spring and autumn. Firstly, control some stocks for powder-like goods and wastes, by enforcing monitoring and supervision on sites and take preventive measures at the same time. Secondly, mobilise resources to gradually adopt spraying water to clean roads to replace traditional dry-cleaning methods. Thirdly, strengthen city greening, and increase both soft and hard cover for the ground surface within the urban areas. Fourthly, improve environmental management on construction sites and rationalise the distribution of concrete within urban areas.
- **Forbid burning rubbish, dry grass and leaves:** Strengthen regulation enforcement, and ban some illegal behaviour, such as burning growing leaves in autumn, burning dry grass in spring and winter, casually burning rubbish as well as operating open barbecues.
- **Enforce treatment in the way of "curing winter diseases in summer":** In summer, rebuilding and renewing some residential boilers with outdated facilities and low efficiencies to prevent pollution in the heating season of winter.

## Summary of lessons and experiences

During this process, especially with the limits of the project, we think it is necessary to note that the process lacked bi-directional and multi-layer feedback and communications. Furthermore, this mechanism needed to be tightened and institutionalised.

The strategies were built on public participation: the key stakeholder groups in Shenyang participate directly in project activities, giving their suggestions, proposals and views to the government. The public also monitors government activities, learns and participates in consultations, decision-making and planning, and has access to environment and development information, which promotes the improvement of awareness of the environment and sustainable development through several other channels: (1) Representatives of People's Congress and Political Consultative Congress; (2) Municipal Government Hotline; (3) Departments in every government agency dealing with public complaints; (4) Specific offices in residential communities; and (5) the public media.

# Sustainable Ismailia Governorate Project, Egypt - From issues to capital project development through investment and regional expansion

Ms. Habiba Eid, Project Manager

## Introduction

Ismailia Governorate is located at the East of Nile Delta and covers an area of approximately 4482.8 km<sup>2</sup>, 70 km along the west and east banks of Suez Canal. It comprises five cities (markaz). Total population is about 715 thousand people. Ismailia city is the capital of the Governorate with a population of about 471 thousand.

The city as well as the whole governorate has common environmental economic problems, namely limited water resources characterized by low quality, the under-employment, constraints inhibiting micro enterprises and entrepreneurs suffering from limited access to business management knowledge (mainly marketing and technology). Lake Timsah and Great Bitter lakes are subjected to acute pollution threatening the tourism industry and fishing activities. There are conflicts between urban expansion and agricultural activities. Also, land reclamation projects are putting more demands on water resources and have environmental problems.

Ismailia's location as the hub-city for the canal region puts it at the cross roads to Cairo, Suez, Port-Said and Sinai which puts it in an attractive location for clean industries and an exporting out-let for Egypt agricultural products. Also, the construction of El-Ferdan bridge over the Suez Canal, the establishment of The Valley of Technology as well as El-Salam irrigation canal for land reclamation project will contribute greatly in the development of Ismailia governorate.

Therefore Ismailia was considered a suitable SCP city for a variety of reasons: first, Ismailia's particular physical characteristics allow the relation between environmental and development issues to be brought into sharp focus and secondly, Ismailia reflects the Egyptian secondary city case when local government and citizens must rely upon their own development initiatives in a political environment which as in all Egyptian governorates, still remains dominated by central government. It is worth mentioning that the Sustainable Cities Program (SCP) is an operational program built on the lessons learned by United Nations Center for Human Settlements – UNCHS (HABITAT) in collaboration with UNDP. Its principal activity is concerned with promoting and supporting sustainable development in the cities of the world through helping municipal authorities and their public, private and community sector partners to improve their capacities for urban environmental planning and management.

The project of Sustainable Growth and Development in Ismailia (SIP), is a typical pilot project that reflects the ideology of SCP. It aims at setting forth a scenario for the sustainable development of Ismailia so as to ensure a lasting socio-economic growth which goes side by side with sound resources and environmental management. As such SIP is the first of its kind not only in Egypt but in the Arab world as well.

## SIP / SIGP

In 1993 the City of Ismailia was chosen to be the first city in Egypt to implement a Sustainable Growth and Development Project. The project has been implemented in two stages (projects):

1. Sustainable Ismailia Project (SIP-I) which was concerned with Ismailia city 1993.
2. Sustainable Ismailia Governorate Project SIP-II (SIGP) which covers the entire Governorate of Ismailia with all its cities and markaz.

The main objectives of both projects were:

- Strengthening the local capacity to plan, coordinate and manage environmental development through applying the environmental planning and management approach (EPM).
- Preparing long term strategic development plans.
- Preparing public investment project proposals to mobilize funds which in turn create job opportunities.
- Capacity building for different sectors of the society, including leaders, members of NGOs and CBOs, women and youth has been given special attention in SIP-II (SIGP). The Social Fund for Development financed the training component.

The project started by the formulation of a steering committee headed by the governor and included members of key parties of Ismailia. Four key issues were specified, and with the use of the environmental profile which had been produced by the national consultant who presented the project, four papers on the four selected key issues were prepared. The preparation for the First City Consultation began. The consultation was held six months after signing the project agreement.

## EPM process dynamics

The EPM process typically involves four distinct phases. These are:

- Information and Expertise
- Prioritization, negotiating strategies and decision making
- Implementing strategies
- Mobilizing and efficient use of resources

The primary reference for all Working Groups (WG) was the **Environmental Profile** (EP) prepared by an external consultant in 1992 prior to the formation of the WGs. The EPM provided a general overview of a broad number of urban environmental issues with a few specific recommendations.

Besides the EP, Working Groups prepared more focused background papers. The TSU together with the Lake Timsah WG (LTWG) produced a document entitled Sustainable Development of Lake Timsah. In addition, the UDWG also obtained information on informal settlements and slum areas through conducting social sample surveys and physical surveys. In addition, WGs initiated a process of obtaining information from the various stakeholders and governmental sources. This was not a straightforward process. For both the LTWG and the UDWG, involving stakeholders was initiated by project management through formal and informal channels of communication. The **City Consultation** also provided a good opportunity to identify and solicit active participation of key stakeholders.

## Setting and clarifying priority issues

Stakeholders in all WGs represented a wide range of interests. Individual priorities were often far apart which made setting priority sub-issues a considerable challenge. In the case of the LTWG, the priority of the SCA was navigation while fishermen were concerned with their source of livelihood, the Lake's fish. Private resorts on the other hand were concerned with attracting tourists while the community at large was concerned with the safety of fish consumption. These conflicting interests were resolved through reaching consensus on a set of criteria for prioritizing sub-issues. The LTWG established criteria reflecting environmental, economic and public health concerns.

The issue clarification process involved a number techniques and tools. Besides routine information collection, issue analysis and mapping were indispensable. Water quality tests conducted on the Lake's coasts were instrumental in identifying the most polluted areas for routine monitoring. The UDWG employed field visits as a primary method of field investigation.

The stage culminated in the holding of four parallel issue-**specific mini-consultations**, which brought together resource persons and stakeholders to clarify priorities and consider strategic options.

## Prioritization, negotiating strategies and decision-making

Once clarification of priority sub-issues was complete, WGs commenced on a process of issue analysis and considered policy and implementation options available. The purpose was to formulate strategies in which a common vision for the future could evolve. Unfamiliar with strategic planning, WG discussions often transgressed to project implementation. Nonetheless, an integral part of the process was the revision of central and local plans and strategies in order to ensure consistency with national priorities. Once WGs generated their respective strategies, an **Environmental Strategy Review Workshop** was held to review issues specific and environmental management strategies formulated by the WGs. The workshop singled out priorities and identified two more priority issues for which new WGs were formed, Human Development and Water Resources. In fact the WGs prepared a comprehensive Strategic Development Plan (SDP) which integrated the inter-linked issue-specific strategies and policy interventions into a single planning document. Had the SDP been adopted as a formal and official statement of the governorate's long term vision, this could have set the stage for reorienting the planning process in Ismailia. The SDP now requires updating and official endorsement in order for it to become Ismailia's sanctioned blue print for development into the century.

During all the previous phases, experiences of the University Professors (Suez Canal University and other Egyptian Universities) have been used, hence we can say that a cadre of National Experts who benefited from the experience was produced, the experience gained having started in the field. As a result those national experts moderated the Projects' Specification Working Sessions sufficiently.

## Projects identification and prioritization

SIP objectives targeted – in general – the building and supporting of an effective management system to undertake the tasks and responsibilities of sustainable growth and development of Ismailia City as a major goal. All processes, operations, activities, and sub-phases such as developing strategies, institutional

reform etc, have been formulated and attuned toward this major goal. The main objectives of SIP were to develop and produce a set of projects that target and respond to the immediate needs and priorities of development and environmental management of Ismailia.

A national consultant was hired to support the technical unit to achieve the following objectives:

- Identification of a set of projects as identified earlier in the environmental management strategy statements (project long list).
- Selection of priority projects with working groups (project short list).
- Conducting pre-appraisal studies for the short list projects and selection of minimum 3 projects for pre-feasibility study phase (PFP's).
- Preparation of pre-feasibility studies for selected projects including project development plans.

At the beginning, the projects were specified as ideas through the following long list:

### **LIST OF PROJECT IDEAS & PROGRAMS/ACTIVITIES** (PROPOSED BY WORKING GROUPS)

#### **1. Sustainable Industrial Development**

- Establishing an Industrial Waste Treatment Unit for Ismailia Industrial Zone.
- Establishing Organic Fertilizers Manufacturing Factory in Ismailia City
- Solid Waste and Sludge out of Sirabioum STP.

#### *Programmes*

1. Development of Agro-industries (Manufacturing, Preservation, Packaging, Distribution of Vegetables and Fruits)
2. Development of High-Tech Industries (Computers, Electronics, Communication Devices...)
3. Development of Agro-Machinery Industries.
4. Development of Small-Scale Industries.

#### **2. Sustainable Agricultural Development**

- Reclamation and Development of A New Land Area Depending Upon "REUSE" of Treated Sewage Water Out of Sirabium STP.
- Establishing A Research and Service Center for Development of Desert Agriculture (Research, Consultation, Seeds improvement, Biotechnology, Tissue Culture, Development of irrigation systems ...)
- Establishing A Plant Unit for Production of Quality Improved Seeds.
- Establishing A Factory for Production of Natural Silk Fibers (Silk Worm).
- Applying "Total Quality Management" System to Food Manufacturing Companies in Ismailia.

#### *Programmes*

1. Formulation and Development of An Experimental "Institutional Model" of "Irrigation Water Users Societies".
2. Formulation and Development of an Experimental Model of Recycling of Village Waste (Bio-gas-Manufacturing of Organic Fertilizers, Fodder).
3. Application of Quality Control Measures for Agricultural Export Products.
4. Integrated Development of Rural Women.



### **3. Sustainable Urban Development**

- Preparation of a Land Use Plan for Ismailia City and District. Including Building Code-Pattern and Architectural Conditions.
- Integrated and Economic Management of Ismailia City Solid Waste (Collection, Sorting, Recycling).
- Infrastructure Development in City Deprived Areas (Roads, Water, Sewage and Electricity Networks).
- Land Development for Urban Growth (Planning and Infrastructure Development).
- Preparation of a Comprehensive Study of “Informal Economy“ in Ismailia City and District.
- Upgrading a Deteriorated Area in Ismailia City.
- Establishing and Operating of Unit of an Urban-Physical Information System.

#### *Programmes*

1. Improving Environmental Sanitary and Health Conditions in Rural Areas.
2. Supporting Use of Solar Heaters.

### **3. Sustainable Development of Lake Timsah**

- Environment Treatment
- Dredging of Lake Timsah
- Dredging of the West Lagoon.
- Aeration / Circulation of West Lagoon.
- Environmental Prevention
- Disconnecting Sewers of Public, Industrial and Private Buildings from Disposal Line to Lake Timsah and reconnecting them to City Main Sewer Network.
- Increasing Capacity of Abou Attwa STP.
- Monitoring Control and Surveillance of Pollution Levels in El-Mahsama Drainage Canal.
- Establishing a Permanent Environmental Monitoring Unit of Lake Timsah.

#### *Tourism Development*

1. Updating “Tourism Development Study – 1977” Prepared by Clifford Calpin.
2. Establishing an International Conference Center on Lake Timsah.
3. Establishing an International Center for Marine Sporting on Lake Timsah.
4. Development of the West Lagoon as a Public Recreation Facility (Constructing a road, Beach Preparation, Service Building).
5. Development of “Canal Cruisers” Tourism in Lake Timsah and Suez Canal

#### *Programmes*

##### **Fishery Development**

1. Improving Fish Farming Techniques and Production Development.
2. Improving Fishing Techniques and Supporting Extension Services.
3. Supporting Social Services and Health Care Facilities in Fishermen Communities.
4. Development of Urban and Rural Areas Adjacent to Lake Timsah
5. Raising Citizens Environmental Awareness.
6. Support of Basic Services in Rural Area

The project hired a Consultant to support the Project Technical Unit setting criteria for comparison and prioritization of proposed projects. Hence, a group of Ismailia Community Representatives were invited to a meeting where the

following criteria were explained, and the specification of the priority projects began.

*Criteria and relative weights for comparison and prioritization of proposed projects*

<b>Criteria</b>	<b>Relative weights</b>	
<i>Environmental</i>	20	
1. To achieve net positive Environmental Impact in the short term		12
2. To achieve net positive Environmental Impact in the long term		8
<i>Economic</i>	26	
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)		8
5. To depend basically upon Ismailia comparative advantages		4
6. Less capital intensive and minimum initial investment		4
7. To enable improved capacity utilization of existing firms		2
<i>Social</i>	28	
8. To generate large volume of job opportunities direct and indirect		12
9. To allow for a large base of beneficiaries – direct and indirect		10
10. To target the most deprived social groups as the main beneficiaries		4
11. To positively contribute to social and cultural development		2
<i>Institutional and Organizational</i>	26	
12. To complete and supplement on-going projects and activities		4
13. To represent a successful experimental model for future dissemination and replication		2
14. To get consensus and acceptance of all – or most – stakeholders and interest groups		6
15. To contribute positively to institutional development and capacity building of both governmental and private institutions		4
16. It could be implemented by non-governmental sectors (private - cooperative – NGOs)		4
17. To have a high potential of a sustainable O&M (financial and operational)		2
18. To have a high likelihood for funding		2
19. General strategic evaluation		2
<b>TOTAL</b>	<b>100</b>	<b>100</b>

### **Utilization of the prioritisation process as a tool to mobilise beneficiaries and local communities for project implementation**

Mobilization of beneficiaries, stakeholders and local communities has been set from the beginning as an operational objective. Data and information collection, field surveys, closed and public meeting etc., have been all tailored to efficiently serve the operational objective of sensitization and mobilization of local bodies and resources toward project implementation. This case is well illustrated in the

projects of physical and social upgrading of deteriorated areas and reuse of treated wastewater of Sarabium STP.

## Project feasibility studies

The process of selection of PFPs from within the 9 projects included in the short list have taken into consideration a very wide and diverse scope of variables that relate - directly and indirectly - to SIP objectives. Major variables of this scope could be summarized as follows:

- High grade in the prioritization process
- High potentials of feasibility
- High potential of smooth and problem free implementation process
- High potential of rapid implementation
- Potential of being a successful model for environmental management
- Possibilities of achieving maximum possible tangible impact upon the local community through providing positive inputs and solutions to more than one sector
- Providing maximum interaction with the largest segment of population of local community
- Stimulating generation of other projects
- High potential of attraction of local and external funds
- Rehabilitation and replacement of Ismailia covered drain
- Establishing a sewage collection and disposal system for the village of Nefisha-Ismailia district.
- Reuse of treated wastewater of Sarabium sewage treatment plant.

The other two projects left for technical layout studies are:

- Restoration and preservation of Lake Timsah ecosystem-partial treatment of the inflow of El Mahsama drainage canal.
- Support of "Total Quality Management" systems application in food processing companies in Ismailia

This important session ended with the specification of the following list of nine priority projects:

- Integrated Solid Waste Management in Ismailia City.
- Industrial Waste Management in Ismailia Industrial Zone
- Physical and Social Upgrading of Kilo 2 Area – Ismailia District
- Physical and Social Upgrading of El-Bahtimy Area - Ismailia District
- Rehabilitation and Replacement of the Covered Drain in Ismailia
- Reuse of Treated Wastewater of Sarabium STP in Ismailia
- Establishing a Sewage Collection and Disposal System for The Village of Nefisha
- Preservation and Restoration of Lake Timsah Ecosystem
- Support of "Total Quality Management" Systems Application in Food Processing Companies in Ismailia

## Implementation instruments

The project has focused on training its staff as well as the beneficiaries from Ismailia for the purpose of capacity building and spreading the EPM concept. Moreover the project presents its services through The Sustainable Development

Center for Training and Capacity building to different sectors. We would like to highlight these programmes briefly.

## **Training and Capacity Building**

### **Leadership training**

SIGP, in cooperation with UNCHS (HABITAT) and the Social Fund For Development has prepared a training and capacity-building programme aiming at enhancing and promoting the organizational and technical capacities and capabilities of members of local, executive and popular councils, members of the private sector, and members of NGOs.

The target groups are members of local popular councils, executive council members, members of Sustainable Development Committees, NGO and CBO members, particularly women and youth. 22 training workshops have been conducted with a total number of 600 trainees. The governorate had identified the specific areas of capacity building to include urban settlements management, local leadership, income generation for youth and women, information generation and investment promotion.

### **Autocad training**

A lot of training in the field of “AutoCAD” and in drawing maps with data for development issues took place. The Technical Support Unit organized training sessions for members of governorates departments and they succeeded in completing these training courses.

### **GIS training courses**

The project held a training course on GIS. The trainees were trained on the following:

- Mapping and GIS system.
- How to deal with GIS system according to your needs.
- What are the main elements inside the GIS system?

The project held another training course on GIS. It was attended by employees from the following departments and directorates:

- Health Affairs Directorate
- Labor force Directorate
- Education Directorate
- Physical Planning Committee
- Production and Economic Affairs Department
- Investment Department
- Technology Valley
- El Quantra Sharek

The third training course on GIS was directed at Youth (University Students) and attended by 13 trainees. The course duration was five weeks.

## **Cooperation between the Sustainable Development Center for Training and Capacity building and the Egypt Environmental Initiatives Fund (EEIF)**

In March 2000 an agreement was signed between the Sustainable Development Center (SDC) and the Egypt Environmental Initiatives Fund (EEIF), in which the partners agreed that the Training Center will support the local NGOs which are financed by the fund, hold two workshops in Ismailia, monitor activities, provide technical support, present a monthly report on activities, outputs and problems and finally submit an evaluation for three of the projects.

## **Cooperation between the Sustainable Development Center for Training and Capacity building and the Egypt Environmental Affairs Agency**

A training course on EPM was conducted at the training center in cooperation with the Egyptian Environmental Affairs Agency in November 1999. 29 trainees from Environmental Directorates and managers from other Egyptian governorates were trained on Environmental Planning and Management.

## **Cooperation with the Arab Cities Organization**

Ismailia governorate has been a member of the Arab Cities Organization for some years now. The organization aims at the development of Arab Cities, through identifying the priority issues in the Arab states, and holding conferences and seminars, highlighting and trying to solve them in cooperation with different experiences invited. The cooperation between the organization and the governorate, through the Sustainable Development Center for Training and Capacity Building in the training programs was directed to Local Administrative and Local Leaders preparation. The governor appointed the project director as a "Connection Officer" .

## **Cooperation with Arab Cities Alliance Programme – World Bank**

We are going to initiate a project for Upgrading Informal Areas in Ismailia Governorate to the joint World Bank – UNCHS (Habitat) Cities Alliance Programme. The World Bank has accepted the proposal and it was included in their work plan. However they indicated that the approval is subject to confirmed World Bank interest and/or commitment of alternative sources.

Poverty alleviation specially in slum areas has the first priority in Ismailia governorate plans. Also the governorate will implement accordingly an upgrading project in El Halloos area in Ismailia city and Markaz as it is high on of Ismailia governorate priorities. Meanwhile Ismailia Governorate will contribute with the amount of 50000 US Dollars. We hope we will be in a position to implement these activities soon.

## **Implementing strategies**

The broad strategies conceived by the WGs acted as the necessary framework for agreeing on and initiating concrete actions and interventions. WGs began developing a long list of projects. Initially, some 36 project ideas were generated. Project prioritization criteria were then developed collectively by the WGs and each criterion was given an arbitrary weight. The criteria reflected key environmental, economic, social and institutional concerns. These criteria were used to prioritize the long list of projects. Nine projects were short-listed for

further development and implementation. Standard project data sheets were prepared for each of the priority projects. A number of projects were developed into pre-feasibility studies while others were developed into full-fledged project documents.

## **Mobilizing and effective use of resources**

Resource mobilization for priority projects proceeded along a number of axes. This included tapping resources from the Governorate's capital budget and requesting that projects be incorporated in future central budget cycles. Proceeds from land sales and cost sharing by the communities in slum areas to finance upgrading projects constituted important sources of funding. A Funding Consultation was also convened in an effort to solicit additional funding.

The Funding Consultation is of particular interest since it represented a new EPM related procedure introduced to the Governorate for the first time in 1996. The purpose of the Funding Consultation was to showcase the portfolio of priority projects with corresponding field visits organized to some of the proposed project sites.

The Funding Consultation was attended by a considerable number of national and bi-lateral funding agencies. However, because Upper Egypt represented a priority for the majority bi-lateral funding agencies at the time, Ismailia's project raised little or no interest. Nonetheless, the event created considerable publicity for SIP and opened avenues of dialogue with funding agencies.

Since then, a number of the priority projects have been funded via central and local resources. The covered drainage project received funds from a central tourism development fund. The solid waste management is expected to receive funds from the Social Fund for Development (SFD) while the restoration of Lake Timsah has been officially listed among priority state projects and has received a code number for consideration in the budget of the Governorate's current Five Year Development Plan.

The significance of small funds and kind contributions in project implementation deserves to be highlighted. For instance, an unused irrigation ditch in Kilo 2 area used as an open dumping site quickly became a public health menace due to rodents. Using private donations the ditch was filled. A citizen from the same area donated a piece of land (120 square meters) in order to build a new electricity booth. In El Bahtimi area, a citizen swapped his land for a similar lot elsewhere in order to facilitate the building of a sewage station for the local community.

## **Fast track projects**

Besides strategy led projects, SIP initiated a number of fast track actions. These are mostly short-term actions characterized by a sense of urgency. In all cases, the EPM process helped generate interest, popular and political support and facilitated the co-ordination among the key players involved. The transportation project for graduate youth, for example, helped solve the inadequacy of public transportation to the Industrial Zone and El Mostakbel City. Through the purchase of a fleet of minibuses with SFD funding, this project has created approximately 50 permanent jobs.

Another fast track action initiated by SIP was a study proposing the relocation and establishment of a new wholesale market. Previously, the market was located in the busy center of the City of Ismailia, creating traffic congestion and

environmental problems owing to inadequate solid waste disposal systems. Intensive efforts by SIP have resulted in the relocation of the market to a new site and the establishment of a new private managing and owning company, the Ismailia Company for Wholesale Markets.

Apart from these two major fast track actions, a number of demonstration-type projects have also been initiated. These include periodic dredging and cleaning up Lake Timsah and Suez Canal Authority allocated 50 million Egyptian pounds for cleaning the lake.

## Lessons learned

Preparation and studying the Environmental Profile (EP) is essential to set up strategies and priorities as well as clarification of issues. But to make the EP a more reliable and credible source of information, the data from different sources should be cross-checked and continuously updated. This requires establishing an official technical unit comprising experts and technicians able to obtain data and statistics from original or primary sources, analyze them and extract information and conclusions in this respect. The Sustainable Committees at the markaz level should be sustainable and supported financially and technically.

Participation causes institutional transformation: Inviting the representatives of different interest groups in Ismailia to participate in the different events (City Consultation, Working Group meetings, mini consultations, Strategy Consultation, and fund raising) has persuaded these institutions to adopt EPM as a process for Urban Planning and Management.

When SIP shifted gears towards strategic projects' identification and development, the participation of end users was important, suggesting the importance of inviting NGOs and CBOs to participate in the process. The establishment of the Society for Development and Environment was in response to this need. Also, establishing this NGO made it easier to mobilize resources for project implementation by approaching donor agencies interested in financing NGOs.

The mechanism of Working Groups which brings together all stakeholders, actors and popular representatives and is characterized by broad presentation and flexibility, is considered the backbone of the EPM process, the key objective of the project at all levels. Working Groups fulfill the coordination and completion among the different sections at the desired level. Also Working Groups are capable of dealing with complex problems which include a variety of different interests (such as the pollution of Lake Timsah). Moreover, exchange of information between Working Group members helps to clarify problems, provide fruitful and focused discussions which turn results to actual working plans, identifying the responsibilities and roles of different parties (The cover drain case).

On the other hand, this system is temporary and it requires a search for other ways for its continuity. Also some stakeholders may not be willing to cooperate or share information and some of them may not always be able to attend the group meetings. Therefore, the careful selection of stakeholders and the explanation of the EPM process to them should be given considerable attention. Also, because WGs are heterogeneous with varying capacity knowledge among the members, facilitators could assist in explaining some tools like brainstorming, problem

analysis, and negotiation, etc. The incentives for WG members should be connected to inputs rather than attendance.

- EPM promotes information sharing: the EPM process stimulated local players representing different interests to share information. Preparing the environmental profile and disseminating it along local actors, circulating research results among interested parties and discussing specific issues in working groups made sharing information easy. EPM process emerged as a mechanism that is *sine qua non* for existing development arrangements to be effective.
- EPM process and strategic planning produce projects with vital importance to all sectors resulting in an integrated development which in turn encourages the community to apply all its sources and facilities to implement the projects. In this respect, the project team should always keep a portfolio of project ideas ready in case unexpected funding opportunities arise. Also, fast track actions and demonstration projects should receive utmost publicity and media coverage.
- EPM processes build technical capacities, SIP had had close functional relations with the governorate and its different departments and committees. Members of the Technical Support Unit (TSU) of SIP gained experience in cross-sectoral coordination, and generating and using information. These members will constitute a resource for SIP II by acting as technical support for the EPM introduction in the remaining four markaz. Furthermore the intensive and productive involvement by representatives of the interested parties (known as stakeholders under SIP) in the working group activities had also deepened the commitment to the EPM institutional set-ups.
- The EPM process enabled development partners to prioritize and develop fundable strategic programmes and projects: Participation of interested parties in decision making resulted in discussing ideas, investing time and effort in technical inputs, and mobilizing resources for implementation. Participants learned to discuss, debate and resolve issues. Further, installing and training on a GIS system has built the capacity of joiner planners to adopt advanced technologies in decision making.
- Capacity building and enhancing capabilities of the local stakeholders and different partners is the only guarantee for the continuity and development of the EPM process in both executive and elected councils and other partners from private sector, NGOs and CBOs. In particular, the local governmental organizations should be given the utmost attention in this respect to realize the participation of all partners in the sustainable development and growth of the community.
- The NGO and CBO members in the governorate as well as in the entire country need intensive training and informative programs to effectively fulfill their participatory role in the process of environmental planning and sustainable development beside their classical social roles

## National and international support to SIP and SIGP

- In Ismailia, the administrative and funding support from UNDP and the technical and substantive support from UNCHS appear generally to have operated smoothly and effectively, to the significant benefit of the project. The



SIP and the SIGP have also received timely and beneficial support from the UNDP program officers assigned to the Project.

The UNDP has been the principal support to the activities in Ismailia, providing three quarters of total funding for the original SIP (SIP-1) and over 37% of the funding for the SIGP (SIP-II). Taking all Project activities together, UNDP has provided 85% of the external finance. Danida-UNCHS fund, however, played a strategic role in providing particular key inputs – and in helping to “bridge” between SIP and SIGP (SIP-II). Emphasis should also be given to the very substantial contributions from the Governorate and the Social Fund – a clear sign of the commitment of the Egyptian partners to the EPM/SCP process. An overview of funding is given in the table below.

<b>Funding source</b>	<b>Formulation &amp; Development (1991-1992)</b>	<b>SIP Implementation (1992-1997)</b>	<b>SIGP (SIP-II) Implementation (1997-2000)</b>	<b>Total</b>
Danida – UNCHS	-	\$ 21,000**	-	\$ 210,000
UNCHS-other	\$ 30,000	-	-	\$ 30,000
UNDP	-	\$ 780,000	\$ 1,053,000	\$ 1,833,000
Governorate		\$ 60,000	\$ 1,245,000	\$ 1,305,000
Government of Egypt		-	\$ 530,000	\$ 530,000
<b>Total</b>	<b>\$ 30,000</b>	<b>\$ 1,050,000</b>	<b>\$ 2,828,000</b>	<b>\$3,908,000</b>

Danida funding for the Sustainable Ismailia Project came in the period 1994-1997 and was used to support particular aspects of SIP implementation: development of EMIS capabilities, provision of additional expertise for the Issue Working Groups including support for project development, monitoring and project management support, and the provision of an EPM expert as U.N. Volunteer. This support reinforced the SIP in critical areas in which the existing project resources were insufficient and was particularly valued by project management and local partners.

Although the total amount of Danida funds committed (\$ 210,00) is relatively small in relation to the total amount of funding provided for SIP, it did come at a particularly crucial time. It both supported the preparatory work leading to the Governorate-wide Project (SIGP) and helped to “bridge” between the SIP and the follow-up Project. Thus it can be said that the use of Danida funds was particularly strategic, both in terms of successfully completing SIP – and enabling replication in the wider Governorate (through the SIGP).

# Philippines, three cities - Setting up a national EPM replication system derived from the experiences of the demonstration cities

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## 1.0 Overview

The Local Environmental Planning and Management Project in the Philippines has recently completed Phase 1 of the SCP-EPM process. A couple of experiential-papers like the Techniques on Stakeholders Participation and the Synthesis on the Philippines EPM experience contain the insights and lessons in the EPM practice of Lipa, Tagbilaran and Cagayan De Oro demonstration cities. A parallel study to establish a National Support Program on Environmental Planning and Management (NSP on EPM) is being packaged with the end goal of leading a national replication process. However, it must be noted that there is still limited experience on the EPM process to date, so that it is not easy to forecast a national replication design, and be absolute on its content and direction. In this regard, the presentation herein must be viewed as an attempt to put cohesive thought on a replication process. In the main, the task of defining national replication was evolved from the experiences of the demonstration cities and some information from the replication cities which were recipients of EPM-related projects, some known experiences of cities worldwide under the SCP-EPM framework, and from the knowledge stock of the DENR.

Since September 1999, the Local EPM Project conducted activities that signalled the national replication of the EPM process.

### (a) City sharing

A mainstay activity of the League of Cities in the Philippines (LCP) which was adapted by the Project as part of a replication scheme is the city sharing. So far, it held two city sharing sessions. The 23<sup>rd</sup> city sharing which covered subject matter other than the EPM process, introduced the EPM experience of the demonstration cities to the city members of the League for the first time. The sharing of the demonstration cities tackled the then tail-end activities of Phase 1 of the EPM process. A few ESAs/ESPs presented their EPM work.

In hindsight, the Project Coordination and Management Unit (PMCU) argued that city sharing solely focused on the EPM project experience is necessary to balance the appreciation of the replication cities on the EPM process. It was further stressed that such a sharing should be held with some clear indication from the demonstration cities on which of the experience will be worth considering during the replication process. Unlike the previous activity, the 24<sup>th</sup> city sharing was designed to elevate the status of the demonstration cities as EPM resource cities to be tapped along with a couple of the more advance cities because they have been implementing EPM projects, but which were selected as replication cities in 1998. Greater interaction between the demonstration and replication cities, ESAs/ESPs, LCP and DENR was expected from the activity. Butuan City, a replication city of the Caraga Region hosted the affair held last August 15-18, 2000. Apart from the three demonstration cities, 11 replication cities, two representatives from ESPs and three city mayors participated in the activity.

The substantive papers presented in the 3-day city sharing are listed as follows:

<b>Day</b>	<b>Contributed paper/reports</b>	<b>Presenter</b>
1	EPM views from the Provincial Governor of Agusan Del Sur	Governor Valentina Plaza
1	EPM views from the Mayor of the host city	Mayor Democrito Plaza II
1	The challenges to harmonizing national-local operations for EPM: Perspectives from the DENR	DENR Undersecretary Mario S. Roño (paper read by Assistant Secretary M. Albano)
1	The challenges to building local capacities for EPM: Perspectives from the UNDP	(nr)
1	Overview of the city sharing activity	(activity design)
2	Adapting the SCP-EPM process framework: Philippine setting	Project Director Nestor Venturillo
2	EPM: A converging point in Lipa City development	Deputy Project Manager Ernesto Reyes
2	Bridging the gaps in Cagayan De Oro City	City Planning and Development Office Coordinator E. Abejuela/EPM Specialist Julius Bona
2	Capturing the Local-EPM experience: The Tagbilaran way	Mayor Jose Toralba/EPM Project Manager Valentino Gamutin
3	Small group workshop reports on EPM activities in cities	Mindanao group, Luzon group, Visayas group
3	A National Support Program on EPM	DENR-FASPO Division Chief W. Obien
3	Clean City Center/CDS Experience	Consultant Elisea Gozun
3	Developing the Philippines EPM toolkit	National Technical Adviser Noel C. Duhaylungsod
3	LCP and EPM work of cities	Executive Director Gil Cruz

### **(b) PMCU-LCP discussions on up-scaling the EPM project experience**

The up-scaling of the Local EPM Project outputs could be approached in two ways, i.e., (1) that the LCP develops an EPM project proposal focused on networking League member cities for EPM work, but shall consider the NSP on EPM concept as baseline framework, and (2) the DENR to transform the NSP on EPM concept into a “Project Document on Institutionalising the Philippines E(+NR)PM Process in Local Government Units”, and shall be governed by the principle of co-managing the ENR sector. Such a perspective will enhance the pace of devolving the ENR functions to the LGUs. Presently, the LCP is considering the Clean City Center as a conduit for coordinated EPM activities while the DENR is thinking of re-configuring the Local EPM Project as the core of the NSP on EPM.

### **(c) Exploring with ESAs/ESPs and other development agencies**

The Local EPM Project facilitated the joint undertaking between Japan International Cooperation Agency (JICA) and the Metropolitan Manila Development Authority (MMDA) on “Community Solid Waste Recycling System” by anchoring the formulation of the Project document. This is a three-year project

to be administered by the Solid Waste Task Force of the MMDA with cooperation from the Local EPM Project and 10 municipalities within Metro Manila. JICA, on the one hand shall provide technical expertise to the MMDA in a continuing support, while the three demonstration cities will receive technical assistance on solid waste management from the MMDA.

Other ESPs such as the USAID-GOLD and a couple of consulting corporations participated in a discussion on the need to put together capability building efforts for the benefit of the cities. EPM tools were volunteered as potentials for the preparation of the Philippines EPM toolkit. Similar connections were conducted with the Development Academy of the Philippines (DAP), Australian Assistance for International Development (AUSAID), Asian Institute of Management (AIM), and the Canadian International Agency for Development (CIDA).

As regards the World Bank-City Development Strategy Program (WB-CDS), a joint proposal has been considered for City Alliance funding. Four of the seven cities covered by the CDS program together with the existing Local EPM cities will be examined as points of joint undertaking between the Local EPM Project and the CDS program, particularly in implementing EPM projects at the city level.

At the UNDP, the concept of re-aligning the Local EPM Project as a platform project after December 2000 was tabled as a possibility. However, this idea has yet to be written, although the PMCU has already opened the discussion among different stakeholders including the demonstration cities. A large part of the concept will more likely cover the national replication of the EPM process and the up-scaling of the present efforts of the demonstration cities.

#### **(d) National Support Program on EPM**

A precursor study has just been concluded and it proposed a national replication scheme hastened by a national program located at DENR. However, the idea still needs to be further defined, but excellent promise is being shown in the arguments (see section 4.0).

## **2.0 Participating EPM cities**

It was understood from the outset that the demonstration cities shall provide the local experience as basis in replicating the EPM process in cities which have been earlier selected and listed in the Project Document. Moreover, as soon as the demonstration cities shall have completed Phase 1 of the EPM process and are commencing Phase 2, the replication cities will be engaged for Phase 1. Therefore, the lessons as well EPM instrumentations evolved by the demonstration cities will be instructive for the replication cities. As earlier stated, two reflection studies will provide the empirical evidence for EPM replication.

About 18 cities were selected as EPM participants, with the cities of Lipa, Tagbilaran and Cagayan De Oro representing the Philippines major islands of Luzon, Visayas and Mindanao, respectively, to serve as demonstration cities. Figure 1 shows the relative archipelagic spread of the participating cities. While there was conscientious effort in selecting the cities, a large part of the final decision was based on the willingness of the key city government executives to integrate the EPM process into their bureaucracy. The selection criteria for the participating cities included two sets, the first being the general criteria to determine the long list of probable EPM participating cities and the second is the set which selected the three demonstration cities.

## (a) General criteria

### **Political Commitment (weight = 40%)**

- Number of ordinances passed and being implemented in relation to environmental protection (10%)
- Presence of environmentally-related projects being implemented or for implementation (participation with different stakeholders) (10%)
- Willingness to pass resolutions in support of the Local-EPM Project (10%)
- Mechanism for sustaining environmental projects (councils, etc.) (10%)

### **Resource and Input Commitment (30%)**

- Percentage of indicative budget willing to commit to the project (10%)
- Availability of staff to be assigned in the EPM Unit to be created (10%)
- Availability of office space and support facilities (e.g. communication and transportation) (10%)

### **LGU Staff Capabilities to be assigned in the EPM/ENRO unit (20%)**

- Educational Background of the staff (10%)
- Nature of appointment (5%)
  - (i) Permanent (5%)
  - (ii) Casual/Contractual (3%)
- Environment-related training hours (for 3 years) attended (5%)

### **Absorption Capacity (10%)**

- Financial aspect/ability to generate funds for Local-EPM (7%)
- Staff complementation (3%)
  - (i) Full-time Participation (3%)
  - (ii) Part-time (1%)

## (b) Criteria for selecting the EPM demonstration cities

### **Political commitment (weight = 40%)**

- Number of ordinances passed (10%)
- Presence of locally initiated environment project being implemented and for implementation (10%)
- Resolutions authorizing the Mayor (10%)
- Mechanisms for sustaining environment projects (10%)

### **Resource and Input Commitment (30%)**

- Percentage of indicative budget willing to commit to the project (5%)
- Percentage of budget allocated to the CPDO against the total for the last 3 years (5%)
- LGU Staff Capability (15%)
  - (i) Number of staff to be assigned in the EPM Unit (3%)
    - One-three (2%)
    - Four & above (3%)
  - (ii) Educational background (5%)
  - (iii) Nature of appointment ( 2%)
    - Casual/contractual (1%)
    - Permanent (2%)
  - (iv) Nature of assignment (2%)

- Part-time (1%)
- Full-time (2%)
- Environment related training hours, 3 years (3%)
  - (i) One (1%)
  - (ii) Two – four (2%)
  - (iii) Five & above (3%)
- Availability of office space and support facilities (5%)

**Absorption Capacity (30%)**

- Financial aspect (ability to generate funds for Local-EPM) (10%)
- FASPS currently implemented (10%)
  - (i) Five & above (3%)
  - (ii) Three – four (6%)
  - (iii) Zero – two (10%)
- Status of CLUP updating (10%)
  - (i) On-going (5%)
    - Data gathering (2%)
    - Data analysis (3%)
    - Plan drafting (5%)
  - (ii) Completed and for public hearing (7%)
  - (iii) Completed and for review by RLUC (10%)

Perhaps, for lack of initial information at the Project start up, the selection criteria did not sufficiently emphasise other city characteristics such as the level of participation of the NGOs, Peoples’ Organizations, academe and business in city environmental planning and management. In this regard, the current study on the techniques of stakeholders’ participation in Phase 1 activities concludes that the substantive variations in experiences between the demonstration cities are attributable to the intensity of the stakeholders’ role playing in the process.

Table I shows a comparative description of the participating EPM cities, with the demonstration cities as having been fully described in their respective environmental profiles. The classification based on income (by Department of Finance) lists three cities as third class and the rest as first class cities, although between Cavite (3<sup>rd</sup>) and Dagupan (1<sup>st</sup>) cities, the income difference is approximately 810,000 US dollars only. Indeed, there was the intention of covering the range of cities nationwide, although the set of criteria placed greater emphasis on characteristics which were believed to increase the possibility of Project success. “Prototypable” city characteristics were missed out, however. In fact, as the Project is finalizing the synthesis of Phase 1, the need to prototype the demonstration cities’ experience has surfaced as a major point for consideration in the replication work.

Table 1: Comparative characteristics of the EPM participating cities.

DEMO CITIES	GEOGRAPHICAL LOCATION LEGAL BASIS and ETHNIC ORIGIN	L. AREA (Sq. Kms.)	POP (1995)	IRA (CY2000)	Classification	
					DOF	DILG
LIPA	Located in Batangas Province, 87 kms from Manila. Chartered on June 20, 1947 by R.A. No. 165 Ethnic Origin: Tagalog	209.40	177,894	256,562,599	First	HUC
TAGBILARAN	Located in south-western coast of Bohol Island. Chartered on June 18, 1966 by R.A. No. 4660 Ethnic Origin: Boholano	36.50	66,683	139,705,575	Third	HUC
CAGAYAN DE ORO	Located in Misamis Oriental. Originally part of the Kingdom of Sultan Kudarat, its early settlers were of Malayan origin. Chartered on June 18, 1966 by R.A. No. 4663 Ethnic Origin: Mixed migrants from Luzon, Visayas & Mindanao	412.80	428,314	489,153,826	First	HUC
<b>REPLICATION CITIES</b>						
ANGELES	Located in Pampanga Province, less than 2 hrs. drive from Manila. Chartered on June 22, 1963 by R.A. No. 3700 Ethnic Origin: Pampangeño/ Negrito Settlers	60.27	234,011	265,498,108	First	HUC
BAGUIO	Located among the mountains and hills of Benguet, about 250 kms north of Manila, with an elevation of 4,500 to 5,500 feet. City was created on September 1, 1909 by Act No. 1963. Ethnic Origin: Igorot	57.51	226,883	249,311,806	First	HUC
BATANGAS	Located along Batangas Bay. Chartered on June 10, 1969 by R.A. No. 5495. Ethnic Origin: Tagalog	282.96	211,879	299,483,364	First	CC
CAVITE	Located 34 kms southwest of Manila. Chartered on May 26, 1940 by C. A. No. 547. Ethnic Origin: Tagalog	10.89	92,641	147,146,245	Third	CC
<b>DEMO CITIES</b>						
DEMO CITIES	GEOGRAPHICAL LOCATION LEGAL BASIS and ETHNIC ORIGIN	L. AREA (Sq. Kms.)	POP (1995)	IRA (CY2000)	Classification	
					DOF	DILG
CABANATUAN	Lies in the center of Nueva Ecija Province. Chartered on June 16, 1950 by R. A. No. 526, it officially functioned as a city on July 24, 1950. Ethnic Origin: Tagalog, Pampangeño	282.75	201,033	298,884,521	First	CC
DAGUPAN	Located in the Province of Pangasinan. Ethnic Origin: Pangasinense	37.23	126,214	177,984,721	First	CC
LUCENA	Located on the southern part of Quezon Province. Chartered on June 17, 1961 by R. A. No. 3271. Ethnic Origin: Tagalog	80.21	177,750	222,831,320	First	HUC
NAGA	Located in the Province of Camarines Sur. Chartered on 18 June 1948 by R. A. No. 305. Ethnic Origin: Bicolano	84.48	126,972	194,204,034	First	ICC
PUERTO PRINCESA	Located at the edge of Honda Bay, on the eastern coast of Central Palawan. Considered as the largest city in the Philippines, also with the largest forest cover. Chartered on June 21, 1969 by R. A. No. 5906, it was inaugurated on January 1, 1970. Ethnic Origin: Mix migrants from Luzon, Visayas & Mindanao	2,381.02	129,577	809,425,324	First	CC
TAGAYTAY	Located on a highly elevated land in the Province of Cavite. Chartered on June 21, 1938 by C. A. No. 338. Ethnic Origin: Tagalog	40.24	29,419	111,861,690	Third	CC

BACOLOD	Situated on the northwestern part of Negros Occidental. Chartered on June 18, 1938 by C. A. No. 326 Ethnic Origin: Ilonggo	162.67	402,345	393,005,533	First	HUC
ILOILO	Located in Panay island. Established the City of Iloilo in 1937. Ethnic Origin: Ilonggo	41.94	334,539	318,454,790	First	HUC
ORMOC	Located in the province of Leyte. Chartered on June 21, 1947 by R. A. No. 179. The law, however took effect only on October 20, 1947 by virtue of Proclamation No. 42. Ethnic Origin: Cebuano	613.60	144,003	345,305,749	First	ICC
TACLOBAN	Tacloban is located in the northeastern part of Leyte and in the southern side of San Juanico Strait. Chartered on June 20, 1952 by R. A. No. 460, as amended by R. A. No. 3068 in 1961. Ethnic Origin: Samarino	201.72	167,310	256,809,804	First	HUC
<b>DEMO CITIES</b>	<b>GEOGRAPHICAL LOCATION LEGAL BASIS and ETHNIC ORIGIN</b>	<b>L. AREA (Sq. Kms.)</b>	<b>POP (1995)</b>	<b>IRA (CY2000)</b>	<b>Classification</b>	
					<b>DOF</b>	<b>DILG</b>
01. BUTUAN	Butuan lies on the broad coastal plains of Northern Mindanao, at the mouth of the Rio Grande de Agusan. Chartered on August 2, 1950 by R. A. No. 523. Ethnic Origin: Mix migrants from Luzon, Visayas & Mindanao	816.62	247,074	474,582,007	First	HUC
02. ILIGAN	Located in its flat coastal plains. Chartered on June 16, 1950 by R. A. No. 525. Ethnic Origin: Mix migrants from Luzon, Visayas & Mindanao	813.37	273,004	488,771,911	First	HUC
03. SURIGAO	Located in the northernmost tip of Surigao del Norte. Chartered on August 31, 1970 by R. A. No. 6134. Ethnic Origin: Mix migrants from Luzon, Visayas & Mindanao	245.30	104,909	218,420,479	First	HUC
04. ZAMBOAN GA	Located at the southern tip of Zamboanga Peninsula. Chartered on October 12, 1936 by C. A. No. 39. Ethnic Origin: Mix migrants from Luzon, Visayas & Mindanao	1,414.70	511,139	816,016,499	First	HUC

**NOTES:**

1. Population figures are based on the 1995 mid-decade census, which is officially used to determine IRA shares by population.
2. Land area figures are based on the 1998 level, per Oversight Committee on Devolution Resolution No. OCD-1999-001
3. IRA figures are based on the regular IRA Shares of LGUs for CY2000. They do not factor in the P10-Billion unprogrammed IRA and the shares of LGUs from the P5-Billion Local Government Service Equalization Fund (LGSEF). Refer to Annex "A" for share of the EPM cities from the LGSEF; and to Annex "B" for estimated shares of cities from the unprogrammed funds.
4. DOF classification is as of 1 July 1996. It is based on the average income of LGUs during the last three years prior. Classification is made once every three years.
5. DILG classification is in accordance with the political relationship between one LGU level and the higher level, in this case, between the city and the province. HUC = Highly Urbanized City; ICC = Independent Component City; and CC = Component City. [E.g., HUCs and ICCs do not participate in election of provincial officials].



### 3.0 Institutional framework

Figure 2 suggests a conceptual connection of EPM efforts of players within the agreed policy on conservation and development of the environment and natural resources as extensively espoused in the Philippine Agenda 21 and other national pronouncements. It may be assumed that the EPM process will be nationalised once integration of work among the groups are attained, and more so if the EPM functions become organic tasks of the city organisations. At the national level, the key players are the LCP, DILG and select ESAs/ESPs which are undertaking processes very similar to the SCP-EPM framework. The DENR, as a national development agency has an added advantage of having sets of regional and community-level offices which possess the technical expertise to assist the cities. Similarly, the DILG has regional and community groups, although not as developed. Meanwhile, the LCP as a quasi-governmental body is less bureaucratic and has the benefit of speedier coordination.

Within an orchestrated EPM program, the general roles of the national players may be defined according to their respective mandates and expertise.

**DILG** – Support bureaus and institutes like the Local Government Academy and the Bureau of Local Government Services are tasked to provide capability building assistance to the LGUs. In fact, periodic training and educational visits on a wide range of topics on local governance are conducted by these groups solely for the LGUs. To this end, the capability building modules produced by the Local EPM Project must find their use through the DILG network. In this way, every LGU in the country will be served.

**LCP** – The natural coordinating role of the League could effectively network the cities in the EPM process. Its city sharing activities and other member-gathering schema may well be the avenue for exchange of EPM knowledge and skills.

**ESAs/ESPs** – Support may be sourced from both local and international groups. For example, the Development Academy of the Philippines could enhance the EPM capabilities of LGU officers by integrating the EPM capability building modules in the required courses for government executives. EPM-related projects from the WB-CDS, CIDA-Local Government Support Program, AUSAID-Local Governance Program, and others could be tapped to assist the present demonstration and replication cities under the Local EPM Project. Support could come in the form of sharing information, knowledge management, tools, funds, referrals and TA.

**DENR** – Since the proposed National Support Program on EPM will be lodged in this agency, it is important that an organic structure on EPM is established at the most strategic level of the department's hierarchy. Drawing from the agency's traditional strength and the duly instituted mandate, the DENR through the NSP could serve as the "clearing house/screening/selection/conduit facility" for EPM projects. Moreover, the program can be seen as the policy forum for EPM matters.

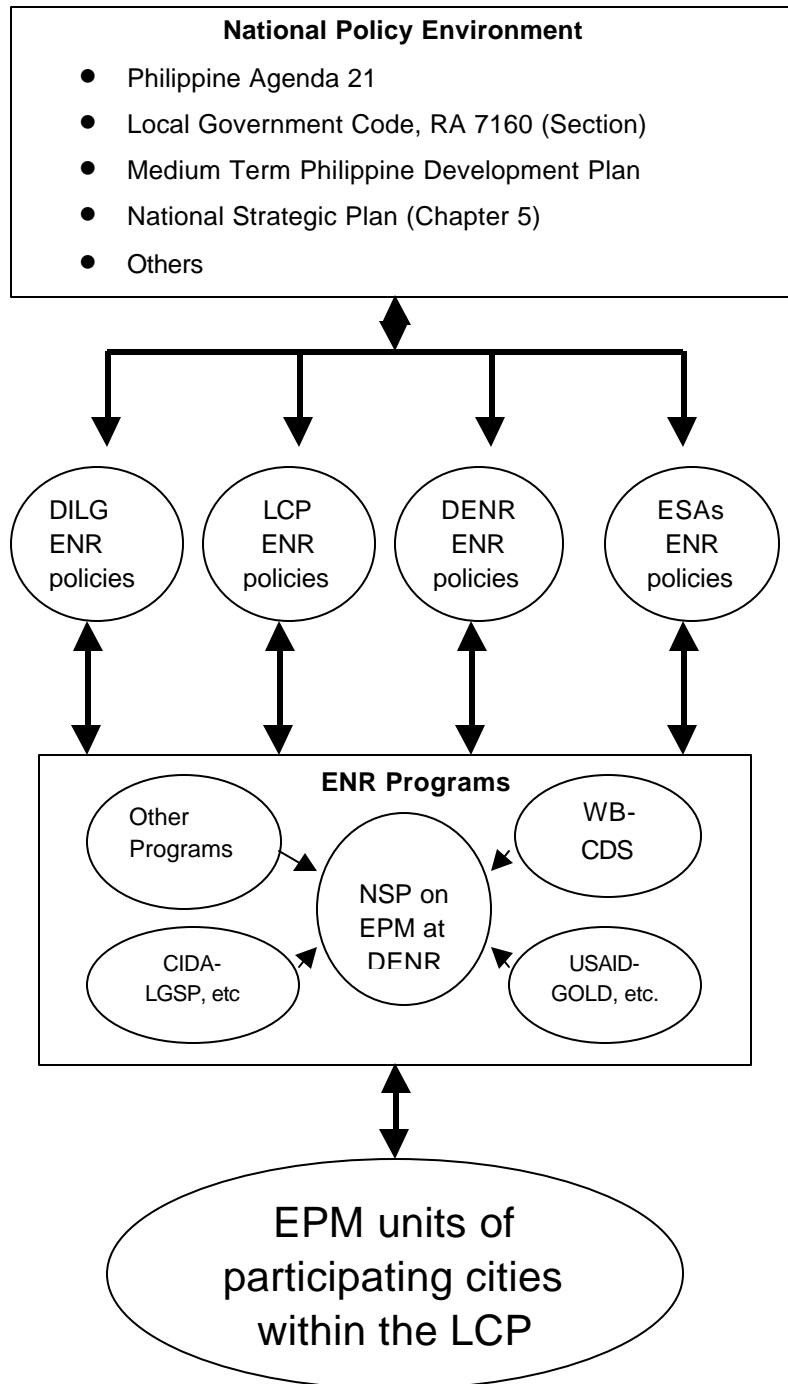


Figure 2: Key players in a national replication of the EPM process

However, a strategic national replication of the EPM process is hinged on the institutionalization of the EPM process in the city organizations. This is to say that nothing less than having an integral EPM unit in the city organization which will consistently champion the EPM process will result in a national effort. The SCP-EPM process framework articulates the necessity for the requisite political authority from the Chief Executive and the city council in locating and/or establishing that unit so that support is ensured. In this connection, a conscious undertaking of the Local EPM Project from its start up activities until the present was to locate the EPM unit within the demonstration city organization. This unit will take on the task after the project has terminated. The cities of Lipa, Tagbilaran and Cagayan De Oro have differentially situated their unit in the city structure but with the projected preference for locating it within the City Environment and Natural Resources Office (City ENRO), as the opportune time comes. It is hoped that the replication cities shall likewise move towards this line of institutionalizing the EPM process even during the inception stage.

### **ENR governance policy**

Basically, the legal basis in setting up a City ENRO/EPM Unit in the city organization is the Local Government Code of 1991 (LGC). In the law, the city organization has the authority to establish structures and mechanisms within their governmental jurisdiction, provided that these shall enhance the disposition of services to their constituencies, and are consistent with existing laws of LGU governance. The LGC, however, has kept an open-ended position regarding the creation of the City ENRO, that is, if the city government finds it imperative to have the office, then it may opt to do so. Such power thus places the decision making in establishing a City ENRO as entirely a local matter. A subsequent DENR Administrative Order 90-32 further clarifies the requirements for devolving the ENR functions to the cities within the principle of co-management. In effect, it has encouraged greater participation of stakeholders in the governance of the ENR sector, and has identified planning and management as planes of participation.

Both laws outline the overriding ENR state policy of the inseparability of the environment and natural resources, and have collectively taken these as an integral sector of city development. Therefore, an EPM unit in all intent and purposes shall be one and the same as the ENR unit of the city. From a Philippines perspective, the E(+NR) planning has to be connected with the general prescriptions of the Comprehensive Land Use Plan of the city. Furthermore, the E(+NR) development planning must cover the entire sector, so that it is contributed as the sectoral plan of the Comprehensive Development Plan (CDP) of the city.

In other words, the City ENRO as a department of the city organization will be the focal unit for EPM functions, but should constantly strive to increase the pace of the devolution of ENR functions as designed by the DAO 90-32. It will be difficult for a city without an ENR unit since a number of national laws need to be localized, such as the Clean Air Act of 1999, advocacy for the proposed Integrated Solid Waste Management Act, and compliance monitoring of the Environmental Impact Statement System (DAO 96-37) and the Programmatic EIS (DAO 2000-05). Additionally, local ENR laws and policies must be implemented.

## Development themes

Usually, development programs fit well with the MTPDP as the macro framework and the city CDP as the local reference, but the correspondence may not be true all the time. In effect, the choice of projects by the City ENRO will have to consider these “mother plans”. There should be no problem with the juxtapositioning if the plans are recognized from the start up activities of the EPM process. In any case, the general development calls for poverty alleviation, people empowerment, equity, gender development, and conservation and development of the ENR have been substantially addressed by the demonstration cities. In a sense, this neatly fitting of development themes concludes that the EPM process as practiced by Lipa, Tagbilaran and Cagayan De Oro is sustainable.

All demonstration EPM projects of the cities respond to the need to mitigate environmental problems like solid waste even as these also attempt to alleviate poverty through optimal stakeholders’ participation. Indeed, the nexus of environment-population-poverty could be seen from the kind of conceptualization of these demonstration projects. This type of EPM project identification should be encouraged during replication.

## 4.0 A National Support Program on Environmental Planning and Management

### Feature of the Program

The most logical organizations to lead the NSP on EPM are the DENR and the DILG-LCP, essentially because these agencies are mandated to plan and manage the ENR sector as in the case of the DENR, and to coordinate cities as for the DILG-LCP. Currently, the study on the definition of the NSP on EPM is being packaged, so that the succeeding discussions are extracts of the document, and from related reports and discussion papers. The points herein, are in general agreement with the policy on environmental planning and management.

The NSP on EPM is an enhanced capability and facility that the city could avail for technical assistance. In other words, the NSP on EPM shall provide advisories to the cities primarily on a demand-driven response system. As a platform for EPM efforts, the program will serve as a gravitating point for EPM policy formulation, tools and skills development, and even for EPM paradigm reflection akin to knowledge management. On strategic matters, the program will be proactive by setting up anticipatory measures against harmful impacts of perturbations. It is proposed further that the Program’s main role shall be to assist the cities in implementing the devolved ENR functions as provided for by law, as well as to provide technical assistance in building the capabilities of cities on E(+NR)PM.

The Program may be viewed as an SD initiative, particularly directed for the localization of the Philippine Agenda 21 in the cities. Under a co-management scheme, the NSP on EPM will open the planning and management functions of the ENR sector to optimal participation by the stakeholders. Since there will be more players than the usual ENR staff, the program approach will be systematized to avoid delays in policy and project implementation. To this end, the experience of the demonstration cities has argued for the grouping of the participants by ecosystem issues.

At the moment, the DENR has available expertise on ENR planning and management. Additionally, it has expert knowledge and skills on sustainable development concepts, tools and instruments. Also, the department is a repository of environment and natural resources policies.

- Forest ecosystem (including urban forestry and green space) management
- Rehabilitation of mined out and deposition areas; regulating, monitoring and evaluating mining operations
- Protected Areas management
- Land Survey and Mapping
- Environmental planning and management

The LCP, on the one hand is a national organisation which has become the main avenue for sharing of experiences among cities. National positions are sometimes evolved from joint conferences and workshops, from which policies emanate. The League is active in policy advocacy.

## **Organizing the NSP on EPM**

As proposed by the commissioned study, the National Support Program on Environmental Planning and Management will be lodged in the Office of the Local Government Affairs (OLGA) of the Undersecretary on International Commitments and Local Government Affairs. The program shall be administered by the Assistant Secretary for Local Government Affairs. This proposed location of the program is seriously being considered by the DENR administration. A Multi-partite Advisory Committee will be co-chaired by the DILG and DENR with representatives from the LCP, National Economic Development Authority and selected ESA/ESPs serving as members of the council. Focal EPM officers from the DENR field offices and the LCP will be charged with coordinating development assistance coming from the NSP and other programs and projects (Figure 3).

In the main, the NSP on EPM is a capability building program with the end goal of producing cities which are knowledgeable, well equipped and networked among each other and with other E(+NR)PM developmental groups and institutions.

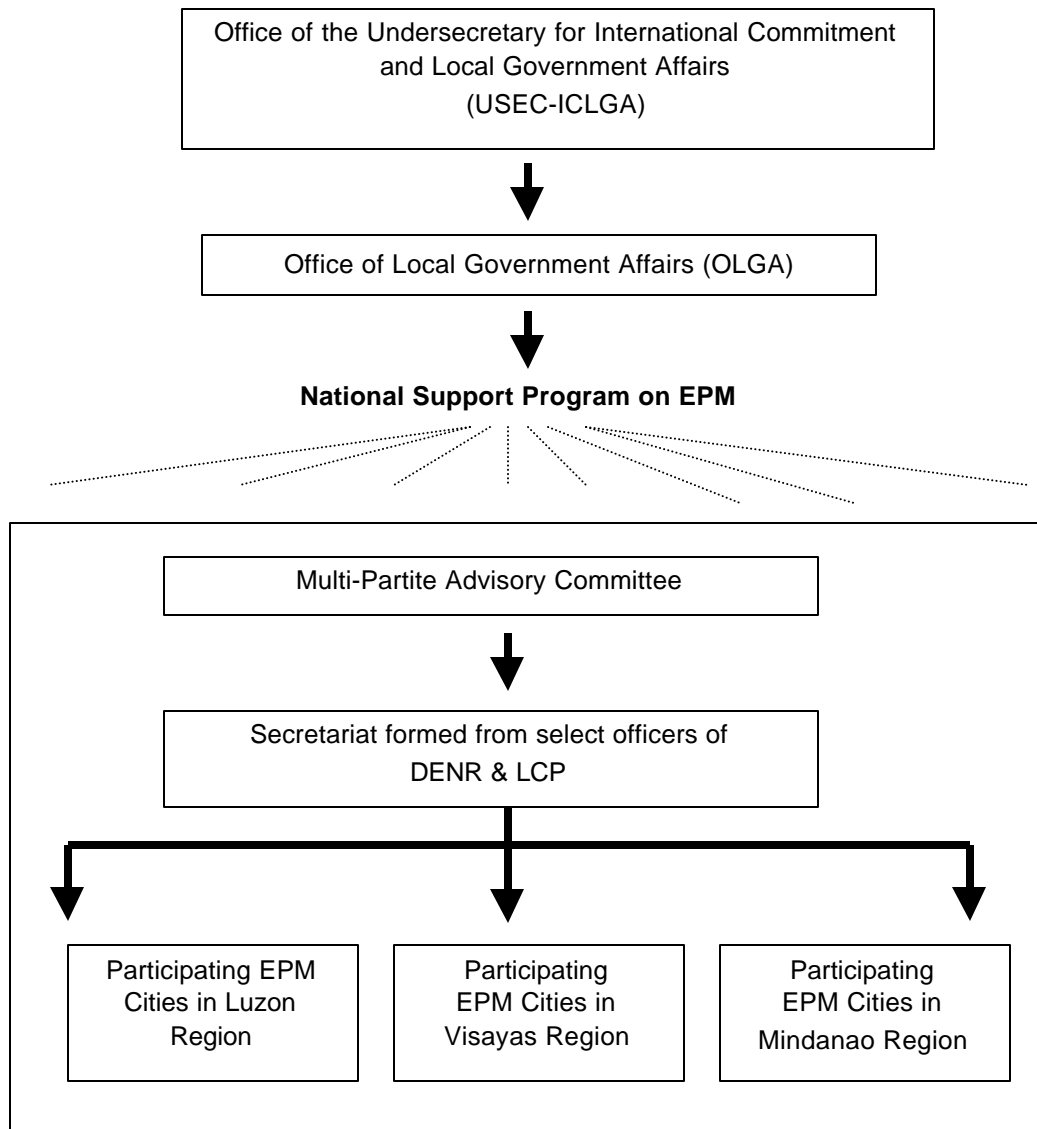


Figure 3: The structure of the NSP on EPM

The program shall be organized with the following components:

**(a) Capability building support**

The recently formulated overall framework of an EPM capability building for the demonstration cities could provide the core thinking of a national capability building effort directed to LGUs. Five major activities may constitute a capability building program, i.e., (1) prototyping of the EPM process experience of the three demonstration cities, (2) synthesis of experiences of EPM-related partners, (3) Philippines EPM toolkit development, (4) training and (5) cross visit.

Prototyping the EPM demonstration cities requires the capturing of the entire cycle of the SCP-EPM process as experienced under distinct city situations. In other words, Lipa, Tagbilaran and Cagayan De Oro cities should portray particular city characteristics apart from them being representatives of the major islands in the Philippines. For instance, the country's city classification distinguishes the first class city from a third class city by their income, population and social services, and similarly a component city of a province from an

independent charter city. So that, the earlier project categorisation of primary and secondary cities may have to be re-examined for purposes of evolving prototypes of EPM experience and from which the replication cities could identify with according to the similarity of their city situation. However, the prototyping will not be inclusive of the three demonstration cities as the experiences of other EPM-related projects and programs may form part of the analysis. This opportunity of juxtaposing the ESA/ESPs EPM work with the demonstration cities should eventually enrich the SCP-EPM process framework. Besides, a few of these EPM-related partners have been into city development work ahead of the Local EPM Project, such that the knowledge that these have accumulated as well as the skills developed shall be valuable to the SCP approach.

The on-going effort to evolve a Philippines EPM toolkit will produce a draft by the end of the year. The compilation of EPM tools will encompass a wide variety of tasks and may come as guidelines, source-books, analytical methodologies, procedural methodologies, summaries of key information, examples and illustrations, briefing and training modules, and others. In general, the tools will be divided as conceptual and operational tools. The selection of the tools will be made on the basis of their, (a) understandability and user-friendliness, (b) simplicity and ease of application, (c) low requirements for technical manpower and special resources, and (d) availability and ease of adaptation to city requirements. The sources will be from those produced by the SCP, EPM-related programs and projects in the Philippines, demonstration cities and in the future will include those developed by the replication cities.

The toolkit will be developed progressively according to the demand of the situation, such as those requiring customisation or modification, although, the present work shall focus more on the least requiring tools. Off-the-shelf tools will be adapted outright. This approach will ensure suitable new tools, whether newly created or discovered, will in due course be incorporated into a continually evolving EPM toolkit.

In the same spirit, the training on the tools will be progressive. Education modules will correlate with the types of tools (conceptual, operational) and adjustments shall be introduced as these tools are used by the cities. Augmenting the training will be the culturally attuned cross visits or what may be termed as people-to-people exchange of knowledge and skills.

## **(b) Networking for EPM support to the cities**

Networking may be engaged at three levels. The first network which must be enhanced is the League of Cities which binds every city by choice. The League may sponsor legislative advocacies for institutionalizing the EPM process in the city organization, and also to sustain the interest of cities on the process. The city sharing activity remains a potent avenue for such advocacies.

The second group is the national agencies and programs that shall be networked by the NSP to pool expertise, resources and information for the cities to avail. Conversely, these agencies led by DENR could systematize policy dialogues from concrete EPM actions of cities, and must sustain debates up to their fruition.

The third network is the international arena which the UNCHS-SCP could facilitate. Global forums that are usually organized by the SCP or sponsored by SCP partners may be tapped by the EPM cities as conduits for knowledge and skills exchange among cities of the world.

### **(c) Knowledge and skills management**

With advance information technology available in almost every city, an electronic information base may be created for the cities to freely access the needed information in the speediest time possible. In this way, the reaction time of the cities to address environmental problems will be quick enough before bigger impacts are created. A Philippines EPM Website shall systematise the upkeep and utilisation of EPM knowledge between the cities, agencies and programs. However, the system shall be strictly governed by the copyright and patent laws or the protection of intellectual properties, in general.

Every city on the one hand, with their respective homepages could optimise the email system for link up with the rest of the world. E-forums may be conducted through the system.

### **(d) Management support**

The NSP will provide tools on management which the City ENRO or the EPM unit will find useful in running their programs and projects. For example, modules and training on project cycle management will be made available to the cities, akin to the Local EPM Project Management and Coordination Unit sponsored training course for the three demonstration cities. A purpose of the training is to hone the skills of the cities to prepare for projects which are fundable and/or marketable.

Particularly, monitoring and evaluation support will be needed for the cities to avert avoidable errors and sort out bottlenecks.

A few organizations have grown from primary development groups into becoming clearing house cum project screening facilities and/or platform, resource conduits and facilitators for resource generation. The NSP on EPM as it works for its full establishment will consider transforming the current PMCU after its termination as a platform project on EPM. Logically, the said group shall serve as a core of the NSP.

### **(e) Advocacy for a national policy on EPM**

Included in the comprehensive IEC framework which was crafted from the experience of the EPM demonstration cities is the stress for continuing policy advocacy on EPM. It is important that city experiences are elevated into policy proposals so that the national replication process is empirical rather than conceptual. All forms of IEC designs (electronic or even posters) will be utilized to create public interest in the EPM process as well as target government to allocate resources for EPM activities in the cities.

Some initial discussions on re-formulating the section in the Local Government Code which describes the creation of the City ENRO as optional into a mandatory clause is gaining momentum as a major policy forum. The NSP could also specifically assist the cities by providing advises on the market-based instruments or resource accounting tools which will be needed to value pollutants-polluters and their remediation, and which will be used for formulating city and national policies on exacting fees and penalties against environmental disturbance. The PMCU should look into the technical aspects of potential policy concerns which were surfaced by the cities during their city consultation activity.



## 5.0 Responding to the Regional and Global Level Needs

Since the NSP on EPM is situated in the USEC for ICLGA, it will have the international exposure needed for regional cum global linkaging. So long as the program will conscientiously reflect on the Philippines EPM experience and manage the knowledge derived therefrom, it shall have concrete items to share with other cities in the region. For instance, the development of the Philippines EPM toolkit is seen as pivotal in regionalising the EPM experience. In this regard, the NSP can play as the regional forum for prototyping experience of EPM cities, particularly for island ecosystems. In the past, the DENR has served as the backbone for regional linkaging on specific areas on island ENR conservation and development, and the experience will be an added advantage.

It will be stressed that island ecosystems posses distinct limitations and constraints in addressing urbanization and the subsequent environment and natural resources destruction. The challenge is how space and resource management could be tackled under pressure from increased population due to urbanization of towns and municipalities. The environment-population urbanization-poverty nexus as briefly surfaced, once more becomes a reality, in fact, an alarming combination when put in context of impoverished and environmentally critical island countries of the region. Another excellent plus factor for the Philippines is a very vibrant electronic information technology.

Meanwhile, the NSP on EPM could participate actively in conferences and meetings organized by the SCP and other urban-related institutions and organizations.

# Tanzania, national programme – National Sustainable Cities Programme: Urban Authorities Support Unit (UASU); Replicating EPM country-wide

Martin Kitilla, National Environmental Planning and Management Expert

## Overview

The Sustainable Dar es Salaam Project (SDP), part of the Global Sustainable Cities Programme (SCP) was launched in 1992 and became fully operational in 1993. It was one of the first SCP demonstration city projects in the world. SDP applied the new Environmental Planning and Management (EPM) Process. The original objective of the project was to build capacity of the Dar es Salaam City Council to plan, coordinate and manage urban development and growth with emphasis on improved multi-sectoral (public, private and popular sectors) coordination and participation. This was achieved through a system of multi-sectoral, multi-professional and multi-institutional working groups. The working group system manifested the successful application of the broad-based, bottom-up participatory approach to urban management.

## The Sustainable Dar es Salaam Project as a focal point

Despite some set backs, the SDP registered a number of important successes and achievements by 1994 to make it recognised as UNDP's best project in Tanzania. The success of SDP was widely publicised through workshops and seminars, newspapers, radio and TV programmes. For instance many of the environmental issue specific working groups prepared 30 minutes weekly TV programmes on their activities which were shown on one of the local TVs. In these TV series, the members of the working groups that came from outside the City Council participated in most discussions and explanations. This thrilled the public and made them believe that the EPM process was a truly participatory one – where actors, who had never been given opportunity for participating in the planning and management of the city were now actively engaged. Thus many individuals, firms, communities, government institutions and those of higher learning and even the many urban areas in the country heard about the success story of the SDP. The SDP thus provided a **focal point** for other interested municipalities to learn from its experience.

Since then the SDP management started receiving inquiries about the project and many people, especially the major urban centres in the country started showing interest in using the approach and principles of the SDP. In the case of urban centres, they wanted to know how the city authorities were able to bring on board other stakeholders from outside the city council to participate in the running of the city! The first such centres to show interest on the project activities were Arusha, Moshi, Tanga and Zanzibar municipalities. Due their keen interest, the SDP was compelled to send a team of three members of its staff to Arusha, Moshi and Tanga municipalities to preach the EPM gospel. During these trips the SDP staff explained in great detail the underlying principles of the SCP and the different steps of applying the EPM process. Also the accompanying requirements and responsibilities such as human resources and financial aspects of applying the process were clearly explained to them. Where facilities were available, video cassettes/ tapes on the various activities of the SDP starting from the municipal

consultation to the different working groups' achievements were shown to the relevant municipal authorities. At the end of the discussions, each municipality indicated whether it was interested in pursuing the process and in what time period it expected to initiate the EPM process.

In order to learn more about the project, some of the municipalities decided to send their nominated personnel to the SDP for periods varying from three to four weeks so that they be attached to the project and get the necessary details on the methodology of applying the EPM process. These personnel participated in different working groups and in the coordinating working group, where they learnt how coordinators of different environmental issues negotiated and agreed on overlapping or conflicting action plans. Such personnel came from Moshi, Arusha, Iringa and Zanzibar.

To ensure political support right from the inception of the EPM process, some municipalities decided to send to the SDP teams of councillors who, apart from being explained the whole EPM process, also visited various areas where the working groups activities were being implemented. This followed from the notion that "seeing is believing". Early councillor teams came from Arusha and Moshi.

### **The Municipal Support Unit (MSU)**

The government also played a key role in initiating the national replication of the EPM process. Recognising the central role that the urban sector plays in stimulating national socio-economic development by providing the framework for commerce, industry and social services to flourish, the Government prepared and adopted a National Programme for Sustainable Human Settlements Development, which aims at:

*"Creating sustainable development in urban centres which will improve living conditions in informal settlements, alleviate poverty, stimulate economic growth and employment and improve the urban environment".*

Since the responsibility for sustainable development in the country's urban centres rests with the local government, a central focus of the Government's Programme was to strengthen local government capacity to improve urban living conditions. In order to do so, the Government proposed the establishment of a **Municipal Support Unit (MSU)** within the Ministry responsible for Local Government in order to:

- Support the Dar es Salaam City Council (through the Sustainable Dar es Salaam Project) and other municipalities prepare and implement urban environmental management strategies and detailed Action Plans, and in so doing, improve the local capacities to manage their urban environments through in-service training;
- Ensure that constraints identified whilst implementing activities at the local level are addressed at the central government/national level through appropriate policy, legislative and institutional changes. This will include strengthening appropriate training capacities;
- Monitor strategy and action plan implementation in Dar es Salaam and other municipalities;
- Provide donors with an agreed conceptual and institutional framework so they may respond positively by supporting specific projects in areas where they have a comparative advantage.

Thus the MSU was vested with responsibility of providing sustained support to the EPM process that was being applied in Dar es Salaam and was considered as the means to extend and support such a process in other municipalities and (later) other urban centres in the country.

Thus the groundwork for national replication was laid down in the Project Document for Phase II of the SDP as the expected end of the project situation. It was concluded in the Document that “the Project will consolidate such (SDP) successes and suggest the national mechanism to expand the process to other municipalities – whose residents and urban managers will benefit from similar project outputs”. The extension of such a process to other municipalities will be through MSU, and would be dependent on the success on the sensitisation of the officials and private/popular sector representatives in the municipalities.

## Positive pronouncements

Positive and encouraging statements on the success of SDP from both the government and international institutions also played a vital role in making other urban centres want to apply the EPM process in their areas. For instance, during the workshop on official launching of the preparation of the strategic urban development plan for the city of Dar es Salaam in October 1996, the Prime Minister, in his opening address said *“the government will stand by your (DCC/SDP) commitments and underscores the need to adopt the concept of participatory planning as introduced by the Sustainable Dar es Salaam Project, as a viable and necessary management tool for the government to address growth and development problems of all cities (urban areas) in the country”*.

Also in his address during the same workshop, the Resident Representative of the United Nations Development Programme (UNDP) said *“...the SDP will make steady progress towards a process that will bring about sustainable development for the city, and in turn use these results to replicate the process to other cities in Tanzania”*.

## The Mayors' Committee

The SDP successes and all the encouragement on the national EPM replication, culminated in the formation of the “Mayors' Committee” from the then nine municipalities in the country in 1996. The major work of the Committee was to pressurise the government, through the Prime Minister's Office (which was by then responsible for Regional Administration and Local Government) to recognise the urgency of replicating the EPM process in their municipalities. The Committee also followed up on the establishment of the proposed national organ, the Municipal Support Unit, as the municipalities felt that the replication could not be done through the Dar es Salaam City Council (where SDP was housed) which was at the same hierarchical level as they were.

Through these discussions, the government finally agreed to replicate the EPM process in the municipalities. The replication aspect was then included in the Project Document for SDP Phase III which became effective in July 1997. In this document, budget was allocated for fostering the replication of the EPM process in the municipalities, at least for the start up phases.

The Dar es Salaam City Council was given the responsibility of initially being the *“care taker organisation”* for the national replication. This followed from the fact the government (PMO) was not ready (due to lack of experienced staff in EPM) to take up replication task. *Hence the national replication of the EPM process in the*

*municipalities officially started in July 1997 under the Dar es Salaam City Council (DCC) as the temporary caretaker institution. The DCC executed this task on behalf of the PMO. The replication was to be driven by local (municipalities') demand for the EPM process.*

## **National Consultation Workshop on replication**

A two-day national workshop on the replication of the EPM process in the municipalities in the country was held in Dar es Salaam in September 1997. It was organised by the Dar es Salaam City Commission (as the former council was dissolved in 1996), playing the coordination role as the “care taker” institution for the replication. The workshop was attended by representatives from all the nine Tanzania mainland municipalities and one from Zanzibar. The objective of the consultation workshop was to address the modalities of the National Execution of the replication of the EPM process in the participating municipalities. Thus it was important for the municipalities to meet and agree on how to implement the replication of the process as spelt out in the Project Document for SDP Phase III. The participating municipalities should clearly understand the replication modality and agree on the activities/actions they will be required to carry out. The understandings here was that the different municipalities have similar issues that need to be tackled jointly and in partnership through exchange of experiences. Thus the major task ahead of them was to formulate new and appropriate Planning approaches/strategies by drawing lessons from the experiences of the SDP.

During the workshop, the experiences (achievements and constraints) of the SDP were highlighted and discussed in small discussion groups and in plenary. From the discussions, it was agreed that the municipalities should build in-house capacities to tackle their own problems, while the DCC as the interim host of the replication exercise will provide technical assistance. Also it was agreed that there was a need for the municipal representatives to visit SDP to see, learn and gain experience instead of just being informed of the achievements in the meetings.

To assist the municipalities to start the process, the Programme procured (through UNDP) vehicles and equipment. Each municipality received a brand new vehicle, a photocopier and a computer workstation (a CPU, monitor and a printer).

In this workshop, key stakeholders central to the replication exercise were identified and their roles clearly spelt out. The stakeholders included the UNDP, the collaboration agencies (UNCHS/Habitat and ILO), the Government (involving key line ministries) and the municipalities. The roles of these stakeholders will be discussed under the Section 3 on Institutional Framework.

## **Initial training of programme coordinators as part of the start-up phase**

After the national workshop, the municipalities were required to appoint some of their staff to become Programme Coordinators, who will be focal points linking the municipalities with the national unit that was to be established. In February 1998, the appointed coordinators were then called to Dar es Salaam for a one-week initial training on the EPM process, so that when they went back to their municipalities, they would be able to initiate the process. Immediately after the training, these programme coordinators were joined with their Lord Mayors and

Municipal Directors and spent a whole day going over the Project Document and also discussing the project funds (budget) set for activities in the municipalities. During this meeting, it was agreed that each municipality should prepare a work plan and a budget proposal in line with the SCP concept. *Of critical importance was the agreement that each municipality should set funds from their annual budgets specifically for the EPM replication – to show their commitments and acceptance of the process.*

## **The establishment of the Urban Authorities Support Unit**

In the Project Document for SDP Phase II, it was proposed that a Municipal Support Unit (MSU) that will be of a more national character be established which would be responsible for national replication. The MSU was to provide sustained support to the EPM Process that was being established in Dar es Salaam, and the means to extend and support such a process in other municipalities and (later) other urban centres nationally. It was from this statement that the notion of the MSU was changed as it could have limited the replication only to the municipalities and leave out other urban areas in the country.

## **The EPM Unit in the Prime Minister's Office (PMO)**

Before the establishment of UASU, the Office of the Prime Minister had proposed to start, within it, a technical support unit that was to be known as the EPM Unit. This was aimed at building capacity in the PMO's local government department in order to coordinate better planning and management in the municipalities through the EPM process. It was believed that the planning, management and coordination protocols and arrangements for the municipalities would be better strengthened because there would now be an integrated system of EPM expertise at top-level coordination in the PMO. However, forming just a small unit within the PMO was not favoured as it lacked the national character.

Thus, in order to (later) take on board other urban centres in the country in the replication exercise, it was found wise to establish a more broad-looking national unit – the **Urban Authorities Support Unit (UASU)** which would be able to support all types of urban centres as time and resources allow.

The Office of the Prime Minister – PMO – (which was by then responsible for Regional Administration and Local Government) decided to host the coordination role of the replication exercise in March 1998. The PMO thus set up a Task Force, which comprised members from it (PMO), UNDP and UNCHS/Habitat and charged it with the responsibilities of coming up with roles and working modalities of UASU. The Task Force submitted and presented its proposals in May 1998. The proposals were deliberated by the different actors and accepted. Thus the UASU was officially established in May 1998 and is responsible for the coordination of the Sustainable Cities Programme in Tanzania, which is a nationally (Government) executed Programme with the UNCHS/Habitat and ILO as collaboration agencies.

However, from July 1997 an interim arrangement was in place in which the Dar es Salaam City Commission executed the project on behalf of the PMO. During this transition period, the replication was in limbo and did not work well, and this led to the following lessons of experience:

- A demonstration city can play an important role in the initial application and in the “learning” process on EPM, but cannot provide technical support and can not spear-head the replication process as it:

- Will not have enough spare capacity to support replication exercise.
  - Has its own many and varied problems to grapple with.
  - Will not go down well with other sister municipalities/townships while advising and guiding them bearing in mind that they are not answerable to it .
- A separate National Unit rather than a demonstration city is essential for a well working replication.

The main functions of UASU, as a vehicle for national replication are broadly categorised into technical support, monitoring, resource mobilisation, tools development and adaptation, capacity building and knowledge management. These functions are described in detail in Section 4: Delivery of Support Functions.

## Participating Cities

### Initial phase

In the initial phase, the replication of the EPM Process is limited only to the municipalities in the country as a first priority. One would ask **why municipalities?**

### Criteria / consideration of urban centres for replication

Before urban centres were included in the replication exercise, they had to satisfy certain criteria or considerations. The criteria included:

- Those urban centres next in the hierarchy after the city of Dar es Salaam i.e. the municipalities which have:
  - High annual population growth rates, hence growing rapidly
  - Accelerated environmental degradation resulting from rapid expansion of population
  - On-going related and complementary projects/programmes to the EPM approach and SCP objectives that were geared towards strengthening the ability of such centres to better manage their growth and development. One such notable programme was the World Bank funded Urban Sector Rehabilitation Project (USRP), which covered all the municipalities. USRP is concerned with the provision of a wider information and policy framework regarding institutional, infrastructural and financial issues.

The municipalities met the above criteria and were thus selected for the Phase I EPM replication. The nine municipalities in the replication exercise are Mwanza, Tabora, Dodoma, Arusha, Moshi, Tanga, Morogoro, Iringa and Mbeya and these are shown in Map No. 1. The progress position of the municipalities in the different stages of the EPM as per September 2000 is as shown in Table 1.

Table 1: Extent of Replication of EPM process in the Municipalities

MUNICIPALITY	IMPLEMENTATION OF THE EPM STAGES						
	Sensitisation	Preparation of Environmental Profiles	Holding of Consultations		Establishing Working Groups	Implementing Plans	Integration
			Min	Mun. (Year)			
Mwanza	✓	✓	✓	✓ (7/98)	✓	✓	
Tabora	✓	✓	✓	✓ (12/99)	✓		
Arusha	✓	✓	✓	✓ (1/2000)	✓		
Moshi	✓	✓	✓	✓ (1/99)	✓	✓	
Tanga	✓	✓	✓	✓ (5/99)	✓	✓	
Dodoma	✓	✓	✓	✓ (12/98)	✓		
Morogoro	✓	✓	✓	✓ (8/99)	✓		
Iringa	✓	✓	✓	✓ (10/98)	✓	✓	
Mbeya	✓	✓	✓	✓ (7/99)	✓		
Dar es Salaam Municipalities							
Temeke	✓						
Ilala	✓						
Kinondoni	✓						

The municipalities were given the first priority for replication. However, in the course of implementing the replication exercise, other urban centres in the country are being brought on board, based either on their importance or the urgency of having their areas planned through the EPM approach. These centres are briefly discussed hereunder.

### Regional townships

The regional townships are headquarters of the different regions in the country. Due to their importance in the human settlement hierarchy in the country, the Ministry of Regional Administration and Local Government has decided to include them in the replication process. However, the success of work in these urban centres very much depends on the availability of resources, as they were initially not included in the Project Document which set a modest fund for the municipalities.

### Other emerging urban centres

In 1998, the Government of Tanzania officially declared that from then onwards, preparation of urban development plans will be done through the EPM process instead of the traditional master planning process. Following this decision, all the urban centres in Tanzania are now required to apply the EPM process in managing the growth and development of their areas. So far a number of such centres are submitting requests for assistance in planning their areas using this new approach. Following this phenomenon, there are all prospects that more centres will be joining the replication process. Others have even been able to solicit and get funds for such undertakings. The emerging question here is: will the UASU and the MRALG be able to cope with this rate of replication? If not, what should now be done?



## **Introducing the institutional framework**

Institutional arrangement for EPM replication in the country was not an easy task as there were some bottlenecks. First, there was no experience on the replication of the process in the country or worldwide. Second, the whole replication undertaking was to be confronted with difficult institutional issues at both the central government and local authority levels. This followed from the fact that there was a lack of clarity on which central government ministry (department) should oversee the replication of the EPM process. However, a number of institutional arrangements were considered for facilitating the replication of the EPM process in the urban centres in the country. Discussed below are some of the options that were considered at the national and municipal levels.

### **The Dar es Salaam City Commission**

Initially it was considered that the City Commission could be the institution responsible for coordinating the EPM replication in the municipalities. This was due to the fact that it had considerable advantage gained from hosting the Sustainable Dar es Salaam Project. This option was not favoured by the municipalities as they felt the city was at par with them, being an urban centre as they were.

Other reasons as to why DCC could not play the role of national replication include lack of adequate and spare capacity and its own problems to deal with.

### **Ministry of Lands and Human Settlements Development**

The other institution that was considered suitable for coordinating the replication process was the Ministry of Lands and Human Settlements Development, because it is responsible for urban planning and is the custodian of plans in the country. Furthermore, it also deals with the development of both rural and urban settlements. This option was left out because of the argument that the ministry was too sectoral to be able to coordinate other line ministries that will be 'in one way or the other' involved in replication.

### **Office of the Prime Minister**

The different parties agreed that the coordinating institution for the EPM process replication should be the Prime Minister's Office (PMO). The agreement was supported by two main factors. One, the PMO was (by then) responsible for Regional Administration and Local Government. Thus all the municipalities and other urban centres in the country were answerable to this office. Two, since the PMO is the parent ministry, thus it was easy to coordinate other line ministries that will be participating in the replication process.

Currently UASU is anchored in the newly established Ministry of Regional Administration and Local Government and is spearheading the replication of the EPM process under the auspices of the Sustainable Cities Programme - Tanzania.

### **Anchorage of the EPM Process in the municipalities**

There were institutional problems in the anchorage of the EPM process (SDP) in the city of Dar es Salaam. Thus great care was taken not to repeat the same mistake in the municipalities. When the DCC accepted the application of the EPM process, the SDP established an independent UNDP/Habitat funded project.

Worse still it had its offices away from the City Hall. This made it too alienated and viewed as an external project.

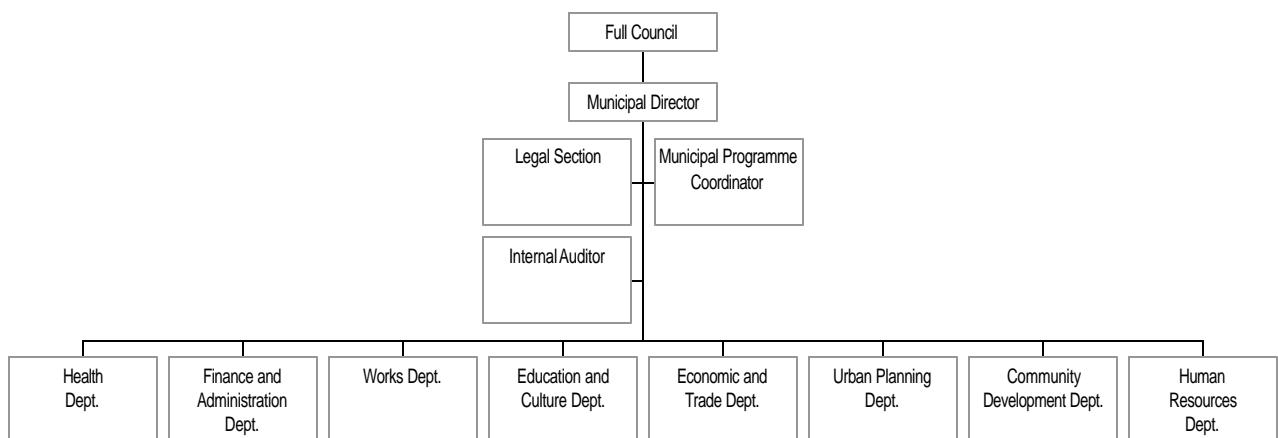
According to the Project Document for SDP Phase I, the project was to have a Chief Technical Adviser, a Projector Director and a National Project Coordinator. According to the Document, the City Director and the City Planner were the Project Director and National Project Coordinator respectively. The institutional aspects in the City Council were therefore the responsibility of the City Planner, who was also the Head of the Urban Planning Department. This arrangement faced an administrative snag, as the City Planner was not able to call other Departmental Heads to meetings to discuss issues pertaining to the EPM process (SDP), since all of them were at par with him. In order to make things work, the DCC was compelled to create a post of a Deputy City Director who, among his other duties, was responsible for the SDP activities.

To avoid this situation in the municipalities, detailed discussions were held with municipal authorities to agree to where the EPM process (Programme) should be located in the municipal organizational set up. In other municipalities, this issue was also discussed in the municipal consultation, and participants were able to give their views with the objective of making sure that the new approach will work effectively and will not be jeopardized by the municipal administration set up. Finally, the municipalities have generally agreed that the Sustainable Municipal Programmes (under the Municipal Programme Coordinators – PCs) should operate from the Municipal Directors’ offices. In that way, the PCs will be above the Heads of Departments in the municipal administrative ladder hence they will command some respect to enable them convene meetings with other municipal staff including the heads of departments. Diagram No. 1 shows this institutional arrangement at the municipal level.

## Municipal Programme Steering Committee

Unlike UASU, which has the National Programme Advisory Committee, the municipalities have Programme Steering Committees that are comprised of the Mayor, two councillors, the Municipal Director, the Programme Coordinator and representatives from the central government (the Regional or District Commissioner), private sector, popular sector (NGOs/CBOs) and special groups (e.g. women, youth, etc.)

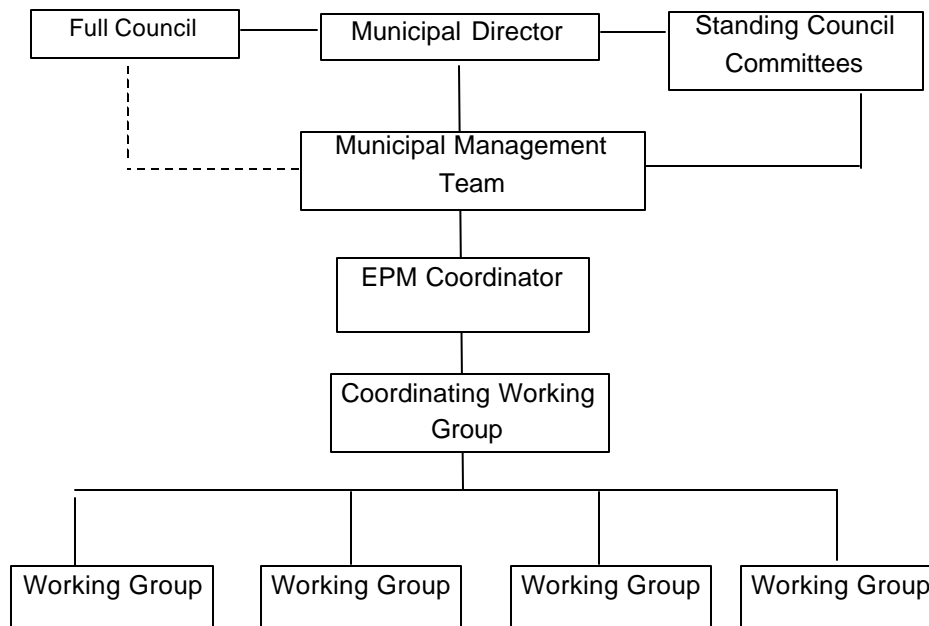
Diagram No. 1: MUNICIPAL ADMINSTRATIVE ORGANIZATION CHART



The major role of the Committee is to steer the Programme towards achieving the intended objectives by providing guidance, advice, supervision and policy direction. In DANIDA supported municipalities, the Committee is also responsible for approving requested funds from the Environment Development Fund (EDF) for implementing action plans developed by the working groups. The EDF is a financial facility established by the DANIDA funds in the concerned municipalities for the stated purposes.

Diagram No. 2 shows the different steps followed to present the activities (work) of the working groups to the municipal functional hierarchy i.e. integrating the EPM process in the present municipal institutional framework.

*Diagram No. 2: Integrating EPM Process in the Municipal Institutional Framework*



Fortunately or unfortunately, most of the nominated PCs are also heads of departments with different professional backgrounds and all except two are Town Planners. One is an Economic Planner while the other is a Social Planner (Community Development Officer). The problem faced by the Programme by having these PCs as heads of departments at the same time is that they cannot manage the two positions effectively and efficiently. Experience has shown that the PCs have devoted more time in their departmental obligations and put less effort into the Programme activities. This has led, in most municipalities, to unsatisfactory performance on the part of the Programme. This is manifested by the extent of progress made in spearheading the EPM process in the respective municipalities.

To tackle this problem, the Ministry of Regional Administration and Local Government is doing its best to ensure that the PCs remain with one title. They are being requested to choose either to continue being heads of departments or become full time Programme Coordinators. This move has not been very successful due to one major snag. Since the PCs are not getting any additional remuneration they are not willing to relinquish their titles as heads of departments and remain without “recognized status”. Otherwise the municipalities will be required to nominate new PCs and start training them afresh on the EPM

approach, thus slowing the process and losing institutional memories. Being heads of departments, they get some remuneration commensurate to their positions but if they choose to be Programme Coordinators, they miss such benefits as neither the municipal authorities nor UASU/UNDP considers granting them any financial motivation!

## **Roles of key institutions in the national EPM replication**

The key institutions necessary for the national replication (as identified during the national workshop on replication) and their roles are:

**UNDP:** As a funding agency, it will assist the urban areas to develop sustainably. The other role will be to mobilize international and national expertise, funding, planning and coordinating UN-Systems.

**The Government:** Its role will be to manage and execute the Programme as agreed in the Project Document together with the collaborating agencies.

**UNCHS/Habitat:** It will continue to provide technical assistance/backstopping (through the Urban Authorities Support Unit - UASU) to the urban areas to achieve improved management capacity. It will also work with UASU to put in place a practical and workable monitoring system to enable a proper way of measuring the EPM progress within the Programme.

**The Municipalities:** Roles of the municipalities include:

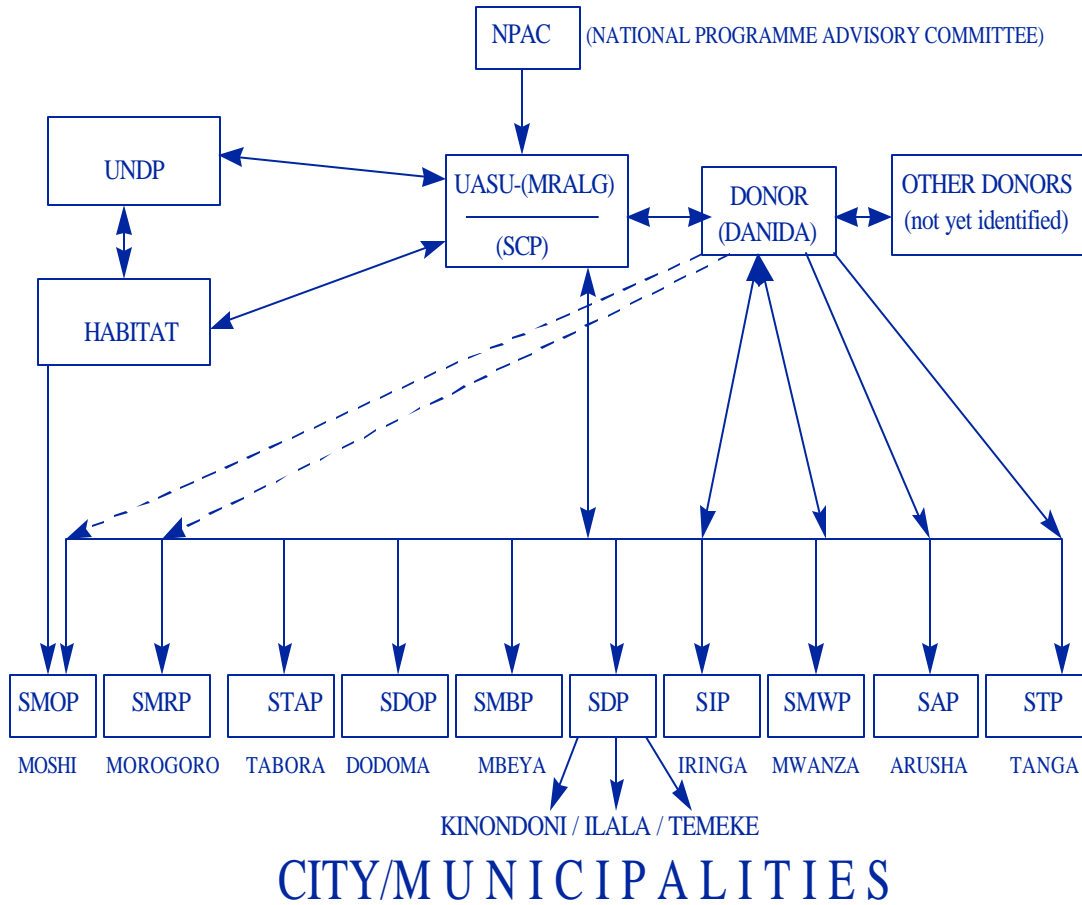
- Nomination of Municipal Programme Coordinators
- Provision of competent staff to carry out the EPM process as issue coordinators, EMIS technicians, etc.
- Provision of office accommodation to house the Programme
- Setting a budget for effecting the EPM process in the municipality (including fuel for programme vehicles, remuneration for the Programme and Issue Coordinators, working group members, etc.)
- creation of an enabling environment for other stakeholders to participate in the process

**The Urban Authorities Support Unit (UASU):** The roles are described under Section 4 below.

## **National institutional arrangement for the EPM replication**

In the national context, UASU is under the Ministry of Regional Administration and Local Government (MRALG). It closely collaborates with some key line ministries like the Office of the Prime Minister and the Ministry of Lands and Human Settlements Development. UASU also has an advisory body known as the National Programme Advisory Committee (NPAC) that draws its membership from key institutions, which, in one way or the other, have a stake in the whole EPM replication process. The main objective of establishing the NPAC is to ensure effective coordination of input from the main actors/stakeholder institutions concerned with promoting environmentally sustainable urban development in Tanzania. Thus the NPAC is an overseeing and policy advisory body.

INSTITUTIONAL ARRANGEMENT



Members to the NPAC are: UNDP, UNCHS/Habitat, ILO, Tanzania Chamber of Commerce, Industries and Agriculture (TCCIA), National Environment Management Council (NEMC), Association of Local Authorities of Tanzania (ALAT), DANIDA, University of Dar es Salaam, Ministry of Lands and Human Settlements Development, Ministry of Regional Administration and Local Government, Vice President’s Office (Department of Environment) and University College of Lands and Architectural Studies (UCLAS). This national institutional arrangement is shown in Diagram No. 3.

**Delivery of support functions**

One of UASU’s central roles is to deliver support functions to the municipalities and other urban centres. Described below are the different roles/support functions and mechanisms through which UASU uses to deliver them.

**Policy support**

Political support is an essential pre-requisite for the successful replication of the EPM process in the urban centres in the country. Fortunately this replication in Tanzania enjoys that support. Right from the start the replication process received full political support from the government, as it took the initiative to establish the UASU to oversee the said replication.

To support the replication process, the government **changed the urban planning system from the conventional “master” planning approach to the**

**new EPM process.** This implies that all urban centres in the country will now be planned using the EPM process, a move that speeds the replication exercise.

The Government is also trying to amend some of the legislation to include the aspects of replication. This includes the recognition and establishment of a mechanism to place the working groups in the organizational charts of the municipalities. Moreover, the on-going Local Government Reform, which recognizes the participation of stakeholders in urban planning and management indirectly supports the replication exercise.

## Technical support

The technical support offered to the urban areas through UASU is in the form of backstopping, technical assistance and material form (equipment and vehicles) and to a limited extent, financial support.

Regarding backstopping, technical personnel from UASU and other resource persons (sent by UASU) visit the municipalities (mostly by request) to assist them in various issues pertaining to the different steps of implementing the typical SCP/EPM process activities as per tools developed at the global level. The personnel assist the municipalities in guiding them to prepare municipal Environmental Profiles (EP's), conducting municipal consultations and in establishing and operationalising cross-sectoral working groups. UASU supports the municipalities with limited funds to print their EP's and conduct municipal consultations.

UASU is a "lean" Unit with only four technical staff. It therefore uses a team of consultants and other resource persons it has trained to offer the technical backstopping in the municipalities. UASU also has limited funds to be allocated to the municipalities for implementing simple, cost effective demonstration projects. UASU also offers technical assistance in terms of *induction* training on the EPM process, EMIS, management skills, gender responsive EPM and local governance for elected leaders. The training is both formal and on the job. Formal training is conducted in collaboration with other actors like the resource institutions of higher learning (University College of Lands and Architectural Studies – UCLAS, University of Dar es Salaam and the Institute of Development Management – IDM) and UNCHS/Habitat. Tailor made training modules are developed and offered to the identified groups of stakeholders.

The training on the EPM process is offered to different groups of actors/stakeholders. They include Mayors, Municipal Directors, Municipal Programme Coordinators, Municipal Heads of Departments and other relevant members of staff, Environmental Issue Coordinators, Members of issue working groups, councillors, Members of Parliament (belonging to the Parliamentary Committee on Environment) and different resource persons from various institutions with different background (who act as a reserve bank for UASU to send them to backstop the municipalities).

## Consultancy on training

Occasionally UASU offers training consultancy services to the municipalities when they want to train some groups of stakeholders on various issues. This only happens when a municipality secures financial support to undertake a training programme which is not part of or not budgeted in the overall training programme of the Unit.

## Capacity and knowledge management support

The above mentioned different types of training modules offered to different actors, is one of UASU's moves to build the capacity to UASU staff and the municipalities together with the participating stakeholders in the whole EPM process. Furthermore, the Unit is striving to build the capacities of the municipalities in terms of facilitating them with vehicles and equipment (like computers, printers, photocopiers, etc.) that are necessary for the EPM activities. The computers have enabled the establishment of the Urban Management Information System (UMIS) Units, which are very important for information and knowledge management. The provided vehicles assist the working groups make field visits or facilitate their movement from one institution to another when collecting data and/or information.

## Map digitization support

UASU maintains central equipment such as computers, a large scale digitizing board and a scanner. It plays a coordination role in the operation and maintenance of EMIS in the municipalities and hence offers certain services to the technicians from such municipalities who come to UASU to digitize their maps and at the same time undergo on the job (hands-on) training. Currently most municipalities lack such facilities.

## Monitoring and documentation support

Monitoring is one of the central roles of UASU. It is only through monitoring that the Programme can determine to what extent the objectives have been achieved at different times by the implementing agencies. To signify its importance, UASU has a full time Monitoring Officer, who regularly visits the municipalities to:

- Observe and record activities taking place in the municipalities so as to measure progress in terms of both the management aspects and actual physical improvements and eventually give feed back to the relevant stakeholders.
- Document the different implementation stages of the EPM Process
- Ascertain constraints and bottlenecks that hinder smooth implementation of the Programme activities in the municipalities and hence enable UASU advise municipal authorities on the appropriate measures to be taken to overcome them.

To ensure that the progress in the municipalities is systematically tracked and measured right from the start, UASU in collaboration with the municipal authorities has already nominated some officials from among the municipal staff, to become Monitoring Officers. These will be trained on "measuring progress" and regularly report to UASU on the progress of the EPM process in their respective municipalities. These "municipal monitoring officers" have been given induction training on documentation by an expert from UNCHS/Habitat.

## Advocacy role

UASU uses different methods when playing its advocacy role for ensuring that the ideals of EPM are promoted, understood, accepted and routinely applied in the day to day running of the municipal activities. They include training, publicity, documentation, study tours and forging partnership. Training is used to introduce EPM to the different groups of stakeholders and how it can be routinely institutionalized and its other planning advantages over the traditional planning approach. The Unit has been able to organize training abroad for the Municipal

Directors as part of expanding the knowledge and understanding of the EPM process.

Also UASU is trying to publicize the EPM through mass media i.e. feature articles in some of the dailies, preparing and airing radio programmes and through newsletters and brochures. Presently UASU has engaged competent firms to prepare documentary video-cassettes which will be shown on different TV stations in the country. On the question of documentation, UASU sometimes sends some documents (i.e. source books from UNCHS/Habitat and other relevant information on EPM from other sources) to the municipalities where they are placed in the Programme offices where participating stakeholders are able to read them. UASU also has some limited funds for publicity and communication for the municipalities. The Unit has also been successful in forging partnerships with different institutions, government departments, private firms and prominent individuals as a means of fostering a wider understanding of the EPM.

To ensure that many people are made more aware and understand the EPM, UASU has established its own web site, where Programme activities can be accessed. Moreover, UASU has plans to establish communication network with all the municipalities through E-mail and internet services,

### **Resource mobilization**

One of the central roles of UASU is to assist the municipalities (and other urban centres) in mobilizing human and financial resources and equipment needed to ensure continuity and sustainability of the EPM process. To achieve this noble role, UASU has approached a number of donor agencies especially bilateral organizations such as DANIDA, JICA, SIDA, DFID, NORAD and ADF, a French Development Agency. So far only DANIDA has agreed to assist the Programme by extending such assistance initially to Mwanza (March 1998) and Iringa (July 1999) municipalities. DANIDA has committed financial assistance to the tune of US \$ 2.1 million and US \$ 2.8 million to Mwanza and Iringa respectively. It has also agreed to support Arusha, Tanga, Moshi and Morogoro municipalities at a later date. Other bilateral donor agencies have indicated their willingness to support the Programme but have not given firm commitments and negotiations are still going on. However, DFID availed 25,000 pound sterling to conduct a research on "training needs assessments" for all the municipalities. The Development Planning Unit of the London University College carried out the research.

### **Fast track demonstration projects**

Another alternative way of getting financial resources in the municipalities is through implementation of economically feasible fast track demonstration projects. UASU has been encouraging municipalities, through the respective working groups, to come up with cost effective but viable fast track projects. Costs for implementing such projects are shared between UASU and the respective municipalities, which are required to contribute at least 10% of the total cost. It is normally agreed that revenue accrued from these projects will be ploughed in the running of the (EPM) Programme in the said municipalities.

UASU has also been encouraging the municipalities to approach potential (local and foreign) donors either from their areas or elsewhere and solicit funds for the EPM process.



## **Support to the preparation of Strategic Urban Development Plans (SUDP)**

When UASU was established, it was charged with the responsibility of supporting and facilitating the preparation of Strategic Urban Development Plans in the city of Dar es Salaam and municipalities. This is in line with the general objectives as given in the Project Document Phase III (that mandated the replication process).

### **Finalization of the SUDP for Dar es Salaam City**

UASU is assisting the Dar es Salaam City Commission to finalize the preparation of the Draft SUDP. The first detailed technical document (comprising 5 volumes) has been completed. This document has been compressed to one handy stakeholders' edition with about 100 pages. There is a 15 page Snap Shot of the document for dissemination to different actors by the city authorities.

### **Contentious issues of the draft SUDP**

After completing the preparation of the Draft SUDP, it was noted that there were several contentious issues pertaining to the said plan where different people have different understanding. Such issues include the following:

- What is strategic about SUDP and what implications does this have on its focus, thematic scope, geographical coverage, time horizon and detail?
- Does SUDP have/ need a legal basis?
- Is SUDP a stand alone plan type; does it replace other plans; how does it relate to other urban management instruments?
- In what detail should the SUDP address land use planning and development control issues and is a land use map mandatory?

UASU in collaboration with the City Commission organized a one-day experts workshop where the participants, drawing on their varying experiences and professions, deliberated upon these issues and came to a common understanding through a consensus based approach.

### **Guidelines for preparing a SUDP**

The Government of Tanzania has decided to adopt the use of the new EPM Process instead of the traditional "master" planning approach in the preparation of all urban development plans. This decision has exerted tremendous pressure on the application of the EPM process. This increased demand is now greater than the available capacity in UASU and Ministry responsible for urban development. This means that in order to cater for the increased demand and speed up rate, other relevant institutions, consulting firms and knowledgeable resource persons will be engaged in the preparation of the said plans.

UASU has prepared draft guidelines/checklist for preparing SUDPs to be followed by planners/practitioners, consultants and other resource persons. The guidelines will also be useful to decision-makers and "client" institutions for monitoring the preparation process.

## **Support needs at the regional level**

In order to fulfil its obligations effectively, UASU needs to be supported in certain areas as outlined below.

### **Development of training materials**

Presently UASU is only offering induction training using UNCHS/Habitat materials which are global in nature. Support is thus needed to develop methodological and topic-based training materials, which could be used to train “trainers”. This would eventually build capacity (in EPM and other related areas) in the Eastern and Southern Africa Region. These training packages can be organized like the *UNCHS training manuals* used for training on local governance for elected leaders.

### **Resources / technical assistance for carrying out “mass” training**

UASU and the SCP Tanzania in general are facing an increased demand in the application of the EPM process in planning for urban development in the country. UASU therefore needs to be technically supported in the area of training on EPM so that enough “trainers” are adequately trained to enable them train many other people who will be engaged in the urban planning exercise.

### **Establishment and operationalisation of EMIS units**

EMIS Units are very essential in setting up information and documentation centres in the municipalities. UASU would therefore need technical support in developing functional desktop publishing units within EMIS which will be used for information out-reach and to generate materials such as posters, magazines as well as radio and TV programmes.

UASU would also need support in acquiring sophisticated and up to date software and other relevant tools to support the EMIS units.

### **Tools for monitoring of the EPM process**

In order to ascertain the progress made in the municipalities, UASU would require support on developing tools for monitoring the degree of achievement in the application of the EPM process.

### **Documents and documentation**

The other area where UASU would need to be supported is that of getting relevant documents on EPM (i.e. source books, tools, guidelines, etc.), reports from participating cities, newsletters, etc., which will be distributed to the municipalities. Different actors and stakeholders will study these and it will be a way of increasing advocacy and expanding knowledge levels.

Documentation of the EPM process, experiences and various achievements has been a problem all along since the inception of the Sustainable Dar es Salaam Project. UASU would thus appreciate getting support in this area so that documentation could be initiated in the municipalities right from the on-set.

## Popularizing the use of the prepared SUDP guidelines

UASU has prepared “experience –based” draft guidelines for preparing Strategic Urban Development Planning Framework. Support is thus required to finalize the said guidelines, print them (as one of the SCP tools) and popularize their use in other participating cities in the world which want to come up with strategic plans as their ultimate output of the EPM process.

## Constraints and Challenges

### Constraints

Despite the achievements attained, the Sustainable Cities Programme in Tanzania is still faced by a number of constraints. These are briefly discussed below.

### Lack of budgets for EPM process from the municipalities

At the wake of the replication process, municipalities were made aware that they were responsible for the whole EPM process in their areas of jurisdiction. Hence they were sensitized and urged to set aside funds from their annual budgets that will be used for forging the EPM process in their areas. Most municipalities have been setting aside substantial amounts of money from their budgets for the EPM process. The problem is that *such funds are not released for the intended purposes*, the main reason being the inadequate collection of the envisaged revenues due to lack of expanded economic bases. When little revenue is realized, the EPM is accorded low priority compared to other activities, which are then allocated the money. This situation makes the municipalities dependent on external support hence lack of sustainability.

### Non-generation of action plans from the municipalities

Working Groups are the “heart” of the EPM process. They are the ones expected to deal squarely with the identified and prioritized issues in the municipalities. Their tasks are to critically analyze the environmental issues and come up with strategies for addressing those issues and subsequently generate action plans. In order to do these tasks, the groups need *to meet regularly under the guidance of competent issue coordinators*. These groups are not performing well as most municipalities have failed to facilitate their regular and scheduled meetings. The issue coordinators and members of the working groups need to be facilitated by being provided with transport to and from the meeting venues. With the prevailing economic hardship, the majority of the members cannot afford to use part of their meager incomes for working group activities. The end result has been the *non-generation of action plans!*

Working Groups under the SDP were able to develop many action plans, which could not be implemented due to lack of funds. Based on this sad experience, a budget line was created in the Phase III Project Document with limited funds for implementing action plans and demonstration projects that would be prepared from the municipalities. In the Programme budget, about US \$ 21,000.00 was set aside for this purpose for each municipality. Unfortunately very few municipalities have been able to use a small portion of this facility following the non-generation of action plans and demonstration projects.

The same applies to those municipalities that are now supported by DANIDA. It was agreed that the funds that would be made available by DANIDA be

exclusively for the implementation of action plans and demonstration projects to be developed by the respective municipalities.

While the environment in these municipalities is fast deteriorating, there are a lot of unspent funds due to lack of developed action plans. This is because the working groups are not meeting, as they are not facilitated. Technical Advisors in those municipalities will thus continue to be “idle” till the groups start working. *Surely one can conclude from this situation that the non-implementation of action plans in an urban area is not always because of lack of funds! There are other factors to be considered.*

## **Changing Municipal Directors and/or Programme Coordinators**

Changing of either the Municipal Directors or Programme Coordinators (PC) is another constraint that is facing some of the municipalities. The Government effects transfers of the Municipal Directors from the municipalities to other smaller urban centres. In the case of PCs, these are either changed from their positions for one reason or another or transferred to other centres which are not under replication. This affects the Programme as the institutional memories in the trained MDs and PCs are lost and the incoming new ones need to be trained afresh in EPM.

## **Challenges**

Discussed below are some of the basic challenges facing the Sustainable Cities Programme in Tanzania.

### **Increased demand for the EPM process**

Following the success of this approach, and as the public becomes more aware of the environmental aspects in planning, other urban areas, which are not covered in the initial programme want to prepare their urban development plans using the said process. This has brought immense pressure on the already over stretched capacity of the authorities (UASU and Ministry of Lands and Human Settlements Development) responsible for the technical back stopping in the preparation of the plans through the EPM process. This means that the requesting urban areas will not be facilitated to prepare their plans due to inadequate capacity and lack of essential resources on the part of the entrusted authorities to spearhead the process.

The above situation raises *a major concern as well as a challenge*. If the process is initially limited to cities, municipalities and townships, what will happen to the many emerging and fast growing urban centres in the country? Will these be left to grow in a haphazard manner to the extent of becoming unplanned/squatter settlements? Will the emphasis be changed and these small “towns” given priority over the already grown (and often spoilt) large towns? It is said that prevention is better than cure! Even if the trend is reversed, how will the (EPM) planning be carried out given the limited capacities of both the human and financial resources on the part of the entrusted authorities for this type of planning? Will mass training of planners, consultants or other resource persons be possible given the high costs that will be involved?

The other serious area of concern is the level of training that should be given to trainers to enable them train others. So far UASU has just been offering only induction training on EPM to the resource persons, which is not adequate to enable them to offer effective training to others.

In order to deal with this situation, some questions need to be answered. At what level of details should the training be offered? Who should do so? Where? For what period of time (duration)? Is there a necessity to establish regional training institution(s) that would offer tailor made courses?

## **Operationalising and sustaining Working Groups**

As earlier indicated, the working groups are the *batteries* of the whole EPM process. If they do not perform, the EPM will not succeed. So the major challenge here is *how will the working groups be operationalised and sustained in order for them to deliver the goods?*

The working groups need to be supported because they are *the “think tanks” or “consultants”* of the concerned urban areas. It has been argued by certain quarters (including the global SCP) that materially supporting such groups is not a sustainable approach to EPM! But the same local authorities are prepared to pay dearly to consultants whom they engage for various tasks. Why are such consultants, many of whom are stakeholders in those areas, not sensitized enough to carry out their consultancies free of charge as in the case for the working groups? Surely this is a double standard!

## **Conducting issue-specific mini-consultations**

According to the “Consultation Shell” document, the participants in discussion groups deliberate on only one or two prioritized issues in the city/municipal consultation. The objective was to give them the “taste” and concept of the working group system. The rest of the prioritized issues were to be discussed at a later date during issue mini-consultations. Due to lack of adequate resources, the Sustainable Cities Programme – Tanzania has been compelled to modify this approach. During the municipal consultation, participants are divided into discussion groups (according to their interests and capacity to actively contribute) and deliberate on all the identified and prioritized issues. It is believed that by taking part in the discussions, they will understand the working group concept and at the same time cover all issues, which would have needed organizing mini-consultations in the future. This approach cuts out a great deal of expense.

## **Additional training module in EPM**

Based on the training conducted for the Programme and issue specific coordinators, it was realized that it was important these people understand the basics of management since they deal with different stakeholders from all walks of life. To heed this need, UASU has now included “basic management concepts” as one of the training modules in EPM training.

## **Future of the Urban Authorities Support Unit (UASU)**

UASU receives its financial support from the UNDP to run the office and to enable the UASU technical staff and the different resource persons to travel to the municipalities for backstopping services. UNDP assistance is scheduled to cease in June 2001. The government cannot afford to support UASU since it involves substantial funding. Thus if no donor comes to support UASU, it means UASU is going to be “disbanded” while its services are still badly needed by the municipalities which are at different stages of the EPM process. What then would be the future of the EPM replication in the country?

## Bringing the EPM process to the neighbourhood level

Currently the SCP is operational at the city/municipal level. Experience in Tanzania has shown that the communities are not taking keen interest and actively participating in implementing issues that were prioritized at the municipal consultation, unless there are demonstration projects to be implemented in their areas. Based on this experience, the SCP – Tanzania is now attempting to scale down the EPM process to the ward level. Environmental Profiles will be prepared in each ward by competent multi-sectoral personnel and other knowledgeable resource persons based in the ward. Then ward consultations will be conducted where the communities will identify and prioritize issues critical for their development. Eventually strategic ward development plans will be prepared which will be combined to obtain an “integrated strategic urban development planning framework” for the municipality in question. This is now being “piloted” in Iringa Municipality.

## Concluding remarks

Following the EPM replication experience in Tanzania, as discussed above, it can be concluded that:

- ◆ **Adequate preparations and building the necessary capacities** are required before one thinks of replicating the EPM countrywide, otherwise is doomed to face numerous problems.
- ◆ **Replication has also policy and tool development dimensions**. This is evident from UASU’s involvement in:
  - the preparation and development of SUDP as an urban planning tool
  - the preparation of guidelines for preparing SUDP
  - the advocacy of policy change and development support to the extent of convincing the Tanzanian government to gradually move from the “master” planning process towards the EPM led planning process.

This is the greatest achievement for both UASU and the Sustainable Cities Programme in Tanzania.

# Nigeria, national programme – Support role of Ministry in replicating the EPM approach and the SCP process at national level

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## Urbanization and urban growth in Nigeria

Nigeria is urbanising at a very fast pace. The share of Nigeria's urban population increased from 20% in 1970 to more than 38% in 1993. Of the projected 120 million Nigerians for the year 2000, about 45 million are now living in cities and towns. By the 1991 Census, there are about 112 urban centres with a population of over 100,000 people, some nine have a population of over half-a-million whilst three centres have a population of over one million each. The urban population growth rate of about 6% is among the highest in the world. At current rates the number of urban dwellers will double in less than 13 years. This is equivalent to adding a city of three million people each year. Such growth rate, in the face of poor management, is creating immense stress on urban services and infrastructure such as water, roads, sanitation and waste disposal. In most of Nigeria's cities, environmental degradation and dysfunctional infrastructure has reached alarming stage.

On the political scene, the creation of more States and Local Government Councils has further resulted in the emergence of new growth poles and by implication, new urban centres. The Nigerian urban and regional development policy document recognizes all State and Local Government Headquarters as urban centres in addition to those that acquired the status by their share population and size.

The problems and challenges posed by the rapid rate of uncontrolled and unplanned urban growth are indeed immense, over-stretching the available resources for effective management. The land, water, coastline, air and other natural resources are being rapidly polluted, creating in the process a loss of valuable resource. A low level of awareness on the part of the people and an absence of effective advocacy and inappropriate programmes of development have further compounded the problems of urban growth and development.

## The Sustainable Cities Programme

The Sustainable Cities Programme, (SCP), in Nigeria was initiated through the Sustainable Ibadan Project (SIP) by UNCHS Habitat and UNEP. The project, which is now in its second stage of consolidation, was launched in 1994 and became effective in 1995. The overall objective of the SIP is to promote environmentally sustainable socio-economic development and growth in Ibadan by:

- Enhancing availability and use of natural resources and reducing exposure to environmental hazards in and around the city, and
- Strengthening local capacities to plan, coordinate and manage urban development.

By 1997, two years after the take off of the SIP, the Federal Government had taken a keen interest in the Programme and had expressed the desire for

replication in other cities to UNCHS Habitat. The interest of the Federal Ministry of Works and Housing was borne out of the fact that it has statutory responsibility to manage and coordinate urban development activities all over the country. With the assistance of UNCHS Habitat and UNDP in Nigeria, the SCP was accepted as one of the priority areas in which the Government of Nigeria was desirous of UNDP assistance under the 5<sup>th</sup> Country Cooperation Framework, CCF1. The SCP is under the Urban Management sub Programme. This is the first time the urban development sector would feature in the country assistance Programme of UNDP in Nigeria despite the enormity of urban problems hitherto plaguing the country.

In the Programme Support Document (PSD) of the UNDP/FGN cooperation, the objective of the Urban Management sub-Programme is “to enhance national capacity for the formulation and implementation of sustainable urban management strategies and policies”. Under the four broad categories of UNDP assistance in Nigeria, the SCP falls under the component National Management of Socio Economic Development (NMSED). The entire Programme is designed “to support national efforts to address inadequacies in urban housing, infrastructure, amenities and urban unemployment that constitute some of the nation’s most pressing urban problems”. The central focus of the UNDP assistance is on capacity building for urban management, development of human settlements etc. through strengthening of local governments and maximizing community participation. This is where the SCP/EPM is anchored.

The expected output of the Sub-Programme is the consolidation of the Sustainable Ibadan Project and replication of the process in Kano and Enugu during the period 1998 to 2001. Also the SCP/EPM will be replicated in 5 additional cities during the same period. Over the period, implementation of the UNDP assisted programmes has been very slow, including the EPM replication, due to political instability and poor coordination at the national level.

## **The replication process**

The EPM replication process at the national level in Nigeria started in 1995 following the Ibadan City Consultation meeting. The Federal Ministry of Works and Housing and Urban Development Bank of Nigeria were well represented at the city consultation and had useful discussions with officials of UNCHS Habitat and the project team at Ibadan. Although the Federal Government of Nigeria was signatory to the SIP document, there was no formal link between the project and the Federal Ministry of Works and Housing until the period of the city consultation. As noted earlier, the involvement of the Federal Ministry of Works and Housing arose out of the fact that the Ministry has statutory responsibility for coordinating and monitoring urban development activities nationwide. On its part the UDBN got into the Programme in a bid to strategically position itself for the delivery of services to the cities and in particular to the Local Governments that are, in their right, shareholders in the bank.

With the establishment of a Sustainable Cities Programme Coordination Unit (PCU) at the Federal Ministry of Works and Housing, the replication of the EPM process took off in 1997. The Unit comprised four senior officials who report through the line to a Deputy Director, Director, Permanent Secretary and ultimately the Honourable Minister. The Unit also carries out other duties within the purview of the responsibilities of the Department of Lands, Urban and Regional Development.



It is instructive to note that the series of Preparatory Committee Meetings for the City Summit attended by Nigerian delegation between 1994 and 1996 further assisted in the understanding of the workings of UNCHS Habitat and its programmes as well as facilitated the need to establish the SCP Coordination Unit at the Federal level. The Unit has achieved considerable progress in setting the strategies for the replication process. Notable among these are:

- Negotiating the EPM replication with the National Planning Commission and UNDP and ensuring its acceptance into the 5<sup>th</sup> Country Cooperation Framework (CCF1);
- Assisting in the preparation of Project Documents for the extension of the Ibadan Project and the start up of Kano and Enugu Projects;
- Promoting the replication of the EPM in additional 5 cities, which will be funded under the CCF1.

## Participating cities

There are three cities currently participating in the Sustainable Cities Programme in Nigeria. While the city of Ibadan is one of the twelve initial global cities selected by UNCHS Habitat and UNEP, the cities of Kano and Enugu came into the programme under the national replication process. The selection of the two cities was based on geo-political consideration of the Nigerian landscape. Being externally supported, the SCP was seen as a means of opening the cities to external assistance both technically and financially. Because of the involvement of the Federal Government in the replication process, it became expedient to seek to balance the regional outlook of the programme in the country. The desire for regional balancing has remained prominent in the development process in Nigeria. The city of Ibadan is located in the western geo-political region, with Kano in the North Central region and Enugu in the eastern region. In part the selection was favored in consideration of the three cities acting as diffusion centres in the three main geographical regions. Nigeria started with only three regions at independence in 1960.

## Ibadan

The city of Ibadan is located in the southwest region of Nigeria. It is the capital of Oyo State and an important administrative and commercial centre. Like other primate cities in Nigeria, the socio-economic and institutional environment in Ibadan is very complex. The city exhibits perhaps the most daunting environmental degradation and dysfunctional infrastructure and service delivery of all cities in Nigeria. Little wonder that it was one of the twelve cities selected by the UNCHS Habitat and UNEP to participate in the first phase of the SCP. Ibadan consists of 11 Local Governments with an estimated population of about 1.5 million people by the 1999 projection of the population. The 11 LGs are responsible for the administration and management of the city along with the State Government. The association of LGs that exists only cooperates in the management of their jointly owned properties. There is no form of municipal institutional structure for coordination of citywide development effort. The implementation of the SIP has however created awareness and need for effective urban management strategy in Ibadan. With the consolidation phase of the SIP, it is expected that the gap between the communities and the city administrations will be closed and the Local Governments will collaborate with one another to foster good governance. The on-going consolidation phase of the SCP is expected to institutionalize the EPM process and open the LGs to adopting it in their routine practice. Some achievements of the SIP include:

- Raising awareness and consciousness about environment and development issues, and the inter-relationships between the two through briefings, workshops and consultations;
- Creating collaborative environment and basis for future training and capacity building;
- Facilitating the establishment of Local Government Development Committees, which will eventually become the first point of contact for Working Groups and other EPM activities.

## Kano

Kano is located in the North Central part of Nigeria. It is the largest city in Northern Nigeria with a population of about 2.3 million people according to the 1991 national population census and a projected figure of 2.6 million people in 1999. It is a centre of intensive commerce, the capital city of Kano State and a university town. Kano has been noted for its commercial activities in the trans-Saharan trade route since the 18<sup>th</sup> century. The city exhibits high level of urban environmental degradation and dysfunctional infrastructure. The various water sources have been polluted due to unmanaged industrialization and uncontrolled solid waste disposal among others. Since the inception of the SKP, the State Government has shown tremendous interest in the programme and supported it financially. A Technical Support Unit has been established with necessary staff and equipment. Although the programme is currently anchored at the State level, the LGs are being encouraged to take ownership and drive the project.

There are 16 Local Government Councils within metropolitan Kano. These are independent levels of Government and collectively they are responsible for the management and administration of the city. Like the city of Ibadan, there is no formal municipal institutional structure for coordinating citywide development activities. The existing structures are essentially State Government outfits. Like other state capitals in Nigeria, the Kano State Government controls a large part of the institutions and resources of the city. Thus the location of the Sustainable Kano Project is currently at the State level. A Technical Support Unit (TSU) has been established which is now under the State Ministry of Environment. Considerable support is being given to the TSU including financial support. The Local Governments in the city are being sensitized and encouraged to embrace the EPM process.

## Enugu

Enugu is the capital city of Enugu State. It is located in the eastern region of Nigeria with a population of 464,514 people by the 1991 national population census. By projection, the city is expected to have up to 574,707 people by 1999. Enugu is an industrial and a mining city. It is a University town and the political capital of the defunct Eastern Nigeria. Development in the city has slowed down in recent times following series of state creation out of the former Eastern Nigeria and the low level of investments over the years resulting form poor governance. However, the city remains the primate urban centre of the eastern zone. There are three Local Government Councils within the metropolis. Like the other cities, there is no municipal institution for the coordination of citywide development activities. The Enugu State Government plays prominent role in the management and administration of the city. Since the inception of the Sustainable Enugu Project, the State Government has shown considerable concern about the project and demonstrated its support by payment of the required counterpart funds for UNDP support. Also, the three Local Government Councils within the metropolis have supported the project through their financial contribution to the project funds

with UNDP. The State Government has established the Technical Support Unit (TSU) for the SKP and provided the staff to the project on secondment from the State civil service. However, the enthusiasm of both the State and Local Government officials seems to have wane over time as no physical project has been achieved. The interests of the State and LGs have however been rekindled following series of meetings and briefings. The LGS have shown considerable determination to take ownership of the project.

## Prospects of other cities joining the programme

The prospect of other cities joining the SCP/EPM process in Nigeria is indeed very bright. In the last two years some cities have come to inquire about the programme and how to participate. This is despite the fact that the Coordination Unit is yet to carryout a national consultation meeting to sensitize other cities. The major inhibiting factor has been the instability in the political leadership, particularly at the Local Government level. Nigeria is a fledgling democracy. The new Local Government Chairmen, Councilors, and State political appointees are currently being sensitized in Ibadan, Kano and Enugu. We expect that the gains of the democratic process will facilitate the popularization of the EPM in the cities. However, some existing policies and legislation, as well as procedure for doing things will have to be reviewed at state and national levels for such process as the EPM to take root. Urban development matters in the Federal Constitution of Nigeria are the responsibility of the State and Local Governments, but in practice, the Federal Government plays a considerably feasible role arising from concentration of power and resources at the centre. The Local Governments lack the capacity to play their expected role in urban management and administration.

Considering the level of awareness about the SCP/EPM process in Nigeria, some seven cities are likely to join the programme within the next one year. Possible cities include Abuja, Lagos, Onitsha, Port Harcourt, Kaduna, Maiduguri and Sokoto. These are state capitals with an average of 500,000 people. They all exhibit high level environmental degradation and inefficient infrastructure and service delivery. In all the cities, citizen participation and community involvement in governance and development is very low.

*SCP cities and likely ones to participate soon in the EPM replication (Source: National Population Commission, 1998.)*

City	1991 Population figure	Projection for 1999
Abuja	371,674	486,114
Enugu	464,514	574,707
Ibadan	1,228,663	1,520,015
Kano	2,298,592	2,951,093
Lagos	5,294,774	7,054,629
Maiduguri	607,300	751,306
Port Harcourt	440,399	565,411
Sokoto	305,826	378,341

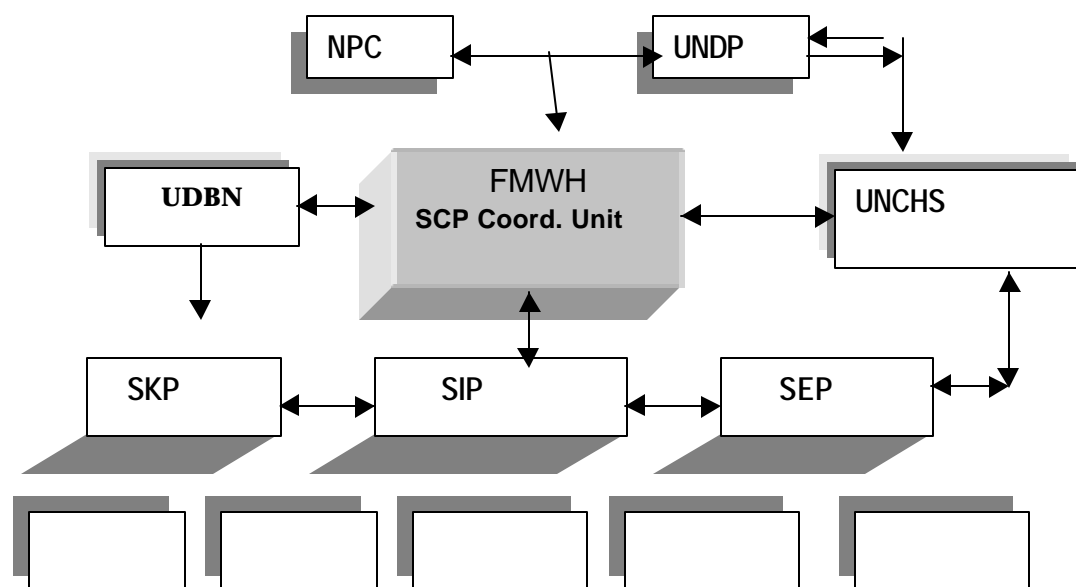
## Institutional framework for EPM replication

Within the framework of the UNDP assistance programme in Nigeria, the EPM replication is being executed with broad participation of Government, the private sector and the wider civil society, as well as UN-specialized implementation agencies. Under the programme, a National Programme Coordinating Committee provides policy direction while Stakeholder Boards oversee the implementation of the programme at both Federal and State levels. Under the set framework, the Federal Ministry of Works and Housing is responsible for the replication of the EPM while city level activities are at the State level. The overall Executing Agency of Government for all UNDP assisted programmes is the National Planning Commission (NPC). All implementing agencies obtain clearance and authorization from NPC and submit quarterly progress reports on implementation.

The Urban Development Bank of Nigeria, being a technically competent institution with the capacity and demonstrated experience in the subject field participates in the replication process mainly as a promoter. Its role has been to facilitate the adoption of the EPM process in the selection, preparation and packaging of urban investment projects for financing. The arrangement is for the SCP cities to identify, prepare and package bankable projects for consideration and financing by the bank. The bank has played very prominent role in the Sustainable Kano and Enugu Projects. It has supported the process financially and in materials. In the last one-year, both SIP and SKP have prepared viable projects for financing. Unfortunately the financial position of the bank has not allowed it to take up any of the projects. The on going re-capitalization of the Bank would perhaps enable it play its role as financial institution for supporting urban investment initiatives using the EPM model in project preparation and delivery.

Although the replication of the EPM is currently being spearheaded by the central government, it is expected that the States and Local Governments would respond to the challenge of driving the process. The UNDP/FGN project document for the 5<sup>th</sup> Country Cooperation provides for State and Local Governments to take ownership and replicate the EPM. Additional 5 cities are expected to be admitted into the programme by the end of the period in 2001.

## Programme management framework



NPC – National Planning Commission  
UNDP – United Nations Development Programme  
FMWH – Federal Ministry of Works and Housing  
UDBN – Urban Development Bank of Nigeria  
UNCHS – United Nations Centre for Human Settlements  
SKP – Sustainable Kano Project  
SIP – Sustainable Ibadan Project  
SEP – Sustainable Enugu Project

\*\*\* The five boxes in the last row are for potential SCP cities in the replication process.

## Programme support and management

As noted earlier in this paper, the replication of the EPM in Nigeria is being pursued under the Urban Management sub programme of the National Management of Socio-Economic Development (NMSED) in the UNDP assisted Programme of development in Nigeria. The entire Programme is being financed under an agreed cost sharing formula between UNDP, Federal, State and Local Governments.

Policy support and guidance is provided at the two levels of Federal and State Governments. Because of over centralization of political power and resources at the centre, the Local Governments have not been able to assert themselves in policy matters. They see themselves as beneficiaries of the central government efforts. Implicitly, the long era of military rule with its line command structure on governance is partly responsible for the attitude of the Local Government to development matters. Also low level capacity, poor financial resources and general political instability account for the situation. The new democratic dispensation is however poised to effect changes through mobilization of citizens' interest in community development. Within the existing framework for programme implementation, a National Programme Coordinating Committee (NPCC) provides policy direction for overall coordination of country programme while a State Programme Coordination Committee (SPCC) provides policy direction at State level reflecting state priority and local socio-economic and development priorities. Below each of the Committees is a Stakeholder Board which functions as clearing house or approving authority for activities to be performed by implementing agencies. The composition of the Committees and Boards reflects a broad spectrum of government, the private sector, NGOs and the wider civil society.

The Programme Coordination Unit (PCU) at FMWH mainly provides technical support to the EPM replication at the Federal level and at the State level by the Technical Support Units (TSU). Recently, a joint meeting of key operators and stakeholders of the SCP in Nigeria agreed to recruit the former Project Manager for the SIP to support the PCU at the federal level. This was in view of his wide experience in the EPM process and the need to beef up the technical capacity of the Unit. It is pertinent to note that the technical support being provided by the PCU and TSU is indeed limited. The officials are not versed in the concept and operation of the EPM process. They have only received limited briefings and exposure on the programme. The gap in the delivery of technical support is however covered by support from UNCHS Habitat.

The National Planning Commission and the Federal Ministry of Works and Housing monitor the implementation of the replication process. The Programme

Support Document for the entire UNDP assisted programme stipulates the role of each agency in the implementation process. The PCU carries out periodic monitoring visits to the participating cities and documents experience through quarterly reports submitted to NPC and UNDP. Progress of implementation is also reported at the annual meetings of the National Council on Housing comprising Ministers, Commissioners and Permanent Secretaries responsible for the development of housing and human settlement matters. Also the progress is reported to the annual Conference of the Directors and Head of Town Planning Departments in the country. These are part of the strategies for sensitizing key stakeholders and popularizing the EPM process.

Currently, capacity building and knowledge management is hinged on the support provided by UNCHS Habitat and a few institutions that have developed sufficient know-how in the EPM process. The city of Ibadan provides a learning field for the EPM process and being a University town, a substantial resource base has been created with a large pool of resource persons for the process. As the programme progresses one expects considerable capacity to be available through the University and the Polytechnic. These two institutions now offer training courses in EPM. In order to expand the scope for capacity building, it is necessary for the Federal Ministry of Works and Housing to collaborate with the Department of State and Local Government Affairs at the Presidency with a view to evolving a training programme for Local Government officials on the EPM, using the existing facilities at the University of Ibadan and the Polytechnic, Ibadan.

As part of the delivery of support to the EPM process in Nigeria, the Urban Development Bank of Nigeria (UDBN) has positioned itself to finance demonstration projects evolved through the process. UDBN is a specialized financial institution established to assist States and Local Governments in financing viable and priority urban investment projects. Although the bank is yet to finance any physical project under the SCP/EPM project, there is a good prospect for the collaborative effort between the bank and SCP cities in Nigeria. Other forms of financial support to the SIP in particular include the Ibadan Trust Fund and through contribution by the Association of Local Governments. In Ibadan, the Local Governments mobilises substantial funds to support the activities of the TSUs and for demonstration projects. We expect Local Governments in the other cities to follow the Ibadan initiative by been innovative in the mobilization of local financial resources to support the process.

## **Support needs at regional and global levels**

The replication of the EPM at national level in Nigeria has been accepted at both national and state levels. In Ibadan, the Local Governments are embracing the process through the activities of the various Working Groups. Considerable awareness has been created through the SIP, SKP and SEP. However there is a need to intensify the process with a view to involving the appropriate agencies and levels of government in the replication process to create wider acceptance. Considering the available resources and capacity in the EPM process, it is necessary that cities in the African region share experience through such forum as exchange programmes between cities and agencies responsible for national replication. Such exchange programmes will foster cooperation at regional level as well as facilitate network of cities. There is also the need to encourage sub-regional collaboration in the sharing of experience among cities. In the West African sub-region for example, certain common issues could be tackled using the experience of other cities within the sub-region. The issue of unorganized

street trading with attendant consequences on traffic and solid waste generation is an area on which experience could be shared.

National replication effort should include capacity to support the demonstration of the use and application of Geographic Information System (GIS) and other Information Management techniques. This will encourage wider use of appropriate information management technique at the local level and further demonstrate the relevance of the EPM in urban development and management. There are existing institutions that could be supported to provide such specialized skill. In Nigeria, the University of Ibadan, Centre for Urban and Regional Planning and the Department of Town Planning of The Polytechnic, Ibadan have started to offer training courses in Sustainable Development and the EPM. The two institutions should be assisted to develop and offer training courses in sustainable human development and the EPM in particular. The manpower requirement for effective adoption of the EPM in Nigeria is very large considering the number of urban centres around the country. Also one institution in each of the other two geo-political regions should be supported to be able to offer training in the field. In Kano, the Bayero University has shown interest in the SCP/EPM process and in Enugu, the Enugu State University of Science and Technology is working closely with the SEP. Technically the Programme should support the institutions.

### **SIP Resource Centre**

Over the few years of its existence, the SIP has established a network of resource persons and acquired some equipment in information technology and mapping. The GIS centre is now a veritable resource centre to all the local Governments in Ibadan. Along with the capacity already built in Ibadan, the centre, if well supported and funded appropriately, could provide various types of maps for use in development planning and monitoring the environment in Ibadan and indeed the entire Oyo State. Considering the potential of the centre, it would be beneficial for the region, if appropriate support can be mobilized for its expansion to enable it play such role as training of technical personnel in GIS and developing needed capacity in the sector. The replication cities of Kano and Enugu rely on the experience from Ibadan. Project managers are being encouraged to visit the city and interact with the TSU and the working groups to learn at first hand the operational methods of the process.