DANIDA

Draft Pilot Project Document for Recycling in Mbabane Annexure 10 Awareness Raising Approach

Job Ref.No. Edition

Prepd. Checked Appd.

Table of contents

1.	Introduction	1
1.1	Testing the National Solid Waste Management Strategy	1
1.2	The Organisation of the Buy Back centres in Mbabane City Area	1
1.3	The Objectives and the Organisation of the Consultancy	1
2.	Background	3
2.1	Development of Mbabane City Area	
2.2	A Skewed Urban Structure	3
2.3	Identification of Problems and Needs	4
2.4	Environmental Impacts	5
2.5	Organisational and Institutional aspects	5
2.6	Solid Waste Management and Recycling in Mbabane	6
3.	Process followed	8
3.1	A Task Team is Established	8
3.2	Mobilising for Public Awareness Raising	8
4.	Structures and procedures established	10
4.1	The Downtown Buy Back Centre	10
4.2	The Sidwashini Buy Back Centre	11
4.3	Guidelines for Operation of the Buy Back Centres	11
5.	The awareness-raising programme	12
5.1	Community Participation	12
5.2	Lessons Learnt from Recycling Awareness-Raising Programmes	13
5.3	Contents of Awareness Raising Programme	15
5.3.1	Discussion of Pilot Project Objectives	15
5.3.2	The Target Groups for the Programme	16
5.3.3	Approach and Methodology	17
5.3.4	The Methods and Tools to be applied	18
5.3.5	Possibilities for Productive End-use	20
5.4	Implementation plan and activities	21
5.5	Training and Development Needs	22
6.	Annexes	24
	ANNEX 1: LIST OF PEOPLE MET	25
	ANNEX 2: LIST OF LITERATURE	27

1. Introduction

1.1 Testing the National Solid Waste Management Strategy

In May 2001 the Swaziland Environment Authority prepared a draft National Solid Waste Management Strategy for Swaziland. The draft strategy is now being tested in a number of pilot projects one of which is a recycling project introducing buy back centres in Swaziland.

The general objectives of the pilot projects are the following:

- To provide feedback to the refinement of the strategy
- To provide sustainable and visible results for the community

A core principle of the National Solid Waste Management Strategy is to focus on affordability and replicability. In the context of awareness raising this must apply by making optimal use of already existing material and structures. A short term consultancy has been prepared to develop an awareness raising approach to the pilot project on the introduction of buy back centres adding practical value to the principles of the strategy.

1.2 The Organisation of the Buy Back centres in Mbabane City Area

The organisation of the recycling pilot project in Mbabane has been underway from the beginning of 2002. Swaziland Environmental Authority has taken the initiative to organise market studies on recyclables in Swaziland and to discuss the possible institutional set-up for recycling in Mbabane in a workshop in March 2002.

A task team chaired by Mbabane City Council was organised as a follow-up of the workshop. So far the task team has held five meetings and the logistics for the establishment of buy back centres are being worked out. A tender has been called for the operation of two buy-back centres in Mbabane. The consultancy for the awareness-raising approach forms part of the preparations for the pilot project to take off.

1.3 The Objectives and the Organisation of the Consultancy

The preparations for the pilot project did not include a community study or a study of the social aspects of the urbanisation process. Instead a social survey to establish a framework for the awareness- raising programme was included in the terms of reference for the short-term consultant.

The overall objectives of the consultancy on the development of the awareness raising approach have been the following ¹:

¹ Reference is made to Annex 1 with the Terms of Reference for the Consultant

- 1. To develop and initiate a community awareness programme on recycling in urban areas of Mbabane
- 2. To draft an all-inclusive report on the education and awareness activities and programmes developed for the recycling initiative in Mbabane.

Within this assignment it has been realised that time will allow for design of the awareness raising approach for the recycling pilot project only. Time is not sufficient to allow for more detailed production of materials and to expect an implementation of the initiatives within the same two weeks. The consultant has therefore focussed on the development of an awareness raising approach based on:

- International lessons learnt from waste recycling projects
- Trends in the urbanisation process of Mbabane city area and a social differentiation among the target group for the awareness raising programme
- An quick assessment of the organisational capacities and human resources in Mbabane City Council and an identification of relevant organisations to carry out an awareness and education program

The present report is organised in accordance with these tasks and as much as possible in conformity with a format for consolidated project reports outlined in the terms of reference. The first chapters describe the framework for the awareness raising approach in the urbanisation process of Mbabane City as well as the contents and as much of the process of the pilot project known to the consultant². Thereafter follows a presentation of the awareness raising programme, the approach and methodology and the training and development activities.

It is expected that approach from now on will be further developed in consultations with stakeholders and revised accordingly. During and after implementation of the pilot project lessons learnt will be deduced and an evaluation of these will determine if the approach is replicable for other communities.

The Consultant has had the opportunity to meet with residents and administrators and organisations from all over Mbabane City and especially with community members from Sidwashini and Msunduza.

During the second week the Consultant has enjoyed a fruitful co-operation with the head of the Environmental Health and Pollution Prevention Unit of Mbabane City Council Mr. Ndela, who is the new chairman of the task team.

² The Consultant has not previously been involved with this pilot project to any major extent

2. Background

2.1 Development of Mbabane City Area

Mbabane³ is the capital and the second largest city of Swaziland with a population of approximately 70.000 today and an estimated growth rate of approximately 4.2% per annum.

The city was established in 1902 as a colonial administrative centre and the colonial layout consisted of a few main streets and historic buildings remaining today⁴. After the 1950íes the urban settlement gradually developed into a small town. The majority of the local urban population settled at Msunduza, which remains a partially planned settlement even today⁵.

From the 1970ies the population grew rapidly and spread into a number of smaller residential townships while a start was made to upgrade the rapidly developing unplanned settlements such as Sidwashini and smaller housing projects at Msunduza. Two smaller industrial areas were established, one near the town centre and one at Sidwashini.

Since 1981, in spite of the provision of the Town Planning Scheme, individual subdivisions and changes of land use have been permitted on an ad hoc basis without a clearly defined overall vision of the city and without clearly defined planning intentions for the various land use zones. Informal residential settlement schemes in particular have mushroomed on the urban fringes to accommodate further population growth.

2.2 A Skewed Urban Structure

Today intensive mixed urban uses are spread out in the north west-south east valley between the Polinjane and Mbabane Rivers at the core of which is the central business district (CBD), the town industrial area and Msunduza, Featherstone and Checkers residential areas. Various other commercial activities, central government offices and schools are scattered to the south of the CBD. The city's middle and high-income residential areas lie north and east of the CBD with very low population densities. Low-income housing estates (Sidwashini II, Extension 16 and Embangweni) have been developed in the far north.

The informal settlements, such as Msunduza, Mangwaneni, Nkwalini, Mahwalala, Manzana and Makholokholo have developed largely on the far side of the water-

3

³ The name Mbabane means "something sharp and bitter". The name is said to belong to a former chief.

⁴ such as the Tinkhundla office at Allister Miller Street, The Tavern Hotel, Coronation Park, the Golf Club and the Queensgate residential area.

⁵ Reference is made to the Mbabane Structure Plan 1997 prepared by Burrow Binnie ltd. In consultation with Plan Inc., approved and issued by Mbabane City Council in 1999. Plan period is 1997-2007.

sheds and on the peripheries of the city in areas difficult to service and lacking in community facilities.

Sixty percent of the city population lives in informal settlements without adequate provision of community facilities. In these settlements less than 50% of the population has access to safe water and less than 20% is served by reticulated sewerage.

The Mbabane City Structure Plan from 1997-07 is an attempt to come to grips with the expansion of the city and to integrate the demands of the residents for public services in a planned development for the city. Furthermore, the Government of Swaziland has initiated an Urban Development Programme for Mbabane and Manzini⁶ to provide city infrastructure and upgrade the informal settlements.

2.3 Identification of Problems and Needs

Mbabane is not a major location for manufacturing activities per se. Rather, its industrial sites tend to attract service providers such as companies involved in transportation, warehousing and other distribution activities and other service activities such as providing supplies to the construction industry.

The urban growth of Mbabane over the past decade has been linked to strong development of the tertiary (service) and administrative sectors. Mbabane is the national capital and so most government ministries are situated here. Accordingly, Mbabane is also the logical location for companies supplying government contracts in various areas.

Mbabane also has a diversified service and commercial sector. There is a concentration of the nation's senior, and therefore better paid civil servants in Mbabane, as well as a large number of more junior civil servants. The civil servants together with the many private sector office workers and expatriates that live and work in Mbabane have a wide diversity in demands and needs for consumer products.

Another significant trend of the growth of Mbabane is the recent mushrooming of informal sector activities in Swaziland and in Mbabane in particular. The reasons behind this development are linked to a number of factors including the poor economic growth over the last ten years and in-migration from neighbouring countries.

Poverty, lack of skills and education and unemployment in the formal sector all tend to give rise to high levels of informal sector employment. Studies from the early nineties indicate that between 19-25% of the population of Mbabane were employed in the informal sector. People employed in the informal sector either stay in low-cost residential areas or informal settlements such as Msunduza, Mahwalala and Manzana.

The informal settlements such as Msunduza, Mabhodleleni, Sidwashini and Nkwalini have population densities far beyond the level of the rest of the urban

⁶ The programme was formulated and negotiated for funding by the World Bank in 1996

area. An estimated 60% of the housing stock in Mbabane is in the informal settlements and built of temporary materials.

It is an unfortunate fact that the provision of supportive infrastructure and land uses (in particular housing, schools, clinics and recreation areas) have not kept pace with the economic growth and growth of the informal settlement areas of the city. The demand for development of the infrastructure and improved public services cannot be met to the disappointment of both high-and middle income inhabitants as well as the increasing number of residents in the informal settlements.

The provision of community and commercial facilities is generally skewed towards the city centre and older suburbs. Most of the informal settlements and the new high-income residential areas outside the central city (within a circle of a radius of four kilometres) lack an adequate provision of services and facilities.

2.4 Environmental Impacts

Lack of proper infrastructure including waste management facilities in the informal settlement areas of Mbabane result in littering and environmental pollution of streams and open spaces from waste.

The impact of the pollution eventually shows up in a deteriorated health picture of the population as an easier spread of diseases and increased numbers of incidents of water related illnesses like diarrhoea. Waste dumped indiscriminately and in the river result in decomposition attracting flies and polluting the water.

Disease incidence in under fives is a useful measure of living conditions and access to clean water and sanitation facilities. It is quite high in informal settlements in Mbabane with an incidence of over 30% for diarrhoea. Household cleanliness also correlates negatively with disease incidence, suggesting that sanitary practice in many households remains problematic.⁷

2.5 Organisational and Institutional aspects

Environmental problems are cross cutting issues calling upon co-operation and conflict resolution among many stakeholders with different interests. At national level a specific entity has been organised to address environmental issues under the Ministry of Tourism, Environment and Communications, the Swaziland Environmental Authority At municipal level the Environmental Health Department is in charge of local waste management.

The Environmental Health and Pollution Control Unit monitors illegal dumping, the enforcement of the provision of litter and refuse bins and collection of bio-hazardous waste. Litter and street cleaning however, is the responsibility of the public works section.

_

⁷ Mbabane Structure Plan, 4.10

The resources of the Environmental Health and Pollution Control unit itself are quite limited. The municipal administration has three staff persons in the head office of the Environmental Section, four food inspectors, and two nurses as well as staff working with waste collection.

The Environmental Health department recognises the need for partnerships with other departments and with the civil society in order to stimulate the interest for environmental issues and to solve the problems.

2.6 Solid Waste Management and Recycling in Mbabane

The City Council estimates that the waste collection rate in the greater Mbabane urban area is about 40%. The City Council operates three trucks and two tractors to manage daily collection in the central business district downtown, household collections twice a week elsewhere in the formal residential areas and a weekly collection from the 34 skips in the informal areas. The skips are located throughout the city within market areas in informal residential areas. Obviously this coverage is not meeting the needs and the city has a serious litter problem.

The residents in the informal residential areas do not enjoy the skip system because people find themselves walking too far to find the skips located on kerbsides adjacent to the major roads. Furthermore, the smaller children cannot reach the lid or edge of the bins. You therefore find informal dumping areas in many places.

Whereas some big commercial enterprises have made arrangement for collection of their waste with e.g. Swaziland Paper Mills the smaller commercial entities need some place to get rid of their waste. A commercial survey carried out in connection with the structure planning indicates the type of improvements business people in the central business district would like to see in the future. Better refuse collection and waste disposal was the second highest priority⁸.

The city has closed down the old dumpsite and opened a new landfill for Mbabane City area, which is up to modern technical standards. However, in the long run with the population growth in Mbabane, the City Council needs to look into possibilities to reduce the waste stream to be deposited at the landfill. The recycling project establishing the buy back centres will reduce the waste stream to be deposited.

In both areas chosen for a buy back centre there is a clear need for extended waste management services. This can be seen from the skips flowing over, the littered roadside and the informal dumps. The service area is bigger than the immediate surroundings of the buy back centres especially with regard to the buy back centre downtown. However, no analysis has been made to draw a more accurate picture of the service area and the potential supply.

.

⁸ Structure Plan p 6.3

The market for the waste collected at the buy back centres however, has been established in so far as interested parties have been identified e.g. the Swaziland Paper Mills, Ngwenya Glass, Reclam as well as the prices they are willing to pay. The project analysis includes an estimate of the market potentials from the main players. The industries believe that a larger share of the waste stream may be tapped especially with respect to paper from government offices and waste from the household sector.

Some of the industries have tried to organise their own supply by way of a system of collectors and smaller operators. They are not satisfied with the outcome of this system and believe that there is room for an expansion of the recycling industry. They therefore welcome the buy back centres. The collectors on the other hand consider the market conditions for their services to be tough and they expect a stiff competition from the buy back centres.

3. Process followed

3.1 A Task Team is Established

As an outcome of a project workshop in February 2002 a task team of interested parties was formed to promote a pilot project testing the idea of buy back centres in Swaziland. The group consists of representatives from Mbabane City Council, SEA, NGO's and the educational sector. Terms of reference have been developed for the task team. Reference is made to annex 6.2.

The task team has held regular meetings where especially the market for recyclables and issues related to the establishment and operation of the buy back centres have been discussed. Guidelines for the operation of the buy back centres have also been developed, see Annex 6.3.

Based on these preparations the City Council has now started a tender procedure calling for proposals to organise and operate the centres. Only major players such as e.g. Swaziland Paper Mills and Reclam have responded whereas the City Council had expected to see smaller independent business people respond as well. The risk is that the big industrial operator will consolidate its monopoly. By employing their own group of collectors the job opportunities for poor residents in the neighbourhood may be closed.

3.2 Mobilising for Public Awareness Raising

From the start it was acknowledged in the task force that public awareness raising is central to the success of the operation of the centres and a number of initiatives were prepared to inform the general public e.g. newspaper articles and a poster and leaflets.

NGO's are usually spearheading this way of informing the public but in this case the NGO called Clean and Beautiful Swaziland is dormant (although now being revived) and the NGO's called Yonge Nawe is very much occupied with other activities. Yonge Nawe has a regular radio programme addressing environmental issues for an interested audience and this programme is well suited to present the environmental initiatives of the City Council. It is important to mobilise the potentials of the NGO's representatives on the team.

The Waterford College representing the schools on the team has shown great commitment to the initiative. The school is building up a reputation for environmental concern and through its community outreach programme it will spread the information on the buy back centres and initiate recycling activities in other schools in the city.

While the issue of awareness raising has been continuously on the agenda of the meetings it is realised, that the task team needs a systematic strategy to public awareness raising taking the different target groups and the supply side into con-

sideration. Furthermore, the task team could consider developing the strategy so as to combine the waste reduction while addressing the poverty concerns within the city. In poor neighbourhoods cleaning up the environment will not be a priority unless direct economic, health and social benefits are immediately apparent.

4. Structures and procedures established

Two buy back centres are planned for Mbabane as a pilot activity. The supply for the buy back centres is expected to come from the commercial sector, the household sector and the government institutions including offices and educational institutions.

The location of the centres is determined by the fact that they must serve the entire city as well as specific localities. The two centres are situated at the two opposite ends of Mbabane City area. The first buy back centre will be located to the Southeast of Mbabane close to the central business district at the end of the industrial area. The other is located in Sidwashini in the outskirts of the city to the far Northwest.

The buy back centres are both located adjacent to an industrial area with neighbouring informal settlement areas. Both are easily accessible by main roads in the city. As such they are close to potential service areas and may provide income opportunities to poorer residents living not too far away. More wealthy residents from the rest of Mbabane may use their own transport to bring their waste to the centres.

Both centres are located next to the river and precautions need to be taken to protect the riverbed and the river itself from pollution.

4.1 The Downtown Buy Back Centre

Downtown the centre will be at the end of one of the main roads in the industrial centre close to the city centre but still comfortably stowed away as befits a waste centre. Potential waste suppliers are the glass works, the Times, the construction enterprises, the gas station etc next door. However, the project has not analysed the need for the services to be provided among the businesses. The City Council has provided a tanker for hazardous waste in the area, e.g. used engine oil.

The residential areas nearby across the river are Extension 3, a lower middle class area and Msunduza, a poorer informal residential area uphill from the town centre with gravel roads and many mud houses. The area mostly contains dwellings but a few food shops are present. A primary and a secondary school are located where Msunduza connects to the downtown area. Save the Children are found just across the school and the Salvation Army is working in the area. The City Council has provided a skip in Msunduza, which was found to be overflowing with waste. Short cuts are found by inhabitants to cross the river so as to have easy access to different parts of the city.

4.2 The Sidwashini Buy Back Centre

Sidwashini is an area of town cut into two by the highway towards the border. To the north of the road is an industrial area consisting of workshops, construction companies, storage facilities, welding workshops etc. Afterwards along the road there is a residential area stretching up the hill with middle class houses with a view uphill and lower middle class semi-detached houses downhill. The main road has tarmac up the steep hill, but subsidiaries are gravel roads. The area looks well kept and clean, with little littering. However, a rubbish dump was found at the wayside.

South of the road there is a commercial area with a covered vegetable market, a supermarket, butchery and a bottle store but also a large tailoring workshop and small firewood vendors. Right behind the commercial area there is a low-income residential area and further towards the river and uphill there is a primary school, a secondary school and SOS Children's Village, all institutions of economic means and good maintenance.

The secondary school called Waterford College, is an international school for children of well off families from the whole city area. This school has been very keen to support recycling efforts and environmental awareness raising activities. The school is represented on the task force. Along the road uphill there is a rubbish dump mainly for construction materials.

The empty market area by the main road is littered but some of the business people have put up simple wastebaskets. The City Council has installed a skip at the road-side, which had a spill over. The marketers burn their waste in small fires outside the market. The supermarket is selling empty card boxes for one Rand a piece, storing them nicely in different sizes in heaps in the shop.

Buy back centres are found in other African countries especially in South Africa. If a suitable model is developed the project may be copied elsewhere in Mbabane and Swaziland. The City Council is pointing towards other informal residential areas such as Fonteyn, and Sandla Selection Park as well as further up to the Northwest past Sidwashini North.

4.3 Guidelines for Operation of the Buy Back Centres

The task team has developed Requirements for Buy-Back Centres. The guidelines spell out the responsibilities of the entrepreneur operating under the supervision of Mbabane City Council and the support to be provided by Mbabane City Council.

The guidelines express that the buy back is basically a business enterprise dependent on the general market conditions. In principle the entrepreneur is free to operate his/her own collection system but in any case access should still be given to independent collectors and civic organisations.

The guidelines include an obligation to regularly inform the public about the services and operation of the centres in the form of advertisements.

The horizon of the pilot project is one year after which the time the operations of the centres will be re-evaluated.

5. The awareness-raising programme

5.1 Community Participation

Of all urban services solid waste management requires the greatest amount of citizen co-operation on a continuous base. A solid waste management system is in fact a continuous maintenance system. To keep the service running, continuous interest and participation of the community is required, for example to separate the garbage, to store it and to bring it to an agreed point etc.

However, the population usually considers other public services to be a more important issue than disposal of solid waste. Waste can always be disposed of in the neighbourhood but you cannot live without e.g. water. This lower perception of the felt needs puts a special emphasis on environmental awareness raising and creation of a strong motivation for participation e.g. in the form of direct economic benefits.

The perception of the service provision itself is also quite different, because solid waste is a socially and culturally more complex issue. Waste collectors often have a low status. Collection and recycling is frequently carried out by minority groups in other countries.

Women are the primary agents of waste management in the households in Swaziland and recognised as a primary source of information on waste practices and key entry points for government extension staff on home management issues, health care etc. In this way the gender roles of Swaziland assemble those of other countries and experiences from development of waste management systems abroad ⁹ may also stimulate the design of the recycling pilot project in Swaziland.

A key milestone in the process of urbanisation is creating systems to manage waste outside the household. The waste management in this process is formalised in community institutions and in this process, women end up being excluded from the benefits e.g. in the jobs. However, the modern waste management system continues to rely on the waste management carried out by the women inside the household e.g. the minimisation of the amount of waste, the separation of the waste and the preparation for collection of the waste etc.

-

⁹ Gender and Waste, Integrating gender into community waste management: project management insights and tips from an e-mail conference 9-13 May 1998, UWEP Working Document 12, by Anna Scheinberg, Maria Muller and Evgenia L. Tasheva (research assistant), September 1999. The research for the initiative was funded by the Netherlands Development Assistance.

In order to improve the quality of the waste management services increased attention to gender aspects are needed in:

- the project preparation when information is collected as men and women have different information on the waste stream, the community waste management etc
- in the process of institutionalising the waste management so as to ensure that also women get access to paid jobs, training and community management positions

The implications of the international experiences for the recycling pilot programme in Swaziland are that awareness raising programme will have to include:

- a strong motivation for change of behaviour based on analysis of community needs
- a diversified approach towards different social layers of the public and
- a gender sensitive approach to awareness raising and system implementation

5.2 Lessons Learnt from Recycling Awareness-Raising Programmes

Official buy back centres are new to Swaziland and information about informal recycling initiatives has not been analysed in depth before in the Swaziland context. However, separation of waste is not entirely a new concept in the country.

Housewives of Swaziland do separate waste although perhaps not from an environmental motive. They use scrap paper to light the fire, they feed chicken and pigs from leftovers, they collect plastic bags for other use etc.

Some individuals collect and store waste items, but depend on transport to the interested party. Others have established small income generating activities out of waste items like torn plastic bags woven into mats, cans straightened and manufactured into toys etc.

It is also known that some organisations and business enterprises have experiences with waste sorting e.g. Swaziland National Trust Commission: the National Environmental Educational Programme, The Malolotja Natural Reserve and Mantenga Lodge.

It is common knowledge that some industries in Swaziland are ready to pay for a supply of some kinds of waste but systematic separation of waste is not a general habit and transportation of the separated waste to the buyer is often a problem anyway.

Waste pickers are found at the landfills and a group of women operating at Mbabane landfill have united to form a co-operative to promote their interests. They sort the waste into different recyclables and sell to interested industries.

Internationally there has been very little research on the perceptions, motivations and behaviour of people with regard to solid waste but it is realised in the donor community that solid waste management projects hold a special position among other sectors establishing infrastructure and service.

Valuable inspiration may be found from the experiences with buy back centres in South Africa. It is known from South Africa that the buy back centres attract informal collectors of recyclables especially if they can sell their items to the centres for at better price than is being paid by agents from formal recycling companies.

A study from Durban reconfirms this trend and includes a stratified picture with regard to the attitude to domestic recycling. Low to middle income groups display complacency and many are found to lack any interest in recycling. The middle to upper income groups practice recycling out of concern for the environment or as part of a fund raising effort.¹⁰

In Zimbabwe the city council of Mutare has initiated composting projects as well as a paper recycling initiative. The initiative was based upon a community-based assessment study that produced a broader perspective of local needs. A city council co-ordinator played a role in educating waste producers on separating their wastes and negotiated private companies and government offices to set up waste paper collection bays at premises known to produce a lot of waste paper. The city council itself participates in the recycling program and has established a collection bay at its head office.¹¹

The lessons learnt from this initiative were that:

- in poor neighbourhoods that have had waste improperly disposed of, cleaning up of the environment will not be a priority unless direct economic, health and social benefits are immediately apparent
- partnership building and enhancing trust between stakeholders is an important element ensuring long-term sustainability

The key replication factors are that:

- Urban environmental management must addresses the causes of environmental degradation, that is, poverty alleviation
- Environmental efforts are unlikely to be viewed as legitimate unless they address basic needs
- Youth groups are an important element of the local community structure, willing to try out new concepts for improvement

•

¹⁰ The recycling initiatives taken in Durban Metropolitan Area are described on the following website: http://ceroi/reports/durban/issues/waste/recycle.htm

¹¹ Local Agenda 21 Incentive Grants Project, Municipality of Mutare, Zimbabwe, Case study 65 (http://www.iclei.org/la21/igp/cs65_mutare.htm)

 Issues of urban environmental management must be approached in an interdisciplinary way

Finally a study based on 55 community waste management projects from Africa, Asia and Latin America is of interest in this connection¹². This study concludes, that the most important social and management problems of community-based solid waste management appear to be motivational issues concerning appropriate incentives for households, servants, operators and managers and co-operation with the municipality concerning operational co-ordination, solid waste management policy and communication.

These experiences have served as inspiration for the awareness-raising programme to be proposed for Swaziland.

5.3 Contents of Awareness Raising Programme

In the following the awareness raising programme for the recycling pilot project will be described based on comments on the objectives of the pilot programme, definition of the target groups of the programme and the different approaches and methods and tools to be applied.

5.3.1 Discussion of Pilot Project Objectives

The objectives of the pilot project are described in the Terms of Reference for the Task Team on Recycling as the following:

- To establish and maintain a recycling system in Mbabane for specific recyclable materials from households, commerce and institutions
- To collect and recycle a substantial part of the recyclable materials (paper, cardboard, glass, cans and metals) from consumers, commerce and institutions in the areas to be serviced by the two buy back centres

The consultant would like to call the attention to the fact that the objectives of this pilot project do not originate in any identified social problems nor link up with any broader development objective with regard to e.g. the general waste management system or the urban social development in Mbabane. Furthermore, there is no link to the communities to be serviced or to the city of Mbabane in general.

Strictly speaking this pilot project needs an awareness- raising programme in order to mobilise a sufficient supply of recyclables to be marketed to identified recycling

.

¹² Ansch, Justine: Community-based Solid Waste Management and Water Supply Projects, Problems and Solutions Compared. A survey of the literature, WASTE, Urban Waste Expertise Programme, Community Participation in Waste Management, UWEP Working Document 2,1996

industries, in other words, to ensure the business interests of the project. It is only if you take a closer look at the Requirements for Buy Back Centres that you find a reference to a social context. Reference is made to point 6 in the requirements:

"The Buy Back Centre should promote job creation by attracting unemployed collectors from the community and informal sector"

In the light of the international experiences, the consultant would like to propose that the buy back centres be given a stronger social or poverty orientation:

- the objectives be integrated into the socio-economic framework of the urban development of Mbabane
- a development perspective for the communities be considered including both poverty alleviation and environmental protection

These changes will allow an awareness-raising approach that may mobilise the target groups for a change of behaviour based on a prospect of improvement.

It may well be that these perspectives have been obvious to the task team all the way but discussing these issues will clear the focus of the strategy and support the sustainability of the project. It seems from the minutes of task team meeting number two, that some discussions regarding this question has taken place. It may be worth while to reconsider some aspects of this discussion.

5.3.2 The Target Groups for the Programme

The target group for the awareness- raising programme of the recycling system is described in the Terms of Reference for the Task Team on Recycling namely:

- Residents
- Schools, government institutions
- Businesses/ shops in the buy back centre areas

For the sake of mobilisation it is advisable to differentiate between different subgroups of these target groups. The differentiation will follow:

- the social stratification of residents because the response to environmental issues varies considerably among different socio-economic groups
- the functionality of the organisation because schools, government offices and businesses have a different purpose of operation

Middle class residents with a higher level of education and a surplus economy often have an outlook on the development of their society and may be motivated for changed behaviour by intellectual persuasion if the changes are well argued for and part of an current debate with a wider perspective. Middle class youth in particular feels driven towards new concepts for improvement. The debate on environmental protection is such a cause.

Low-income households are more likely to be struggling to meet their basic needs and any changes proposed must touch upon these with a positive perspective. Environmental issues open up for new possibilities for income generating opportunities and improved health. The benefits must be within reach in time and locality and not postponed to a more distant future.

Both types of residents are target groups in that the centres will serve the immediate neighbourhood, Msunduza and Sidwashini, but also Mbabane in total.

The organisations will respond differently to an appeal for changes. Whereas schools may be open to new ways to inspire the students, problems of affordability and practicality must be overcome. It is generally considered to be necessary to promote new behaviour from childhood and the schools are therefore central to the long-term success of recycling of waste.

Government institutions often need a bit of a push to change their bureaucratic routines. Whether in this case the initiative is best promoted in an informal way in the beginning can be discussed. Practical problems may stifle any positive attitude whereas an economic incentive may promote it from the point of view of management and/or individual employees. For the sake of legitimacy of the cause and setting an example the administration has a special responsibility to change its ways.

The business community is always geared towards changes of the market and will support the recycling initiative if there are economic gains worth while pursuing.

5.3.3 Approach and Methodology

The approach will adjust to the different target groups and focus on the following areas of motivation:

- Possibilities for income generation through sales of collected waste and organisation of productive end use
- Perspective of improved health especially with regard to reduced incidences of diarrhoea among under fives
- The environmental issues involved such as prevention of pollution and sustainable environmental management
- Prospects for a cleaner neighbourhood and improved efficiency of government services
- Prospects of an easy solution to practical problems of disposal of packaging materials

The proposal could be carried forward as a community development initiative. However, so far the communities have not been actively involved in e.g. any needs assessment of the pilot project and there is very little indication of interest in this direction in the documents presenting the project. It may be more in line with reality at this stage of the pilot project development to present it as a city council initiative.

The success with the public is therefore quite dependent on the practical service experienced by the customers from the centre. Especially the income generating prospects for community members will be important and the service to individual collectors will have to have priority in the operation of the centre. Furthermore, the service aspect to the business community with regard to both collection and marketing will need to be secured so that the service is regarded as trustworthy.

The City Council of Mbabane has only limited resources to spread the information about the centres and promote the supply of waste articles for the recycling activity. Neither is it realistic to spread this information through a door-to-door basis due to the size of Mbabane City Area. Rather it should be viewed as a mass campaign conducted via partners.

It is therefore proposed that the council invite other organisations, the politicians and the media into a partnership. This approach is already apparent in the composition of the task team but the group of partners will have to be enlarged.

The team includes representatives from civil society, the educational sector and the government administration. Because of the different features of the target groups the partners in promotion will include:

• NGO's addressing middle class and in particular lower class community members, preferably with a big outreach programme:

The Salvation Army, Red Cross, Save the Children, The Sabenta Adult Education Institute, Yonge Nawe, Clean and Beautiful Swaziland, Shape, Women's Organisations and others

- Local administrators and politicians: The Mayor, City councillors, zonal leaders, Tinkhundla members
- The educational sector: The primary and secondary schools in particular
- The relevant city council staff from Department of Health and Environmental Health, Department of Public Works etc.

It is not proposed that representatives from all these sectors necessarily become members of the task team. Rather they should all be considered for mobilisation as machinery for different awareness raising initiatives.

5.3.4 The Methods and Tools to be applied

The messages will be in the form of specific and precise information regarding location, prices, items to be collected etc. Furthermore, there is a need to promote change of behaviour through role models, practical examples, and drama.

The practical example is expected to be the most powerful means of persuasion and therefore city councillors have a special responsibility to set an example in their own working environment and as a personal mode of behaviour. The City Council should go forward and organise the collection from the offices and afterwards be prepared to spread the system to other government institutions. By setting an example the City Council will increase the credibility of its commitment to the environmental concept.

The channels for the messages are many and include of course the media especially radio programmes and newspapers. The message may be in the form of slots, articles, presentations and features. Events may be arranged to catch the interest of the media e.g. an opening ceremony of the buy back centres, a drama presentation in a town square, an environmental campaign or a public competition among the schools. The important thing is to keep an ongoing dialogue with the media.

The non-governmental organisations will spread the message through their outreach programmes and networks as input in their regular scheduled meetings and as part of their activities. The church leaders may also considered to be included in the efforts as good behaviour and cleanliness characterises a good Christian citizen.

They will all need materials such as posters and pamphlets describing the benefits and "How to do it". They may also need introductory sessions in the form of meeting or workshops explaining the practice, the need for precautions for health reasons etc.

The schools can inspire each other and already the Waterford College has committed itself to promote the idea of recycling to ten other schools in Mbabane City area, including both primary schools and high schools. The schools chosen are located all over the city area including in buy back centre areas. Please see the map for the location of the schools.

Not only will Waterford College introduce the concept but they will also assist the school in putting up an internal waste sorting system. Waterford College will organise visits to the schools and give presentations to the teachers and children. One of the ways to promote school children is to give a drama presentation, and the College is currently considering this idea among a group of interested students.

If feasible, Waterford College may also invite representatives from other organisations to see their waste sorting system in operation.

The business community will call for another approach and here the Chamber of Commerce or other types of business associations may have a role to play to promote the idea. The small stores at the markets should also be addressed.

It is believed that assistance to promote a practical, non-bureaucratic system may be a way to push the government offices into recycling activities. Staff from the City Council may perhaps operate on a consultancy basis to assist in the process. It is to be debated whether this target group should be encouraged to operate a formal or an informal system.

Whereas the collection of paper from institutions and government offices may not be a big problem, it still needs to be considered how to organise the transport or collection of the recyclables from the offices. Many government offices are located in the same area of town and an organised system of collection once a month could be considered.

It is recommended that the waste pickers of today are involved in preparing the information materials as they have a first hand knowledge of the opportunities and risks involved in sorting, collecting and storing waste. To acknowledge their insight and experience is a sign of respect for a job, which may otherwise not be considered worth copying and it may throw legitimacy on the practice. It is therefore proposed to involve the co-operative of waste pickers from Mbabane landfill in the preparations for the buy back centres.

The timing of the activities is important as it does take some time to operate through the network of other organisations. You will have to have materials ready very early, so that they may be used in introductory meetings with staff and volunteers from the organisations. The materials should basically explain the message in drawings or cartoons.

It is important not to strike a disciplinary tone in the materials. The concept of recycling is based on a positive vision of reuse of materials and it is therefore proposed that the approach should encourage a new behaviour instead of reproaching citizens for bad habits.

It also carries a positive message to a poor community if the buy back centres promote job creation by attracting unemployed collectors from the community instead of relying on already employed company staff. Women should be considered for positions at the buy back centres and the co-operative members have already shown great organisational and business oriented skills within their field of operation.

It is believed that the "brown" environmental issues are perhaps not as developed and well known as the "green" issues. The curriculum developers may have to be inspired to include this aspect in the future textbooks in the schools.

5.3.5 Possibilities for Productive End-use

Another way of encouraging income- generating activities is to promote a productive end use of the collected recyclables as small-scale businesses. In the same way as extension officers promote gardening, poultry etc. social workers could also promote small scale manufacturing of recyclables.

Some initiatives along these lines are well known such as weaving of mats from plastics, production of toys from cans etc. Others could be developed and inspiration found perhaps in South Africa.

5.4 Implementation plan and activities

The implementation period of the programme runs from now on up till the opening of the buy back centres, which is scheduled for late August 2002. There is in fact no time to waste!

The task team will divide among themselves the tasks to be performed but obviously the City Council carries a major responsibility for the implementation. The City Council and the councillors have to spearhead these initiatives but otherwise the private organisations will carry most of the burden. A special mention must be made of the commitment of Waterford College. The importance of their school activation programme cannot be overestimated. It is important for the City Council to nurture the partnership with the private organisations and to show appreciation of the commitment.

The programme consists of the following elements:

- Preparation of materials
- TOT programme
- Media campaign
- Launching of centres and systems
- Local community activities

The implementation plan is attached in Annex 6.4. The programme is operating as a cascade of activities initiated through the TOT for representatives from partner organisations. You get the same impact if you throw small stones into the water and see the rings grow in the water. Programme and information materials must be ready for the TOT and the media campaign.

The TOT will target the private organisations, the local politicians and administrators, the business community and the government sector. Through their activities later on the information will filter into the communities. The contents of the TOT will be scribed in more details below.

Meanwhile the media must be nurtured all the time with events, materials, launchings etc. The media activities must increase towards the time of the launching.

Even though this programme will alert the citizens of Mbabane to the opening of the buy back centres the most important part of the awareness raising is dependent on the successful operation of the centres. It is believed that the customer experiences with the centres will be carried forward by spontaneous interpersonal communication.

Furthermore, the task team needs to reflect on how to promote development of new materials for the educational sector highlighting the importance of the "brown" environmental issues.

Relying on alternative networks is both an opportunity and indeed a must for the City Council but it also includes some risks of misinformation. The City Council and the task team need to be careful about the economic expectations raised among the general public in relation to the return for the collection of the waste at the buy back centres. Frustrations may backfire through the same networks.

5.5 Training and Development Needs

This programme is to a large extent based on training –of- trainers from the private organisations and meetings with focus groups. Furthermore, it relies of introduction of systems especially in the government offices and the educational sector.

Several different TOT sessions should be planned for. It is proposed that TOT will be carried out for representatives from:

- 1. the participating NGO's and private organisations, such as the Salvation Army, Shape, Red Cross, Sabenta, Yonge Nawe, Clean and Beautiful Swaziland etc.
- 2. Local councillors, zonal leaders, local members of Parliament and Tinkhundla members
- 3. Different departments of the City Council like the departments for education, public works, health, community development and the planning department.

The objectives of the training will be to enable the participants to spread the message, encourage public participation and answer the most common questions regarding the operation of the buy back centres.

The training may be in the form of a workshop with the following topics:

- the concept of recycling
- introduction of new habits
- incentives: economic, health wise and environmental
- the operation of a buy back centre
- ways and means of disseminating the information through organisational network

A full day workshop with a maximum of twenty will be optimal.

Focus group meetings should be held with the following groups:

- relevant business people from the Sidwashini and Msunduza to explain about the operation of the buy back centres and motivate for sorting and collection
- representatives from the educational sector in Mbabane so as to introduce the initiatives of Waterford College and support the introduction of waste sorting systems in the schools

Special initiatives need to be planned for the administrative management of Mbabane City Council and representatives from the ministries to explain about the recycling initiatives and promote development of an internal collection system. This initiative may not be not be limited to one meeting only. Rather it will take a follow up to ensure successful implementation. Whereas the initiative may be decreed from the office of the Permanent Secretary the practicalities should be worked out with staff of lower ranks from the ministries.

6. Annexes

ANNEX 1: LIST OF PEOPLE MET

Mbabane City Council

Mr. Jabulani, Councillor for Msunduza area, Deputy Mayor

Ms. Sibongile, Councillor for Sidwashini, Chief of Finance Committee, Mbabane City Council

Mr. Sinda Mabuza, Director of Environmental Health Department, Mbabane City Council

Mr. William Ndela, Head of Environmental Management and Pollution Control Unit (EMPCU)

Ms. Gugu Dlamini, Nurse, Health Section, City Council

Mr. Patrick Mashaba, Assistant City Planner

Mr. Jonathan Cele, Student attached to EMPCU, focussing on environmental awareness raising

Mr. ???? Head of Security, Mbabane City Council

Ministry of Housing and Urban Development

Mr. Patrick Dlamini, Director

Swaziland Environmental Authority

Mr. Mboni Dlamini, Senior environmental Engineer

Ms. Lungile Gumbi, Environmental Inspector

Ms. Tilly Zondi, Environmental Analyst

Ms. Rama Maposa, Office Messenger

Mr. Tinus Joubert, CTA, Swaziland National Solid Waste Management Strategy

Ms. Miriam Dlamini, Secretary to the CTA

Non-governmental Organisations

Ms. Violet Buluma, Project Officer, Yonge Nawe

Ms. Noma Gule, The Salvation Army, Mbabane

Ms. Emma Dube, The Salvation Army, Mbabane

Community Police Group of Msunduza

Co-operative of landfill waste pickers

Educational Institutions

Mr. Neville de Silva, Teacher, Waterford College

Students at Waterford College

Ms. Nyamile Manana, Administrator, Sabenta Adult Education Institute

Others

Mr. Jonathan Cory, artist producing our pamphlets etc.

Ms. Mary Cory, artist

ANNEX 2: LIST OF LITERATURE

- Ansch, Justine: Community-based Solid Waste Management and Water Supply Projects, Problems and Solutions Compared. A survey of the literature, WASTE, Urban Waste Expertise Programme, Community Participation in Waste Management, UWEP Working Document 2,1996
- 2. City Council of Mbabane: Mbabane Structure Plan 1997, prepared by Burrow Binnie Ltd. In Consultation with Plan Inc. P/L, December 1997, approved in 1999
- 3. City Council of Mbabane: Customer Information, Faith in the Future, 2000DANCED, Kingdom of Swaziland: National Solid Waste Management Strategy, Project Document, April 1999
- 4. DANCED, Kingdom of Swaziland: National Solid Waste Management Strategy, Draft Status Quo and Needs Analysis Report, July 2000
- 5. DANCED, Kingdom of Swaziland: National Solid Waste Management Strategy, Draft Capacity Assessment Report, January 2001
- DANCED, Kingdom of Swaziland: National Solid Waste Management Strategy, Awareness Raising Approach for Pilot Project in Kwaluseni Peri-Urban Community, February 2002
- 7. Durban Metropolitan Area, The recycling initiatives taken in Durban Metropolitan Area are described on the following website: http://ceroi/reports/durban/issues/waste/recycle.htm
- 8. Local Agenda 21 Incentive Grants Project, Municipality of Mutare, Zimbabwe, Case study 65 http://www.iclei.org/la21/igp/cs65_mutare.htm
- 9. Anna Scheinberg, Maria Muller and Evgenia L. Tasheva: Gender and Waste, Integrating gender into community waste management: project management insights and tips from an e-mail conference 9-13 May 1998, UWEP Working Document 12, September 1999. The research for the initiative was funded by the Netherlands Development Assistance.