

## DOMESTIC WASTE COLLECTION

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# Case Study to Document Community Based Domestic Waste Collection Programmes in South Africa

## Case Study 4: Nelson Mandela Bay Metropolitan Municipality – Community Cooperatives

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**i. EXECUTIVE SUMMARY**

Nelson Mandela Bay Metropolitan Municipality (NMBMM) is currently implementing a community based co-operative waste collection programme. The model is being implementing in 9 designated areas within the jurisdictional area of the municipality. 29447 equivalent houses are serviced under the programme. Nine separate co-operatives with a total of 256 members and 40 employees have been established to service the designated areas.

A comprehensive waste collection service is provided under the programme that includes:

- o Weekly collection of garden and domestic waste;
- o Collection and disposal of animal carcasses;
- o Litter picking;
- o Street Cleaning and
- o Removal of illegal dumps.

The removal of building rubble and grass cutting is not included under the programme.

The contractors are required to pay for the acceptance of the waste at the landfill sites, in accordance with promulgated tariffs, but not for acceptance at the waste at transfer stations (approximately 3%)

A number of potential co-operatives were formally established prior to the initiation of the procurement process for the service providers. The Economic Development Unit of the NMBMM and the Department of Trade and Industry assisted with the formation and establishment of the co-operatives so as to ensure compliance with the Co-operative's Act. During the tender phase a compulsory tender meeting was held to brief all potential tenderers of the requirements in detail.

The contracts were awarded to the successful tenderers on the basis of a competitive bidding process.

Certain of the co-operatives appoint members from the local community to work as labourers from time to time on a rotational basis. They are assisted by the Department

of Labour to ensure legal compliance with labour legislation. Employees are selected and appointed by the cooperatives in consultation with the local community.

On-going support, training and mentorship is provided to the co-operatives by NMBMM so as to ensure the sustainability of the co-operatives.

The Cooperatives are penalised for non performance and provision is made in their contracts for termination due to continued non performance.

The Municipality is responsible for the overall management of the programme, including the administration of the Cooperative contracts. Cooperatives are responsible for their own administration and supervision, with support from the municipality through a mentorship programme.

ii. **LIST OF ABBREVIATIONS**

EPWSP	:	Extended Public Works Support Programme
DEAT	:	Department Environmental Affairs and Tourism
DPW	:	Department of Public Works
EPWP	:	Extended Public Works Programme
ESSP	:	Environmental Sector Support Programme
SME	:	Small Medium Enterprise
CBO	:	Community Based Organisations
CBWC	:	Community Based Waste Collection
CBWCP	:	Community Based Waste Collection Programme
MFMA	:	Municipal Finance Management Act
MSA	:	Municipal Systems Act
NMBMM	:	Nelson Mandela Bay Metropolitan Municipality
DTI	:	Department of Trade and Industry
DOL	:	Department of Labour

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## 1 INTRODUCTION

A number of community based domestic waste collection models are currently being implemented in South Africa. These models include community based co-operatives, managed contract models and management contractor models. The models generally, albeit to varying degrees, foster the government's strategy of Black Economic Empowerment through the pro-active development of emerging contractors and the provision of business management, administrative and technical support programmes. The aim of this study is to identify examples of these models, to examine them in some detail and to document the detail as case studies. Ultimately these case studies will be disseminated to, *inter alia*, municipalities and other authorities in SA, to assist them in making informed decisions on the application of particular models within their respective areas.

The report is based on interviews conducted with the operating, supervisory and management officials within the respective municipalities, together with relevant documentation provided by them.

Each programme investigated has its particular strengths and weaknesses, and no one programme is considered better than any other.

The following waste collection programmes were examined and documented:

- i) Case Study 1: Ekurhuleni Metropolitan Municipality Domestic Waste Collection Programme.

The model implemented by the municipality is a **Principal Contractor/SME Subcontractor** Model, where a principal contractor is appointed who contracts directly with local SME subcontractors to undertake the collection.

- ii) Case Study 2: eThekweni Emerging Contractor Waste Collection Programme

The programme is implemented by Durban Solid Waste. It constitutes a **Direct SME Contract** model where a managing agent, contracted by the Municipality, is responsible for planning, administering and supervising collection services undertaken by SME contractors who are contracted to the Municipality.

iii) Case Study 3: Gauteng Domestic Waste Clearing and Collection programme.

This programme aimed at utilising Managing Agent, NGOs and SME contractors to provide a comprehensive service to previously unserved communities. The Managing Agent was responsible for the implementation and management of the programme, as well as the appointment of NGOs and SME contractors. NGOs were appointed to facilitate the management of beneficiaries (members from the local community who participated in the programme) and were also responsible for the day-to-day management of the programme and SMEs. SME contractors were appointed to collect waste from households for disposal at landfill sites. They were also required to transport recyclables to waste salvagers in the area.

iv) Case Study 4: Nelson Mandela Bay Municipality (NMBM) – Co-operative Waste Collection Programme.

The programme is implemented by NMBMM in 9 areas within the jurisdictional area of the metro, servicing some 30 000 households. The collection model constitutes that of a **co-operatives model** and is managed and administered by NMBMM. Nine community co-operatives are contracted to the Metro to provide the waste collection service.

v) Case Study 5: City of Cape Town Service provision in low income and informal areas project.

This model is a **Direct SME contract** model similar to the one implemented by DSW (Case Study 2). The primary difference is that the function of the Managing Agent providing planning, administrative and supervisory inputs and the support services to the emerging SME is fulfilled by the municipality.

## 2 PROGRAMME

### 2.1 Background

NMBMM decided to utilise the services of community based cooperatives for the provision waste collection services within certain areas. Prior to inviting tenders for the provision of the services the Economic Development Unit of the Metro and the



Department of Trade and Industry assisted local communities with the formation and establishment of co-operatives in compliance with the Cooperatives Act.

Tenders were thereafter invited and awarded to the cooperatives on the basis of a competitive bidding process.

NMBMM supported the cooperatives through training and a mentorship programme.

Since the commencement of the programme in 2005, some 9 Community Cooperatives with a total of 256 active members have been established. Two of the cooperatives employ an additional 40 persons from their respective communities. A total of 296 employment opportunities have thus been created.

## 2.2 Extent of the Programme

The programme is located in nine residential areas within the Metro's area of jurisdiction. The economic profile of the areas serviced by the co-operatives ranges from low-income densely settled informal households to high income low density formal households.

The extent of the areas serviced under the programme is as follows:

Cooperative	Area	Units <sup>1</sup>	Members
Sodlasonke	Gqebera	7329	30
Cocisizwe	Soweto-on-sea	5059	62
Eyabafazi	Matthew Goniwe	1719	20
Ncedolwethu	Seaview	687	11
Ncedolwethu	Blue Horizon	213	
Kuphilwa-Phi	Joe Slovo	4492	59
Masiphuhle	Kuyga	2180	18
MK	Missionvale	5000	19
Ntinga	Motherwell	3955	37

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<sup>1</sup> Units refer number of service points which include households and small businesses.

### 2.3 Scope of Collection Services

The service providers are required to collect domestic waste on a weekly basis in the formal and in the informal areas within their respective designated areas. The service provided is described as follows:

- The contract area is divided into five daily collection rounds;
- Five plastic bags are supplied and delivered to each household per month;
- Domestic and garden waste is collected once per week, Monday to Friday (07h00 to 16h00), including public holidays;
- All waste, including domestic and garden waste is placed in the plastic bags provided by the municipality.
- Animal carcasses are also collected by the cooperatives and disposed of at the landfill site.
- All the waste must be removed by the service provider with no limitation placed on the amount or volume of waste;
- The waste collection service is limited to households, small businesses and schools (counted as households);
- Large businesses are required to contract with the municipality or with the service providers for the removal of their waste;
- The cooperatives collect the waste from the street verges on the scheduled collection days;
- The entire contract area, including streets, verges, public open spaces and vacant land, with the exception of privately owned land, is litter-picked and kept free of all waste;
- All kerbs, channels, surfaces or un-surfaced roads, footpaths and sidewalks are swept and kept free of waste and litter and vegetation (weeds, etc); Grass cutting on road sides is excluded from the service provided by the Co-operatives;
- All illegal dumps are cleared by the service provider;
- The waste is disposed of at designated landfill sites or taken to designated transfer stations as may be required by the Metro;
- The service provider pays for the acceptance of the waste at the landfill sites in accordance with the promulgated tariffs. In the case of Seaview and Blue Horizon, where waste is transported to a transfer station, no costs are levied
- Building rubble is not removed by the service providers

## 2.4 Programme Structure

The community co-operatives are contracted to the Metro to provide a comprehensive waste collection service within their respective areas.

The structure and implementation model of the service is presented graphically at **Annexure A** appended hereto and is described as follows:

### 2.4.1 Programme Management

The Metro utilises its own resources for the planning, administration and monitoring of the programme. Key aspects of thereof are the following:-

- Planning:
  - Contract zoning
  - Contract procurement
  
- Administration:
  - Dealing with contractual issues;
  - Processing of payments to the service providers;
  - Mentoring and support services to service providers and
  - Programme financial and budgetary control
  
- Monitoring;
  - Provision of the inspectorate
  - Inspection of contracts to certify works completed.
  - Assessment of work schedules and returns for generation of monthly payment certificates.
  - Dealing with service providers on day to day operational issues;
  - Dealing with complaints and
  - Liaison with communities.

The following personnel are assigned by the Metro to administer and monitor the implementation of the programme

- A full time contracts officer.
- Three depot managers responsible for quality control

#### **2.4.2 Contract Services**

The preferential procurement policy of the Metro gives preference to cooperatives based in the designated service areas. The co-operatives are contracted directly with the Metro.

The contractors collect the waste and place it directly into collection vehicles and transport it to the disposal site (or transfer station). All areas are generally accessible to vehicles allowing for a kerbside collection system, albeit that in some informal areas waste has to be taken by hand to a nearby kerbside.

The service providers are required to provide all the vehicles, personnel, materials, consumables and equipment necessary to provide the specified service.

The contracts range in size from 213 to 7329 equivalent households. The monthly turnover ranges from R 5325 to R 150 244.50 (excluding VAT) per month. Some 256 people are members of the cooperatives, with two co-operatives each employing an additional 20 people each.

These contracts are generally only accessible to service providers that have access to vehicles and/or finance for vehicles and operating cash flows. A number of the service providers have been able to raise finance on the strength of the contracts awarded to them.

### **2.5 Establishment of Cooperatives**

The Department of Trade and Industry and the Economic Development Unit of NMBMM assisted members from the respective communities in creating community cooperatives compliant with the Co-operatives Act.

A number of co-operatives were created within each contract area. The service providers were selected on the basis of a competitive bidding process.

## 2.6 Monitoring

Performance monitoring is performed by three depot managers employed by NMBMM. Performance assessments are completed on a weekly basis soon after the service providers have serviced a particular area.

The service providers are penalised financially for poor performance. The criteria used for assessing and penalising the service providers are set out in the table below. For penalty determination purposes, in terms of the contract, it is assumed that 70% of a payment certificate constitutes refuse collection and disposal and the remaining 30 % constitutes street sweeping, litter picking and the removal of illegal dumps

The weekly performance assessments are used to calculate the monthly average performance for each service provider. In situations where the service providers under-perform during one week, but then rectify the situation, no penalties are usually applied. In general the monitoring system is effective in assessing the level of service provided by the service providers. The system is a motivator for the service providers to maintain and improve performance.

On average penalties have been applied 4 times per year. The maximum penalty was 20% of the invoice.

<b>Refuse collection and disposal:</b> Evaluation is based on the number of complaints received				
Number of complaints per month	0 to 7	8 to 36	37 to 73	74+
Performance score	95 – 100%	90 – 95%	80 – 90%	< 80%
Penalty (based on 70% of invoice)	Full payment	80% of invoice	60% of invoice	No payments
<b>Street sweeping, litter picking and removal of illegal dumping:</b> Evaluation is based on the photometric index (Attached under <b>Annexure B</b> )				
Photometric index level	Level 1	Level 2	Level 3	Level 4
Performance score	100%	> 90%	80 – 90%	< 80%
Penalty (based on 30% of invoice)	Full payment		60% of invoice	No payments

Metro health officials monitor compliance with the OHS Act on an ad-hoc basis and provide assistance to the cooperatives to ensure compliance.

### 3 KEY PROGRAMME STATISTICS

Key programme statistics are summarised as follows:

Criteria	Number	Unit
NO OF FORMAL HOUSES	No Info	Households
NO OF INFORMAL HOUSES	No Info	Households
NO OF NON-RESIDENTIAL EQUIV HOUSES	No Info	Equiv. Households
TOTAL NO. OF EQUIV. HOUSES	29 947	Equiv. Households
NO OF SKIPS/CONTAINERS	N/A	No.
TOTAL STREET LENGTH	No Info	km
NO OF COMPREHENSIVE CONTRACTS	9	No.
NO OF LABOUR ONLY CONTRACTS	N/A	No.
NO OF SKIP CONTRACTS	N/A	No.
ANNUAL COLLECTION BUDGET	7 493 624.16	R per Annum
ANNUAL MANAGEMENT BUDGET	362 957.64 <sup>1</sup>	R per Annum
TOTAL ANNUAL BUDGET	7 856 581.80	R per Annum
AVE. TURNOVER PER COMPREHENSIVE CONTRACT	69 385.41	R per Month
AVE. TURNOVER PER LABOUR-ONLY CONTRACT	N/A	R per Month
AVE. COLLECTION COST PER EQUIV. HOUSE	20.85 <sup>3</sup>	R per House per Month
AVE. MANAGEMENT COST PER EQUIV. HOUSE	1.01 <sup>1</sup>	R per House per Month
TOTAL AVE. COST PER EQUIV. HOUSE	21.86 <sup>3</sup>	R per House per Month
TOTAL MASS COLLECTED	6 012 <sup>1</sup>	Tonnes per Annum
UNIT COST	1 307	R per Tonne
TOTAL JOBS CREATED	296	No.
AVE. NO. OF EQUIV. HOUSES PER JOB	101	Equiv. Houses per Job
NO. OF SME's	9	No.
NO. OF WOMEN-OWNED SME's	No Info	No.

Cooperatives range in size from 11 members to 62 members, with contract values ranging from R83 044.44 to R2 343 093.03. Unit cost ranged from R16.32 to R29.36.

#### 4 COLLECTION SYSTEM

The scope of the service provided by the service providers is described in paragraph 2.3 above.

Key aspects of the collection system are summarised below:-

- Each contract area is divided into five sub-areas.
- Each service provider provides a suitable vehicle for the collection and transportation of the waste. Generally only one vehicle is provided by each service provider with a back-up vehicle being hired by them in the event of a break-down. The service providers generally use 4t wire-caged trucks for the service. One ton LDV's are also utilised by some of the smaller cooperatives. The contracts do not stipulate what vehicles may or may not be used. The vehicles utilised by the cooperatives therefore varies depending on need and available finance.
- Collection teams load the bags of waste placed on the street verges into the collection vehicles. Waste from inaccessible informal areas is collected and taken to the collection vehicles manually.
- The street cleaning schedule normally aligns with the waste collection schedule. Teams of litter pickers clear each area on the scheduled days and place the litter in plastic bags on the street verges for collection by the collection team.
- An elected team leader, who is also a member of the co-operative board, supervises the work. The team leader is responsible for contract implementation and is contactable at all times. The team leader also assists in the collection of waste.
- The active cooperative members and employees are required to wear identifiable overalls to assist the inspectorate in confirming that work is being undertaken in the designated areas on any particular day. The overalls are supplied by the Metro.

The adopted system is considered to be both appropriate and efficient since:

- It achieves parity of service with all residents of NMBMM receiving the same level of service, regardless of the socio-economic status of the community.
- It has achieved very high levels of community cleanliness.

- It is dealing adequately with the quantity of waste being generated at the source of generation, with virtually all waste generated in the areas now entering the waste stream.
- It provides a holistic and comprehensive service that deals with cleanliness of the community as a whole, and not only collection from households.
- It is properly scheduled which ensures efficient services and accommodates proper inspection and supervision.
- It is labour intensive.
- It is cost effective.

## 5 PROGRAMME PLANNING

5.1 The programme was implemented under the following planning framework:-

- **Parity of service:** All households whether formal or informal should receive a similar service throughout the Metro;
- **Community consultation:** The local community should be consulted with regard to the planned programme;
- **Cooperative based service:** Preference should be given to locally formed cooperatives. The Metro should assist with the formation and establishment of the cooperatives.
- **Cost effective servicing:** The programme should be planned and implemented in a manner that ensures a cost effective service that would deal effectively with the quantity of waste being generated and that would achieve high levels of cleanliness.

5.2 A number of legally compliant community cooperatives were formed and established within each contract area prior to inviting tenders for the service, the intention being that these cooperatives would then be in a position to tender for the work. The Metro's Economic Development Unit and the Department of Trade and Industry assisted the communities with the registration of their cooperatives.



## 6 PROCUREMENT OF SERVICE PROVIDERS

- **DOCUMENTATION**

The following are the key aspects of the contract documentation:-

- The tender documentation was compiled on the basis of the quantities established in the planning phase;
- The tender documentation was compiled by the Metro Stores Department with the assistance of the Waste Management Department.

The tender documents are comprehensive and include detailed specifications and a detailed schedule of activities.

- Key features of the documentation are:
  - Public tender process;
  - Correction of arithmetic errors by the municipality;
  - Amendments to imbalanced rates tendered (in collaboration with the tenderer);
  - Insurance cover
  - Operational times 07h00 – 16h00 Monday to Friday including public holidays;
  - Payments to contractors based on production and quality of service delivery;
  - Aspects not included in the tender documentation:
  - Minimum wages for employees and clauses emphasising compliance with the Basic Conditions of Employment Act and the Labour Relations Act and
  - No indication given to the tenderer of everything that should be allowed for when compiling the tender
- The tender document provides a practical basis for proper administration and effective control of the contract

- **TENDERING**

The key tendering criteria were the following:

- Tenders were restricted to community based cooperatives;
- Attendance at a tender briefing session held prior to the tender closing date was compulsory. Tender requirements were explained in detail at the briefing session and the prospective tenderers were assisted with the compilation of their tenders.
- The municipality provided limited support to prospective tenderers during the tender stage. Tender requirements were discussed and explained at the tender briefing session and they were advised to obtain expert advice when compiling their tenders, if necessary.
- A three week tender period was provided to allow sufficient time for tenderers to apply the diligence necessary to compile and submit accurate tenders.

- **ADJUDICATION**

Tenders were adjudicated in accordance with the NMBMM preferential procurement policy.

All tenders are checked for compliance with the conditions of tender. Those not complying are not considered further.

All tenders are corrected for arithmetical errors and errors in extension of rates. Preference was given to Cooperatives residing in the areas to be serviced or within the same Ward as the areas to be serviced.

The following criteria were considered in assessing whether or not the tenderers had the ability to perform the contract successfully:

- i) Bad references (i.e. previous record of non-performance);
- ii) Resources or access to resources (as required to perform the works satisfactorily);
- iii) Financial backing;
- iv) Balanced rates between cost items;

- v) Completeness and accuracy of tender submitted;
- vi) Compliance with legal/safety aspects;
- vii) The prices tendered to be sufficient to sustain the service.
- viii) The successful tenderer must have the capacity, or the potential to achieve the capacity, to manage the contract
- ix) The lack of previous experience was not a criterion for assessing the performance ability of tenderers

The preferential points system was thereafter applied to all tenders meeting the performance ability evaluation

An adjudication report with Waste Departmental recommendations is submitted to the evaluation committee.

The evaluation committee makes its recommendations to the adjudication committee.

The tender is thereafter awarded.

A high level of diligence is applied to the adjudication process, with a view to ensuring that the recommended tender is viable and sustainable.

No contracts with cooperatives have to date failed. This is indicative of the success of the procurement and adjudication processes.

## 7 SUPPORT SYSTEMS

A formal support structure was implemented as part of the programme. The support provided is based largely on operational assistance, business planning, training and on-going mentoring. Specific support services provided to the cooperatives include:

- Training (refer to section 10 – Skills development)
- Business planning support. Support was limited to the basic administration including financial management.
- Operational support through training and mentoring

Refer to sections **3 and 10, 11** for further information regarding support provided.

## **8 OPERATIONAL PERFORMANCE**

The operational performance of the service providers is summarised as follows:

- **Compliance with Regulatory Framework**

The majority of the cooperatives appear to be operating generally in compliance with the regulatory framework that governs business operations.

A feasibility study required in terms of section 78 of the Municipal Systems Act has not been completed.

- **Business management**

The Cooperatives are coping with the management of their operations and business related activities. The ability of the cooperatives to succeed in business management is enhanced by the support (training and mentoring) provided.

- **Financial sustainability**

Those cooperatives that are managing their contracts correctly are clearly realising reasonable profit levels. This is verified by the following:

- No failures of cooperatives after an 18 month period;
- All contracts with the cooperatives have been extended by two years from the initial 10 months as indicated in the tender documentation;
- Certain cooperatives purchasing their vehicles instead of hiring vehicles from local suppliers;
- All cooperatives are continuing to meet cash-flow needs and their financial commitments under the contracts;
- The service providers are winning other contracts from large businesses thereby increasing their profitability;

- **Labour practices**

Two of the cooperatives employ staff members from their respective communities on a two monthly rotational basis. Appointments of employees are done in accordance with the Basic Conditions of Employment Act. DOL provides assistance to the cooperatives, ensuring compliance to legislative requirements. Members of the cooperatives are remunerated for their services at R1500 per month. Profit sharing also takes place on an annual basis. This varies from cooperative to cooperative. In the case of the two cooperatives that employ local labourers, an amount of R1500 per month is paid for their services.

- **Compliance with specifications**

There is a well structured inspection and measurement system in place that ensures that the service providers are only paid for works completed. The service providers are penalised for work not completed in accordance with specifications.

This high level of inspection and the penalty system contributes substantially to the general high level of compliance with the servicing specifications.

- **Provision of Vehicles**

In terms of the contract the service providers are required to provide all collection vehicles required for service delivery. Most of the service providers rent suitable vehicles from local truck rental companies. Certain service providers have, however, purchased their own vehicles.

Typically the vehicles used for the service include wire caged 4-ton trucks and 1-ton LDVs. The service providers are required by the municipality to ensure that a standby vehicle is available. Usually arrangements are made with local truck hire companies for the provision of stand-by vehicles in the event of vehicle breakdowns.

- **Financial structuring**

There is no structured support system provided to the service providers other than given to them on request when applying for financial facilities. This support provided is limited to confirmation of tender/contract details and viability.

## 9 EMPLOYMENT OF LABOUR

Generally the members of the cooperatives do the work themselves in providing the service. Only 2 of the 9 cooperatives employ additional labour who are usually employed on a 2-month rotational basis.

The members of the cooperatives elect a team leader from within their ranks to supervise the work.

Members from the community who would normally experience difficulty in finding employment (e.g. ex convicts) are sometimes approached and offered employment.

## 10 SKILLS DEVELOPMENT

Members of the cooperatives are provided with both accredited and non-accredited training by Department of Labour (DOL) and NMBMM.

DOL assisted the municipality by appointing a contractor to provide members of the cooperative with the SETA accredited training, NQF level 3 & 4. The training was provided by Vision 4 Consulting. The training provided consisted of:

- Basic business skills and
- Life skills training.

In addition NMBMM provided training workshops to members of the cooperatives. This training was not SETA accredited. The training provided by the municipality addressed the following:

- Waste Management
  - Refuse collection and disposal
  - Complaint system
  - The municipal Integrated Waste Management Plan (An overview)

- Public Relations
  - Dealing with the public
  - Conflict resolution
  - Promoting good relations
  
- Health and safety
  - Use of Personnel Protective Equipment
  - First aid training
  - Safe working practices
  - Unsafe conditions
  
- Environmental education
  - Destructive waste management practices
  - Cooperatives as informal educators
  
- Monitoring (By both the cooperative and the municipality)
  
- Discipline
  
- Operational Efficiency
  - Working methods
  - Planning

Regular scheduled meetings between the Metro and the service providers are held. At these meetings performance, operational issues and planning are discussed. Such meetings establish a relationship between the members of the cooperative and the municipal officer and, indirectly, through exposure to the various issues serves as a training vehicle to the members of the cooperatives.

## **11 PROGRAMME ADMINISTRATION AND SUPERVISION**

### **11.1 Programme Administration**

The NMBMM utilises internal resources for the administration and management of the programme. The responsibility rests with the Waste Management Department, and more specifically the Contracts Manager within that department. The Contracts

Manager is supported by three Depot Managers. The Depot Managers assist the Contracts Manager in monitoring the performance of the contractors. Duties of the unit include:

- Planning activities such as the demarcation of contract areas and procurement documentation.
- Dealing with contractual issues that may arise
- Processing of payments to the cooperatives. This includes calculating the penalties as described under section **3.4**.
- Providing mentoring and support services to the cooperatives. E.g. Facilitating training workshops and facilitating regular meetings with the cooperatives. The Contracts Manager also documents these meetings, assign specific tasks as outcomes of the meeting.
- Dealing with complaints received from the community. Such complaints are forward to the relevant contractor for immediate action if required.
- The completion weekly monitoring forms
- Operations meetings held every three months to discuss:-
  - Waste management operations, which addresses
  - Environmental Education and Awareness
  - Weekly monitoring done by the municipality
  - Safety
  - Financial Management
  - Conflict resolution
  - Penalties
  - Capacity building/training



## 11.2 Programme Monitoring and Penalty System

An integral part of the programme and a major contributor<sup>2</sup> to its success is the monitoring system implemented by the municipality, as described under paragraph 3.4 above

The service providers are financially penalised for poor performance.

## 11.3 Payments To Service Providers

The service providers are required to submit their invoices on the first of every month for payment to be made by the end of the month.

Any outstanding amounts owed by the Contractor to the NMBMM for services provided by the Metro and any penalties raised are deducted from the amount invoiced.

## 12 COST RECOVERY

Cost recovery is effected in the formal areas through the rates system. . A special levy is charged by the municipality for the removal of domestic waste and sanitation. No cost recovery is effected in the informal areas and some form of cross subsidisation must take place. Residents in the formal areas that cannot afford the service can obtain an exemption but are required undergo a means test and register as indigents.

## 13 EFFECTIVENESS OF THE PROGRAMME

- **Unit Cost:** The unit cost varies from R 16.83 to R33.91 (incl. VAT) per household per month for the provision of a comprehensive service. The average cost per household amounts to R 23.77 per month.

The cost associated with service delivery by the cooperatives is on par with that provided by the municipality at R20 per household per month for informal areas and R 25 per household per month for formal areas.

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<sup>2</sup> Comment by a Municipal Official

- **Levels of Cleanliness:** The programme has achieved very high levels of cleanliness that are on a par with the established suburbs within the Metro that are being serviced departmentally.

Representatives from the cooperatives indicated that illegal dumping is a matter of concern. An awareness campaign has been initiated by certain of the cooperatives to try and stem the illegal dumping.

- **Community development:** Albeit that community development *per se* is not addressed directly under the programme, indirectly there have been substantial and significant improvements in this regard since the inception of the programme. Living standards have improved, employment levels have improved, skills levels within the community have improved and an awareness has been created in the community with regard to the beneficial effects of sound waste management practices. In addition the contractors employed under the programme have developed to the extent that they have been successfully tendering for other work outside of the waste collection programmes within their communities.
- **Poverty Alleviation:** This is achieved largely through job creation at the community level which in turn results in increased expenditure within the community.
- **Programme Integrity and sustainability:** The programme complies with all relevant legislative requirements, with the exception of section 78 of the Municipal Systems Act (Act 32 of 2000). The programme has been running at its current scale successfully since 2005, confirming sustainability.
- **Job creation:** A total on nine cooperatives have been formed with a total of 256 members. Some 40 people are additionally employed on a rotational basis by two of the cooperatives.

## 14 KEY FACTORS

The following are considered to be the key factors that have contributed to the success of the programme:

- Training/mentorship of the service providers on an ongoing basis;

- Cost effective service delivery;
- A real empowerment/ development model;
- Performance monitoring and penalisation of poor performance;
- Maximisation of job opportunities through the utilisation of labour intensive methods;
- A commitment to the programme by all stakeholders.
- Remuneration of cooperative members is through profit sharing, promoting ownership of the cooperative by its members.
- Employment of community members by the cooperatives.
- Guaranteed income to the cooperatives through the contract with NMBMM. No product resale was required.
- An “open door” policy with the cooperatives, promoting communisation
- 

## 15 OVERVIEW OF THE PROGRAMME

The programme implemented in NMBMM is a successful and cost effective programme. Employment opportunities for 296 persons have been created.

The structure of the programme is relatively simple and uncomplicated.

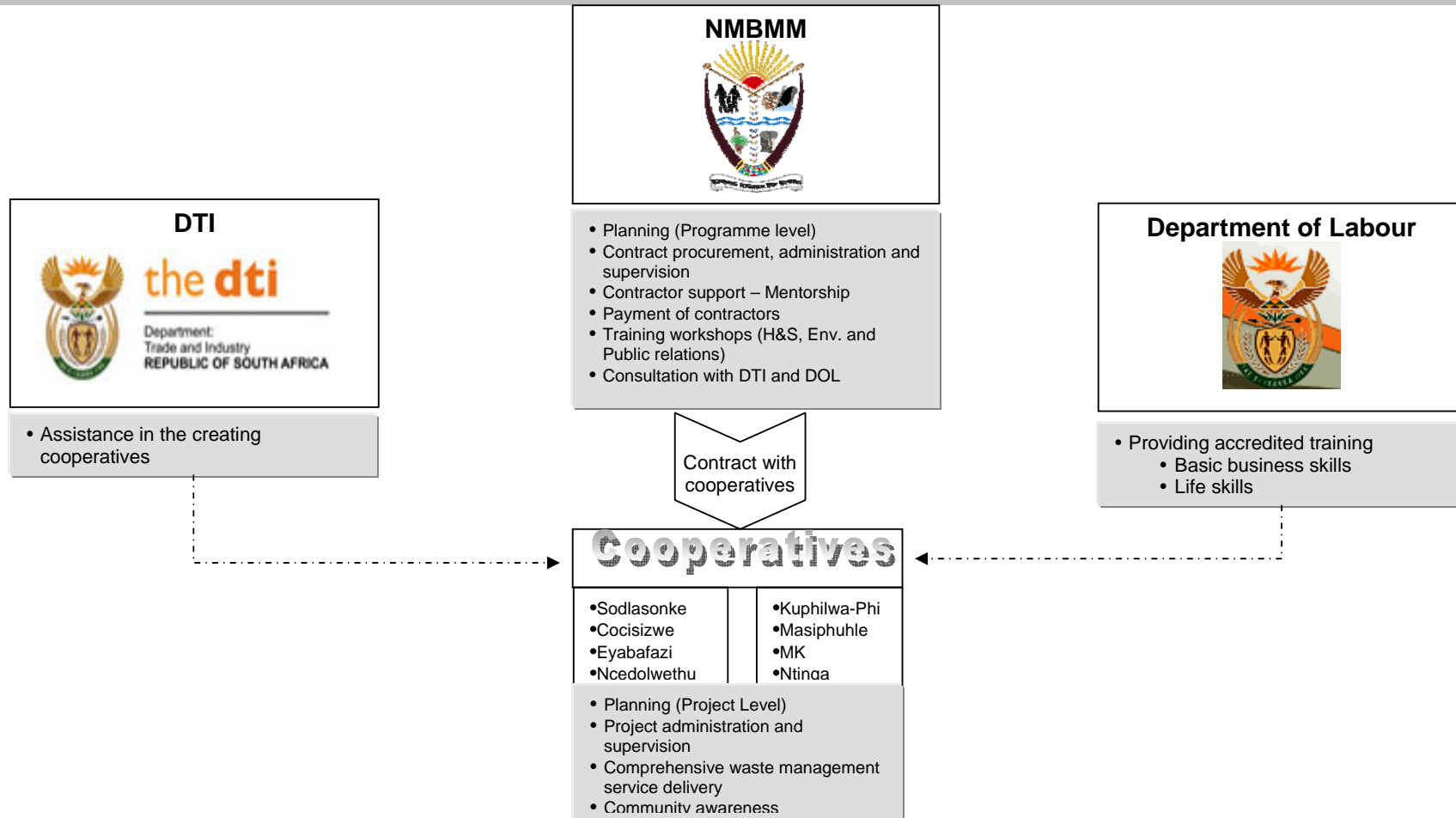
On-going support and mentorship to the service providers ensures sustainability of the programme.

During 2006 the programme was runner-up in the Impumelelo awards.

**ANNEXURE A**

**PROGRAMME SCHEMATIC**

# NMBMM Waste Programme Project Structure



**ANNEXURE B**  
**PHOTOMETRIC INDEX**



# Waste Management

## Photometric Index




## Standards of Cleanliness

*Informal Residential*  
*Formal Residential*

**Waste Management**  
Environmental Services



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PORT ELIZABETH | UITENHAGE | DESPATCH



## Standards of Cleanliness

This booklet explains and indicates the standard of cleanliness required within the designated area of Waste Management Co-operatives.

**The contractor is expected to achieve Level 1.**

**Level 1** would result in a 100% score and full payment to the contractor.


**Level 2** would result in a 90 to 99% score and still full payment to the contractor. However, contractors must not see this level as the norm but rather a warning that they have to improve before penalties are incurred.

**Level 3** would result in a 80 to 89% score and a penalty imposed on the contractor. Payment will be based on 60% only of the 30% portion of the invoice amount.

**Level 4** would result in a 0 to 79% score and a penalty imposed on the contractor. Only the 70% payment for refuse collection services will be made, no payment will be made for cleansing service.

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**Waste Management**  
Environmental Services



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## **Informal Residential**

Level 1  
Desired Standard of Cleanliness



Level 2  
Fair to Reasonable Standard of Cleanliness



2

**Waste Management**  
Enviromental Services



Level 3  
Unacceptable Standard of Cleanliness



Level 4  
Totally Unacceptable Standard of Cleanliness



**Waste Management**  
Enviromental Services







### **Formal Residential**

Level 1  
Desired Standard of Cleanliness



Level 2  
Fair to Reasonable Standard of Cleanliness



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**Waste Management**  
Enviromental Services



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### **Formal Residential**

Level 3  
Unacceptable Standard of Cleanliness



Level 4  
Totally Unacceptable Standard of Cleanliness



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**Waste Management**  
Enviromental Services



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## **ANNEXURE C**

### **MANAGEMENT / ADMINISTRATION / MONITORING COST CALCULATIONS**

## **MANAGEMENT/ ADMINISTRATION/ MONITORING COST CALCULATIONS**

The following cost calculation provides an estimate of costs incurred by the municipality for the management, administration and monitoring of the cooperatives.

A Contracts Manager and 3 Depot Managers have been assigned by the Metro to manage, administer and monitor the cooperatives

- 1) Since limited information is available the following assumptions have been made:

### Salaries:

The following is based on known salaries for a municipality in KZN.

- The Contacts Manager is appointed at a Level 3 position, with a salary of R34 000 per month.
- The Depot Managers (3) are appointed at a Level 4 position, with a salary of R 25 000 per month.

### Multiplier:

A 1.5 multiplier will be applied to incorporate cost associated with operational expenses, e.g. infrastructure – office, IT, electricity, etc.

### Time allocations:

The following time allocations were provided by the municipality

- Contracts Manager spends approximately three days per month on issues related to the programme. Assuming 24 working days per month this amounts to a time allocation 12.5% per month for such activities.
  - Each Depot manager is responsible for 3 Cooperative contract zones. An average of 5 day per month is spent by the Depot manager on activities related to the Cooperatives. Assuming 24 working days per month, this amounts to a time allocation of 21% per month.
-

Based on the above assumptions the total cost incurred by the municipality for the management/ administration/ monitoring of the programme can be calculated as:

Deport Manager (DM):

$$\begin{aligned} \text{DM PCPA} &= \text{CTM} \times 12 \times 1.5 \text{ multiplier} \times \text{TA} \\ &= \text{R}25\,000 \times 12 \times 1.5 \times 21\% \\ &= \underline{\text{R}94\,500} \end{aligned}$$

Contracts manager (CM):

$$\begin{aligned} \text{CM PCPA} &= \text{CTM} \times 12 \times 1.5 \text{ multiplier} \times \text{TA} \\ &= \text{R}35\,000 \times 12 \times 1.5 \times 12.5\% \\ &= \underline{\text{R}78\,750} \end{aligned}$$

Where,

DM = Deport Manager

CM = Contacts Manager

PCPA = Project cost per annum

CTM = Cost to municipality (salary package)

TA = Time allocation in %

Therefore the cost to manage the project can be calculated as:

$$\begin{aligned} &= (\text{R}94\,500 \times 3 \text{ Depot Managers}) + (\text{R}78\,750 \text{ for the Contracts Manager}) \\ &= \underline{\text{R}362\,250} \text{ or R } 1.01 \text{ per household per month at } 29947 \text{ households serviced} \end{aligned}$$

WASTE QUANTITIES

Monitoring data on the quantity of waste generated in the Blue Horizon and Seaview areas are not available. The quantities are estimated as follows:

It is assumed that the quantity of waste generated in these areas is 4.7kg per household per week.

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Based on this assumption the total generated by households in Blue Horizon and Seaview are estimated as:

$$\begin{aligned}\text{Waste generated} &= \text{Households} \times \text{Generation rate} \\ &= 900 \text{ households} \times 4.7\text{kg per week} \\ &= \underline{4\,230\text{kg per week}}\end{aligned}$$

$$\begin{aligned}\text{Waste generated per annum} &= 4\,230\text{kg per week} \times 52 \text{ weeks} \\ &= \underline{228\,420\text{kg per annum, say } 230 \text{ t per annum}}\end{aligned}$$