



DOMESTIC WASTE COLLECTION

DOCUMENTATION OF CASE STUDIES OF COMMUNITY BASED DOMESTIC WASTE COLLECTION PROGRAMMES IN SOUTH AFRICA

CONSOLIDATION REPORT

14 November 2007

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1 **INTRODUCTION**

The Department of Environment Affairs and Tourism (DEAT) has the responsibility of implementing the Extended Public Works Programme (EPWP) - Environmental Sector, which has the target of creating 200 000 work opportunities over the five year duration of the EPWP.

One of the areas identified by DEAT and the Department of Public Works (DPW) for the expansion of the EPWP Environmental Sector is domestic waste collection. This is due to the fact that there is substantial under-provision of domestic municipal waste collection services, particularly in the poorer less developed settlements and neighbourhoods of South Africa. It is estimated that, nationally, just over 5 million households do not receive adequate waste collection services.

Successful programmes for collecting domestic waste, using community based entities including Community Based Organisations (CBO's), Cooperatives and Small and Medium Enterprises (SME's) and local labour, have been implemented in South Africa.

The aim of this investigation was to identify and document case studies of programmes that have been implemented in SA, so as to increase understanding as to how they are implemented, and how well such projects perform.

Documentation of these programmes and recommendations in respect of best practices based on lessons learned in the case studies will assist Local Governments, CBO's, SME's and other organisations in making informed decisions when embarking on waste collection programmes, as well as providing information of alternative approaches that may be considered during project planning and implementation.

This report presents a consolidated evaluation of the individual case studies and highlights the strengths, weaknesses, risks, and the key success factors associated with each particular case.

The individual case studies are appended hereto as follows:-

Appendix 1: Case Study 1: Ekurhuleni Metropolitan Municipality Domestic Waste Collection Programme.

Appendix 2: Case Study 2: eThekweni Emerging Contractor Waste Collection Programme

Appendix 3: Case Study 3: EPWP Domestic Waste Clearing and Collection Programme Implemented in Gauteng

Appendix 4: Case Study 4: Nelson Mandela Bay Municipality: Cooperatives: Waste Collection Programme

Appendix 5: Case Study 5: City Of Cape Town Service Provision In Low Income and Informal Areas

The Case Study reports are generally structured in accordance with the following, although information associated with all the aspects listed was not always available on all the case studies:

- **Introduction**

A description of the areas being served and the scope of services incorporated in the programme.

- **Programme Structure and Functional Model**

A description of the programme structure in a functional model format that clearly identifies all stakeholders, the rolls and responsibilities of each stakeholder and lines of control and communication.

- **Collection system**

A description of the collection system being used.

- **Programme Planning Issues**

A description and assessment of the methodology, processes and systems adopted to plan the programme.

- **Procurement of SMEs**

A description of the procurement processes used to appoint the SMEs.

- **SME Support Systems**

A description of the scope of support services provided to the SMEs and the methodologies, systems and processes utilised.

- **SME Operational Performance**

An assessment of:

- The extent to which the SMEs are compliant with the regulatory framework governing business.
- The extent to which the businesses are being properly managed.
- Financial sustainability/profitability.
- The extent to which SMEs are applying good labour practice.
- The extent to which SMEs are providing services that comply with the specifications and requirements of their contracts.
- Vehicle procurement and management systems.
- Financial structuring.

- **Employment of labour**

A description of the methodology, processes and systems associated with employment of labour.

▪ **Skills Development**

A description of the methodology, processes and systems associated with skills development in respect of :

- Municipal Officials
- SMEs
- Employees
- Communities

▪ **Programme Administration and Supervision**

A description of the methodologies, processes and systems being utilised to administer and supervise the programme.

▪ **Cost Recovery**

A description of the cost recovery mechanisms associated with the programme that are in place.

▪ **Effectiveness of the programme**

Comment on how effective the programme is in respect of the following aspects:

- Levels of cleanliness.
- Unit costs.
- SME development.
- Employee development.
- Community development.
- Poverty alleviation.
- Cost recovery.
- Programme integrity.
- Programme sustainability.
- Job creation.
- SME opportunities created.
- Community participation.

▪ **Key factors**

- Identification of the key factors contributing to the success of the programme.
- Identification of the key factors inhibiting success of the programme.

The evaluation of the different models focused on:

- Programme structure;
- Service provider procurement and selection processes;
- Programme management, administration and supervision;
- Service provider support systems
- Employment structures and systems
- Training
- Success factors
- Critical flaws/problem areas
- Evaluation of effectiveness of the model
- Evaluation of the cost of the model

The reports were based on interviews conducted during field investigations, telephonic interviews and information provided by the respective programme managers. The scope of the project did not make provision for detailed verification of the information provided and assumes that the information provided was accurate and comprehensive.

Each of the case study reports has been submitted to the relevant programme manager to ensure that the information provided by them is adequately, accurately and correctly stated in the report.

2 KEY FEATURES OF EACH CASE STUDY

2.1 Case Study 1: The Ekurhuleni Metropolitan Municipality Domestic Waste Collection Programme:

The model implemented by the Ekurhuleni Metropolitan Municipality is a Principal Contractor/SME Subcontractor Model. The Principal Contractor is appointed by the municipality and local SME Subcontractors are appointed directly by the Principal Contractor to undertake the collection. The Principal Contractor is responsible for planning, administering and supervising the collection services that are undertaken by the SME Sub Contractors.

Some 269367 equivalent households are serviced under the programme. A comprehensive waste collection service is provided under the programme including domestic waste collection, litter picking, street cleaning, removal of illegal dumps and removal of animal carcasses.

After a competitive bidding process, the Principal Contractor was appointed by EMM to implement the programme and is contracted to EMM. Thereafter the principal contractor entered into subcontract agreements with a number of SME subcontractors to perform the waste collection service. The SME subcontractors are contracted to the Principle Contractor.

The principal contractor assisted the subcontractors with the establishment of their waste collection businesses. On-going support, training and mentorship is provided to the subcontractors by the principal contractor in order to enhance the sustainability of the subcontractors and the service they provide.

Some 54 SMEs / emerging subcontractors have been contracted by the principal contractor to deliver the service. The subcontractors each employ between 10 and 14 staff members. 565 local employment opportunities have been created under the programme.

2.2 Case Study 2: The eThekweni Emerging Contractor Waste Collection Programme Implemented by Durban Solid Waste (DSW):

This is a Direct SME Contract Model. A managing agent is contracted by the Municipality who is responsible for procuring the SME Contractors for and on behalf of DSW and for planning, administering and supervising the collection services that are undertaken by the SME contractors. The SME contractors are contracted directly to the Municipality.

Formal and informal areas are serviced under the programme with parity of service between the informal and formal areas. Some 93 519 formal houses and 97 638 informal houses are serviced under the programme. The following services are provided:

- Collection and disposal of domestic waste on a weekly cycle;
- All streets, street verges, open areas and open stormwater channels are cleaned/litter-picked on a weekly cycle;
- Illegal dumps, piles of rubble and refuse and animal carcasses are removed as and when identified;
- Street drums are provided at points of high litter generation (such as Taxi Ranks) and are cleared on a twice weekly basis;
- Vegetation in street verges is cut and cleared on a three times annual cycle;
- In the informal areas waste is placed in skips positioned at accessible points adjacent to the communities. The skips are taken to the disposal site by a separate contractor at least once a week or more frequently at sites where waste generation rates are high.

A total of 32 SME contractors have been appointed under the programme. Labour-only contracts, where the SME is responsible for collecting waste to skips placed within the contract zone which are cleared under a separate contract, have been established in the informal areas. Comprehensive contracts, where the SME is required to collect the waste into collection vehicles and transport the waste to the disposal site, have been established in the formal areas. The contracts were procured on the basis of a competitive bidding process. The combination of labour-only and comprehensive contracts provides opportunity for a range of SME levels, with the labour-only contracts providing for entry level SMEs with limited access to finance.

A total of 726 employment opportunities have been created under the programme

No formal structured management/administrative and skills development/training is provided to the contractors and their staff under the programme. Informally, however the contractors are provided with guidance and assistance by the managing agent on an on-going basis.

The SMEs are assisted by the managing agent to establish their businesses, to register with the relevant authorities, to procure vehicles, to access financial facilities and to complete contract specific business plans during the contract initiation/preparation period after award of the contract and prior to commencement of services.

2.3 Case Study 3: The Domestic Waste Clearing and Collection Programme Implemented under the Extended Public Works Programme by the Gauteng Department of Public Transport, Roads and Works.

The programme was implemented by the Gauteng Department of Public Transport, Roads and Works (GDPTRW) under the EPWP in various Municipalities in Gauteng.

The programme utilised the services of a Principal Contractor, 3 Principal Agents, 23 CBO's, 18 SME Contractors, 1 456 Beneficiaries and 54 Labourers to provide the following service within the project area serving some 28 860 households:-

- The collection and disposal of domestic waste;
- The reclamation of recyclable material;
- Litter picking;
- Street cleaning;
- Removal of illegal dumps;
- The establishment of vegetable gardens and parks on cleared illegal dump sites

Administrative and management support and programme specific skills training and life skills training was provided to the contractors and their staff under the programme.

Responsibilities were assigned as follows under the programme:-

- The Principal Contractor was responsible for implementation and overall management of the programme and the appointment of the Principle Agents, each allocated to specific zones;
- The Principal Agents were responsible for management and administration of the programme and for the procurement and selection of the SME Contractors, the CBO's and the Beneficiaries in their allocated zones;
- The CBO's were responsible for on-site operations management and for the day to day management of the SME's and the Beneficiaries;
- The SME's were responsible for the collection, transportation and disposal of household waste and the transportation of recovered recyclable materials to reclamation companies;
- The Beneficiaries were responsible for salvaging recyclable material, litter picking, street sweeping and the clearing of illegal dumps, and
- The Department of Labour provided accredited life skills training.

The contractual structure is relatively complex as follows:

- The programme was implemented in accordance with an MOU between GDPTRW and the Municipalities involved.
- The Principle Contractor (IDT) was contracted to the Gauteng Department of Public Transport, Roads and Works (GDPTRW) under the EPWP.
- The Principle Agents were procured through a tendering process by the Principle Contractor and were contracted to the Principle Contractor.
- The CBOs were procured through a tendering process by the Principle Agents and were contracted to the Principle Agents.
- The SMEs were procured through a tendering process by the Principle Agents and were contracted to the Principle Agents.
- The beneficiaries were selected by the Municipality, contracted to GDPTRW and supervised by the CBOs.

The programme has subsequently been terminated.

2.4 Case Study 4: Community Based Cooperative Waste Collection Programme Implemented by the Nelson Mandela Bay Municipality (NMBM)

Nelson Mandela Bay Metropolitan Municipality (NMBMM) is currently implementing a community based cooperative 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 cooperatives 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:

- Weekly collection of garden and domestic waste;
- Collection and disposal of animal carcasses;
- Litter picking;
- Street Cleaning and
- 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 cooperatives 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 cooperatives so as to ensure compliance with the Cooperative'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 cooperatives 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 cooperatives by NMBMM so as to ensure the sustainability of the cooperatives.

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.

2.5 Case Study 5: Service Provision in Low Income and Informal Areas Implemented by the City Of Cape Town.

This Direct SME Contract Model is currently being implemented in the City of Cape Town (COCT). The model is being implemented in 22 informal areas within the jurisdictional area of the Metro. The service is provided to 153 284 households under the programme.

There are 22 SMEs appointed with a total workforce of 505 on the programme.

Management and planning of the programme and the administration and supervision of the contracts is undertaken by the Metro.

The following service is provided under the programme:-

- The collection and disposal of domestic and garden waste;
- Litter picking;
- Street cleaning;
- Removal and disposal of illegal dumps and
- Removal and disposal of building rubble

The following services are excluded from the programme:

- Grass cutting and vegetation clearing and
- Removal and disposal of animal carcasses

The contractors provide a once weekly kerbside collection service and transport the waste to strategically placed containers near their respective collection zones. The containers are transported by the Municipality and the waste disposed of at the disposal site.

Twenty two separate emerging SME Contractors have been appointed by the City to provide the service within the designated areas. The contracts were awarded to the successful tenderers on the basis of a competitive bidding process. The contractors are required to appoint their staff members from the local community. Provision of the service has created 505 jobs in the area.

The contracts are generally "labour-only" contractors and the SMEs do not require collection vehicles, although some of the Contractors use LDVs to transport some of their waste to the containers. As such this provides opportunity for entry level SMEs who do not require access to substantial financial facilities.

No management/administrative support and skills development/training is provided to the contractors and their staff under the programme.

3 **METHODOLOGY APPLIED TO COMPILE INFORMATION**

The methodology employed in documenting successful community based waste collection programmes consisted of the following steps:-

STEP 1: Development of a framework document to provide a logical structure in which the assignment can be completed. The framework document address key aspects such as: -

- The project scope;
- Management structure;
- Methodology and selection criteria for programmes to be evaluated as part of the assignment;
- Format, structure and scope of the case studies; and
- A programme implementation plan.

STEP 2: Conducting a comprehensive scan to identify potential community based domestic waste collection programmes that will add value to the knowledge base. Existing programmes were identified through communication with national departments and by issuing a questionnaire to all local municipalities in South Africa through the offices of the EPWSP.

Once potential programmes were identified, the selection of the programmes was workshopped with a Task Team consisting of DPLG, DPW, DEAT and the EPWSP, who made the final selection.

STEP 3: Evaluating and documenting programmes as selected through dedicated research teams allocated to each programme that proceeded as follows:

- The teams met with key officials to obtain all relevant data and information on the programme under investigation.
- The research team then met with other stakeholders (SMEs, community representatives etc.) and made such additional inspections and evaluation as necessary to document the findings as set out below.
- After evaluation of the data, a draft case study report was completed and discussed with the key municipal officials to ensure the accuracy of the draft report.
- The municipal officials were specifically asked to document key lessons learned during the implementation and management of the programme.

STEP 4: Based on findings from the investigation and feedback from programme managers and municipal officials' key lessons learned and best practice was documented.

4 SUMMARY OF KEY STATISTICS OF EACH MODEL

A summary of the key statistics of each of the above models is presented in Table 1 attached at the end of this report.

The models are not directly comparable as the actual services provided differ from municipality to municipality. In addition the social and local economic development objectives associated with each model differ from municipality to municipality, which had a direct influence on the structure and scope of each programme.

5 STRENGTHS AND WEAKNESSES OF EACH MODEL

An assessment of the strengths and weaknesses of each model is presented in the Table 2 attached at the end of this report.

6 LESSONS LEARNED AND BEST PRACTICE

Factors that will influence the success and that would enhance the sustainability of the specific model adopted in each case study are presented in the Table 3 attached at the end of this report. This is influenced by the goals or objectives of the particular municipality implementing the model.

Key lessons learned and recommendations in respect of best practices based on the evaluation of the various programmes and models, as well as on feedback from the programme managers and municipal officials on both the case study programmes and other programmes, are as follows:

6.1 Planning

Proper and accurate planning is critical for the success of a community based waste collection programme. The following aspects must be considered in the planning processes:

- It is important that the strategic objectives of the programme are identified before planning takes place. This will provide the strategic framework within which the most appropriate delivery model can be designed and/or selected and detailed planning can be completed.
- It is important to consult effectively with key stake holders during the planning processes to ensure that the programme meets the needs of, and has the support of, the various stakeholders.
- Servicing levels must be selected on the basis of affordability and/or available funding, the desired level of cleanliness and on the programme objectives.
- Collection methodologies will differ substantially depending on the particular circumstances in each Municipality and/or service area. The most appropriate collection methodologies and systems must be selected based on the settlement pattern in the communities being served and on the needs and requirements of the selected delivery model.
- Contract zoning and route scheduling must be carefully planned to suit the collection systems, the delivery model and local community structures in a manner that will support cost effective delivery of services. It is particularly important to size the collection zone to suit the collection unit in a manner that achieves 100% utilisation of the unit. (For example, a kerbside collection system based on refuse bags using an REL with 4 collectors can service up to 2000 households per day. Contracts should be zoned at 10 000 houses to achieve proper utilisation of the collection unit and to keep unit costs to a minimum.)
- It is important that the number of servicing points in the communities being served is accurately quantified as this is fundamental to accurate collection zoning and route scheduling which has a direct impact on collection costs.
- In cases where one of the programme objectives is to contract with cooperatives it is important that the Municipality assist in facilitating the process of getting the cooperatives established and registered (in terms of the Cooperatives Act) prior to commencing with the procurement processes.

- If the programme is considered a substantial extension of services then the need to comply with Section 78 of the Municipal Systems Act must be investigated and implemented where required.

6.2 Delivery Model

The case studies are based on two fundamental model types:

- **A Principle Contractor model** where the Municipality contracts with a Principle Contractor who appoints locally based SMEs as subcontractors to provide the collection services.

Key features of this model are:

- The Principle Contractor is contractually responsible to the Municipality for managing the provision of collection services in accordance with the contract specifications.
- The Principle Contractor generally appoints and selects the SMEs in consultation with the Municipality and provides the required business support services, training and mentoring necessary to establish the SME and to support the sustainability of the SME.
- The Principle Contractor will select the collection systems and methodologies and will facilitate the procurement of the required vehicles and equipment, as well as the financial facilities, for and on behalf of the SMEs.

The model is practical, cost effective, sustainable and replicable under most circumstances.

Its principle strength is that it places the entire responsibility for provision of services on a single Principle Contractor who will generally have the technical, managerial and financial capacity to establish and support the SMEs.

Whilst the risk of failure of the Principle Contractor is limited, the consequence of failure will be substantial and could result in the collapse of an entire programme with associated impact on service delivery, SMEs and the workforce. This risk can, however, be mitigated through the application of a highly diligent tender adjudication process that will ensure that only competent tenderers with the required capability and capacity are appointed.

The establishment and on-going management costs associated with the Principle Contractor are generally substantial and the model only becomes cost effective where the scale of the programme is relatively large. Although feasibility needs to be examined in each particular circumstance, this model is generally not recommended in programmes of less than 50 000 households.

It is important that SME development requirements be properly specified in the contract and that the Principle Contractor's compliance with these requirements is properly monitored.

- **A Direct Contracting model** where the Municipality contracts directly with the SMEs to provide the collection services.

Key features of this model are:

- The Municipality will establish a programme management structure, either internally or through outsourcing, to administer the programme and to provide support services to the SMEs.
- The SMEs are procured by the Municipality through a tendering process and are individually contractually responsible to the Municipality for provision of the collection services in their respective contract zones.
- Each SME will select the collection system and methodology, generally within broad parameters set out in the contract, for its contract.
- The SMEs are responsible for procuring the required vehicles and financial facilities. The programme management structure established by the Municipality can play a supportive role in facilitating this process and assisting the SMEs to procure vehicles and access financial facilities.
- The programme management structure established by the Municipality will generally provide business support services to the SMEs, although these vary substantially in each circumstance.

As with the Principle Contractor model, it is practical, cost effective, sustainable and replicable under most circumstances.

This model is most appropriate in programmes where the collection methodologies and systems do not have to be integrated with a waste transfer and bulk transport system and where the SME can transport the waste directly to the disposal point.

The model can be implemented in any size of programme.

It is administratively more onerous than the Principle Contractor model as the Municipality is required to administer and support a number of SME contractors as opposed to administering a single Principle Contract. This can, however, be adequately addressed through the establishment of an effective programme management unit with the capability and capacity to manage and administer the programme.

Whilst the level of SME support services differed in the programmes investigated and were generally not as substantial as those in the Ekurhuleni programme, the comprehensive support services necessary to ensure sustainability of SMEs can be provided through the Programme Management Unit, provided that this is included in the terms of reference of the unit.

The risk of failure of any single SME is probably higher than in the Principle Contractor model. The consequence of failure is, however, low as it will be restricted to a limited area within the overall programme and can be addressed through utilisation of other SMEs on the programme to temporarily provide the services.

6.3 Form of SME

The two SME forms encountered in the case studies (and other programmes assessed in the case study selection process) that appear to be most appropriate to a community based waste collection programme are private contractors and community cooperatives.

Evaluation of the case studies show that both models can work and can be effective. The NMBMM programme is, however, relatively small and the effectiveness of a cooperative based approach on a large programme could not be assessed.

There are a range of contracting entities, mostly including sole proprietors, partnerships and CCs, active in these SME based programmes. All these forms are legal entities with whom the Municipality can contract with. Sole proprietors and partnerships are, however, subject to personal liability and this form of contracting entity is not generally recommended. CCs and/or registered Pty(Ltd) companies are the preferred form of SME contractor.

New entry SMEs who tender for these contracts and have not traded before are, however, generally not registered entities when tenders are submitted. As such these tenderers can only tender as sole proprietors or partnerships. In some cases the Municipality's procurement processes are such that the successful tenderer cannot convert to a CC after tender award. It is recommended that the tender documents and procurement processes be structured to provide for this.

Community Cooperatives need to be registered in terms of the Cooperatives Act before they can be considered a legal entity that the Municipality can contract with. The same restriction mentioned above also applies to potential cooperatives wishing to tender but not yet registered. It is important that Municipalities wishing to accommodate this form of SME embark on programmes to get Co- operatives registered before the tender process commences and/or that the procurement process and tender documentation make provision for the successful tenderer to register after selection as preferred bidder and prior to contract award.

The Cooperative model provides for a higher level of community participation in the programme. The model does, however, carry a higher risk of failure than the contractor model, particularly in respect of managing community co-operation and dynamics in circumstances where the Cooperative is not performing and it becomes necessary to apply sanctions in terms of the contract (such as the application of penalties or cancellation and/or replacement of the contract). This risk can, however, be mitigated to some extent through the establishment of appropriate dispute resolution processes and mechanisms. The cooperative model is also more subject to political interference than the contractor model.

The cooperative model is best suited to labour only contracts, although can also be used on comprehensive contracts. Because the cooperative programme is administratively and managerially more onerous, due largely to the need for a higher level of management of community dynamic, it is considered to be more appropriate in smaller programmes.

6.4 SME contract types

Two basic types of SME contracts were encountered in the investigation:

- **Labour-only contracts**

Generally the SME is required to collect waste from households and place it in containers, or at central collection points. The containers and/or central collection points are then cleared by the Municipality (or under separate contract) and transported to the waste disposal site.

Under this form of contract the SME will not require expensive collection vehicles and, as such, it provides entry opportunity for potential SMEs with only limited access to Finance.

This form of contract is particularly appropriate and cost effective in informal communities where there is limited vehicular access to individual households.

- **Comprehensive contracts**

In this case the SME is required to collect the waste into vehicles and to transport it to the disposal site.

Under this form of contract the SME will require expensive collection vehicles and as such, the SMEs will generally be required to access fairly substantial financial facilities to purchase vehicles and to fund cash flows.

This form of contract is mostly appropriate in communities where there is reasonable access to individual households and where the settlement patterns are such that it can support a kerbside collection service.

Under the labour-only contract model, as well as in cases where the comprehensive model is adopted but SMEs are required to transport the waste to staging areas from where it is transported in bulk, a third form of contract to provide and clear bulk waste containers is also required. This generally involves very expensive compaction and/or container type vehicles. These contracts can also be awarded to SMEs, although the cost of the vehicles is restrictive which is an entry barrier to SMEs who cannot access the required finance.

6.5 Procurement

Examination of the case studies as well as feedback from the various programme managers and Municipal officials (involved in both the case studies and in some of the programmes that were not selected) yielded the following:

- The procurement processes need to be compliant with procurement regulations and the procurement policies within each Municipality. This should apply equally to programmes where the cooperative approach is adopted.

The need to comply with Section 78 of the MSA must be investigated in every case and these processes must be followed to ensure legal compliance where required. This was not done in any of the case studies and in many other similar programmes running in RSA, more than likely because of the delays and costs associated with the process.

- The procurement process should include for training SMEs on tendering techniques and tender pricing and for transferring a good understanding of the contract to SMEs either during or prior to the tendering period.
- A high level of diligence needs to be applied in the tender evaluation process that will limit the risk of failure to a minimum.

In respect of the **Direct Contract Model** where SMEs are contracted directly to the Municipality, the selection criteria should not be based on lowest cost but on a “most favourable tender” principle based on the following criteria:

- The tendered price should be cost effective but adequate to sustain the provision of the specified services.
- The tendered rates should be balanced.
- The selected tenderer must be viable and must have the ability to access the resources (vehicles, finance etc) necessary to implement the contract (within the framework of the support programme that is to be implemented under the programme).
- The selected tenderer must either have, or have the potential to achieve, the capability to manage the contract (within the framework of the support programme that is to be implemented under the programme).

It is further recommended that the award process be based on a “preferred bidder” approach where the successful tenderer is selected based on the above mentioned criteria and contract award is only effected after the ability to access the required resources has been confirmed. This is considered good practice due largely to the fact that Financial institutions will often not confirm financial facilities until there is confirmation that the contract has been awarded.

The following is recommended in respect of the **Principle Contractor Model** :

- Ideally procurement should be based on a pre-qualification process, where only those tenderers who have proven capability and capacity to implement the contract are pre-selected and invited to tender.
- Adjudication should be based on a “Quality and Cost” based approach, with Quality contributing no less than 50% of the adjudication points.
- Quality would generally be assessed on the basis of proposed methodology, capability of the proposed management team, previous experience in similar contracts and company capacity.
- The nature of these contracts, where the methodologies and approach proposed by each tenderer will differ, is such that it will generally be necessary to conclude some negotiation with the preferred bidder before making an award and finalising the contract. The procurement process must thus make provision for this “preferred bidder” approach to contract award.
- The process to be used to procure/appoint the SME subcontractors must be clearly defined in the tender document, particularly in cases where the Municipality is to be involved in the selection process.

6.6 Key Contractual Provisions

The Contracts need to be formulated to ensure that the Municipality can control the provision of services and that both parties are adequately protected from a contractual perspective. Key aspects that should be provided for in the contracts and that are

considered good practice are as follows:

- Those contracts where it is necessary for the contractor to deploy expensive vehicles and equipment should have a contract period of no less than 5 years. This will allow a reasonable period within which to redeem the cost of the vehicles on a cost effective basis.

Contracts involving the provision of labour only need not have a 5 year term but a term of not less than 2 years is recommended.

- The contracts must make adequate provision for the application of penalties as sanction against non-performance.
- The contracts should make provision for the Municipality to make alternative arrangements, either internally or through the use of another contractor, to provide services where the contractor fails to do so (and at the cost of the non-performing contractor).
- The payment schedules should as far as is practicable be based substantially on the number of households (and other service points) actually serviced and/or the actual extent of general cleansing services (such as length of street litter-picked, volume of illegal dump removed etc.). It is important that the contracts are for the provision of cleansing services in accordance with specific specifications as opposed to based on the provision of labour and vehicles.
- The Principle Contractor contract should provide for a surety that is adequate to cover costs that may be incurred by the Municipality in the event of non-performance and/or termination of contract. This would typically be 10% of the annual value of the contract or at least the value of establishment costs tendered by the Principle Contractor.

A surety is not generally recommended in the SME contract, or should at least be fairly low in value, as this will just place additional financial burden on the SME and further barrier to entry.

- The SME support services to be provided by the Principle Contractor must be clearly specified in the contract and there must be adequate provision to apply penalties in the event that the Principle Contractor does not comply with these specifications.
- The services to be provided under the contract should be structured such that the contractor is held responsible for the total cleanliness of the contract zone. Structuring contracts on the basis of different functional areas, such as separate contracts for house collection and street cleaning in the same zone, is not recommended as this creates split responsibility with associated difficulty in identifying the non-performing contractor.
- The specific requirements of the Municipality associated with the process to be followed by the Principle Contractor in the selection and appointment of the SMEs should be clearly specified.
- The specific requirements of the Municipality associated with the process to be followed by the SMEs to recruit local labour (and conditions of service such as minimum wage rates) should be clearly specified.

6.7 SME Support

All of the programmes investigated under the project incorporated some degree of SME support programme. These varied from relatively unstructured mentoring and support programmes to highly structured programmes incorporating accredited training.

The different levels of SME support did not appear to have had any substantial impact on the delivery of services under the contract but it is clear that it does have an impact on SME sustainability and the capacity of the SME to continue to function as a viable business on completion of the programme.

The level of support services and the degree to which the achievement of sustainable SMEs is adopted as a programme objective does, however, have an impact on cost. It is important that Municipalities recognise that there is a cost associated with maximising the potential to create sustainable SMEs.

The following items will enhance SME sustainability and should be considered when deciding on the extent of support services to provide:

- The provision of training, probably through workshopping, related to contract details and pricing/submission of tenders during or before the tendering stage.
- Assistance in establishing the SME and getting it registered with all the relevant statutory authorities.
- The production of contract specific business plans for the SME.
- Assisting in the procuring of vehicles and equipment and the necessary financial facilities to support contract cash flows.
- The provision of administrative support. These could vary substantially, depending on the capability of the SME, and would include aspects such as accounting services (which could incorporate running the accounts, managing the bank account, managing creditors/debtors etc or simply the provision of advisory services).
- Training needs assessment and the facilitation of accredited training programmes.
- Implementation of mentoring programmes.

It is important that the training and support programmes are designed and implemented with a view to capacitating the SME to run the business independently and to build the skill and capability to continue to trade in the waste contracting market (and in business in general) during the course of the contract.

6.8 Programme Management, Administration and Supervision

Feedback from the various programme managers on the Case Study programmes as well as other programmes confirmed that the establishment of a competent structure to manage, administer and supervise the programme is fundamental to the success of programmes of this nature.

This can either be achieved through establishing an in-house structure staffed by Municipal Officials, or by outsourcing.

Key aspects associated with programme administration that will enhance success are as follows:

- Contracts need to be properly monitored and appropriate systems based on daily inspection and monitoring of tonnage collected need to be established and implemented.

Some programmes also make use of categories of cleanliness and define these in photographs as an additional tool for monitoring performance.

- Contracts should be managed strictly in accordance with the contract specifications and conditions and contractors should only be paid for work properly completed in accordance with the contract. This should, however, be done in parallel with a programme to provide the SME with advice and/or support to address areas of poor performance.
- Performance must be closely monitored and penalties must be applied where applicable and strictly in accordance with the contract.
- Appropriate systems must be set up for contract certification that will ensure contractors are paid strictly in accordance with the contract and that will allow external audit.
- Appropriate management information systems must be set up so that key programme statistics and KPIs can be recorded and monitored on an on-going basis.
- Systems for interaction with the community and dealing with complaints must be established and implemented.

6.9 Training

All of the programmes investigated incorporated some training, ranging from relatively structured accredited programmes to relatively informal on-the-job mentoring and skills transfer approaches.

It is important that Municipalities decide on objectives in respect of SME, SME employee and municipal official development so that appropriate training programmes can be selected and incorporated in the programme.

These programmes should generally address the following:

- Formalised and accredited training programmes for SMEs, supported by on-going mentoring programmes, designed to develop the necessary management and administrative skills to capacitate the SME to continue to function effectively on conclusion of the current contract.
- Both Technical and Life Skills training for Employees to increase employability and enhance their ability to access work opportunities, both within the waste sector and outside of it, on conclusion of the contract.
- Formalised training for municipal officials on integrated waste management as well as specific training related to management and administration of the particular programme to capacitate the officials to manage the programme effectively and to increase their skill level in relation to integrated waste management.

6.10 Labour issues

The number of houses served per job created varied quite substantially from case to case.

The number of jobs required will be dictated by the level of service adopted and, to some extent, by the settlement pattern and access conditions within the communities.

The cost effective programmes on which SMEs employ labour (as opposed to beneficiaries within cooperatives where minimum wage rates do not apply) seem to range from 300 to 500 households per full time job.

More jobs can, however, be created if a rotational employment system is used where employees do not work full time but rotate with other employees.

Adequate provision should be made in the contracts to enforce SMEs to comply with good labour practice and with acceptable wage rates and conditions of service. Whilst the labour force may be employed by the SME and not the Municipality, experience has shown that labour problems will generally arise if these issues are not properly addressed.

All of the cases are based on employment of personnel from within the community being served. The SMEs and/or Principle contractors are generally required to consult closely with the appropriate community structures when recruiting workers.

6.11 Cost

Cost is substantially affected by level of service adopted and local factors such as the distance to disposal site, access conditions, the need to transfer waste to bulk transport systems etc.

Evaluation of the case studies indicates, however, that programmes that are cost effective (and where there is no requirement for bulk transfer of waste to the disposal site) range from about R 17 to R 20 per house per month.

7 CONCLUSION

All of the case studies involved the contracting out of collection services to SMEs as follows:

- Ekurhuleni contracted with a Principle Contractor who appointed locally based contractors to provide the collection services on a subcontract basis.
- eThekweni Metro and Cape Town have contracted directly with locally based contractors.
- NMBM has contracted directly with community cooperatives to provide the services.
- The Gauteng EPWP programme structure was relatively complex and involved contracting with a Principle Contractor who employed Principle Agents and CBOs to manage SMEs and a labour force that was contracted to the Province to provide the services.

The levels of service and scope of each case study differed substantially, depending on the specific objectives set by each Municipality for its programme as well as on the resources available to each Municipality for implementation. These factors need to be taken into account when evaluating the programmes against each other.

Each model investigated has its particular strengths and weaknesses. Each model could find efficient and effective implementation depending on circumstances and on the objectives of the programme in the particular Municipality. The Gauteng model was, however, found to be complex and could result in split responsibilities and accountabilities between the various parties involved in providing the services.

Both the Principle Contractor and the Direct Contracting model are being used quite extensively in RSA and are both viable and effective as long as the issues described in 5 above are properly addressed.

The SMEs can be either contractors, cooperatives, NGOs and/or other forms of CBOs. It is, however, critical that the SME, in whatever form, is properly constituted as a legal entity that a Municipality can contract with.

The NMBM cooperative programme is, however, relatively small. As such the effectiveness of the cooperative approach on large scale programmes could not be assessed.

Community based waste collection programmes in the various forms and permutations dealt with above can be cost effective, appropriate and successful provided that due diligence is applied in the planning, procurement and programme administration processes.

Key objectives that can be met through the implementation of these programmes include:

- Relatively fast track extension of services to un-served communities.
- Provision of cost effective services that can achieve desired levels of cleanliness and improve the environmental, aesthetic and health aspects within the communities being served.
- Sustainable SME development.
- Sustainable job creation at the community level.
- Skills development at the SME, SME employee and Municipal Official level.

The evaluation of the case studies has shown that SME based, labour intensive domestic refuse collection programmes would be an effective approach to dealing with the waste collection challenges in RSA, particularly in the extensive and generally low income urban, peri-urban and dense rural unserved communities in Municipalities throughout RSA.

TABLE 1 : KEY STATISTICS ASSOCIATED WITH EACH CASE STUDY

<u>CRITERION</u>	<u>UNIT</u>	<u>CASE STUDY 1</u>	<u>CASE STUDY 2</u>	<u>CASE STUDY 3</u>	<u>CASE STUDY 4</u>	<u>CASE STUDY 5</u>
NO OF FORMAL HOUSES	Households	No Info	93 519	No Info	No Info	No Info
NO OF INFORMAL HOUSES	Households	No Info	97 638	No Info	No Info	153 284
NO OF NON-RESIDENTIAL EQUIV HOUSES	Equiv. Households	No Info	16 217	No Info	No Info	No Info
TOTAL NO. OF EQUIV. HOUSES	Equiv. Households	269 367	207 374	28 860	29 947	153 284
NO OF SKIPS/CONTAINERS	No.	N/A	207	N/A	N/A	383
TOTAL STREET LENGTH	km	No Info	953	No Info	No Info	No Info
NO OF COMPREHENSIVE CONTRACTS	No.	54	20	18	9	N/A
NO OF LABOUR ONLY CONTRACTS	No.	N/A	12	N/A	N/A	22
NO OF SKIP CONTRACTS	No.	N/A	2	N/A	N/A	No Info
ANNUAL COLLECTION BUDGET	R per Annum	53 013 276.00	44 000 000.00	31 168 800.00	7 493 624.16	16 149 664.00
ANNUAL MANAGEMENT BUDGET	R per Annum	5 890 364.04	4 500 000.00	3 029 772.00	362 957.64 ¹	2 188 895.52
TOTAL ANNUAL BUDGET	R per Annum	58 903 640.04	48 500 000.00	34 198 572.00	7 856 581.80	18 338 559.52
AVE. TURNOVER PER COMPREHENSIVE CONTRACT	R per Month	71 763.69	146 000.00	No Info	69 385.41	61 172.97
AVE. TURNOVER PER LABOUR-ONLY CONTRACT	R per Month	N/A	38 000.00	N/A	N/A	N/A
AVE. COLLECTION COST PER EQUIV. HOUSE	R per House per Month	14.39	17.79	90.00 ²	20.85 ³	8.78
AVE. MANAGEMENT COST PER EQUIV. HOUSE	R per House per Month	1.60	Included in above	8.75	1.01 ¹	1.19 ¹
TOTAL AVE. COST PER EQUIV. HOUSE	R per House per Month	15.99	17.79	98.75 ²	21.86 ³	9.97 ⁶

TABLE 1 CONTD.

<u>CRITERION</u>	<u>UNIT</u>	<u>CASE STUDY 1</u>	<u>CASE STUDY 2</u>	<u>CASE STUDY 3</u>	<u>CASE STUDY 4</u>	<u>CASE STUDY 5</u>
TOTAL MASS COLLECTED	Tonnes per Annum	Unknown	65 000	Unknown	6 012 ¹	No Info
UNIT COST	R per Tonne	Unknown	670.00	Unknown	1 307	No Info
TOTAL JOBS CREATED	No.	565	726	1510	296 ⁷	505
AVE. NO. OF EQUIV. HOUSES PER JOB	Equiv. Houses per Job	477	290	19	101	304
NO. OF SME's	No.	54	27	18	9	No Info
NO. OF WOMEN-OWNED SME's	No.	No Info	9	No Info	No Info	No Info
CONTRACT PERIOD	Years	3	3-5	1	3	3

NOTES

1. Estimated amount
2. Amount includes for the establishment of vegetable gardens and parks on cleared illegal dump sites and for the removal of recyclable material from the waste stream and for the delivery thereof to waste reclamation companies, the cost of which has not been separately recorded
3. The amount includes for the cost of acceptance of the waste at the landfill site.
4. The amount includes for grass and vegetation cutting and clearing, the cost of which is estimated at R 1.80/household/month
5. Additional payment is made to the contractors for the removal of large illegal dumps and building rubble
6. The amount excludes transporting the waste to the disposal site which is done by others, the cost of which is estimated at R 19.12/household per month
7. Total jobs created includes beneficiaries and employees

TABLE 2 : STRENGTHS AND WEAKNESSES ASSOCIATED WITH EACH CASE

(Note: Weaknesses are indicated in underlined text)

CASE STUDY	PROGRAMME STRUCTURE	MANAGEMENT ADMINISTRATION AND SUPERVISION	SUPPORT SYSTEMS	EMPLOYMENT STRUCTURE	TRAINING	SUCCESS FACTORS	EFFECTIVENESS	RISK PROFILE	UNIT COST
<p><u>Case Study 1 :</u> Principle Contractor/SME subcontractor Model Implemented By Ekurhuleni Metropolitan Municipality.</p> <p>Municipality appointed principle Contractor through a proper tender process who has appointed 54 SME subcontractors to serve the 269 000 households in the service area.</p>	<ul style="list-style-type: none"> Well structured tried and tested model. Principal contractor appointed by municipality and subcontractors appointed by the principal contractor Easy to manage from a municipal perspective as only 1 service provider to manage Technical planning functions and SME contract administration functions largely performed by the appointed principal contractor Municipality needs to establish inspectorate to monitor service delivery Municipality's social, economic developmental and BEE goals can be achieved under the model 	<ul style="list-style-type: none"> Strong management, administrative and supervisory structure from municipal level down to operational level Strong communication structure from operational level up to the political level Strong monitoring capability with facility to penalise poor performance 	<ul style="list-style-type: none"> Strong initial and on-going technical, administrative and management support provided to the SME subcontractors Assisted with access to financial institutions for set-up and operational funding 	<ul style="list-style-type: none"> Legally compliant employment practises Labour intensive strategies with 54 SME's and 565 labourers employed under the model Social targets set by municipality re employment of women, youth and disabled met 	<ul style="list-style-type: none"> Business management, administration and technical accredited training provided to SME subcontractors Job specific training provided to SME's and labourers <u>Life skills training not provided to labourers</u> 	<ul style="list-style-type: none"> Accredited training to SME's Cost effectiveness SME development Programme integrity Performance monitoring Penalty system for poor performance Community awareness and support 	<ul style="list-style-type: none"> Rapid roll-out of service delivery Comprehensive service provided within the serviced area High levels of cleanliness achieved Social, economic and BEE objectives achieved Competitive unit cost of service delivery Sustainable service Legally compliant procurement process 	<ul style="list-style-type: none"> Risk of failure of the principal contractor low <u>Consequences of failure of the principal contractor severe</u> <u>Risk of failure of any one SME subcontractor medium.</u> Consequences of failure of SME subcontractor easily managed 	<ul style="list-style-type: none"> R 16.89 per house per month in the Boksburg area R 18.68 per house per month elsewhere <p>(Excluding the cost of the waste receptacle provided by the municipality to each household- a wheely-bin in this instance)</p>
<p><u>Case Study 2:</u> Direct Contract Model (Implemented By eThekweni Municipality)</p> <p>The Municipality appointed a managing agent to manage the planning and implementation of the programme to provide collection services to some 207000 households. The Municipality has contracted directly with 32 SMEs, procured through a public tendering process, to provide the collection services. The SME contracts are administered by the appointed managing agent.</p>	<ul style="list-style-type: none"> Well structured tried and tested model. The model provides for parity of service throughout the jurisdictional area of the municipality Technical planning functions would be performed by the municipality and/or its appointed agent under the model Municipality would need to establish contract administration capability and capacity to manage service delivery under the model – either internally or outsourced Municipality would need to establish inspectorate to monitor service delivery under the model-either internally or outsourced 	<ul style="list-style-type: none"> Strong management, administrative and supervisory structure from municipal level down to operational level Strong communication structure from operational level up to the political level Strong monitoring capability with facility to penalise poor performance 	<ul style="list-style-type: none"> <u>Weak on-going technical, administrative and management support provided to the SME subcontractors</u> Fairly substantial support provided to get SME established. <u>Only limited assistance provided in respect of SME access to financial facilities and vehicle purchase.</u> <u>Limited Assistance with access to financial institutions for set-up and operational funding</u> 	<ul style="list-style-type: none"> Legally compliant employment practises Labour intensive strategies with 32 SME's and 726 labourers employed under the model Social targets set by municipality re employment of women, youth and disabled met 	<ul style="list-style-type: none"> <u>No Business management, administration and technical accredited training provided to SME subcontractors</u> On-the-job day to day mentoring and support is provided. <u>No life skills training provided to labourers</u> 	<ul style="list-style-type: none"> Diligent, detailed and accurate planning processes. Diligent procurement and tender adjudication/SME selection processes. Innovative structuring of SME contracts. High levels of community consultation Community based employment Documented, effective and auditable paper trail High levels of administrative and supervisory inputs The cost effectiveness of the program 	<ul style="list-style-type: none"> Rapid roll-out of service delivery Comprehensive service provided within the serviced area High levels of cleanliness achieved Social, economic and BEE objectives achieved Competative unit cost of service delivery Sustainable service Legally compliant procurement process 	<ul style="list-style-type: none"> <u>Risk of failure of any one SME contractor medium.</u> Consequences of failure of SME subcontractor easily managed 	<ul style="list-style-type: none"> R 17.70 per house per month The above unit cost includes for grass cutting of street verges and open spaces- a service not provided in the other models. Cost of this component of the service R1.70 per house per month

TABLE 2 CONTD.

CASE STUDY	PROGRAMME STRUCTURE	MANAGEMENT ADMINISTRATION AND SUPERVISION	SUPPORT SYSTEMS	EMPLOYMENT STRUCTURE	TRAINING	SUCCESS FACTORS	EFFECTIVENESS	RISK PROFILE	UNIT COST
<p>Case Study 3: Principle Contract Model (Implemented By Gauteng Dept Of Public Transport, Roads and Works).</p> <p>The Department appointed a Principle Contractor who subcontracted with three Principle Agents to plan and manage implementation of the programme in different areas within the programme. The Principle Agents appointed CBOs to handle day to day management of 18 SMEs responsible for refuse collection in communities incorporating a total of 28860 households. The workforce comprised of 54 labourers and 1456 community beneficiaries appointed by GDPTRW.</p>	<ul style="list-style-type: none"> Relatively complex model structure with split responsibilities at waste collection Technical planning functions performed by the municipality and/or its appointed agent under this model Municipality would need to establish contract administration and contract management capability and capacity to manage service delivery under this model Municipality would need to establish inspectorate to monitor service delivery under the model Municipality's social, economic, developmental and BEE goals can be achieved under the model 	<ul style="list-style-type: none"> Supervisory and management structure is complex and could easily result in split responsibility and/or accountability. Model has sound communication structure from operational level up to the political level Model has sound monitoring capability Model has weak penalty system to penalise poor performance 	<ul style="list-style-type: none"> Support provided to SMEs in the form of training No assistance with access to financial institutions for set-up and operational funding 	<ul style="list-style-type: none"> Labour intensive strategies with 18 SME's and 1510 labourers employed under the model Social targets set by municipality met Beneficiaries were paid less than the statutory minimum wage (which may have been in accordance with some special dispensation) 	<ul style="list-style-type: none"> Business management, administration and technical accredited training provided to SME subcontractors Job specific training provided to SME's and labourers Life skills training provided to labourers 	<ul style="list-style-type: none"> High levels of community consultation Accredited training to SME's Provided opportunity for SMEs and CBOs. 	<ul style="list-style-type: none"> Comprehensive service provided within the serviced area High levels of cleanliness achieved Social, economic and BEE objectives achieved Unit cost of service delivery excessively high Not sustainable Legally compliant procurement process Complex management structure 	<ul style="list-style-type: none"> Risk of failure of any one SME contractor medium. Consequences of failure of SME contractor easily managed Risk of encountering difficulties in supervision and control of workforce appointed as beneficiaries and contracted to the Department is relatively high. 	<p>R98.75 per house per month</p> <p>Note that this unit cost is not directly comparable to the cost of other models. This unit cost includes a significant recycling component and the cost of developing parks and vegetable gardens on rehabilitated illegal dump sites the cost of which cannot be isolated from the above unit cost due to lack of information.</p> <p>The number of labourers/beneficiaries employed on the contract relative to the low number of houses confirms a high unit cost of collection.</p>
<p>Case Study 4: Direct Contract Model using Cooperatives as SME Service Providers (Implemented By Nelson Mandela Bay Metropolitan Municipality)</p> <p>The Municipality worked with DTI to establish and register a number of cooperatives in the communities to be served prior to proceeding with the tendering process. There are 9 cooperatives contracted directly to the Municipality, employing some 296 beneficiaries/workers who provide collection services to 29947 households.</p>	<ul style="list-style-type: none"> Well structured model. The model could provide parity of service throughout the jurisdictional area of the municipality Technical planning functions would be performed by the municipality and/or its appointed agent under the model Municipality would need to establish contract administration and contract management capability and capacity to manage service delivery under the model Municipality would need to establish inspectorate to monitor service delivery under the model 	<ul style="list-style-type: none"> Strong management, administrative and supervisory structure from municipal level down to operational level Strong communication structure from operational level up to the political level Strong monitoring capability with facility to penalise poor performance Prone to political interference which can complicate programme management. Can be difficult to manage performance of a community based cooperative – particularly where coop has strong community support. 	<ul style="list-style-type: none"> Strong initial and on-going technical, administrative and management support provided to the SME subcontractors No assistance with access to financial institutions for set-up and operational funding 	<ul style="list-style-type: none"> Legally compliant employment practises Labour intensive strategies employed with 9 Cooperatives and 296 jobs created 	<ul style="list-style-type: none"> Business management, administration and technical accredited training provided to Co-ops Job specific training provided to Co-ops and labourers Life skills training provided to labourers 	<ul style="list-style-type: none"> Training/mentorship programme Cost effective service delivery Performance monitoring Penalisation for poor service delivery Labour intensive strategies Commitment to the programme by all stakeholders 	<ul style="list-style-type: none"> Comprehensive service provided within the serviced area High levels of cleanliness achieved Competitive unit cost of service delivery Sustainable service Legally compliant procurement process 296 jobs created 	<ul style="list-style-type: none"> Risk of failure of any one cooperative medium to high. Consequences of failure of any one cooperative medium. 	<ul style="list-style-type: none"> Unit costs range from R14.76 to R29 75 per house per month. Average Unit Cost is R20.85 per house per month This includes an average cost of R0.92 per house per month for the acceptance of the waste at the local disposal site
<p>Case Study 5: Managed Contract Model (Implemented by the City of Cape Town).</p> <p>The City have contracted directly with 22 SMEs, procured on a tender basis) on a labour only contract basis to collect waste from 153284 households and place it in containers which are cleared under a separate contract.</p>	<ul style="list-style-type: none"> Well structured model providing parity throughout the jurisdictional area of the municipality Technical planning functions performed by the municipality and/or its appointed agent under the model Contract administration and contract management capability and capacity required under the model Municipal inspectorate required under the model 	<ul style="list-style-type: none"> Strong management, administrative and supervisory structure at municipal level Strong communication structure between all stakeholders Strong monitoring capability with facility to penalise poor performance 	<ul style="list-style-type: none"> No technical, administrative and management support provided to the SME contractors No assistance with access to financial institutions for set-up and operational funding 	<ul style="list-style-type: none"> Legally compliant employment practises Labour intensive strategies with 20 SME's and 505 labourers employed under the model Social targets set by municipality met 	<ul style="list-style-type: none"> No training and skills development 	<ul style="list-style-type: none"> Cost effective service delivery Performance monitoring Penalisation for poor service delivery Labour intensive strategies Development of emerging contractors 	<ul style="list-style-type: none"> Rapid roll-out of service delivery Comprehensive service provided within the serviced area High levels of cleanliness achieved Social, economic and BEE objectives achieved Competative unit cost of service delivery Sustainable service Legally compliant procurement process 	<ul style="list-style-type: none"> Risk of failure of any one contractor: medium. Consequences of failure of any one contractor easily managed 	<p>R8.78 per house per month</p> <p>Total cost including bulk transportation to disposal site: R 29.09 per household per month</p>

TABLE 3 :FACTORS THAT INFLUENCE SUCCESS/SUSTAINABILITY FOR EACH CASE

<u>CASE STUDY</u>	<u>PROGRAMME STRUCTURE</u>	<u>MANAGEMENT ADMINISTRATION AND SUPERVISION</u>	<u>SUPPORT SYSTEMS</u>	<u>EMPLOYMENT STRUCTURE</u>	<u>TRAINING/ SKILLS DEVELOPMENT</u>	<u>RISK PROFILE</u>	<u>UNIT COST</u>
<u>Case Study 1 :</u> Principal Contractor/SME Sub Contractor Model Implemented by Ekurhuleni MM	Well structured tried and tested model that can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability.	Strong management, admin and supervisory structure that can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability.	Comprehensive initial and on-going support provided to the SME subcontractors, the structure of which can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability.	The model implemented is a legally compliant labour intensive business model, the structure of which can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability.	Business management and administration and job specific training related to service delivery is provided under the programme. From this perspective therefore the model cannot be improved to enhance sustainability. The programme could be enhanced to provide life skills training to labourers should the municipality wish to pursue this social objective.	The Risk of failure of the principal contractor is low The consequences of failure of the principal contractor are severe, however, so steps must be taken to ensure that the principal contractor employed by the municipality has the capability, is experienced and has a good track record. On the other hand the risks of failure of any one SME subcontractor are medium. However, the consequences of failure of an SME subcontractor can be easily managed. In the event of a failure the municipality can step in and provide the service temporarily until another contract is in place or an adjacent contractor can be requested to step in and assist until a new contract is in place.	The programme is cost effective and has unit costs that compare favourably with other models. The contracts have been running for a while now which is indicative that the contracted rates are sustainable
<u>Case Study 2:</u> Direct SME Contract Model (Implemented By eThekweni Municipality)	Well structured tried and tested model that can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved upon to enhance sustainability.	Strong management, admin and supervisory structure that can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved upon to enhance sustainability.	A formal programme of technical, management and admin training would enhance the sustainability of the model in that the risk of failure of the SME contractors would be reduced. The programme could be enhanced to provide life skills training to labourers should municipality wish to pursue this social objective	The model implemented is a legally compliant labour intensive business model the structure of which can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability.	No business management, administration and job specific training related to service delivery is provided under the programme. The sustainability of the SME's could be enhanced through the provision of this training under the programme. In addition the programme could be enhanced to provide life skills training to labourers should municipalities wish to pursue this social objective	The risk of failure of any one SME subcontractor is medium. However, the consequences of failure of an SME subcontractor can be easily managed. In the event of a failure the municipality can step in and provide the service temporarily until another contract is in place or an adjacent contractor can be requested to step in and assist until a new contract is in place.	The programme is cost effective and has unit costs that compare favourably with other models. The contracts have been running for a while now which is indicative that the contracted rates are sustainable
<u>Case Study 3:</u> Direct SME Contract Model (Implemented By Gauteng Dept Of Public Transport, Roads and Works)	The programme provided for the collection and disposal of domestic waste and for separation of recyclable waste from the waste stream at source. Recyclable material was transported to the reclamation companies under the programme as well. The structure employed to manage the programme and provide the service was complex with split responsibilities at waste collection. Considering the objectives of the programme The model is not comparable to the other case studies assessed under this project	The model provided a sound management, administrative and supervisory structure from top management level to operational level. The imposition of stronger sanction/ penalty system to penalise poor performance would improve sustainability from this perspective	The model provided sound support, in the form of training, to the contractors and cannot be improved upon to enhance sustainability from this perspective. Assistance with access to finance, however, may have been of benefit to the SME contractors.	Beneficiaries were paid less than the statutory minimum wage which may have been in accordance with some special dispensation.	Business management and administration and job specific training related to service delivery is provided under the programme. From this perspective therefore the model cannot be improved to enhance sustainability. Life skills training was provided to labourers under the programme as well in pursuit of this social objective From a perspective of training therefore the model cannot be improved upon to enhance sustainability	The risk of failure of any one SME subcontractor is medium. However, the consequences of failure of an SME subcontractor can be easily managed. In the event of a failure the municipality can step in and provide the service temporarily until another contract is in place or an adjacent contractor can be requested to step in and assist until a new contract is in place	Note that the unit cost of service delivery under this programme is not directly comparable to the unit costs of the other models. It would seem, however, that the inclusion of a recycling initiative in a domestic waste collection programme would add significantly and substantially to the costs. Unit costs are extremely high and the programme is not considered sustainable.

TABLE 3 CONTD.

<u>CASE STUDY</u>	<u>PROGRAMME STRUCTURE</u>	<u>MANAGEMENT ADMINISTRATION AND SUPERVISION</u>	<u>SUPPORT SYSTEMS</u>	<u>EMPLOYMENT STRUCTURE</u>	<u>TRAINING/ SKILLS DEVELOPMENT</u>	<u>RISK PROFILE</u>	<u>UNIT COST</u>
<p><u>Case Study 4:</u> Cooperative Model (Implemented By Nelson Mandela Bay Metropolitan Municipality)</p>	<p>Well structured model that can be applied elsewhere to other programmes. From this perspective therefore the model cannot be improved upon to enhance sustainability</p>	<p>Strong management, admin and supervisory structure that can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved upon to enhance sustainability</p>	<p>Comprehensive initial and on-going support provided to the SME subcontractors, the structure of which can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability Assistance with access to finance, however, may have been of benefit to co-ops</p>	<p>The model implemented is a legally compliant labour intensive business model the structure of which can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability.</p>	<p>Business management and administration and job specific training related to service delivery is provided under the programme. From this perspective therefore the model cannot be improved to enhance sustainability. Life skills training was provided to labourers under the programme as well in pursuit of this social objective From a perspective of training therefore the model cannot be improved upon to enhance sustainability</p>	<p>The risk of failure of any one cooperative is reasonably high. The consequences of failure of a cooperative is considered to be reasonably high due to problems associated with terminating contracts and/or penalising cooperatives with community based organisations that have strong community support.</p>	<p>The programme is cost effective and has unit costs that compare favourably with other models. Contract rates appear to be reasonable, providing a cost effective solution to the Municipality as well as adequate income to cover cooperative costs, and should support sustainability.</p>
<p><u>Case Study 5:</u> Direct SME Contract Model (Implemented by the City of Cape Town)</p>	<p>Well structured tried and tested model that can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved upon to enhance sustainability</p>	<p>Strong management, admin and supervisory structure that can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved upon to enhance sustainability</p>	<p>A formal programme of technical, management and admin training would enhance the sustainability of the model in that the risk of failure of the SME contractors would be reduced. The programme could be enhanced to provide life skills training to labourers should municipality wish to pursue this social objective</p>	<p>The model implemented is a legally compliant labour intensive business model the structure of which can be readily applied elsewhere to other programmes. From this perspective therefore the model cannot be improved to enhance sustainability</p>	<p>No business management, administration and job specific training related to service delivery is provided under the programme. The sustainability of the SME's could be enhanced through the provision of this training under the programme. In addition the programme could be extended to provide life skills training to labourers should municipalities wish to pursue this social objective</p>	<p>The risk of failure of any one SME contractor is medium. However, the consequences of failure of an SME contractor can be easily managed. In the event of a failure the municipality can step in and provide the service temporarily until another contract is in place or an adjacent contractor can be requested to step in and assist until a new contract is in place</p>	<p>The programme is cost effective and has unit costs that compare favourably with other models. The contracts have been running for some time with no failures, which is indicative that the contracted rates are sustainable</p>

APPENDIX 1

**CASE STUDY 1 –
EKURHULENI METROPOLITAN MUNICIPALITY DOMESTIC
WASTE COLLECTION PROGRAMME**

APPENDIX 2

**CASE STUDY 2 –
ETHEKWINI EMERGING CONTRACTOR WASTE COLLECTION
PROGRAMME**

APPENDIX 3

CASE STUDY 3 – EPWP DOMESTIC WASTE CLEARING AND COLLECTION PROGRAMME IMPLEMENTED IN GAUTENG EKURHULENI

APPENDIX 4

CASE STUDY 4 – NELSON MANDELA BAY MUNICIPALITY: CO-OPERATIVES: WASTE COLLECTION PROGRAMME

APPENDIX 5

CASE STUDY 5 – CITY OF CAPE TOWN SERVICE PROVISION IN LOW INCOME AND INFORMAL AREAS