

Implementing small, and medium enterprises (SME) waste and recycling programmes

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ABSTRACT

Municipalities face the challenge of how to manage their waste, in an environment where other priorities like water, housing and electricity are competing for funding from municipal budgets. Management should include avoidance or prevention where possible and then diversion from landfill through source separation programs as per the National Waste Management Strategy (NWMS)(DEA, 2011). The NWMS has committed to “69 000 new jobs created in the waste sector” and “2 600 additional SMEs and cooperatives participating in waste service delivery and recycling” (DEA, 2011: 6) by 2016. This challenge rests on the shoulders of local government for implementation.

This paper is based on research work the CSIR (which the author and colleagues) conducted for the DBSA and Green fund on cooperatives in the waste and recycling sector. The findings discussed will provide some insight into what should be considered in establishing or implementing a viable waste SME program. Considerations for the SME organisation, the organisation supporting the SME, and external factors are discussed below.

Keywords: waste, recycling, cooperatives, informal pickers, cooperatives, SME, implementation strategy,

1. INTRODUCTION

Currently the waste sector in South Africa is dominated by formal waste companies including private companies and the public sector represented by local government. The formal waste sector (public and private) in 2012 was reported to employ a minimum of 29,833 people (DST, 2013). The private sector (estimated at 9,741 employees in 2012) included waste handlers (67.6% of respondents) engaged in all activities related to the waste value chain including cleansing, collecting, sorting, transporting, storage, separating and the recovery of recyclables. In addition to this, respondents in the study also identified as being consulting/engineering firms (37.4%), equipment providers (16.5%), while others identified as playing an R&D role (2.9%) within the waste sector. The public sector was estimated to employ approximately 20,092 people engaged in cleansing, collection, and disposal of waste.

There is another less well-known player, the informal sector. The informal sector in South Africa was estimated to be responsible for collection of 80-90% (by weight) of paper and packaging waste in 2014. Most of this ‘waste’ is either collected at landfill sites or from kerbside, at little or no cost to local government (Godfrey et al. 2016). While little or no official statistics exist, it is estimated by authors that the informal sector consists of 60,000 – 90,000 waste pickers (i.e. approximately 2 to 3 times employment in the formal sector) who earn a livelihood harvesting recyclables in South Africa. The informal sector reportedly achieves a recovery rate of ± 16-24 tonnes/picker/annum (compared to 54 and 48 tonnes/picker/annum from informal pickers in Cairo and Lima). The formal and informal waste sectors are linked in a symbiotic relationship (Van de Klundert & Lardinois, 1995), however this relationship was recently reported by South African informal waste pickers to be exploitative, especially through middlemen buying recyclables from them (DEA, 2015). Waste picker earnings are reportedly affected by age, sex¹, season², and location³ amongst other factors (Viljoen et al., 2016).

¹ Younger males achieving higher earnings than women do.

² Waste pickers often collected less recyclate in rainy season, and buy back centres paid less for wet recyclate.

³ Being located at a landfill where the picking was done in a smaller area rather than from different kerbsides which required more travel for a similar amount of recyclate

There has been for some time now a drive by national and local government to promote waste cooperatives as a viable business model, especially to make the transition from informal waste picker to entrepreneur. Other institutions and authors have pointed to the potential of cooperatives and SME for resource diversion from landfill (Godfrey et al., 2016), job creation (Thomson & Jackson, 2007), self-determination, recognition and earning a decent livelihood. This is especially evident when the successes of the Brazilian (PACSA, 2011), Egyptian (Wilson et al. 2006), Argentinian (Baillie & Feinblatt, 2010) are recounted. However, the dti (the dti, 2012) reported that approximately 91.8% of registered waste and recycling co-operatives were no longer operational, which is equivalent to a survival rate of only 8.2%. This poor survival rate for cooperatives in the waste and recycling sector was the fourth worst, after other cooperatives engaged in trading, transport, and multipurpose activities.

Recent reports in the press point towards a drive by national government to formalise the informal sector (Evans, 2016). It is not clear what interventions will be taken in this regard. There is however mention that approximately 62 147 individual waste pickers, mainly engaged in landfill picking, are registered with the Department of Environmental Affairs (DEA). There is also mention of “*a recycling enterprise support programme that would provide the initial capital set-up costs for emerging entrepreneurs*” (Evans, 2016: 1)

The CSIR has recently completed a study for the DBSA and Green fund (the CSIR study), which looked at ‘Evaluation of co-operatives as a developmental vehicle to support job creation and SME development in the waste sector’(Godfrey et al., 2015). The learning from this study will be used to compile an indication of what provisions need to be considered when either government or other stakeholders (i.e. private sector) embark on implementing an SME waste and recycling programme. These provisions can be categorised in to internal considerations relative to the SME, external factors relating to the funder or supporter, and other factors with regard to the environment in which the SME operates. The study is based on the results (through purposive sampling and using qualitative and quantitative data analysis methods) of 30 waste and recycling cooperatives⁴ and 18 stakeholders⁵. The responses are especially relevant to the current drive by government (and private sector) to register cooperatives; however, some of these will also apply to other forms of SME.

2. INTERNAL CONSIDERATIONS TO THE COOPERATIVE OR SME

Cooperatives in the CSIR study indicated a number of **attributes to individual** cooperative members, which were necessary for success. These individual attributes were referred to as passion, motivation drive, and hard work by the individuals in the cooperatives for the job they were doing. The following phrases were used to describe these attributes, including having a “*positive mind*”, “*slow money*”, “*believe in yourself*”, “*overcoming challenges*” “*resilient and not be disappointed*”, “*passion and focus, you cannot get rich quick from this business*” and a correct “*mind set*”. Besides the individuals in the team, the interaction between **team members** was also very important. One stakeholder remarked, “*...choose the team very carefully, look for inherent skills or look for aptitudes. Don't do everything yourself that's why you have a team around you*”. Cooperatives also reported that good member selection was critical, especially for the successful operation of the cooperative business model. The model requires registration of a minimum of five members, and it is critical how these members are selected, or brought together. The length of time members had associated with each other prior to forming the cooperative was also investigated. It was assumed that the longer that individuals had associated, the better an indication of how sustainable the cooperative was. Figure 1 provided below outlines the period of time respondents had associated with each other and the number of years the cooperative had been working together. In the figure below, nearly half of the cooperatives interviewed had only associated for a period of one year and didn't have any prior experience working with

⁴ Cooperatives were sampled based on a wide as possible geographic spread in South Africa, the number of people involved in the cooperative, age of the cooperative and activities in the waste and recycling value chain. Initially a database of 215 cooperatives was compiled through stakeholders providing contact details of organisations they had worked with. This was further refined through a screening process which identified 64 legally constituted cooperatives from which the sample of 30 cooperatives was drawn. Valuable information from the initial screening process was used to compile some baseline data of the cooperatives.

⁵ Including metros, municipalities, provincial and national government entities, NGO's, developmental funding institutions (South African and international), material recovery organisations and private recycling business.

one another. This does suggest that association might have been in response to an external stimuli or pressure rather than being a natural organic progression. This further highlights the dangers of forcing together individuals through incentives (promises of premises, equipment or cash grants⁶).

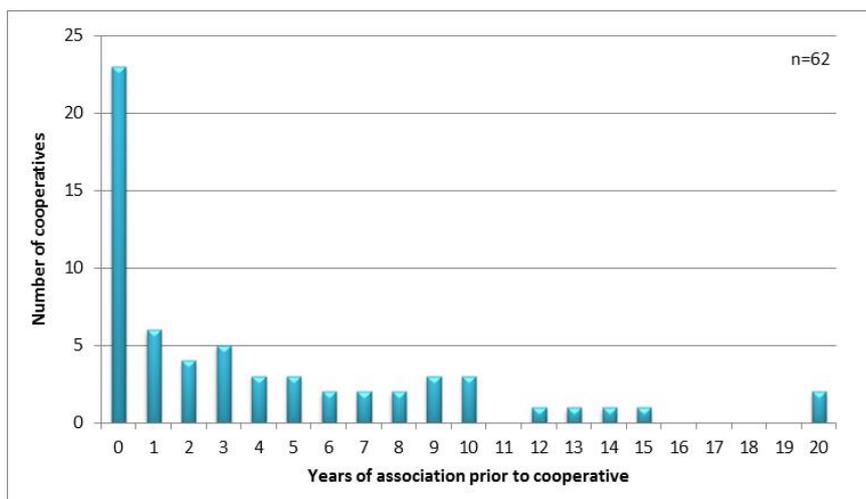


Figure 1 : Years associated before registering as a co-operative (Godfrey et al., 2015)

Both stakeholders and cooperatives reported that **operational** and **administrative** considerations were important. These included items such as **good record keeping** (especially daily production information such as costs, income, tonnages, sources etc.). Private sector stakeholders indicated that the importance of record keeping needed to be communicated to cooperatives as early as possible and prior to the operations of the cooperatives commencing. Some stakeholders supporting cooperatives needed to justify the budgets dedicated to assisting cooperatives, and this could effectively be done by motivating the tonnes diverted from landfill (for the public sector), or the tonnes of recycle retrieved (for the private recycling organisations). If records were not kept, this made justifying the return on the investment (cash or items provided in kind) difficult, and hence normally the termination of these assistance programs.

Training and mentorship was another important factor identified by both cooperatives and stakeholders alike. Training and mentorship should include an understanding of what the SME business model is and how it functions, what is **governance** in the organisation and how does it affect the working relationship between the individuals in the organisation. A basic understanding of **business principles** and the **technical aspects** of waste management and recycling was also recognised to be important. Private sector stakeholders who were engaged in providing this training to cooperatives indicated that members often had problems with the **financial management** sections of the training. Stakeholders indicated that training and mentorship (i.e. mentorship over a period, not just once off activities) provided significant opportunities to increase efficiencies in quality and quantity of recycle collected.

3. CONSIDERATIONS FOR THE ORGANISATION FUNDING OR SUPPORTING THE SME

The most important thing for a stakeholder keen to implement an SME program is to build on a **framework which outlines the level of support** the stakeholder is happy to make available to the SME. Support could be **operational assistance**, including what **infrastructure** is going to be provided, **access to equipment** (trolley, scales, balers), **electricity, transport** and also what the **qualifying criteria** for those opportunities will be. A study by Viljoen, Blaauw, and Schenck revealed that the only factors under direct control of waste pickers that may have a positive effect on income was the use of a trolley and the number of hours worked.

⁶ The dti Co-operative Incentive Scheme (CSI) grant of R350 000, which was reported by some stakeholders as encouraging unscrupulous behaviour among individuals coming together to form cooperatives. The formation of cooperatives or indeed other SME models could possibly have been as a result of a top down approach when taken by stakeholders invested in demonstrating numbers of entities formed.

The waste pickers had little or no control over market prices, access, and quality of recyclable waste collected which contributed to the variation of income received (Viljoen et al. 2016).

Where possible the support needs to be tailored to the needs of the SME, hence a **needs assessment** could be a good tool to determine this support. Making known **funding opportunities** also assists the SME. Where **funding** is not provided, it is important to collaborate with other entities (development funding institutions or agencies) providing grants and funding. Some stakeholder entities assisted cooperatives with **company registration**. Care should be taken in growing the SME. Stakeholders in the CSIR cooperatives study reported that where expectations to fast track the number of cooperatives in municipal support programs, care should be exercised in adopting a **top-down approach** to cooperative registration. Fast tracking the growth of cooperatives means that these organisations have grown faster than what they can comfortably handle, and are left with infrastructure and debts they cannot afford to service. A top down approach contradicts the principals of autonomy and independence which forms the basic requirement for an autonomous association between individuals (Satgar, 2007). Stakeholders indicated that *"individuals in cooperatives are forced together to meet governments project agenda, this is why some fail"*. They are *"not formed by people who want to work together, they are squeezed together through some accident or because of the opportunity for money"* (Godfrey et al., 2015).

4. EXTERNAL FACTORS TO THE COOPERATIVE

The study also identified a number of issues which can be classified as factors external to the control of the cooperative or the organisation providing funding or support to the cooperative. These include the **markets** to which the cooperatives sell recyclables, **separation at source programs** and **recognition** for the work the cooperatives were doing. The uncertainty of **markets** were reported to be a challenge for cooperatives collecting recycle for sale, and also a source for disillusionment (thoughts of being exploited) amongst the cooperative members. Having your own transport was cited as an advantage to be able to bypass smaller middlemen in favour of larger buy back centres who hopefully offered a better price. Networking was seen as a way to identify better markets or understand new technology to assist the cooperative with its activities. Market intelligence was also cited by stakeholders, *"Know the industry from which you will source waste. Engage with the leaders"*, *"Understand the space in which you want to play"*, *"Know what you are getting into in terms of waste sorting"* and *"What part of the value chain you are targeting"*. Know the market, *"understand the markets to which you'll be selling your goods"*, *"who is your market"*, and *"what are the prices that people are offering"* (Godfrey et al., 2015: 43). Local government was identified as a partner by cooperatives which could facilitate new relationships with private sector and also with markets for the cooperative to sell their recycle. Other studies have suggested that the markets available for recycle are distorted due to the low gate fees charged at landfill sites to dispose of waste. Therefore landfilling is still a comparatively cheaper option compared to the costs associated with recycling or waste-to-energy alternatives (DST, 2013). This also while recycle rich material is still going to landfill sites, because of poor separation at source initiatives.

Separation at source was identified as another external factor, which affected cooperative success. Cooperatives indicated that separation at source provided an opportunity for better quality (cleaner) and quantities of recycle from households, and therefore better prices for the recycle. Some cooperatives which conducted awareness campaigns or pamphlet drop offs indicated that they could see the benefits of these awareness generating initiatives. Cooperatives and stakeholders also identified a lead role for government in sending out a uniform message to households regarding separation and which could have immediate benefits for the cooperatives. Another stakeholder pointed out that the national policy already exists, it is a matter of ensuring that this policy (as per the Waste Act and the National Waste Management Strategy) is implemented. A source of concern however, was the conflict with informal waste pickers operating in areas where there were strong separation at source initiatives and SME's servicing contracts usually issued by local government. Cooperatives reported that informal pickers intercepted rich recycle from households where they had agreements with municipalities to collect recycle.

External **recognition** for the work that the cooperative was doing was also cited as a motivational factor for cooperatives. This was attained when the cooperatives won contracts from the municipalities (to operate), were reported in media for achievements or were showcased as a successful business. Recognition (media, events, competitions) is an important factor which should be encouraged as this not only placed the work the cooperative was doing in the public domain, but also served as a generator of good will with community members and provided incentives for the project. It would be useful for stakeholders supporting cooperatives to be aware of the motivation that this recognition provides, and where possible allow for provision to be made

5. CONCLUSION

Municipalities' are under pressure to make good on the targeted "69 000 new jobs created in the waste sector" and "2 600 additional SMEs and cooperatives participating in waste service delivery and recycling" (DEA, 2011: 6) by 2016. A basic framework for implementation of SME's in the waste sector should include the following considerations:

SME considerations:

- ✓ Ensure that individuals with the right personal attributes are selected to drive SME's in the waste sector,
- ✓ Identify the right team members with the right skills,
- ✓ Provide training on operational and administrative requirements (i.e. record keeping) for managing the SME,
- ✓ Members of the SME need to understand how their business model functions and what governance issues need to be considered,
- ✓ SME's need to have a basic understanding of business management and the technical aspects of their field of work,

Support organisations:

- ✓ Should be transparent about a framework of what type of support they are willing to provide to SME's including (operational assistance, infrastructure, access to equipment, electricity, transport etc.) usually determined through a needs assessment of the SME and what the specific qualifying criteria are,
- ✓ Should assist with facilitating funding opportunities for SME's, company registration and growing cooperatives, while taking care not to engage with SME in a top down manner.

External factors to the SME and stakeholder organisation includes:

- ✓ Developing meaningful opportunities to improve quality and quantity of recycle from well thought out separation at source initiatives,
- ✓ Facilitating access to markets where SME can sell the recycle they generate, and
- ✓ Provide visible platforms (media, events, competitions) for the SME to showcase their skills and performance which generates recognition for the SME.

The legal motivation to drive separation at source programs already exists, what is required is implementation of these existing pieces of legislation.

ACKNOWLEDGEMENTS

The author would like to acknowledge the contribution of the co-authors for the DBSA cooperative study, including Prof. Linda Godfrey, Ms. Wilma Strydom, Ms. Thembelihle Mamafa, and Mr. Maxwell Mapako. Thanks also to the cooperatives and stakeholders that dedicated their time and knowledge in participating in the study; the Department of Environmental Affairs and the Development Bank of Southern Africa who supported the research through the Green Fund initiative.

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