



DEA deputy minister Barbara Thomson handing over 15 trolleys to the SA Waste Pickers Association in Mooiriver.



Deputy minister Thomson joined the community to clean up the streets of Bruntville in Mooiriver.

Deputy minister supports waste initiatives in KZN

Community role players given trolleys, bakkie

By **Zibuse Ndlovu** and **Abraham Shoba**

Deputy minister of the department of environmental affairs (DEA), Barbara Thomson, handed over 15 trolleys to the SA Waste Pickers Association in Mooiriver, and a Kia bakkie to Songimvelo Recyclers in Msunduzi, KwaZulu-Natal.

Speaking at both the events, Thomson highlighted the importance of supporting waste management initiatives as they contribute to job creation and improving the quality of life for all.

"Recycling has enormous economic potential. Conservative estimates put the financial value of the formal SA waste sector at R15bn. It is time that we wake up to this economic potential of recycling," said Thomson.

Referring to the job creation opportunities in the sector, the deputy minister called on local businesses and entrepreneurs to explore the economic opportunities provided through waste recycling. "Let us involve our youth and women in such interventions as they are the most affected by unemployment and poverty."

Songimvelo Recyclers employ vagrants and unemployed youth to collect recyclable material for recycling within the city. "They have played a role in cleaning the streets of Msunduzi by collecting recyclable material and disposing of it at landfill sites," said Msunduzi mayor Themba Njilo.



DEA deputy minister Barbara Thomson and Msunduzi mayor Themba Njilo handing over bakkie keys to Songimvelo Recyclers in Msunduzi.

Njilo said the clean-up initiative by Songimvelo Recyclers and tools donated by the DEA would help transform the city. "This is a dream come true for the city to take on a clean-up initiative. We've already started the cleaning process beginning at the Ematsheni area and clearing up the streets."

The DEA, in partnership with the department of public service and administration through its Tirelo Boshia Programme, provided the means to purchase a vehicle for Songimvelo Recyclers.

The vehicle is fitted with a customised trailer to increase the capacity to transport recyclable materials, and Songimvelo Recyclers founder Hugo Ngcobo said the donation came in handy as it will assist them with their recycling business.

"Upon receiving a truck, we managed to keep Pietermaritzburg clean by opening a mobile buy-back centre in the city and we also go around the city and buy recyclables in kilograms from the ordinary people who simply participate in

recycling," Ngcobo said.

His co-founder Ivan Khumalo said lack of employment influenced their decision to start the company to ensure they turn waste into money.

The SA Waste Pickers Association, Groundwork and Petco are among the organisations that have partnered with the DEA to support emerging waste pickers.

Sibusiso Dladla, founder of Mooiriver Recycling Corporation, said the trolleys handed over to waste pickers will make their work easy. "We are thrilled to receive these trolleys, and we hope that others who are doing the same work will be encouraged from what we have achieved and strive to do more," said Dladla.

The waste pickers in Mooiriver have in the past converted retail store trolleys into convenient modes of transport to move the collected waste material to buy-back centres. "As a recycling corporation we want to grow, create decent jobs, maybe in future manufacture and produce products that people can buy," he said.

CSIR support for jobs in waste

The Council for Scientific and Industrial Research (CSIR) has undertaken research for the Green Fund to evaluate waste and recycling co-operatives to understand the opportunities and constraints facing waste co-operative implementation in SA.

The Fund is managed by the Development Bank of SA on behalf of department of environmental affairs. The waste sector can contribute towards addressing SA's unemployment challenges.

The informal waste sector in SA has been active for more than two decades and plays an important role in diverting recyclables away from landfills.

However, CSIR research shows that the sector is marginalised and operates at the fringe of municipal solid waste management systems.

In efforts to create sustainable, thriving co-operatives, the public and private sectors need to collaborate to boost co-operative development in the waste sector.

"We have all seen the trolley pushers on our roads," said CSIR principal researcher Linda Godfrey, referring to the informal waste pickers collecting waste from kerbsides. "There are an estimated 60,000-90,000 informal waste pickers earning a livelihood from the collection and sorting of recyclables in SA. These informal waste pickers collect about 80%-90% of all post-consumer paper and packaging recyclables in the country, saving municipalities R750m in landfill airspace per annum, at little to no cost."

One of the ways to inte-



grate the informal waste sector into the formal waste economy, is formalisation through the establishment of co-operatives, said Godfrey.

Co-operatives are jointly owned by enterprises operated by its members for their mutual benefit.

"But we found that co-operatives have a very high failure rate in SA." Waste co-operatives in SA face numerous challenges including lack of infrastructure such as transport, equipment and premises to sort and safely store their collected waste, as well as lack of capacity for training and acquiring knowledge and skills.

"What we found is that while training is necessary, it is often insufficient. What co-operatives need to become sustainable is incubation and mentoring, but this comes at a significant cost," she said.

Godfrey believes that co-operatives require long-term support and investment from all relevant role-players in the sector, as they have the potential to create a significant number of direct and indirect income opportunities.

Amalgamated Beverage Industries (ABI) employed this model with recycling SMMEs, with good result in terms of profitability and productivity.

Consequently, the CSIR partnered with ABI to discuss integrating the informal sector and SMMEs into municipal solid waste management in South Africa.

The CSIR provided insight on potential solutions to waste management challenges in SA. "The waste sector can definitely support low-skilled workers and also provide wonderful opportunities to deal with waste as a secondary resource," said Godfrey.

The CSIR's support for SMME development in the waste sector is linked to the department of science and technology's (DST) Waste, Research, Development and Innovation Roadmap.

The CSIR, through the Waste RDI Roadmap Implementation Unit, manages a portfolio on waste research development and innovation on behalf of the DST.

Understanding waste characterisation

By **Thandeka Mandigora**

Waste characterisation is done in municipalities to gain a better understanding of the types and quantities of waste a municipality generates.

It forms part of information management, which can help municipalities to devise strategies for waste diversion, includ-

ing contributing to climate change mitigation, integrated waste management planning and the National Waste Management Strategy implementation.

Waste characterisation follows these four steps:

- Waste is randomly selected as it comes into the landfill site from the various settlements.

- Waste should be mixed and re-separated into various waste streams or types;
- A hand-held scale is used to weigh the various streams;
- These are recorded to determine the quantities and types of waste that are generated in that particular municipality.

Factors such as seasonality, geographical areas and waste

quantities from a weigh bridge must be considered, as these can influence the results of waste characterisation.

The municipal waste support directorate in the integrated waste management & strategic support chief directorate is tasked with providing capacity building and training in order for municipalities to meet their waste service delivery mandate. The promulgation of the Waste

Act in 2009 and the development of the National Waste Management Strategy revolutionised the waste sector. For the first time a waste-sector specific legislation was developed.

■ Mandigora is a control environmental officer within Municipal Waste Support. She has an honours degree in environmental science and 12 years' experience in the industry