

Mooi River Waste Reclaiming

Boosting recycling and empowering informal waste pickers in Mooi River

2010 SEED Winner

SEED CASE STUDIES: INSIGHTS INTO ENTREPRENEURIAL SOLUTIONS FOR SUSTAINABLE DEVELOPMENT



Founding Partners







AT A GLANCE

IMPRINT

Publisher:	SEED
------------	------

c/o adelphi research gGmbH

Caspar-Theyß-Str. 14a, D-14193 Berlin

Germany

www.seed.uno | info@seed.uno

Lead Authors: (SEED/ adelphi research): Amélie Heuër, Magdalena Kloibhofer, Helen Marquard-For further information, contact: Amelie Heuer

(amelie.heuer@seed.uno)

Contributing Authors:

(SEED/ adelphi research): Mirko Zürker

Layout/Design: alma grafica UG

www.almagrafica.de

Picture credits:

Mooi River Recycling Center (MRRC)

Supported by: the European Union, the Government of Flanders, Federal Ministry for Environment, Nature Protection, Building and Nuclear Safety, Germany and Ministry of Economic Affairs, Netherlands and UN Women

The findings, interpretations and conclusions expressed in this publication are those of the authors based on interviews and site visits to the enterprise and do not necessarily reflect the views of SEED or Adelphi Research.

CONTEN

1. Partnering for local solutions	4
2. Building an inclusive eco-enterprise	8
3. Reaching impact	10
4. Charting green and inclusive growth	12

Copyright © 2015 adelphi research gGmbH All rights reserved. May 2015

SEED Case Studies Series

Demonstrating Sustainable Development on the Ground Through Locally-driven Eco-entrepreneurship

Social and environmental entrepreneurship, also known as green and inclusive entrepreneurship or eco-entrepreneurship, could play a critical role in achieving a global Green Economy. By embracing the added values of social improvement and wise resource management eco-enterprises that have won a SEED Award are living proof that entrepreneurial partnerships between various stakeholders can create innovative and novel solutions for delivering sustainable development at the grassroots and be economically sustainable.

Over the last ten years, SEED has awarded nearly **180 SEED Awards** to eco-enterprises in 37 countries. While the value of eco-entrepreneurship in delivering sustainable development is increasingly recognised and harnessed in the development sphere, there is still very little data available on the triple bottom line impact of these entreprises and their contribution to sustainable development.

The SEED Case Studies are designed to help fill that gap by generating insights for policy and decision-makers on the role of green and inclusive enterprises in achieving sustainable development, and on enabling factors that can help them overcome barriers and reach scale and replicate.

Mooi River Waste Reclaiming contributes towards climate change mitigation, conservation, and reduction of air, land and marine pollution by collecting, compacting and selling recyclable waste.

By formalising the workforce of informal waste pickers, Mooi River Waste Reclaiming provides a safer a source of income and employment, increases the rate of recycling in the area, and reduces municipal expenditures for waste management.

PRODUCTS & SERVICES



Collects and buys paper, cardboard, glass and plastic waste



Processes and compacts wastes into bales for recycling company



Provides informal waste pickers with shelter, protecting clothing and training on waste collection

KEY FACTS



TRIPLE BOTTOM LINE



Social impacts

- Formalised waste picking by creating a
 'Waste Pickers Association'
- Provided employment and income to 70 workers in 2014, 70% of whom were women, with 50% of the total under 25 years of age
- » Generates on average an annual income of USD 2,200 for cooperative members, indirectly benefitting over 700 people in the townships

#

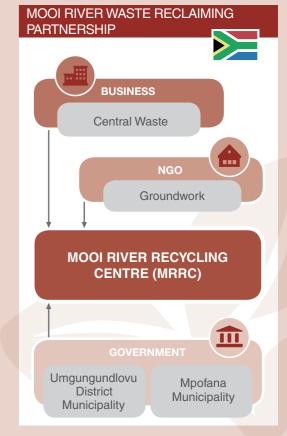
Environmental impacts

- Reduced 360 tonnes of glass, paper, cardboard and plastic waste in 2014
- Created awareness on recycling in the communities through informal education sessions
- » reduces landfills



Economic impacts

- Reduced municipal costs of waste management
- Promoted waste picking; an important workforce with specific knowledge of sorting, collecting and baling of the waste
- » Boosts the recycling quota of the local and district municipalities



1. Partnering for local solutions

1.1 Local challenges

Rising youth unemployment in the Garden State

Mooi River is a small, riverside town situated in the province KwaZulu-Natal (KZN), on the eastern coast of South Africa. With its lush sub-tropical climate, diverse nature of mountainscapes, sandy beaches, flat dry savannahs where the 'Big Five' can be spotted, and its eclectic character of teeming African life, KZN, also called the 'Garden State' is one of the major tourist destinations in South Africa.



After the global recession, KZN is considered to have recovered reasonably well and attained a constant economic growth of 2% in 2012, an estimated 3% in 2014 and a projected 4% in 2015, which contributes approximately to 16% of the national economy, i.e the second largest contributor in the country after Gauteng. Despite this positive growth, a recent study from the Development Bank of Southern Africa (DBSA) has identified unemployment and the access to

basic services, especially waste refuse, amongst the top five challenges the province is experiencing.

Unemployment has been significant in the past decade, reaching an annual average of 26.7% around 2010. While the Quarterly Labour Force Survey reports that the province has managed to reduce the unemployment levels to 20.7% in the first quarter of 2014, the remaining unemployment situation is particularly challenging for youth (15-34) with an annual average of 37.2%. Young women[™] (15–34 years) are "in a particularly precarious situation, with unemployment rates more than 10% higher than that of young men (15-34 years) over the period 2008 - 2014" In Mooi River itself, the municipality reported in 2011 an unemployment rate of 23.9% with 29,3% youth unemployment. As agriculture does not account for more than 4% of the employment in KZNVIII, many young men living in rural areas go to industrial towns such as Durban or Johannesburg to look for work. As a result, women are often left alone to look after their households; they largely survive on migrant remittances and government social schemes. The cash income remains limited therefore and it was reported in April 2014 that 23% of households in KZN lived in poverty.X

Overburdened waste management and the informal sector

With its almost eleven million people, KZN accounts for an estimated 20% of the South African population and is the second most populous province in the country with a high population density of about 112 people per square kilometre^{xi}. The dense population puts major pressure on the province's

- Fast facts

Between 85,000
- 105,000 South
Africans work in waste removal, 29% of whom are informal waste pickers.

KZN had an average annual unemployment rate of 20.7% in 2014, of which over 37% was youth (15-34). Informal waste pickers face poor and unsafe work conditions, insecure income and total absence of any social benefits.

In 2014, 23% of the households in KZN lived in poverty.

infrastructure and access to services, in particular to the provision of refuse removal. Although South Africa's waste legislation is in line with global trends and the South African Government has mandated waste management as one of the critical areas it needs to address in terms of service delivery and sustainability, enforcement and monitoring have proved difficult due to both a lack of suitable waste expertise and practices. Consequently, landfilling remains the most common and currently most financially affordable solution to growing waste issues KZN is estimated to have 119 legal landfills.

Waste removal offers an important source of income to about 1% of the South African population^{XM} which roughly equates to 85,000 – 105,000 people.^{XMI} Twenty-nine percent of those workers work in the informal sector.^{XMII} Waste picking offers poor individuals with few other employment opportunities a source of livelihood regardless of age, level of education or skills set, and it has low capital requirements.

But waste pickers are very often marginalised by society and their work is stigmatised as indecent. "While circumstances of the informal sector can vary per country and per sector, they generally share common characteristics such as poor employment conditions, insecure income, long hours/overtime, unsafe working conditions, and the absence of any social benefits such as pensions, sick pay and health insurance" 1. Furthermore, their informal status means that they are often banned from entering landfills. These characteristics appear to apply to South Africa in many cases.



1 http://ilo.org/global/topics/employment-promotion/informal-economy/lang--en/index.htm

1.2 Creating innovative local solutions

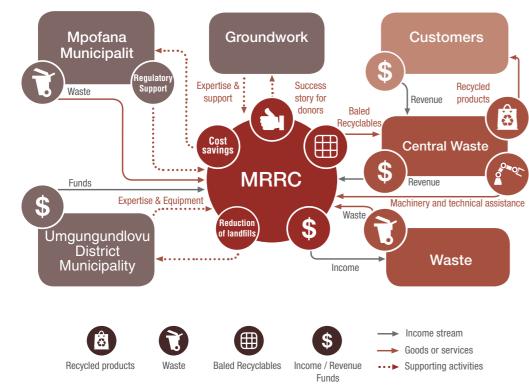
The Mooi River Recycling Centre (MRRC) was initiated in 2009 by a group of informal waste pickers together with Groundwork, a non-profit environmental justice service and development organisation in South Africa. Their goal was to bring informal waste pickers together under a collective umbrella to address their lack of access to landfills and improve their situation. By partnering with the local municipality (Mpofana Municipality) they created a cooperative recognised by government agencies and legalised the waste pickers presence at the local landfill from where they were previously evicted.



The cooperative obtains waste such as paper, plastic, glass, and cardboard directly from its members. In addition MRRC also purchases waste from regular non-member waste pickers and ad hoc waste pickers who collect household waste in the townships. The waste pickers are remunerated depending on the type and weight of the material they offer. The collected recyclables are then compressed in a baling machine and sold to a larger recycling company which processes the goods and converts the products back into a usable format.

Training and awareness-raising play an important role within the value chain. All waste pickers who work with the cooperative receive training in how to sort waste and especially in how to handle hazardous waste. Those that are cooperative members receive additional benefits compared to the non-member waste pickers, such as shelter. protective clothing, and recycling equipment. Maybe even more importantly, they receive more extensive education on waste recycling, skills training in how to process the various types of waste, and business skills in administration, computer literacy and management. Besides, households in townships are informed about the value of recycling and encouraged to preserve their waste for waste pickers to collect it.









Groundwork is the enterprise's core partner. They initially assisted MRRC with acquiring an occupancy certificate from the municipality that allowed them access to the landfill site and encouraged the waste pickers to form a cooperative. Now that MRRC is successfully run by the waste pickers, Groundwork has taken a step back, but it still provides technical expertise, infrastructure and administration support, as well as assistance in negotiation with other agencies and with identifying funding opportunities. In turn, Groundwork benefits from the success of MRRC. It was originally set up as a pilot project and with their success Groundwork is able to showcase a success story of their work at the grassroots.

The Partners



Regional Government

The Umgungundlovu District Municipality is a regional government agency and one of their main mandates revolves around waste disposal. With only limited space for landfills, the district aims to attain a 70% waste recycling rate. However the current rate is only 40% and the registered landfills are filling up rapidly. MRRC is therefore a key partner that contributes towards achieving the headline goal. To help the enterprise succeed, the District Municipality provides it with machinery and ensures that it receives good prices for its baled recycled materials. In addition, the District Municipality provided funding for the initial site infrastructure and reduced operation costs by exempting the enterprise from certain by-laws and service fees. The District Municipality showcases this success story as an example of good municipal service delivery and in 2012 they won an award for the Greenest Municipality.

1.3 The Power of Partnerships

The MRRC Partnership

Throughout their growth process, MRRC has been heavily reliant on partners, each of which supported the enterprise's scale up in their own way. One characteristic that each partnership shares, however, is the loose and informal approach. Each partnership grew out of trust and mutual benefits and none are so far formalised in a contract or MoU.

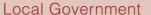
Partnership management: an ongoing challenge

Looking at the relationship with the partners, it is clear that not only have the partnerships been essential to MRRC's development, but that the enterprise holds a key position in relation to each partner. It is nothing short of remarkable that the relationships have continued for over four years without any contractual engagement. Mutual benefits have been key to this success. This approach, however, does not come without its challenges and it appears that the relationships are profoundly dependent on individuals. Since a workforce is generally dynamic, a change in leadership can put a strain on those ties, which in this particular case has created

disputes regarding the allocation of funds and resulted in the loss of some cooperative members. Communication has been paramount in overcoming these challenges, and through various reconciliation meetings, the partners have been able to continue their work together.

Looking ahead, the enterprise may need to formalise some of their partnerships to avoid future disengagements from members and/or partners. Furthermore, the enterprise is looking to partner with institutions that could offer expertise in business management, information technology and machine maintenance as well as a financial partner that would enable the acquisition of more machinery and equipment for further scale-up. The enterprise is also struggling with a lack of environmental expertise and would value the involvement of a new partner that could help integrate additional environmental aspects into the value chain.





The **Mpofana Municipality** has worked with MRRC from the start and provided the permits to access the landfill as well as assistance with understanding and adhering to regulations. It promotes the enterprise by ensuring that all waste is sent to MRRC. MRRC's contribution to recycling is invaluable for the Municipality which does not possess the adequate equipment for compressing waste, nor the expertise or the funds to manage the process by itself.



Business

Central Waste is a South African recycling company based in in Pietermaritzburg; it is the sole business in the partnership. Central Waste originally provided MRRC with a loan as start funding, which they have now been able to reimburse. Furthermore, they provided the machinery and, importantly, the technical assistance necessary to operate and maintain it. Nowadays, Central Waste is the main buyer of the baled waste which MRRC sells at a fixed price that includes the rental fee for Central Waste's waste compactor.

2. Building an inclusive eco-enterprise

In 2007, a group of informal waste pickers working the same landfill decided to pool their efforts and created MRRC. The trigger was a worry that they might lose the right to operate in the local landfill. They therefore contacted Groundwork with a request to help them formalise their operations. In 2009, the cooperative was born and earned recognition from the local and regional government as well as from peers in the sector. This translated into the right to work on the landfill site and in turn enabled the cooperative to set up partnerships with formalised companies. The start of their partnership with Central Waste in 2009 meant that the enterprise had a constant demand, ensuring a steady stream of revenue. The cooperative won a SEED Award in 2010, which supported them in consolidating the partnership and their business model, and with the SEED Accelerator² support they received in 2014, they were able to improve their organisational and financial management. By being recognised internationally, the enterprise also gained more local acknowledgment which engendered more municipal support: the municipality built a central building for the enterprise to allow the scale-up of their production. These developments did not come without challenges. In 2014, operations were almost brought to a standstill for several months due to a fire that burnt down parts of MRRC's facilities and MRRC has faced strong competition from other (government-supported) waste collecting projects.

2.1 Financial development

At the outset the cooperative was set up with revenue from waste collected, funds from the Umgungundlovu District Municipality for the initial site infrastructure, and a loan from Central Waste which MRRC has been able to pay back. The model was then supported by a start-up grant of USD 5,000 under the SEED Catalyser support in 2010, and by a scale-up grant of USD 40,000 in the pilot phase of the SEED Accelerator in 2014/2015. The latter served

to cover investments in accounting software, equipment for processing PET bottles and for baling, for marketing and for skills development, health, first-aid and fire-fighting training. During this period, the enterprise was introduced to and trained in the use of financial administration systems. In 2014, a turnover of USD 23,200 and operating costs of USD 21,800 resulted in a profit of USD 1,400. Since the enterprise is recognised as a cooperative they also qualify for a reduced tax exemption. The enterprise is now aiming to improve transportation of its products and will try to diversify its customer base, both of which are expected to improve its financial situation.

2.2 Employment situation

Starting 2015, the enterprise reports 10 direct members, of whom 7 are women, 4 are in management positions and over 50% is under 25 years old. Another 30 regular waste pickers (over 80% are women) work on a weekly basis with MRRC by providing them with collected waste. In addition, a further 30 waste pickers (of whom 60% are women) work with MRRC on a more ad hoc basis.

In terms of wages for the members of the cooperative, the highest annual salary reported is USD 2,300 with an average of USD 2,200 across all positions. Non-members waste pickers are able to earn USD 5,000 a year depending on the type and amount of waste they collect. While there is a clear difference between the earnings of cooperative members and waste pickers that are non-member, the income of the cooperative members is stable and they benefit from additional advantages, such as shelter, protection, equipment, education and transferable skills training on sorting and compressing waste, business administration and management and computer literacy. MRRC continually ensures they offer decent and competitive wages to their members and to the non-member waste pickers in order to help them overcome poverty.

Fast Employment Facts					
	Workers	Avg. Salary of members per Year	Female Workforce		
	70	\$ 2,200	70%		
	Cooperative members	Regular waste pickers	Temporary waste pickers		
	10	30	30		

2.3 Business Development

MRRC has sets itself various targets for the coming months and years. With regard to outreach, MRRC is aiming to approach more households in the township to increase the

awareness about recycling in the hope that as a result, those households will start to separate recyclable waste for MRRC to collect. In turn, MRRC intends to increase the number of people they work with to 100 by the end of 2015.

On a more operational level, the enterprise aims to acquire its own bailing machine, rather than renting one, and equipment including laptops, computer systems and furniture. There has been good progress made on this front through the financial input of the SEED funding and the direct donations from the enterprise's partner, Central Waste. By having its own equipment, the enterprise will be able to increase its production volume and in turn achieve profits.

Finally on an organisational level, MRRC is aiming to improve its financial management skills as well as IT literacy.



² Advanced SEED support for selected SEED Alumni, focusing on financial capacity building and including a financial contribution of up to USD40,000.

3. Reaching impact

While working towards financial sustainability, MRRC, as an inclusive and green business, sets out equally to create social and environmental benefits.

3.1 Beneficiaries

The enterprise focuses primarily on providing income opportunities as well as safe working conditions to informal waste pickers in Mooi River and on offering an alternative solution to waste management and landfilling. Benefits are created along the entire value chain:

- Sourcing: informal waste pickers have an opportunity to sell waste and generate income
- Processing: cooperative members have permanent work and build practical and business skills
- Distribution: local recycling business has a constant supply without costs of collection
- Local municipality: incurs fewer costs for waste management;
- District municipality: benefits from reduced amount of waste ending up in landfill, which contributed towards their mandated targets;
- (urban) Communities: benefit from a reduced burden of waste and a cleaner environment.

3.2 Social impacts

MRRC has one primary social target, which is to reduce poverty in the townships by providing income-generating opportunities. In many countries, waste pickers often face banishment from landfill sites, and South Africa is no exception. By having formal access to the landfill, the enterprise ensures that informal waste pickers have access to the site and therefore can have a source of income. By offering membership of the cooperative, the enterprise is also able to create permanent job opportunities

for unemployed people. So far they have been able to offer 10 permanent memberships and income generation opportunities to another 60 people. It is estimated that each worker supports on average 11 family members, and hence that over 700 people benefit indirectly from MRRC's operations. While this only constitutes about 2.5% of the Mooi River population, the potential for scale-up is significant. Regular waste pickers can earn on average about USD100 a week, which is about 30% more than the estimated earnings of a waste picker in Durban^{XX}. With approximately 70% of the workforce being women and about 50% of all workers being under the age of 25, MRRC also reaches some of the more vulnerable segments of the community and helps them become more self-reliant. In addition, MRRC creates additional opportunities in the supply chain: by supplying more to Central Waste, they indirectly generate more work for the employees of that business.



Furthermore, the enterprise indirectly educates the community in terms of waste removal and cleanup, which has begun to attach value to waste and by stimulating waste recycling, MRRC contributes to public health and sanitation as waste pickers largely collect garbage from neighbourhoods that lack public services. Without waste pickers, residents would be forced to burn trash, or dispose of it in rivers, streets and empty lots.

"I now am able to support my family and can now operate a computer and use machines in the plant. I am a school dropout and it would have been difficult for me to get a job" Beneficiary: Cooperative member

3.3 Economic impacts

The economic aspect of the Triple Bottom Line includes the internal economic performance (Section 2) as well as economic advancement for the community. In essence, the enterprise's impact on the community is threefold. First, waste pickers are an important workforce with specific knowledge of sorting, collecting and baling of the waste into raw materials suitable for the recycling industry - a feature that the municipalities lack. Second, the collection of waste is often the bottleneck of recycling value chains in developing countries and waste pickers offer a solution for boosting recycling rates of the Umgungundlovu District Municipality, and expanding the lifespan of city dumps and landfills.

And last but not least, waste pickers effectively act as a subsidy for the Mpofana Municipality. Since waste collection is considered to be one of the core services provided by a municipality, the enterprise reduces the burden of labour or machinery cost of municipal waste collection, transportation services, and processing. Indirectly, cleaning up the city has the added benefit of enhancing local tourism. The town is located on the main road between two of South Africa's major cities: Durban and Johannesburg.

3.4 Environmental impacts

With formalised waste reclaiming, the landfill sites are now better managed by the constant presence of workers who are 'managers' of the site. In 2014, MRRC reported to have received and processed on average 30 tonnes of collected waste per month, which already increased to 50 tonnes a month in early 2015. The composition of that waste on average consists of 40% glass, 24% cardboard, 20% plastic and 16% paper. Recycling also helps conserve valuable resources as much energy and raw materials are saved. To name a few³:

- by recycling the plastic 'PET', up to 80% energy that would typically be used when making new plastic bottles can be saved.^{XXI}
- by recycling paper and cardboard, MRRC
- 3 Due to the range and diversity of the waste that is being collected it is not possible to provide exact estimates of the equivalent ${\rm CO_2}$ emissions that are being avoided or the number of trees that are saved.

- also works against deforestation as it reduces the number of trees cut to produce new paper and cardboard.
- On average recycling glass is estimated to save 25–30% of the energy used to make glass from virgin materials.

In addition, the enterprise also creates awareness through informal education sessions on recycling in the communities. Although these are still limited, MRRC aims to expand them in 2015 with the goal of encouraging people to recycle and use the services of the enterprise.



While the impacts generated by MRRC are already considerable and have potential to grow, they still face challenges as some people in the townships continue to burn waste, causing toxic fumes. There are also concerns over the health and well-being of the workers who may come into contact with toxic materials in the landfill. Awareness-raising amongst the community members and assistance from environmental experts would help MRRC counteract these challenges.

"The community has begun to attach values to waste as they are able to earn money from it. As a result, the streets are now also clear of papers and plastic waste" Beneficiary: waste picker

3.5 Policy impact

The enterprise works directly with the district and local municipalities, and while it does not actively contribute towards policy making, its work has had some impact on the local policy. For instance, MRRC regularly contributed to government events where the enterprise is showcased as a success story. According to Groundwork, the development of MRRC has indirectly also contributed to a change in policy, which now allows salvaging of waste from landfills.

4. Charting green and inclusive growth



IMPACT

Collecting waste to reclaim livelihoods

MRRC can truly speak of achieving triple bottom line impacts. By collecting recyclable waste, the enterprise contributes towards climate change mitigation, sound use of valuable resources and reduction of air, land and marine pollution. Equally important, it is also a source of income and employment for 70 workers, 70% of them women, in an area with over 20% unemployment, and it indirectly benefits over 700 people. Finally, it contributes significantly to the district and local municipalities as it increases waste collection, particularly in areas where access to formal waste refusal was limited in the past, it boosts waste recycling quotas which in turn creates more landfill space, and it reduces waste management costs for the municipalities.

The enterprise is considered to have a leadership role in the community as a champion of sustainability and of local recycling.



CHALLENGES

Partnership management and external competition

Partnership management has been a challenge at times. The loose informal nature of the partnerships has sometimes resulted in internal disputes over funds allocation and leadership, leading to the loss of members. Through improved communication, but more importantly, better management of expectations, the members and the partners have been able to move forward. Inclusion of the members in the decision making process and formalisation of the partnerships will be central in the future to bring stability, empower the members and develop a sense of unity within the cooperative.

Competition from other waste collection organisations has also been a challenge that MRRC is tackling by paying workers well for their waste and by increasing awareness-raising in the townships.



SUCCESS FACTORS

Key market position and mutual benefits

One of the main success factors is the enterprise's key position within the community and the municipality. By providing a service that is highly relevant and needed (waste collection) and by offering a product with a constant demand (recyclables), the enterprise has placed itself in an indispensable position, needed by both the local and district governments and by the community.

Furthermore, it is thanks to the mutual benefits generated by the enterprise that the partnerships have remained intact without formalisation: MRRC has the infrastructure and equipment to collect and bale waste which the municipalities are lacking and which private companies (such as MRRC's business partner) cannot do at a competitive price. This assures a steady supply of waste while reducing overhead costs. By agreeing on set prices with their business partner, the enterprise is assured a steady customer while the business partner is assured a constant supply of material.



FUTURE NEEDS

Improving training opportunities and furthering partnerships

While the enterprise now has the tools, infrastructure and partnerships to operate successfully, future developments should look to increasing the knowledge of members and raising awareness of recycling in the community. The enterprise would benefit from staff training in the area of business administration, machinery maintenance, and information technology.

By further developing community education programmes about recycling, the community is more likely to feed recyclable materials directly into the enterprise's system and increase its supply base.

The enterprise could also improve its partnership model by formalising its partnerships to mitigate conflict. Additional partnerships that could bring financial resources, equipment and environmental expertise to the enterprise could also help it to expand, increase productivity and improve health and safety standards even more.





Acknowledgements

We would like to express our sincere appreciation to Sbusiso Dladla (Project Leader and Chief Financial Officer of MRRC), Thandeka Mtiyane (Environmental Officer of the Waste Management Section of the Umgungundlovu district municipality), Tim Lloys-Ellies, Terrence Lloys-Ellies, Calvin Lloys-Ellies (Owners of Ellies Waste Paper - T/A Central Waste) and the beneficiary Princes Ndlovhu for participating in numerous hours of interviews and kindly giving us a glimpse into their daily activities. We are also grateful for all the technical assistance and advice received from the Koninklijk Instituut der Topen (KIT) and from our colleagues at SEED: Rest Kanju, Timothy Chipperfield and Marianne Henkel.

About SEED

SEED strengthens the capacity of small grassroots enterprises in developing countries to enhance their social, environmental, and economic benefits, builds bridges between entrepreneurs and policy makers and stimulates exchange and partnership building.

SEED was founded by the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP) and IUCN (International Union for Conservation of Nature) at the 2002 World Summit on Sustainable Development in Johannesburg and is hosted by Adelphi Research gGmbH, based in Berlin, Germany.

Adelphi Research (AR) is a leading think-and-do tank for policy analysis and strategy consulting. The institution offers creative solutions and services regarding global environment and development challenges for policy, business, and civil society communities.

About the lead authors



Amélie Heuër – Amélie Heuër has worked at SEED since 2009 and is the SEED Programme Manager. With ten years' experience working in the field of sustainable development, she has specific expertise on multi-stakeholder partnerships, socio-economic

research and grassroots livelihood development, coastal resources management, and eco-entrepreneurship in developing countries and emerging economies.



Magdalena Kloibhofer

– Magdalena Kloibhofer
is a Project Manager at
Adelphi Research and has
worked for SEED since
2011. Her focus lies on
fostering sustainability
entrepreneurship and
inclusive green business
models in developing

countries and emerging economies, with specific experience in socio-economic research and capacity building to help enterprises develop socially and ecologically sustainable business models.



Helen Marquard – Helen Marquard has been Executive Director of SEED since 2007. Prior to that she was a senior official in the UK government, responsible for various aspects of environment and sustainable development policy at the EU and

international level. Helen holds a PhD from Manchester University.

Notes

This case study is mainly based on interviews and site visits to the enterprise in late 2014 / early 2015, as well as internal documents such as the enterprise's business plan. Additional resources are listed below.

- I South Africa.info 2012, KwaZulu-Natal province, South Africa, Available from http://www.southafrica.info/about/geography/kwazulu-natal.htm#.VSzPQkuh999 [14 April 2015]
- II Statistics of South Africa. http://beta2.statssa. gov.za/publications/P02114.2/P02114.22014.pdf
- III Development Bank of South Africa. http://www. dbsa.org/EN/DBSA-Operations/Proj/ Documents/Summary%20of%20KwaZulu-Natal%20Province.pdf
- IV Development Bank of South Africa, pp 3. http://www.dbsa.org/EN/DBSA-Operations/Proj/ Documents/Summary%20of%20KwaZulu-Natal%20Province.pdf
- V Statistics of South Africa. http://beta2.statssa. gov.za/publications/P02114.2/P02114.22014.pdf
- VI Statistics South Africa. Mpofana. http://www.statssa.gov.za/?page_id=993& id=mpofana-municipality
- VII First National Bank, May 2014 https://blog.fnb. co.za/wp-content/uploads/2014/05/KZN-Economic-Chartbook 2H141.pdf
- VIII First National Bank, May 2014 https://blog.fnb. co.za/wp-content/uploads/2014/05/KZN-Economic-Chartbook_2H141.pdf
- IX Zakwe, T P 2001, 'Towards sustainable rural development in KwaZulu/Natal' University of Zululand Institutional Repository, Available From: http://hdl.handle.net/10530/189>. pp 18.
- X Mail& Guardian. Poverty on the decline in SA.
 3 April 2014. http://mg.co.za/article/2014-04-03-four-million-less-in-poverty-in-sa

- XI Development Bank of South Africa, Kwazulu-Natal Profile Summary Report, Available From: http://www.dbsa.org/EN/DBSA-Operations/Proj/Documents/Summary%20of%20 KwaZulu-Natal%20Province.pdf>. [10 March 2015], pp 1.
- XII Development Bank of South Africa, pp 5.
- XIII http://www.aurecongroup.com/en/thinking/ archive/sustainable-solutions-to-south-africas-waste-challenges.aspx
- XIV http://www.unep.org/gpwm/InformationPlatform/ CountryNeedsAssessmentAnalysis/SouthAfrica/tabid/105924/Default.aspx
- XV https://ujdigispace.uj.ac.za/bitstream/ handle/10210/10452/Muzenda%20E%20waste. pdf?sequence=1
- XVI International Labor Office 2013, Women and men in the informal economy: a statistical picture (second edition), ILO: Geneva. pp 48.
- XVII Based on work force calculations from:
 Statistics South Africa 2014, Employment,
 unemployment, skills and economic growth
 An exploration of household survey evidence
 on skills development and unemployment
 between 1994 and 2014. Slide 10, Available
 at: http://beta2.statssa.gov.za/presentation/
 Stats%20SA%20presentation%20on%20
 skills%20and%20unemployment_16%20
 September.pdf>. [12 March 2015].
- XVIII International Labour Office 2013, pp 48.
- XIX http://repository.uwc.ac.za/xmlui/handle/10566/664
- XX http://urbanearth.co.za/articles/ waste-pickers-south-africa
- XXI Creating inclusive value chains in plastic waste management is paramount for a green economy https://www.seed.uno/blog/articles/1587-creating-inclusive-value-chains-in-plastic-waste-management-is-paramount-for-a-green-economy.html

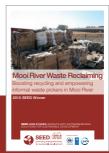
FIND MORE INTERESTING AND INFORMATIVE CASE STUDIES ON WWW.SEED.UNO













FOR MORE INFORMATION, PLEASE WRITE TO INFO@SEED.UNO OR VISIT WWW.SEED.UNO









SEED Founding Partners









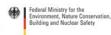


SEED Partners













SEED Hosting Partner















SEED Corporate Partner