ANALYSIS FOR POLICY MAKERS
INSIGHTS FROM THE GRASSROOTS

Shaping Sustainable Development through Eco-entrepreneurship
Over the last ten years, SEED has awarded 200 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 enterprises and their contribution to sustainable development.

Over the last ten years, SEED has observed the progress and impacts of 13 SEED Winners in Colombia, India, Kenya, South Africa, Uganda and Viet Nam, interviewing 60 respondents, resulting in 13 case studies. This report aims to bring those findings together 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.

Acknowledgements

We would like to express our sincere appreciation to the SEED Winners BanaPads (Uganda), Claire Reid Reel Gardening (South Africa), Dichung (Viet Nam), EcoPost (Kenya), FEED (South Africa), IMAI (South Africa), Mooi River Recycling Centre (South Africa), Muliru Farmers (Kenya), Muthi Futhi (South Africa), Provokame (Colombia), Solar Sister (Uganda), Tambul Leaf Plates (India) and Watamu Solid Waste Management and Recycling Enterprises (Kenya) 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 African Centre for Technology Studies (ACTS), Reflejarse and SNV and from our colleagues at SEED: Helen Marquard, Frederik Eisinger, Marianne Henkel and Rest Kanju.

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 Koninklijk Instituut voor de Tropen (KIT)

KIT (the Royal Tropical Institute) is a non-profit organisation with more than 100 years of experience that aims to improve health and ensure equitable social-economic development as much as promote intercultural cooperation with partners worldwide.

KIT Sustainable Economic Development is specialised in sustainable and inclusive development and the fight against poverty. The unit engages in practical research, provides advice and training, and facilitates capacity building. This business unit also fulfils an important role for companies who wish to make their economic activities more efficient and sustainable, partly with a view to improving income levels among the very poor.
Executive summary

Poverty eradication, food insecurity, climate change and environmental degradation are some of the greatest global challenges facing the world today. As a result from the Rio+20 conference in 2012, the international community is about to agree on Sustainable Development Goals (SDGs) for the Post-2015 Development Agenda, which aim for a world that is just, equitable and inclusive, and promotes sustained and inclusive economic growth, social development and environmental protection to the benefit of all. The transition to a Green Economy is considered as one of the most important tools to achieve this sustainable development.1

Small, micro and medium enterprises (SMMEs) that pursue a triple bottom line (TBL) approach offer one concrete means of achieving this shift to a Green Economy. This report highlights grassroots eco-enterprises, the types of impact they are achieving and the challenges and opportunities they face. Thirteen in-depth case studies of selected eco-enterprises that have won a SEED Award are used to showcase their contributions towards a greener economy, but also what main challenges inhibit them from scaling up.

Theses SMMEs achieve a mix of social, economic and environmental impacts through the goods and services they provide, as well as through the way they manage their enterprises. Evidence shows the following types of TBL impacts delivered by those eco-enterprises.

### Environmental impacts
- Climate change mitigation by reduction of greenhouse gas emissions
- Waste reduction through waste management, recycling and development of bio-degradable alternatives
- Promotion of biodiversity and conservation

### Economic impacts
- Encouragement of local business development
- Reduction of community costs and increase of purchasing power
- Creation of innovative value chains that are green and inclusive

### Social impacts
- Increase of income and job opportunities for marginalised groups
- Education, training and skill development in local communities
- Women empowerment and improvement of gender equality
- Increase in local food security and quality of nutrition
- Provision of basic services in local communities

The eco-enterprises face numerous challenges to sustain their growth and scale up. Challenges include: limited access to finance for working capital or investments for scale up; gaps in business skills; unfavourable business environment; low financial sustainability and lack of TBL planning and monitoring. Opportunities for the eco-enterprises for further growth include: their unique market position close to local demand; partnerships and community engagement that provide access to various resources and networks; and capacities for innovation to address problems and needs in local communities.

To support the growth and scale up of eco-enterprises, the following recommendations can be drawn from this study:

### Recognition and promotion of eco-enterprises in order to transition to a Green Economy

Governments, donors and investors should shift the focus from creating value for shareholders to creating value for ‘stakeholders’ by giving proper recognition to the importance of eco-enterprises in emerging markets.2 Policy makers should give increased attention to developing policy condu- cive to the success of these SMMEs as they help to drive local economic development, address local social and environmental challenges and can inspire other SMMEs to make steps in this direction.

### Provision of training in business development

Eco-enterprises require business development support to be efficient contributors to the Green Economy and to become financially sustainable while scaling up their business activities. Policies should give attention to women-led eco-enterprises which are an under-represented but essential driver for growth and TBL impact, especially in rural and agricultural economies.

### Facilitation of access to finance

Access to start-up and scale-up finance is one of the biggest obstacles for more impact by eco-enterprises. Policy makers need to invest in ongoing dialogues with financial institutions to develop products and approaches that are responsive to SMMEs’ situations.

### Facilitation of partnerships and networks

Partnerships make a real difference to eco-enterprises in pooling and accessing resources. Networks can facilitate joint learning and knowledge sharing. Policy makers should see themselves as indirect stakeholders and seek out the views of SMMEs to understand and address the specific barriers they face in each sector.

### Support for target setting, monitoring and evaluation

It is important for eco-enterprises to define and monitor their TBL targets, and to be able to communicate their impact to all stakeholders. There is a clear opportunity here for donors who offer grants (or other forms of financing) to eco-enterprises to pairs this with capacity building support so that they can monitor their own progress. Policy makers should also invest in independent studies that quantifiably measure the TBL impacts of SMMEs and in mechanism that feed those results back into policy, particularly in reviewing the implementation of the SDGs.

### Giving a voice

SMMEs are major players in innovation and job creation, and should be invited to participate more fully in policy development discussions, for example through multi-stakeholder platforms. Creating platforms for dialogue also present opportunities for enterprises to connect and build partnerships – crucial for innovation, productivity enhancements, and unlocking market opportunities.

### Support of a regulatory environment for eco-enterprises

Governments need to work on streamlining bureaucratic processes, protect intellectual property, and ensure courts have the capacity to efficiently enforce contracts and land tenure rights to unleash innovation and support SMMEs.

---

1 https://sustainabledevelopment.un.org/futurewewant.html

2 Ehrhart, C E, 2014, Delivering Tomorrow: Exchange, Engage, Excel: Creating Value Through Stakeholder Engagement
1. Introduction

1.1 Moving towards a Green Economy

Economic growth is widely viewed as the most important driver for development and poverty alleviation. The rapid economic growth of the Asian Tiger economies in South East Asia in the 1990s, and the continued strong growth and development in China are commonly cited examples of growth driving poverty reduction1. Recent evidence, however, suggests that not all growth is the same, and that some growth which exacerbates inequality can act as a drag on the economy, leaving poverty as a persistent problem2,3. Most economic development and growth strategies encourage rapid accumulation of capital4. Gross Domestic Product (GDP) is often used as a proxy for societal welfare or human wellbeing, although it was never intended to be used as such. One major shortcoming as a welfare measure is that the GDP fails to account for non-marketed values related to environmental goods and services or social goals that improve the quality of human life5,6.

Economic growth often results in environmental externalities – the extraction and depletion of natural resources can have both local and global environmental impacts which are rarely factored into bottom lines. We are now facing irreversible losses in diversity and degradation of ecosystem services, threatening the ability of the Earth’s ecosystems to sustain future generations7. An obvious example is the threat posed by climate change. Should today’s developing countries take the same route to development as developed countries have done, the additional pressure on our already stretched biosphere would be a serious risk to the wellbeing of current and future society8,9,10,11, not to mention the economic and social costs of environmental degradation and climate change. The link between ecological scarcity, climate change, and poverty has been well established. The world’s poor are generally more vulnerable to the effects of ecological risks as they depend on natural resources for their livelihoods, more often live in marginal areas (such as semi-arid, or low lying coastal areas), and have the least means to cope12,13.

Growth by itself is thus not sufficient to reduce poverty – it needs to be sustainable, sustained and inclusive14. Indeed, as the International Monetary Fund points out, “there is a strong case for considering inequality and the inability to sustain economic growth as two sides of the same coin”14. Thus, there is an increasing concern to put social and environmental objectives on equal footing with economic ones15.

That is, a kind of economic growth and development trajectory which is socially inclusive and environmentally sustainable. The 2012 UN conference on Sustainable Development (Rio+20) was the start to an international process to develop a set of Sustainable Development Goals (SDGs), building on the Millennium Development Goals that were established in 2000; those goals are expected to converge towards a single core development agenda: Post-2015 Development Agenda. Based on the guidelines about Green Economy policies for sustainable development and eradication of poverty, which were adopted at the Rio+20 conference16, UN member States agreed, amongst others, that the sustainable development goals (SDGs) for the Post-2015 Development Agenda must address and incorporate in a balanced way economic, social and environmental dimensions of sustainable development and their interlinkages.

The concept of the Green Economy is described as “an economy in which economic growth and environmental responsibility work together in a mutually reinforcing fashion while supporting progress on social development, simultaneously improving human well-being and social equity, and significantly reducing environmental risks and ecological scarcities”17,18. “The key aim for a transition to a Green Economy is to enable economic growth and investment while increasing environmental quality and social inclusiveness”18,19. This requires policies that incentivise public and private investments that incorporate broader environmental and social considerations, whilst maintaining a robust regulatory framework to counter unsustainable economic activities. A Green Economy must therefore be geared towards growth and reducing environmental risks, social inequity and global poverty20.

1. The “Green Economy, in the context of sustainable development and poverty eradication, is considered as one of the important tools available for achieving sustainable development. It should contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth’s ecosystems” (UN; A/RES/66/288, art.56); that is, manage natural resources sustainably, increase resource efficiency and reduce waste. Green economy policies should drive “sustained, inclusive and equitable economic growth and job creation, particularly for women, youth and the poor” (UN; A/RES/66/288, art.62).

2. “It is important to take into account the opportunities and challenges, as well as the costs and benefits, of green economy policies” (UN; A/RES/66/288, art.63) This also includes the evaluation of policies on a range of social, environmental and economic indicators.


Box 1: The future we want – Rio+20 (2012)

The “Green Economy, in the context of sustainable development and poverty eradication, is considered as one of the important tools available for achieving sustainable development. It should contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth’s ecosystems” (UN; A/RES/66/288, art.56); that is, manage natural resources sustainably, increase resource efficiency and reduce waste. Green economy policies should drive “sustained, inclusive and equitable economic growth and job creation, particularly for women, youth and the poor” (UN; A/RES/66/288, art.62).

“It is important to take into account the opportunities and challenges, as well as the costs and benefits, of green economy policies” (UN; A/RES/66/288, art.63) This also includes the evaluation of policies on a range of social, environmental and economic indicators.

[Based on: A/RES/66/288 – Green Economy in the context of sustainable development and poverty eradication]
1.2 The role of SMMEs

Small, micro and medium enterprises (SMMEs) are often called ‘the backbone of the economy’, these dynamic enterprises contribute to economic development in several ways: they have the ability to create economic opportunities through innovation, enhance productivity and social and productive networks; indeed “research has shown that countries which have high start-up rates of such enterprises benefit from higher economic growth”21. Globally, the SMME sector generates substantial employment and economic output.22

In developed countries micro-enterprises formalise and graduate to small or medium enterprises, but in developing countries proportionally fewer are able to do so (Figure 1). This is a key challenge for developing countries looking to drive sustainable growth in their economies. “SMMEs are comparatively weak in Africa because of small local markets, undeveloped regional integration and very difficult business conditions, which include cumbersome official procedures, poor infrastructure, weak legal systems, inadequate financial systems and unattractive tax regimes”.23

SMMEs need support to overcome barriers to growth and entry, and at the same time the right incentives structures to encourage them to approach their business with a Triple Bottom Line (TBL) in mind. This involves mechanisms to stimulate and facilitate the emergence of enterprises that integrate social, economic and environmental benefits into their business model as part of the transition to the Green Economy.

Eco-enterprises are SMMEs pursuing a TBL approach, they offer one concrete means of achieving this shift to a Green Economy, providing solutions to local problems in ways that create social and environmental benefits being financially sustainable at the same time. “Stimulating entrepreneurship will be particularly important for environmental innovations because new and young enterprises often have the drive and capacity to exploit technological and commercial opportunities that are neglected by more established companies, sometimes challenging the business models of existing firms”24.

Locally-led eco-enterprises are happening and it is crucial to report on their impact and learn lessons from their successes, but also on the challenges they face and how they try to overcome those. At a symposium on “the Green Economy: Accelerating the Transition”, hosted by SEED in South Africa in April 2011, a wide range of stakeholders from government, the private sector, academia, and local entrepreneurs and communities came together to discuss the way forward towards a Green Economy. One of the concluding statements was that:

“The Green Economy can and should have its roots at the local level, in small, micro and medium-sized socio-environmental enterprises and governments play a central role in setting policy, creating skills development programmes, supporting research, addressing policy coherence and building institutional relationships. Added to this is their responsibility for policies, regulations and programmes for support to the SMME sector so that social and environmental enterprises can thrive and build the green economy from the ground up.”


2. Driving green and inclusive entrepreneurship: Lessons from the field

2.1 SEED Winners

Since 2002, SEED has promoted triple bottom line solutions at grassroots level by selecting and supporting more than 200 eco-enterprises in 37 countries. Through an annual award scheme, the SEED Awards identifies promising, innovative and locally-driven start-up social and environmental enterprises (eco-enterprises), in countries with developing and emerging economies, which have the potential to make real improvements in poverty alleviation and environmental sustainability while contributing to a greener economy. Those SMMEs work in a wide range of sectors such as sustainable agriculture (including aquaculture), biodiversity, green technologies, waste and sanitation, and energy.

The three years’ study that SEED undertook in 2014 looks in more depth at a sample of those eco-enterprises through 13 case studies. These case studies explore the benefits and challenges of these enterprises in LMICs. Over 60 enterprise owners, executives, business partners and beneficiaries were interviewed to collect data on impacts, enablers and barriers. Five eco-enterprises are operating in the agricultural sector, three in waste & recycling, one in energy, and four in green technologies and services. An overview of the 13 eco-enterprises is provided in Annex 1.

The case studies show that locally driven eco-enterprises can and are achieving TBL impacts and that scaling or replicating them can contribute to greener and more inclusive growth. This section describes some of those impacts and how they are being achieved.

2.2 Environmental impacts

Mitigating climate change by reducing emissions

Through the use of solar products, ride-sharing platforms and agricultural waste the enterprises in the case study sample aim to mitigate climate change. For instance, Dichung in Vietnam and Solar Sister in Uganda have come up with solutions to reduce emissions by addressing people’s dependence on fossil fuels, like gasoline, diesel, kerosene and paraffin. Dichung’s ride sharing system seeks to decrease transport flows, whereas Solar Sister’s products offer an alternative source of energy for household appliances. In both cases, the environmental impact is also a social one. Dichung’s car-sharing solution shows people that you can save money by traveling together. At the same time, commuters meet new people and make new friends.

Solar Sister’s environmental impact is closely related to one of the main social impacts. Its products pose much less danger to customers than traditional fuels. Kerosene and paraffin produce smoke that may cause respiratory issues, particularly when cooking is done inside poorly ventilated huts. Flame-based products are also likely to cause house fires. Reducing emissions does not have to increase costs – customers spend less on energy than they used to before shifting to solar-powered products and efficient cookstoves.

The biodegradable plates made by Tamulbl Leaf Plates in India and Provokame in Colombia have replaced millions of plastic and polystyrene plates. The biodegradable plates decompose into soil within 50 to 60 days. BanaPads has also found an innovative solution for the end of the product’s life cycle. The banana fibres used for the pads can be composted and made into natural fertilizer, which can be used to nourish the banana trees.

Tackling waste through recycling

Watamu Solid Waste Management and Recycling Enterprises (WSWMR) in Kenya and Mooi River Recycling Centre (MRRC) in South Africa achieve a positive environmental impact by recycling glass, paper, cardboard and plastic waste. In the case of WSWMR, recycling non-biodegradable waste by 20% has helped to ensure that marine biodiversity in the nearby marine park is not threatened by solid waste pollution. Recycling also contributes to reducing emissions temporarily, especially when waste is transformed into goods that may be used for decades. This is the case with EcoPost’s (Kenya) plastic fence and sign posts. By making fencing and sign posts out of recycled plastics, not only reduces the amount of plastic on the streets and in landfills, but also replaces the use of wooden posts and in doing so contributes to saving trees.

Promoting biodiversity and conservation

Many eco-enterprises among our case study sample engage in conservation efforts to promote biodiversity. For example, Muliru Farmers in Kenya protect the rainforest by providing an alternative source of income generation through the cultivation of medicinal plants and providing alternative sources of firewood by planting trees in the communities. Muthi Puthi has built its business around the cultivation of threatened medicinal plant species in South Africa. Various eco-enterprises build capacity and train members of the local community on how to protect the environment and preserve species at risk. Community environmental education is part and parcel of what many eco-enterprises do.

2.3 Social impacts

Increasing income and job creation for marginalised groups

The creation of jobs and income generation are frequently cited by the SMMEs as important direct impacts. Case study data shows that all eco-enterprises have created both full-time and part-time jobs, for nearly 3,500 people, as they have grown, just as regular enterprises do. What is quite striking from our case studies is that most jobs are on a part-time or casual basis (92.5%). Maybe even more importantly to consider is not only the number of jobs created by those eco-enterprises, but to whom they provide income opportunities. All focus on providing job opportunities in the community; more often than not targeting specifically marginalised groups who otherwise lack access to employment and earning activities. For instance, EcoPost in Kenya provides income opportunities to over 2,000 casual waste collectors and 200 employees in marginalised communities – 56% of which are women. BanaPads in Uganda provides full and part-time employment to over
300 workers and has trained over 400 women in creating their own franchise business; and Solar Sister in Uganda, Tanzania and Nigeria which provides 50 full time jobs and has trained nearly 1,200 women in creating their own solar retail micro-business.

One eco-enterprise, Provokame in Colombia, intentionally employs single female head of households to obtain their own income, and female convicts, to reduce their sentences and acquire skills that will help them re-integrate into society.

One of the indirect effects of the creation of job and income opportunities is the stimulation of local economies. For example, Muthi Futhi in South Africa works on medicinal plants, and organic fruits and vegetables, employing around 10% of the community. Some of those who have worked for Muthi Futhi report using their income to invest in their own micro-businesses. The generation of income leads to increased local economic activity through an economic ‘multiplier’ effect. Workers receiving income from the eco-enterprises have more disposable income, which ripples through the community, stimulating economic activity in for instance stores, garages, repair services and myriad other ways.

Empowerment of marginalised groups is another example of social impact through the creation of employment. Women who are starting to gain an income (e.g. cases of Solar Sister and BanaPads) become financially less dependent on their husbands, generally leading to greater influence in the household decision-making process.

**Education and training**

The creation of new jobs by eco-enterprises involves necessary skills training of employees and other workers. Such capacity building and training is often extended to the wider community. Tambul Leaf Plates in Northeast India, for instance, has trained many people how to produce plates: over 500 male youth and 400 women. This is important, since the economy there is weak, development low and the population density less compared to most other parts of the country. FEED in South Africa has trained over 200 farmers in low-carbon eco-agriculture organic farming. IMAI, also in South Africa, is training farmers in transferable skills such as hygiene, food processing and marketing, as well as in cooperative governance and enterprise development: WSWMB in Kenya trains local community members (65 so far) in business management of recycling enterprises; BanaPads trained over 400 women in transferable business skills including marketing, money management and maintaining a product inventory and trained over 3,000 girls, school manager and parents in women health and safe menstrual management.

Some enterprises also offer training on conservation and biodiversity. Here, there is a cross-over between social and environmental impacts. Muthi Futhi in South Africa and Muliri in Kenya both protect local biodiversity by cultivating and processing endangered indigenous medicinal plants. In collaboration with other partners, such as universities, they organise skill training programmes that help to improve the capability and the performance of the enterprise’s farming team but also raise awareness amongst the communities about the (economic) value of conservation. Many of these skills are transferable and contribute to better harvests in subsistence cultivation.

**Gender equality**

It is estimated that about a third of all formal SMEs in emerging markets are women-led. But women’s entrepreneurship is largely skewed towards smaller enterprises. Female entrepreneurship thus represents a vast untapped source of innovation, job creation and economic growth in the developing world. Women’s ability to participate in SME development should be enhanced at all levels, as women account for an important share of private sector activity and contribute most to poverty reduction.

Four enterprises among the case studies specifically empower women through farming and/or manufacturing: Provokame in Colombia, BanaPads and Solar Sister in Uganda, and Muthi Futhi in South Africa. In these cases, women are well represented in the workforce, including in managerial and decision making positions, comprising between 76-99% of all workers. Female entrepreneurs play a vital role for innovative enterprises such as Solar Sister. Solar Sister provides solar-powered appliances to female micro-entrepreneurs, who sell these products in rural and semi-urban areas. The solar-powered appliances help households to save money on diesel, kerosene or paraffin. Other eco-enterprises in the case study sample are less clear in their report on gender-related impacts and potentially more could be done with regards to gender equality in the workplace as a way to normalise gender roles. Provokame targets vulnerable women, providing training and jobs to unemployed single mothers, resulting in additional income for their families. This in turn helps to minimise the gap between these marginalised families and the rest of society.

In the case of BanaPads, it is the product as well as the distribution model that contribute to gender equality. Ugandan women in rural areas lack access to affordable sanitary pads and clean facilities and contend with discrimination due to their menstrual cycles. In order to avoid embarrassment, many girls stop going to school altogether when they are experiencing their cycle. BanaPads addresses the issue of menstrual management in Uganda by creating biodegradable sanitary pads from natural fibres, which has so far enabled over 4,000 girls and young women to stay at school during their menstrual cycles, while generating income for over 700 women producing and selling the sanitary pads.

Addressing food insecurity and malnutrition through sustainable farming and post-harvest processing

Eco-enterprises can play an important role in fostering sustainable farming practices. The eco-enterprises that are active in the agricultural sector employ eco-friendly practices, farm organically and manage their land sustainably. Some of them, such as Muthi Futhi and FEED Africa in South Africa, spread organic farming practices among emerging farmers and advocate organic farming through community activities. Sustainable farming practices are thought to promote food security as local food systems become more resilient to seasonal fluctuations and external shocks. Innovations such as the seed strips of Claire Reid Gardening (CRG) contribute to addressing issues of food insecurity and malnutrition in households by producing handmade paper strips embedded with organic seeds that can produce 13 types of vegetables, such as beans, spinach or beetroot and 5 types of herbs. The strength of each Reel Gardening product revolves around the unique seed sowing factors that maximise the germination rate, which makes subsistence farming accessible to all regardless of their educational level and literacy, whilst reducing the water usage by 80% compared to traditional practices. So far they have improved the access to fresh vegetables for over 30,000 children and in doing so increased the nutritional value of their diets.

IMA reduced post-harvest losses of perishable food crops (fruit and vegetables) by food preservation through pickling. In the case of the FEED in South Africa, the households of FEED workers and outgrowers become more food secure because they benefit of the introduction of specific food crops, in this case vegetables. Secondly,
the community as a whole becomes more food secure as the production of vegetables moves closer to where they live, reducing the costs.

Provision of basic services

Many of the eco-enterprises provide goods and services that are lacking in their community. In the case of WSWMR in Kenya and MRRC in South Africa, a waste collection service is provided, which was hardly existent in that area before. In Uganda, 95% of women cannot afford standard commercial sanitary pads and BanaPads offers a healthy and affordable alternative accessible to all. In the case of Solar Sister, access to clean energy is provided to households and communities that do not have access to grid energy and therefore generally had to use kerosene stoves and lanterns as a source of energy. Kerosene consumption produces black smoke that is hazardous to human health and can cause a variety of ailments. Indirectly, each service or product provided by those eco-enterprises improves hygiene and reduces health risks substantially in local communities.

2.4 Economic impacts

Supporting innovative value chains that are green and inclusive

One of the commonalities between the eco-enterprises that have won a SEED Award is the element of partnership. Each enterprise operates in multi-stakeholder partnerships, not only involving local chains of suppliers and buyers, but also NGOs, local government and research institutions. In doing so, the enterprises develop innovative value chains, that are green and inclusive throughout. Consequently, eco-enterprises play a significant role in stimulating innovation; this includes not only the introduction of new technologies, but also new working processes, or organisational structures within a value chain. For instance:

Women-to-Women distribution addresses the last mile access to energy

By combining a solar and clean energy technology with a direct sales network, Solar Sister solves the problem of ‘last mile’ access to clean energy and contributes to reducing energy poverty to the most remote communities in Uganda, Tanzania and Nigeria. With the distribution model for-women, by-women sales network, Solar Sister has brought high-quality, affordable solar technology to over 180,000 women in Uganda, Tanzania and Nigeria.

Using IT solutions to develop green transport solutions

Dichung in Vietnam has developed an online platform to stimulate car-sharing. It provides customer-to-customer services and also business-to-customer services for transportation companies. These companies can use Dichung’s technology, to plan rides more efficiently. Dichung is thus helping to develop an emerging green transport industry in Vietnam.

Adding value to local raw materials

The case study data shows that the enterprises usually source their raw materials locally, often materials that would normally have gone to waste, and in doing so provide new opportunities for local producers to turn their surplus into added value. In some cases the creation of an innovative product has led to significant increase in the price for the raw materials. For instance, Tambul Leaf Plates in India uses areca nut sheaths, which used to be discarded as waste, to produce leaf plates. The company has created 110 community production units and because of Tambul’s success, the selling price of areca nut sheaths for collectors has gone up by 30%.

Reducing community costs and increasing purchasing power

Some eco-enterprises produce (semi) public goods, which result in a reduction of costs for the local communities. A recurrent example in the case studies, is the reduction of public cost for waste management. Enterprises such as MRRC in South Africa, EcoPost and WSWMR in Kenya provide an important service to the community by collecting and recycling waste. While this service would normally have been the responsibility of the local government (municipality or council), lack of infrastructure or resources impeded its efficient implementation. In the three cases, the enterprises offer innovative approaches to solving a local problem, which has generally earned them the support of local governments financially or in-kind.

Of course, more ‘traditional’ single bottom line enterprises may achieve similar or even larger economic impacts than the eco-enterprises described here. The intention here is to highlight that eco-enterprises can equally achieve economic impact with the provision of goods and services that regular enterprise may not otherwise address without some form of payment for this semi-public good. They offer an alternative and complementary model and can also inspire regular enterprises to reshape their business models to be more inclusive and environmentally sound.

Other eco-enterprises develop products that reduce household costs thus increasing the household purchasing power. Typical examples are the solar-powered products reducing household expenditures on kerosene (Solar Sister in Uganda), or the seed strips resulting in lower water usage (Reel Gardening in South Africa).

Encouraging local business development

Some eco-enterprises not only seek to grow their own business, but also assist their customers to set up their individual businesses. The beneficiaries often receive training in transferable business skills, and combined with the extra income, this allows them to set up their own independent businesses. For example, women in Uganda started to invest in additional income generating activities, making use of the business management trainings and additional income obtained through BanaPads and Solar Sister. Tambul Leaf Plates has generated employment and additional income for 3,000 community farmers who would otherwise mainly rely on subsistence farming. This eco-enterprise furthermore enabled rural youth and women to establish their own production units of leaf plates.

In many touristic areas, conservation and the development of sustainable forms of tourism go hand in hand. WSWMR in Kenya was created to tackle unemployment while reducing non-biodegradable solid waste pollution. One of the most important side-effects of WSWMR’s efforts was to boost the local tourism sector and the protection of vulnerable species, such as sea turtles. The existence of these species is not only important for biodiversity, but also for the growth of sustainable tourism. WSWMR’s recycling activities also create opportunities for local artisans who use the recycled material and sell their artefacts to tourists.
Chapter 2 described the types of TBL impacts that eco-enterprises in our case study sample are already achieving. However, eco-enterprises face numerous challenges to sustain their operations and scale up. Some of these challenges are specific to their eco-enterprise profile, whilst others are common to SMMEs in emerging economies more generally.

3.1 Challenges

Financial sustainability and financing for scale up

Eco-enterprises face challenges in securing finance to maintain operations and expand so that they may have greater TBL impact. Securing finance is a major challenge for SMMEs in developing countries generally, since they are perceived to have a high risk profile by financial institutions. Finance tends to be more accessible to large businesses that have considerable assets to use as collateral, are highly professionalised and have a well-established track record. At the other end of the scale, microfinance institutions typically work for small lenders by taking a group guarantee approach, and deal with relatively small amounts of money. SMMEs however lack the collateral and track record to give financial institutions the confidence they need to lend amounts ranging often from twenty thousand to two hundred thousand dollars, and sometimes beyond.

Weak functioning financial markets are highly professionalised and have a well-established track record. At the other end of the scale, microfinance institutions typically work for small lenders by taking a group guarantee approach, and deal with relatively small amounts of money. SMMEs however lack the collateral and track record to give financial institutions the confidence they need to lend amounts ranging often from twenty thousand to two hundred thousand dollars, and sometimes beyond.

Weak functioning financial markets are highly professionalised and have a well-established track record. At the other end of the scale, microfinance institutions typically work for small lenders by taking a group guarantee approach, and deal with relatively small amounts of money. SMMEs however lack the collateral and track record to give financial institutions the confidence they need to lend amounts ranging often from twenty thousand to two hundred thousand dollars, and sometimes beyond.

Furthermore, longer term it should be of interest that banks do not serve them partly because they do not well understand lending to SMMEs, as they provide eco-enterprises with capital to make investments during the enterprise’s ‘take-off’ phase. However, longer term it should be of concern if they are not able to access formal loans or venture capital due to a lack of lender or investor confidence. Grants will not be available long term. Furthermore, should an enterprise wish to scale up, grants and other forms of funds can usually be the best way to achieve this due to uncertainty in competitive grant processes. The financial viability and sustainability of these enterprises is thus uncertain in the longer run. There exists a gap in capacity of these SMMEs to adopt more business-oriented approaches for managing and financing their work. The case studies find that nearly all SMMEs in the sample lack access to investors and lack access to funds for business management training.

It is important to highlight that the case study eco-enterprises report that winning an award has helped the enterprise to gain credibility with those in positions to provide financial resources. However, even with significant recognition and a proven concept, these enterprises still spend significant efforts raising revenues to maintain and expand their operations.

In recent years (and particularly since the global financial crisis) there has been a shift in donor financing modalities. Donors are reconsidering grants as a viable modality due in part to their cost and shifting towards soft loans and equity. The idea is that loans and investments help the enterprise to be more competitive, as well as acting as a kind of revolving fund where returns can be reinvested in other enterprises to have wider impact. Such loans and investments by donors and private investors in TBL enterprises fall under the term ‘impact investment’, because they are more willing to accept a degree of financial risk, or lower financial returns on an investment because they recognise the wider social and environmental impacts that can be realised through the investment. For this reason, impact investment could have great potential for eco-enterprises like the SEED Winners. However the field of impact investment is still relatively nascent and reports, for instance from The Monitor Institute and the Acumen Fund warn that impact investment should be considered as a complement rather than a replacement to traditional sources of funding.

TBL planning and monitoring

Defining economic, social and environmental targets is important to focus business activities, and prompts eco-enterprises to monitor progress and share learning. Besides its internal utility, it also enables an eco-enterprise to communicate its TBL impacts to customers, partners and stakeholders to demonstrate the added social or environmental value of their enterprise. All of the SMMEs in our case study emphasised the value of SEED in helping them focus their vision and define specific targets. 39

The case studies show that enterprise managers will adjust their targets over time, as they move towards achieving old targets and when they receive support to help with TBL planning. In all cases, the targets have become much clearer and more measurable from the start of the enterprise to the present. Similarly to previous case studies of SEED Winners, the eco-enterprises in this sample highlight how targets are expanded over time to achieve a broader outreach, target new areas or to increase environmental impacts. We also report to in order to provide a solution to new or additional social or environmental local issues. All of the enterprises were focused on achieving a range of TBL benefits, social and environmental targets and outcomes, and, at the same time, creating livelihoods and income diversification for the enterprise managers and employees and/or for people in its surrounding communities.

Ultimately, good research data offers important insights for informing policy makers on the effects of TBL enterprises (both positive and negative). To accurately measure the impact of eco-enterprises requires resources and expertise beyond self-reporting of an enterprise’s self-perception of progress. The challenge then is for other stakeholders such as donors to contribute resources for evaluating investments in eco-enterprises to gather detailed data and learn lessons that can be widely disseminated.
3.2 Success factors

Several success factors can be identified among the heterogeneous case studies of eco-enterprises.

Marketable product or service

First and foremost, eco-enterprises need to be able to demonstrate that their business or service has the potential to work in the market, and that it is appropriate for the needs and capacities of the local communities. While this might sound obvious, we wish to emphasize that market research is essential to ensuring that the product or service not only looks good on paper, but that it has the potential to be marketable and make a contribution towards social and environmental impact locally. Not all promising development projects, for example, can be transformed into sustainable enterprises if the costs related to product development are too high or if the technology is not appropriate to the local context. Looking at the case study enterprises, it is clear that these conditions are present. Another feature is that these eco-enterprises are located very close to their markets, so their market position literally helps them to know and reach their market. They are well positioned to be responsive to changing demands from customers and also the wider community.

Partnerships and community engagement

Eco-enterprises must develop the ability to engage in, and harness a network of, stakeholders as well as partners. Partnerships are vital for harnessing knowledge and inter-organisational learning, for pooling resources and capabilities, for navigating bureaucracy and accessing finance, and for promoting the enterprise’s added value to customers, donors and the wider community. In our case studies, eco-enterprises frequently emphasized how highly they valued partnerships with diverse stakeholders. Some of these partnerships formed organically based on mutual interests, and some emerged and developed through interactions with local government or with the support of donors. However, partnerships only work if there is a clear interest, clear roles and benefits for all partners. Else, partnerships may just exist in name and achieve little.

Innovation to address local problems

“Innovation and investment are essential components for moving to the Green Economy”. Chapter 2 describes the different types of TBL impact that eco-enterprises in the case study sample are achieving. Often the products or services are not radically innovative, but are based on existing ideas that have been modified or scaled in a way that can achieve TBL impact. Whilst innovation may imply the development of new technology, it can also involve new ways of organising an enterprise’s supply chain in a way that is more environmentally friendly and efficient, or bringing new skills or services to people in the community. In a local setting, innovation really has value when it not only generates additional profits for an enterprise by driving production efficiency, but when it helps to address local problems.

---

42 See the World Bank’s ‘Doing Business’ reports and rankings: [http://www.doingbusiness.org/rankings](http://www.doingbusiness.org/rankings)


44 Dentoni D, Blitzer V, Pascucci S. 2015. Cross-sector partnerships and the co-creation of dynamic capabilities for stakeholder orientation. Journal of Business Ethics 129(3)
4. Recommendations: supporting social and environmental enterprises for green and inclusive economies

The recommendations presented here are a synthesis of our case study analysis, and participant consensus at several high level SEED Symposia46-47.

The importance of eco-entrepreneurship should be recognised and promoted

To transition to a Green Economy it is of paramount importance that the focus shifts from only creating value for shareholders to creating value for stakeholders48. The first step is for governments, donors and investors to give proper recognition to the importance of SMMEs in emerging markets. The best way to get the process moving is by supporting the early pioneers of eco-entreprises, by highlighting their experiences, and by bringing regular and larger businesses along with them who will carry the baton of corporate social responsibility. Policy makers and other stakeholders should give increased attention to developing policy conducive to the success of these SMMEs as they help to drive local economic development, address local social and environmental challenges and can inspire other SMMEs to make steps in this direction.

Tailored and excellent business development support is crucial for stability and growth of eco-entreprises

Related to the issue of access to finance, eco-entrepreneurs need business development support to become competitive contributors to the Green Economy and to become financially sustainable. They need to be able to access skills development programmes to give business managers the tools they need to maintain and scale a sustainable business. Eco-entreprises that achieve environmental and social impacts must also keep a sharp focus on commercial aspects of the business. A financially unsustainable enterprise cannot survive in a cut-throat competitive environment, and hence social and environmental benefits and opportunities may be lost if the enterprise is not viable.

Eco-entreprises themselves highlight the need for support to develop their business plans to submit to institutional investors when seeking financing. Eco-entreprises also need support to develop their marketing strategies, so that they can promote their products and services, while educating consumers and gaining traction for the idea of a greener economy. Policies should give attention to women entrepreneurs who are an under-represented but essential driver for growth and TBL impact, especially in rural and agricultural economies.

Providing finance solutions for the ‘missing middle’ is crucial for eco-entreprises

Access to start-up finance is one of the biggest obstacles to scaling up green and inclusive SMMEs. Policy makers need to work with financial institutions to develop products and approaches that are responsive to the situations of those particular SMMEs. Finance is a difficult issue for lenders too, as SMMEs and particularly start-ups are generally regarded to have a higher risk profile than more established and larger businesses. However, policy makers need to invest in an ongoing dialogue with and between financial institutions, and SMMEs as to the details of this challenge. We need to move beyond discussing financing challenges in generalised ways and delve deeper to understand the details of issues such as what banks would consider to be acceptable risk, what the costs are to financial institutions in managing SMME portfolios, and what banks are looking for in due diligence reports. There is more at stake here than the failure of a few SMMEs to attract financing. Where a lack of access to finance is systematic for eco-entreprises, in-depth investigation is required to identify causes and remedies, else enterprises will be stuck in low-growth cycles with little transformation and in turn little impact.

Partnerships of different stakeholders make a real difference to eco-entreprises

As discussed under ‘success factors’, partnerships make a real difference to eco-entreprises in various ways, such as knowledge sharing and learning, pooling resources, navigating bureaucracy, accessing finance and marketing. Policy makers should consider how they might play a role in facilitating networks that eco-entreprises can share and learn from each other. This might include promoting and supporting online platforms (which may be private sector developed), or encouraging business expos and symposia. Perhaps most importantly, policy makers should see themselves as indirect stakeholders and really seek out the views of SMMEs to understand the specific barriers they face in each sector, and address first the low hanging fruit.

Target setting, monitoring and evaluation can amplify and quantify the contribution of eco-entreprises

Target setting, monitoring and evaluation can amplify and quantify the contribution of eco-entreprises. It is important for eco-entreprises to define and monitor their TBL targets, and to be able to communicate their impact to customers, partners and stakeholders. Case study enterprises who received support in setting and monitoring targets expressed how much they valued this as it helps them to focus their vision and activities, and to communicate their added value to clients. There is a clear opportunity here for donors who offer grants (or other forms of financing) to eco-entreprises to pair this with capacity building support so that they can monitor their own progress. Fortunately, as increasing numbers of enterprises move towards a TBL vision of sustainability, guidelines such as the Global Reporting Initiative’s G4 Sustainability Reporting Guidelines have been developed to provide organisations with the tools to monitor and report TBL impact49. On the other hand, the multitude of tools and mechanism can also be confusing for SMMEs and such organisations should consider how to ensure SMMEs have access to the tools most appropriate to their size and their sector. On another level, policy makers should also have a vested interest in commissioning studies that quantifiably measure the TBL impacts of a sample of SMMEs in more rigorous ways than enterprise self-reporting. A selection of well-designed studies, carried out by third party evaluators will offer policy makers important insights on the effects of eco-entreprises (both positive and negative), and how they might alleviate barriers that enterprises face.

SMMEs need to be given a voice

SMMEs need to have a voice – cumulatively, they are major players in innovation and job creation, and should by invited to participate more fully in policy development discussions. Multi-stakeholder platforms are ideal fora for policy dialogue, to express the constraints they feel and their ideas of how government Better provide an enabling environment. Creating platforms for dialogue also present opportunities for enterprises to learn from each other and build partnerships – crucial for innovation, productivity enhancements, and unlocking market opportunities.

Eco-entreprises need a sound and encouraging regulatory environment

The government has a vital role in preparing an attractive business environment for eco-entreprises. In developing countries SMMEs generally face higher barriers to entry than in developed countries. This is of particular concern because a feature of developed countries is a high percentage of strong SMMEs driving employment and innovation. To unleash innovation, governments need to work on streamlining bureaucratic processes, protect intellectual property, deploy resources at the local government level to implement policies efficiently and ensure courts have the capacity to efficiently enforce contracts and land tenure rights.

About the authors

Koninklijk Instituut voor de Tropen (KIT)

Helena Posthumus

Helena Posthumus has worked as a senior advisor at KIT since 2013. Prior to that, she has worked in academia in the UK and the Netherlands for 15 years, carrying out academic research in the field of sustainable development. She has specific expertise on rural development, socio-economic research, natural resource management and monitoring & evaluation.

Roger Bymolt

Roger Bymolt is a senior advisor at KIT working in the field of sustainable development. Roger specialises in value chain development, impact investment and monitoring and evaluation and has extensive experience in Africa, Asia and the Middle East.

Bart Slob

Bart Slob is a senior advisor at KIT, working actively with governments, public authorities, civil society organisations and companies to promote and ensure responsible business behaviour. His expertise is in implementation of CSR policies, value chain analysis, business ethics, business and human rights, and sustainable private sector development.

SEED/ adelphi research

Amélie Heuër

Amélie Heuër has worked at SEED since 2009 and is the SEED Head of Research. 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.

Rainer Agster

Rainer Agster has supported SEED since 2006 and is the SEED Director of Operations. He is responsible for the overall management of all SEED operations and provides input to the strategic development of SEED. In addition to social and environmental entrepreneurship he has specific expertise in energy efficiency, green/climate finance and adaptation to climate change.
### 5. Annex

#### Annex 1 Overview of the 2015 SEED case studies

<table>
<thead>
<tr>
<th>Enterprise name</th>
<th>Sector</th>
<th>Partners</th>
<th>Country</th>
<th>Products / Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muthi Futhi</td>
<td>Sustainable Agriculture</td>
<td>Local business, local community, national businesses, research institute</td>
<td>South Africa</td>
<td>Medicinal plant ingredients; organic fruits and vegetables</td>
</tr>
<tr>
<td>IMAI Farming Cooperative</td>
<td>Sustainable Agriculture</td>
<td>National governmental organisation, provincial government, research institute</td>
<td>South Africa</td>
<td>Organic horticultural products; Achar pickle made from mangoes and vegetables; training in organic farming and in hygienic processes</td>
</tr>
<tr>
<td>Reel Gardening</td>
<td>Sustainable Agriculture</td>
<td>Local and international businesses, local NGO</td>
<td>South Africa</td>
<td>Water-saving biodegradable strips of organic seeds; Skills development in gardening, composting and business administration</td>
</tr>
<tr>
<td>Muliru Farmers</td>
<td>Sustainable Agriculture</td>
<td>International NGO, research institute, state corporations, businesses</td>
<td>Kenya</td>
<td>Natural remedies from sustainably-farmed indigenous plants; environmental awareness training on protecting the local rainforest</td>
</tr>
<tr>
<td>Provokame (LifePack)</td>
<td>Green Technologies and Services</td>
<td>Local businesses, research institutes, international sponsors</td>
<td>Colombia</td>
<td>100 % biodegradable paper plates embedded with plant seeds; training in plate making; awareness-raising of sustainable production and consumption</td>
</tr>
<tr>
<td>Tambul Leaf Plates</td>
<td>Green Technologies and Services</td>
<td>Government, national NGO, business, local NGO</td>
<td>India</td>
<td>Biodegradable disposable plates; pressing machines for producing plates; training in micro-entrepreneurship</td>
</tr>
<tr>
<td>EcoPost</td>
<td>Waste and Recycling</td>
<td>Research institute, local NGO</td>
<td>Kenya</td>
<td>Fencing posts and sign posts from recycled plastic; environmentally-friendly building and construction material</td>
</tr>
<tr>
<td>BanaPads</td>
<td>Green Technologies and Services</td>
<td>International governmental organisation, research institute, national NGOs</td>
<td>Uganda</td>
<td>Biodegradable and affordable sanitary pads, financial management skills training; women’s health and hygiene training</td>
</tr>
<tr>
<td>Solar Sister</td>
<td>Energy</td>
<td>National and international NGOs, international businesses</td>
<td>Uganda</td>
<td>Portable solar powered appliances, efficient cook stoves; training in micro-entrepreneurship</td>
</tr>
<tr>
<td>Watamu Solid Waste Management and Recycling Enterprises</td>
<td>Waste and Recycling</td>
<td>Local government, local association, local businesses, local NGOs</td>
<td>Kenya</td>
<td>Crushed plastic for recycling; raw materials for local artisans; construction aggregate made from recycled glass</td>
</tr>
<tr>
<td>Mooi River Recycling Centre (MRRC)</td>
<td>Waste and Recycling</td>
<td>National NGO, regional government, local government, business</td>
<td>South Africa</td>
<td>Municipal waste collection; waste recycling</td>
</tr>
<tr>
<td>Feed Africa</td>
<td>Sustainable Agriculture</td>
<td>Local business, Government, NGO</td>
<td>South Africa</td>
<td>Organic vegetables and fruits farming</td>
</tr>
<tr>
<td>Dichung</td>
<td>Green Technologies and Services</td>
<td>National NGO, research institute, businesses</td>
<td>Vietnam</td>
<td>Online customer-to-customer ride-sharing platform; online business-to-customer marketplace for discounted taxi services and public transport tickets</td>
</tr>
</tbody>
</table>
SEED Winner Impressions

Reel Gardening – SEED Winner 2010, South Africa

BanaPads – SEED Winner 2013, Uganda

Solar Sister – SEED Winner 2013, Uganda

Watamu Solid Waste Management and Recycling Enterprises – SEED Winner 2013, Kenya

BanaPads – SEED Winner 2010, South Africa

Reel Gardening – SEED Winner 2010, South Africa
READ MORE ABOUT THE DETAILED CASE STUDIES ON WWW.SEED.UNO

Muliru Farmers
Creating youth employment in Assam while protecting the last Kenyan rainforest
2010 SEED Winner – India

Dichung
Ride-sharing technology to reduce traffic congestion and CO₂ emissions in urban Vietnam
2013 SEED Winner

EcoPost
Preventing deforestation, combating pollution and creating youth employment by transforming waste into plastic posts in Kenya
2010 SEED Winner

Mooi River Waste Reclaiming
Boosting recycling and empowering informal waste pickers in Mooi River
2010 SEED Winner

Muthi Futhi
Income creation and women’s empowerment in rural KwaZulu-Natal through the cultivation of traditional medicinal plants
2013 SEED Winner – South Africa

Tambul Leaf Plates
Creating youth employment in Assam while reducing plastic waste
2013 SEED Winner – India

Provokame
Empowering vulnerable women and combating climate change
2013 SEED Winner – Cambodia

IMAI Farming Cooperative
Preserving vegetables to build self-reliance among South African farmers
2011 SEED Winner

Claire Reid Reel Gardening
Alleviating food shortages through sustainable subsistence gardening
2011 SEED Winner

Solar Sister
Empowering women in Africa through clean energy solutions
2011 SEED Winner

Muthi Futhi
Empowering vulnerable women and combating climate change
2013 SEED Winner – South Africa

IMAI Farming Cooperative
Preserving vegetables to build self-reliance among South African farmers
2011 SEED Winner

Claire Reid Reel Gardening
Alleviating food shortages through sustainable subsistence gardening
2011 SEED Winner

Solar Sister
Empowering women in Africa through clean energy solutions
2011 SEED Winner

Provokame
Empowering vulnerable women and combating climate change
2013 SEED Winner – Cambodia

Dichung
Ride-sharing technology to reduce traffic congestion and CO₂ emissions in urban Vietnam
2013 SEED Winner

EcoPost
Preventing deforestation, combating pollution and creating youth employment by transforming waste into plastic posts in Kenya
2010 SEED Winner

Mooi River Waste Reclaiming
Boosting recycling and empowering informal waste pickers in Mooi River
2010 SEED Winner

Muthi Futhi
Income creation and women’s empowerment in rural KwaZulu-Natal through the cultivation of traditional medicinal plants
2013 SEED Winner – South Africa

Tambul Leaf Plates
Creating youth employment in Assam while reducing plastic waste
2013 SEED Winner – India

Provokame
Empowering vulnerable women and combating climate change
2013 SEED Winner – Cambodia

IMAI Farming Cooperative
Preserving vegetables to build self-reliance among South African farmers
2011 SEED Winner

Claire Reid Reel Gardening
Alleviating food shortages through sustainable subsistence gardening
2011 SEED Winner

Solar Sister
Empowering women in Africa through clean energy solutions
2011 SEED Winner

Provokame
Empowering vulnerable women and combating climate change
2013 SEED Winner – Cambodia

Dichung
Ride-sharing technology to reduce traffic congestion and CO₂ emissions in urban Vietnam
2013 SEED Winner

EcoPost
Preventing deforestation, combating pollution and creating youth employment by transforming waste into plastic posts in Kenya
2010 SEED Winner

Mooi River Waste Reclaiming
Boosting recycling and empowering informal waste pickers in Mooi River
2010 SEED Winner

Muthi Futhi
Income creation and women’s empowerment in rural KwaZulu-Natal through the cultivation of traditional medicinal plants
2013 SEED Winner – South Africa

Tambul Leaf Plates
Creating youth employment in Assam while reducing plastic waste
2013 SEED Winner – India

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

Facebook
Twitter
LinkedIn
RSS