SEED Initiative

for entrepreneurship in sustainable development

SEED SYMPOSIUM AND SEED WINNERS WORKSHOP

The Green Economy in Africa: Climate Change and Energy, Agriculture and Food Security, and the Role of Grassroots Entrepreneurs

Pretoria, South Africa 29th March – 1st April, 2012

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Introduction

On 29th March 2012, close to 150 people gathered in Pretoria at the CSIR International Convention Centre to explore the role of social and environmental enterprises in shaping the Green Economy. The 2012 SEED Symposium was the second in a series of annual events designed to bring together start-up entrepreneurs, government leaders, international research institutions and the private sector. Through keynote presentations, guest speakers, panel sessions and discussion, Symposium participants explored two central questions:

- How are these enterprises – often with only one or two owners or employees – supporting the Green Economy; and in particular, how are they working to address two paramount challenges in Africa: climate change and energy, and agriculture and food security?
- What do they need from their governments and other stakeholders in the way of support and enabling conditions, in order to succeed?

The Symposium series anchors a larger, multi-year programme of work by the SEED Initiative and the United Nations Environment Programme (UNEP), largely supported by the European Union (EU), to foster the Green Economy and to encourage the growth of socio-environmental entrepreneurship in Africa. At the heart of this work are the SEED Awards. SEED works at the grassroots level of the Green Economy, identifying innovative, promising start-up social and environmental enterprises in developing and middle income countries, providing them with support for business planning, skills development, profile raising and access to potential partners, supporters and investors. SEED has up to now recognized 100 winners in over 30 countries. In the last two years, SEED has paid particular attention to social and environmental enterprises across Africa, with the support of the European Union. In 2011, over 450 applications were received from 76 countries, with 35 enterprises winning SEED's recognition and support. Of those, 33 enterprises representing 15 countries participated in the Symposium. Throughout the Symposium, the SEED winners showcased their products and services in an open marketplace and contributed to the discussion. Following the Symposium, the winners met for two days in their own workshop to explore common success factors and challenges.

The following report synthesizes the key points of discussion during the symposium as well as its conclusions and draws on:

- The Symposium presentations and panel sessions
- The Winners workshop discussions

For the Symposium a background paper was developed which is at Annex 1. The Symposium programme is at Annex 2.

Celebrating progress: The SEED International Awards Ceremony

On the evening of March 29, the Symposium participants reconvened to recognize the SEED Award winners for their innovation at the SEED awards ceremony. In a special video address for the event, Achim Steiner, UN Under-Secretary General and UNEP Executive Director, recognised the important role of the SEED winners in building the Green Economy through creating jobs and livelihoods in their communities. For SEED's corporate sponsor of the Award Ceremony, Hisense, the SEED programme is an opportunity for the company to give back to the community, to help improve standards of living and quality of life through championing local social and environmental enterprises.

Mounkaila Goumandakoye, Regional Director, UNEP Regional Office for Africa and Hastings Chikoko, Head of IUCN South Africa, presented certificates to the 35 SEED winners for 2011 who were also congratulated by Lucy Morassutti, National Sales Director for Hisense, South Africa, SEED's corporate partner.

Acknowledgements

SEED wishes to record its appreciation for the support provided by UNEP and in particular the European Union and the SEED's corporate sponsor, Hisense; and to thank the Independent Development Trust (IDT), SEED's partner in South Africa, for their generous assistance and collaboration in organising the Symposium.

Setting the stage

The Chair of the Symposium **Mounkaila Goumandakoye, Regional Director, UNEP Regional Office for Africa** welcomed the presenters, panellists, SEED winners and participants. In his opening remarks, he noted the highest levels of commitment across the continent to the Green Economy, with the endorsement by heads of state at the African Union summit. Leaders across the continent now link the achievement of poverty reduction with a shift to a low carbon economy. The Chair highlighted the growth capacity of the African economy: both in terms of job creation and with respect to inclusive growth that addresses sustainability and poverty alleviation. But the challenges facing the continent are considerable: of the ten fastest growing economies, five are African; but on the list of Least Developed Countries, 23 are African.

The SEED Marketplace

As part of the Symposium, SEED Winners set up an open market to demonstrate their products and services. This was an opportunity for Symposium participants to talk directly to these enterprises about the progress they are making, and the challenges they face, including having to deal with inflexible export regulations, requirements for training to meet health and technical standards, and the need for bridge financing as they expand. At the same time, they expressed great pride in the numbers of real jobs they are creating in their communities, and the benefits that their communities are gaining, through improvements to local environment and social conditions.

Helen Marquard, Executive Director of the SEED Initiative, reinforced the importance of entrepreneurship in delivering the Green Economy from the ground up. She set the stage by noting that the Symposium comes at a time of global financial upheaval, rising youth unemployment, diminishing resources, and increasing evidence of the impacts of climate change. New paradigms are needed for growth and development. Opportunities are growing for large corporations to look at more environmentally respectful solutions, with new technologies and production processes that will be less damaging. But this is just one part of the equation. Decision makers also need to reach out to the engine of economies – small, micro and medium sized enterprises, which constitute over 90% of all enterprises in the world[1]. This is the focus of the SEED Initiative: on these locally based entrepreneurs, who are innovators and champions of social and environmental change, and using business approaches to achieve their goals.

Dr. Marquard noted the founding of SEED by IUCN, UNDP and UNEP in South Africa in 2002, at the World Summit for Sustainable Development. Over ten years, SEED has held a series of competitions for promising and unconventional enterprises –those that have social and environmental as well as business goals. It is difficult enough for SMMEs to grow; but adding the emphasis on social and environmental outcomes increases the challenges that these enterprises face. Nevertheless, many are scaling up successfully and making a difference in their communities. It is a testament to the concept of the Green Economy that it is compelling a drive to

[1] Global Entrepreneurship Monitor http://www.gemconsortium.org/

effect change not only at the national policy level but right down to action within communities.

Mapula Tshangela, Director, Department of Environmental Affairs, South Africa, presented the South Africa perspective on low carbon and food security across Africa. She identified the need for scientific evidence-based policy making to shape practical programmes that will take South Africa forward into the Green Economy. Work by both government and academia has helped to inform the development of the second National Strategy for Sustainable Development. International agencies are also important, with UNEP helping the government of South Africa on economic and other modelling needs. The Green Economy is resource efficient as well as low carbon, and will require both integration across sectors – energy, water, environment -- and the embedding of poverty alleviation. Growth should not only be measured by GDP, but also by human development and the ecological footprint.

Ms. Mapula recognized that entrepreneurs and the private sector have a role to play, but need government to put in place the proper regulatory framework. South Africa is investing more than $100 billion Rand to support the transition to the Green Economy, with a variety of incentive programmes. Such funds need to be as accessible to entrepreneurs as they are to large corporations.

Mr. Nick Nuttall, UNEP DCPI, served as Moderator for the Symposium, and presented the key note address on behalf of **Achim Steiner, UN Under Secretary General and Executive Director, UNEP**, headlined as The Green Economy – a Global Responsibility. He noted that we live in a world beset by challenges. Treaties and conventions have been signed and innovative new arrangements such as carbon trading are in place in some regions. But there are also seven billion people sharing the planet. Unless natural resource use is decoupled from economic growth, the world will be in trouble. Critical tipping points are ahead in which whole ecosystems could tip into difficult conditions.

While the UN system can be glacial, the agenda for the upcoming Rio conference (the 20th anniversary of the 1992 Earth Summit) is promising, with the Green Economy becoming the hot topic as a way forward. Some countries are resisting what they see to be the "commodification of nature", but UNEP and others are working to improve understanding. The removal of subsidies on fossil fuels is one area where governments can cooperate; another is a commitment to public procurement for green products and services, a move which could tip whole economies to green outcomes.

Mr. Steiner noted that a wind farm in Kenya – the largest in Africa – has just been given approval to proceed. The green economy is about scaling up to these levels. All companies start as something small, and therefore policy makers should not underestimate what these small entrepreneurs, like the SEED Winners, are doing. The economic models of the past are not going to serve the future.

The Announcement of SEED South Africa

The Symposium marked the beginning of a new initiative, launched by SEED and the Independent Development Trust (IDT): SEED South Africa.

Thembi Nwedamutswu, Chief Executive Officer of IDT, spoke with passion and commitment to the role of grassroots entrepreneurs in her country, and the importance of programmes like SEED for recognizing and supporting their efforts to alleviate poverty and protect the environment. In her view, SEED has the potential to become "the largest global environmental sustainability movement powered by a network of emerging grassroots social and environmental entrepreneurs as the engine of a citizen and community-led transition to the Green Economy all over the world."

SEED South Africa will be modelled after the global SEED programme: it will be grounded in local experience, will recognize success, and bring those lessons to national policy makers.

At the close of Mr. Steiner's remarks, the Chair observed that developing countries are taking the position that the Green Economy must be framed in the context of sustainable development and poverty alleviation. Countries are looking carefully at the proposed Sustainable Development Goals, in order to have a means to assess performance on economy and development. Five issues are being debated in Africa as part of defining its position in the lead up to Rio:

- The Green Economy should not be "Green protectionist"
- The Green Economy should not lead to conditionalities on aid
- In creating opportunities for new jobs, there should be a net job gain
- The Green Economy should not create disadvantages for women
- Much green technology is in the north. Can Africa access it adequately, and what is needed for capacity building to implement it?

Two additional speakers rounded out the opening session: **Amelia Supetran, Energy and Environment Team Leader UNDP Philippines**, representing **Agostinho Zacarias, the UNDP Resident Representative in South Africa**, and **Richard Young, Head of Development Cooperation, EU Delegation to South Africa**. Each represented the support and commitment that their respective agencies are making to Green Economy strategies, including attention to the role of SMMEs. UNDP is facilitating efforts through:

- Promoting harmonization between the Green Economy, Climate Change and the Millennium Development Goals (MDGs)
- The development of indicators
- Capacity advice on a "pro poor" Green Economy
- Prioritizing policy responses at the national level by helping countries to access financing mechanisms such as the Global Environment Facility's Small Grants Programme.

The EU supports the SEED Initiative and recognizes the role that SMMEs have to play in achieving it. In Europe, the EU has committed to smart, sustainable growth through its 20-20-20 strategy: setting targets for a 20 percent reduction in GHG emissions below 1990 levels, 20 percent of EU energy consumption to come from renewable resources, and a 20 percent increase in energy efficiency, all to be achieved by 2020.

The EU advised Symposium participants that the financing of the Green Economy in developing countries will be innovative: new approaches are being developed, in which grant funds may be blended with loan arrangements from the development banks, to catalyze green investments. The EU supports the two main pillars at Rio:

- The consideration and framing of the Green Economy in the context of sustainable development and poverty eradication
- The institutional framework for sustainable development

Drilling down

Two panel sessions provided deeper insights into the role of SMMEs in two major sectors of the Green Economy: agriculture and climate change:

The first session, "The Green Economy in Africa - Climate Change, Agriculture and Energy – Visions and Perspectives" brought together Cecilia Njenga, Regional Programme Coordinator, Southern Africa, UNEP; Andreas Klemmer, Enterprise Development Specialist, ILO; Nicola Jowell, SAB Foundation Manager; Godwell Nhamo, Professor and Programme Manager, Exxaro Chair in Business and Climate Change, University of South Africa; Sepo Hachigonta, Climate change coordinator, Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN). The panelists addressed, inter alia,

- the promise of new renewable technologies, the need for further technological innovation, and the need for support for SMMEs to gain access to new technologies
- the importance of partnerships between research institutions and local NGOs, to ensure that consumer products for the local market can be made with locally resourced agricultural inputs
- the importance of decentralized energy solutions, that require both national/international policies and SMMEs for implementation
- the need to combine public awareness raising with policy interventions and market interventions: building supply and stimulating demand.

The second panel session brought forward "Experiences from the ground: SMMEs aiming to drive the green economy in Africa". Panelists Leticia Greyling, Senior Lecturer Rhodes University Business School; Rentia van Tonder, Head, Green Business Unit, Industrial Development Corporation; Michael Feldner, Investment Advisor, E+Co; and Heather Creech, Director Global Connectivity, IISD, identified the following opportunities and challenges for SMMEs:

- the need to strengthen "value" driven supply chains, enabling small, local firms to supply larger firms
- the importance of SMMEs undertaking Triple Bottom Line reporting as a way to demonstrate value to investors
- the gap in financial skills among SMMEs which prevents them from meeting the needs and expectations of investors
- the higher transaction costs, particularly in getting legal advice and support, for SMMEs, which can be in excess of what the microenterprise might expect to earn in a year
- the complexity of government bidding processes that make it challenging for SMMEs to compete on a level playing field with larger companies
- the gap in technical skills, particularly in renewable energies, within SMMEs and communities, that is slowing adoption of new technologies and the creation of new jobs
- the role that local economic development departments at both state and national levels play in setting up and supporting such programmes.

In addition to the panel sessions, two guest speakers focused on issues at the heart of the Symposium: the need for SMMEs to follow business principles in order to advance the Green Economy, and the need for policy makers to recognize potential gender barriers in implementing the Green Economy.

First, **Valerie Geen, Director, Climate Change and Energy for the National Business Initiative**, South Africa, spoke on the role of African SMMEs, and the need for partnerships between large companies and smaller enterprises. She highlighted that SMMEs need to be just as efficient as big business, but that governments and big business are in stronger positions, with financial resources, power, and the ability to leverage change. They have much to offer in the way of support to smaller enterprises. Investors are also important actors but require that SMMEs are able to set goals, measure and report on progress. Investors need to know in advance what the economic, social and environmental footprints of SMMEs will be before they invest.

Nomcebo Manzini, Regional Programme Director UN Women, then spoke on climate change and the need for gender perspectives. She referred to the findings on gender in SEED's 2011 research[2], identifying that women-led enterprises may not be as involved in technology-based enterprises as men, women may have limited access to external expertise and may need more assistance in adopting business models for their work. More research is needed into barriers women may face in starting up social/environmental enterprises. Ms. Manzini noted that women in developing countries often do not enter science and technology education programmes; and yet the science and technology sector is of increasing importance to the green economy. Women also do not have access to the same resources as men, particularly in countries where women cannot own property or land (and therefore have no collateral) or cannot access credit without permission of their husbands. These factors limit women's participation in the economy, and in particular in the green economy.

The Chair of the Symposium, Mounkaila Goumandakoye, Regional Director, UNEP Regional Office for Africa, brought forward the following insights from the day. These were reviewed and expanded upon in the subsequent SEED Winners Workshop, March 30-April 1.

Key Insights

1. **There is a need to bridge macro strategies with implementation at the local level:** The many frameworks, strategies, policies and implementation mechanisms being developed for the Green Economy need to bridge actions at the national level and what is being implemented by SMMEs on the ground. There is a disconnect between the macro level approach to building the Green Economy as presented by many of the opening speakers, and the micro level actions of social and environmental enterprises as presented in the panel sessions during the afternoon. For example, as UNEP's Regional Director for Africa acknowledged, UNEP, could have sought much more input from SMMEs as it developed its high level work for its report on the Green Economy. SEED's research in 2011[3] identified the difficulty in capturing the contributions of local level revenue generation by SMMEs to the national economy. Panelists also noted difficulties in linking these local level efforts to progress on national climate change and food security agendas. For SMMEs to scale up their contributions, they will need more skills, within their enterprises and their communities, and an enabling environment to succeed.

   Another area that needs improvement in bridging macro and micro interests is the involvement of a broader range of actors. For example, finance and environment departments need to work together; and large private sector companies should be involved. The South African Department of the Environment recognizes these disconnects and is willing to take on the challenge of finding ways to support SMMEs as the engine for green economic development.

2. **Reliable financial mechanisms are needed for SMMEs:** Micro and small enterprises face serious difficulties in accessing financial resources across various stages of enterprise development: proof of concept,

[2] Creech, et al. An Investigation into the Triple Bottom Line Performance of Small and Micro Social and Environmental Enterprises in Developing Countries: Year two of a three year study. SEED and IISD, 2012.

[3] Ibd.

start-up, and growth. Non-profits in particular face real barriers in the lack of legal frameworks that define social entrepreneurship, and allow non-profits to access not only traditional grants, but also loans and investments for for-profit initiatives. Several of the presenters noted the need to create linkages between SMMEs and larger businesses that might assist with opportunities for financing.

3. **Public demand for social and environmental enterprise goods and services must be fostered: SEED Winners consider public environmental education is not just values driven** – it is a business issue.Participants in the Symposium discussed the role of media in increasing public awareness and changing consumer purchasing choices as a necessary lever to help social and environmental enterprises grow their businesses. People's mindsets need to shift to increase demand for social/environmental goods and services. It will be particularly important to increase public understanding of what the Green Economy is: Decision makers need to be able to describe what it involves and how to present the stories so that media can deliver the message adequately.

4. **Potential gender-based barriers in the Green Economy must be recognized:** Policy makers will need to find ways to remove gender-based barriers in the Green Economy. If new jobs are created, particularly those involving new energy and agriculture technologies, they should not just be going to men; and that old jobs are not being removed in ways that adversely and disproportionally affect women.

5. **Monitoring, reporting and learning are essential mechanisms:** Participants acknowledge the importance of continuous learning and improvement for all working in the Green Economy, and in particular for social and environmental enterprises. Those contributing to the Green Economy should not be working in isolation. But it is often difficult for enterprises to know whether and how they are making a difference. Social and environmental enterprises need to learn how to set clear targets for the social, environmental, and business dimensions of their work – and monitor and report publically on how they are doing. Just like larger corporations, SMMEs need to be open and transparent about their work, both positive impacts and mitigation of potential negative impacts. Investors need to know what the social and environmental footprint of an enterprise will be before investing. Triple Bottom Line (TBL) planning and reporting will be an important tool for these enterprises. Symposium participants noted SEED's efforts to promote and build capacity for TBL with SMMEs.

Highlights from the Winners workshop, March 30-April 1, 2012

Following the Symposium, SEED convened a workshop for the SEED Winners. Over a day and half, Winners worked together to share experience across their respective sectors and countries, noting common challenges, and learning from each other about what works in building a successful enterprise.

The Winners discussed, among many issues, where good ideas come from. They shared personal stories ranging from one Winner discovering traditional methods of construction that could be reintroduced to local villages; to another seeing an opportunity for using solar power for commercial baking that the Winner then scaled up for village bread production; to yet another finding out about new bee hives that would work well for small scale installations and harvesting, and realizing the potential for additional environmental benefits through increased pollination, and an ecotourism benefit through the progressive restoration of traditional flora. Often technical challenges were identified as part of the story telling process, ranging from propagation challenges to access to component parts; much discussion was also given to enterprise governance and decision making, and in particular on the common challenge of financing.

A number of insights emerged from the Workshop that complement and reinforce the lessons from the Symposium:

1. **SMMEs are concerned about protecting their innovation.** Social and environmental entrepreneurs value open source approaches and innovation networks, in which new ideas and solutions can be recognized and protected through group rules and standards. But at the end of the day, access to advice on registering patents may also be needed.

2. **The need for having access to skilled people in their communities cannot be underestimated.** SMMEs face huge challenges in teaching people new technical skills. The lack of technical knowledge is a significant barrier in getting a product to a certain quality to be competitive in the marketplace.

3. **Partnerships are an integral component of the business model.** Many of the enterprises noted three types of partnership: a partnership with a research or technical institution to assist with quality control; a partnership with a buyer for the product/service being offered; and supply chain relationships for inputs to the enterprise.

4. **Passion cannot replace financial statements.** SEED Winners were encouraged to set their goals high, but also to set their targets, especially their financial projections, at reasonable, indeed conservative levels. Credibility with investors is important when seeking financing through the more traditional business approaches.

5. **It is all about access.** SEED Winners emphasized that they need not only access to skilled people at the local level, but also access to research institutions to help develop and test products and technologies; access to information; access to advisors and mentors who can add value to the enterprise; access to impact investors; access to communications channels to promote their success. Governments need to open many different doors to support the emergence of social and environmental enterprises as the foundation of the Green Economy.

Annex 1: Backgrounder for the SEED Symposium

SEED Symposium 2012

The Green Economy in Africa: Climate Change and Energy, Agriculture and Food Security, and the Role of Grassroots Entrepreneurs

Backgrounder for the SEED Symposium

Prepared by Heather Creech, Director, Global Connectivity
International Institute for Sustainable Development (IISD)

March 2012

This paper was compiled by Heather Creech, IISD, from a cross section of work on the green economy conducted by IISD staff in various programme areas, including Trade and Investment, Climate Change and Energy, and Global Connectivity. Thanks are due in particular to Ben Akoh, IISD, for background notes on climate change and food security in Africa. The views in the paper are those of the author and not of the SEED Initiative.

The SEED Symposium 2012 is the second in a series of international meetings to explore the role of local entrepreneurship and small and micro enterprises in shaping the Green Economy. The central questions for the Symposium series are whether and how these enterprises – often with only one or two owners or employees – support the Green Economy, and what they might need in the way of support and enabling conditions from their governments.

The Symposium brings together under one roof the entrepreneurs themselves and the policy makers who can improve conditions for enterprise success. The symposium is part of the United Nations Environment Programme (UNEP) and the SEED Initiative's efforts, largely supported by the European Union (EU), to foster the Green Economy and to encourage the growth of socio-environmental entrepreneurship in Africa.

The following paper has been compiled as guidance to participants, outlining central concepts, challenges and key questions to stimulate discussion during the Symposium.

What is the "Green" economy?

The Green Economy can be described as "a system of economic activities related to the production, distribution and consumption of goods and services that result in improved human well-being over the long term… It is characterized by substantially increased investment in green sectors, supported by enabling policy reforms." UNEP has further explained that "a key feature of a green economy is that it seeks to provide diverse opportunities for economic development and poverty alleviation without liquidating or depleting a country's natural assets."

See UNEP Green Economy Initiative, at http://www.unep.org/greeneconomy/.

Introduction

The SEED Initiative, hosted by the UNEP World Conservation Monitoring Centre, is a global partnership for action on sustainable development and the green economy. It was established in 2002 at the World Summit on Sustainable Development (WSSD) in Johannesburg. The SEED Awards recognise the most promising innovative, small-scale and locally-driven enterprises around the globe which integrate social and environmental benefits into their business model (see www.seedinit.org). SEED supports these grassroots entrepreneurs with tailored capacity building, including in business administration and planning, and profiling opportunities to enable them to scale up or replicate their activities.

Between its inception in 2002 at the WSSD, and its ten year anniversary at Rio+20 in June 2012, SEED will have provided consideration and encouragement to 2,500 social and environmental enterprises applying for recognition, with over 100 awards presented. Tens of thousands of entrepreneurs and supporters from

On the nature of social and environmental entrepreneurship

Many social and environmental enterprises consider themselves to be "not for profit" enterprises rather than "for profit" small businesses. A desire for community-based social and environmental change, rather than personal gain, drives many of these entrepreneurs. Nevertheless, while they may describe themselves as "not-for-profit", it is clear that these entrepreneurs are experimenting with new business approaches – sales of new products and services and other revenue generation mechanisms – in order to sustain the delivery of benefits to their communities. *These enterprises need not be private entities, but the service provided should be 'business-like' and the business plan financially viable (www.areed.org*).

around the world have accessed SEED's online tools and reports. SEED also has an active research agenda, working closely with the International Institute for Sustainable Development (IISD) to increase technical knowledge and understanding about these small-scale social and environmental enterprises. Over a period of three years, SEED and IISD are surveying all the applicants for a SEED award, to identify common characteristics, strengths and challenges. Based on the evidence gathered about enabling factors and barriers to success, SEED is advancing policy recommendations to decision makers in national and international agencies.

Key messages from Symposium 2011

In 2011, SEED launched its annual Symposium as a means to connect policy makers with the experience of entrepreneurs on the ground[1]. Key messages from Symposium 2011 included:

1. Green economy thinking and planning need to be fully integrated into how the world approaches all economic development. Work is needed to strengthen public perceptions on the green economy: it is not an either/or approach ("green jobs are good; all other jobs are bad"), but rather a strategy to facilitate entry into the economy of innovative, environmentally friendly services, goods and technologies.

2. Public policy is a key lever for the green economy, and there are now examples of countries starting to implement policies to support the emergence of a green economy. However, in most countries, there is a need to strengthen capacity for policy development at the environment and economy nexus.

3. The Green Economy must be people centred and have poverty alleviation as a prime goal: a Green Economy must be a "pro poor" approach.

4. At the heart of green economy thinking, policy development and planning is a particular emphasis on clean and renewable energy. The Green Economy is a low carbon economy, grounded in responding to the needs for mitigation and adaptation to climate change. Government policy on clean energy is a critical building block for the green economy.

5. The green economy requires a wide variety of skills – public sector management skills, business skills, technology skills. Governments note that although countries may have unemployment rates as high as 25%, there are even higher rates of job vacancies in the public sector –as much as 40%. "Green jobs" should be "good jobs", but the skills base for a green economy may be lacking.

6. Innovation and investment are essential components for moving to the Green Economy. Research into new processes, the development of intellectual property and the use of intellectual property as assets to attract investment need enabling policy environments.

7. The role of learning cannot be underestimated. A green economy is an adaptive economy, based on cycles of learning, action, reflection and response. Knowledge is a building block of the green economy "value chain".

8. The final key message emerging from the Symposium is that the green economy can and should have its roots at the local level, in small, micro and medium sized socio-environmental enterprise. Governments have an important role in setting clean energy policy, in creating programmes for skills development and training, in supporting the research sector, and in addressing policy coherence and building institutional relationships with other governments and international agencies. They should add to this

1 The report of the first Symposium can be downloaded from http://www.seedinit.org/en/best-practices-and-policy/seed-reports.html.

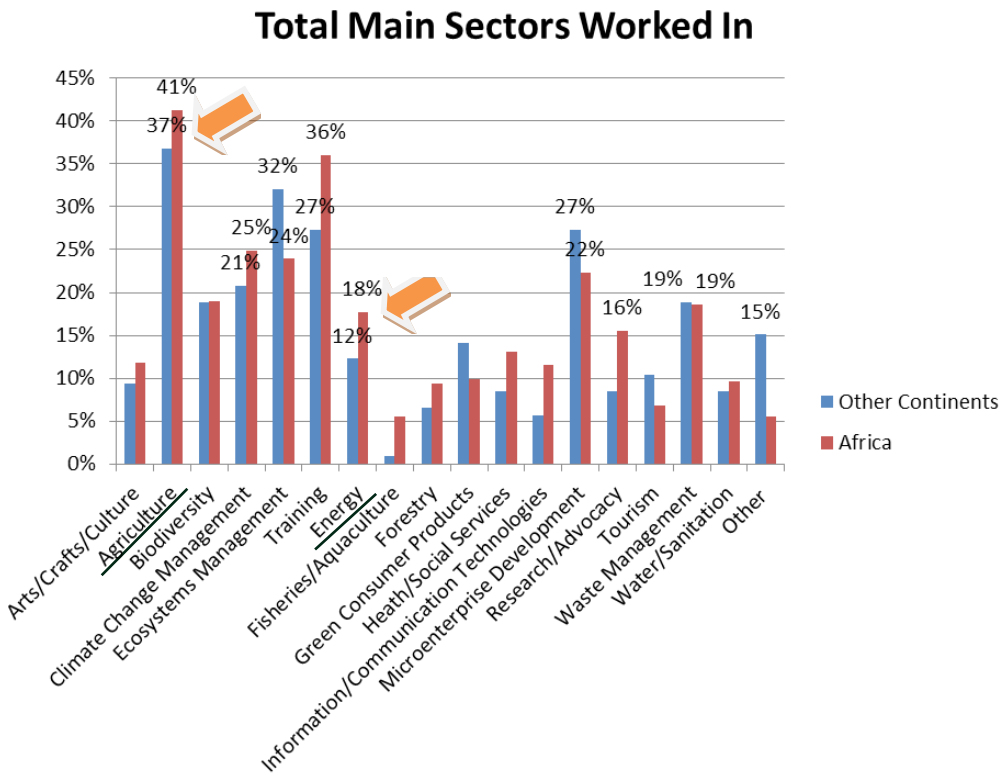
a careful consideration of policies, regulations and programmes for support to the SME sector, so that social and environmental enterprises will have the space to grow and thrive, building the green economy from the ground up.

The focus for SEED Symposium 2012

The first Symposium recognized the building of a low carbon economy as a central feature in green economy planning; but it also noted that green economy planning must be pro-poor. As a result, Symposium 2012 will focus more explicitly on both clean energy and on food security. The Symposium will examine the role of local entrepreneurs in promoting solutions that address clean energy and climate change as well as agriculture vand food security.

Growing small scale solutions in the energy and agriculture sectors

The social and environmental enterprises who connect with SEED work primarily in the agriculture sector. However, between the first and second year of SEED's three year study, researchers noted an increase in those working in the energy sector, and in particular noted that a somewhat greater percentage of African respondents are involved in the energy sector compared to enterprises in other regions[2].



[2] Creech, H., Paas, L, and Voora, V. An investigation into the Triple Bottom Line Performance of Small and Micro Social and Environmental Enterprises in Developing Countries: Year 2. SEED/IISD, 2012. (In press; to be published at www.seedinit.org).

The following sections present a brief overview of the difficult contexts in which these enterprises work, and the challenges they share with other SMMEs involved in energy and agriculture.

Climate change and energy in Africa

Like other regions of the world, Africa is beginning to experience the impacts of human-induced climate change. Decadal increases in temperature of between 0.1 and 0.3°C have been observed across the continent, with indications that Africa is warming faster than the global average. Observed changes suggest that rainfall patterns are becoming more variable across the continent, reflecting the influence of factors such as the El Niño/La Niña-Southern Oscillation (ENSO). Reflecting regional differences in climate and ecosystems, these observed changes in climate parameters have not occurred uniformly across Africa[3].

Several countries in Africa are gaining international recognition --South Africa and Kenya in particular -- for rethinking the linkage between climate change, energy and economic development. South Africa, with its power infrastructure built on coal, is considering that dirty power is untenable if the country wants to be part of the international economy. Kenya's green energy policies will double or even triple energy production, and at the same time bring significant economic benefits to some of the poorest regions in the country where these energy projects will be located[4].

UNEP's African Rural Energy Enterprise Development programme

Through AREED, energy entrepreneurs in Mali, Ghana, Tanzania, Senegal and Zambia have been offered a combination of enterprise development services, technical support and early stage financing to promote small, sustainable energy ventures. This integrated financial and technical support allows entrepreneurs to plan and structure their companies for growth and makes eventual investments by mainstream financial partners possible. End user financing through micro-credit schemes is also available.

From: www.areed.org.

Analyses of energy security issues across Africa often focus on large scale systems, last mile access to the grid, and the shift from coal to cleaner energy sources for power generation. Recognizing that 60 per cent of the population lacks access to electricity, and 88 per cent of those are in rural areas,[5] many researchers are also working on the opportunities and barriers for decentralized renewable energy solutions (solar, wind, micro hydropower, biofuels)[6]. UNEP, the World Bank, the Global Village Energy Partnership, and the Partnership for Clean Indoor Air, among many others, have begun to look more carefully at the role of micro and small enterprises as effective agents for the provision of onsite, low-cost energy supply for cooking, lighting and communications (recharging cell phones and operations of cell phone towers). But this is far from straightforward. Challenges facing social and environmental entrepreneurs include the need for basic business skills, viable

[3] Akoh, B. et al. The strategic application of information and communications technologies to climate change adaptation in Africa, in: E-Transform Africa. African Development Bank, 2012. Available at: http://www.etransformafrica.org/sites/default/files/Final-Report-Climate%20Change%20Adaptation.pdf

[4] SEED symposium 2011. Retrieved from: http://www.seedinit.org/en/best-practices-and-policy/seed-reports.html.

[5] Lighting Africa: Catalyzing Markets for Modern Lighting. Retrieved from: http://www.lightingafrica.org/25-million-people-with-better-light--another-5975-million-to-go.html

[6] IISD Trade Knowledge Network. Series on Trade and Energy Security 2010-2011. (http://www.iisd.org/tkn/research/trade_and_environment.aspx); UNDP Small Grants Programme. Biogas Technology in Agricultural Regions, Tanzania (http://sgp.undp.org/download/SGP_Tanzania2.pdf); Venema, H, Cisse, M. Seeing the Light: Adapting to climate change with decentralized renewable energy in developing countries. IISD, 2004. (http://www.iisd.org/cckn/pdf/seeing_the_light_dre.pdf)

business plans, access to reliable technologies, quality control standards for installation and maintenance, access to financing, and policy support. [7] [8] [9]

The economic co-benefits achieved by these energy entrepreneurs are less well understood. At present, data on job creation in the energy sector is available primarily for grid-connected electricity generation technologies and large scale biofuels. In South Africa, a research team from the Industrial Development Corporation (IDC), the Development Bank of Southern Africa (DBSA) and Trade and Industrial Policy Strategies and (TIPS) has prepared an estimate of the direct employment potential of greening the economy in several sectors. The research on the direct job creation potential in energy generation deals primarily with jobs in wind power, concentrated solar power, waste-to-energy and other technologies. While they note off grid applications, the data does not appear to be disaggregated specifically to highlight net job creation in off grid opportunities.[10] The International Renewable Energy Agency (IRENA) notes that "since the employment potential of off-grid applications is large, it will be covered by a forthcoming study by IRENA on job creation in the context of energy access, based on a number of case studies."[11]

A SEED 2010 Winner working in off grid solar power[12]

KAYER solar photovoltaic systems for rural households Founded in 2006 by the farmers union of Mékhé, Senegal, KAYER, together with microfinance institutions, provides renewable energy solutions to the households and organisations in the non-electrified areas. The households finance the solar station with a credit granted by a microfinance partner.	**Social impacts:** Improvement of living conditions in the villages through public lighting in community spaces, schools and health centres; access to information and entertainment **Environmental impacts:** Substitution of the use of fossil energies (oil); Reduction of the carbon impact/footprint by using renewable energy **Economic impacts:** Contributes to the development of income generating activities in the villages such as gardening during the dry season, mobile recharging, freezing and storing, recharging solar lamps or nocturnal craft activities.

Food security and agriculture

Food security continues to be a major concern for the African continent where "45 per cent of the African populations living on less than $1/day [spend] 50-75 per cent of their income on staple foods –a high proportion of which are imports"[13]. Africa continues to harbour a quarter of the global population of undernourished

7 Williams, D. Research Suggests SMEs Favouring On Site Renewable Energy, in Cogeneration & Onsite Power Production Magazine February 13, 2012.

8 Energy SME Development is a core programme of the World Bank's Energy Sector Management Program. See http://esmap.org/esmap/SME

9 www.areed.org

10 Maia, J. et al. Green Jobs: An estimate of the direct employment potential of a greening South African economy. IDC/DBSA/TIPS, 2011.

11 Beaton, C, Kitson, L. Renewable Energy Jobs: Status, prospects and policies. Biofuels and Grid-Connected Electricity Generation. IRENA, 2011. p6.

12 www.seedinit.org

13 UN Economic Commission for Africa. Committee on Food Security and Sustainable Development. The Status of Food Security in Africa. UNECA, 2009. Retrieved from: http://www.uneca.org/csd/csd6/StatusFoodSecurity-inAfrica.pdf

persons, with over 70 percent of those living in rural areas.[14] These challenges can be highly localized: "almost all food crises in Central Africa are predominantly related to severe localized food insecurity, as are most of the crises in Eastern Africa (70 per cent) and half of the cases in West Africa".[15] The vulnerability of local populations to food crises increases with poverty, disease, including HIV/Aids, and the impacts of climate change and poor ecosystem management practices.

The abilities of African countries to address food security are further complicated by an underdeveloped agricultural sector, barriers to market access, unstable political environments, and other factors.[16].Many platforms and initiatives have been established to discuss these ongoing challenges in a continent that is not short of ideas, diagnosis or prescriptions[17] -- such as NEPAD's Comprehensive Africa Agriculture Development Programme; FAO's Special Programme for Food Security, and the UN Committee on World Food Security. Strengthening governance, facilitating market access, improving rural off-farm opportunities, and addressing the capacity gaps in education, research and development, are only a few of the interventions that many suggest could help address agriculture development and food security.[18]

However, micro and small enterprises have until very recently been "unrecognized players"[19] in addressing food security. In October 2011, African Ministers signed the Johannesburg Declaration on engaging the private sector in furthering Africa's agribusiness, food security and nutrition agenda. In that Declaration, public and private sector stakeholders were specifically urged to mobilize private capital and improve access to finance for smallholders and SMEs, and in particular to provide technical assistance, technology transfer and innovation, mobile communications applications, and improved storage and transport capacity.[20]

Social and environmental micro and small enterprises working in the agriculture sector face similar challenges to those working in the energy sector. These include the need for entrepreneurship skills, access to financing, access to technologies, access to research in crop production, storage and processing, and market stability and access. [21] [22]

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14 Mwaniki, A. Achieving food security in Africa: challenges and issues. UN, (nd). Retrieved from: http://www.un.org/africa/osaa/reports/Achieving%20Food%20Security%20in%20Africa-Challenges%20and%20Issues.pdf

15 UN Economic Commission for Africa. Committee on Food Security and Sustainable Development. The Status of Food Security in Africa. UNECA, 2009. Retrieved from: http://www.uneca.org/csd/csd6/StatusFoodSecurity-inAfrica.pdf

16 Ibid.

17 Akoh, B. Internal work document, IISD, 2012.

18 Ibid.

19 Teng, P. Ensuring Food Security: Opportunities for Entrepreneurship and Investment. 2011. Retrieved from: http://aseanfoodsecurityfoodproduction.files.wordpress.com/2011/07/2-paul-teng-updated-rfs.pdf

20 Johannesburg Declaration on engaging the private sector in furthering Africa's agribusiness, food security and nutrition agenda. 2011. Retrieved from: http://www.agbiz.co.za/LinkClick.aspx?fileticket=%2BXP35vSk7r4%3D&tabid=362

21 ZERO: Zimbabwe Regional Environment Organisation in collaboration with Professor Sam Moyo. Linking Land and Food Security in Africa: a focus on Southern Africa. nd. Retrieved from:, http://www.sarpn.org/documents/d0001002/CFA-ZERO_Land_Food_Security.pdf

22 Teng, 2011.

A SEED 2010 winner working in agriculture and food security[23]

Village Cereal Aggregation Centres in Kenya VCACs introduce post-harvest technologies and support farmers to engage in safe near-farm cereal storage, in order to increase food security and their capacity to trade competitively.	**Social impacts:** The initiative is creating new community-level co-operatives, which enhance the farmers' ability to engage in joint production, processing, storage and marketing activities. This will lead to increased incomes, food security and improved social welfare. **Environmental impacts:** By encouraging improved production and proper land and water utilisation, the initiative encourages farmers to adopt good environmental protection practices and reduce the use of harmful pesticides in food storage. **Economic impacts:** Post-harvest losses in cereals are reduced by over 25% by increasing profitability in cereal production activities. This helps farmers to gain better returns on their investment.

Four concepts to underpin Symposium 2012 dialogue

The green economy is a knowledge based economy

SEED's three year study suggests that in both the agriculture and energy sectors, social and environmental enterprises are developing and/or introducing new technologies and processes to their communities. Knowledge is central to their work: nearly two thirds of respondents in the second year relied on relationships with technical and research partners to help with developing their enterprises and managing environmental impacts. A third of the respondents suggested that relationships with technical and research partners is a relevant need but only partially available.

Furthermore, because these enterprises are introducing new technologies and processes, they find that they also must invest in education and training to build the skilled work force within the communities. **99**% of the year 2 respondents suggested that they are doing, or plan to do, some type of training/skills development within their communities. Over 50% of these enterprises are involved in some type of technology training, ranging from new agricultural methods (such as aeroponics) to bee keeping technologies to water distribution systems to solar panel installation and maintenance. This reinforces the key finding from year one that SMMEs are challenged by the lack of skilled people in their communities, and that there is a considerable training burden being placed on SMMEs to build these capacities in order to get their enterprises underway.

This need for technical and vocational training in green technologies and services is starting to be identified in some countries. Kenya, for example, recently conducted curriculum reform across its vocational polytechnic schools to develop training that more effectively enhances skills for sustainable livelihoods. The Ministry of Education also introduced new programmes and initiatives at the school level to promote sustainability. These include the creation of demonstration projects like tree nurseries, solid-waste management systems, and solar/bio-gas energy generators, as well as a service learning programme in which students do peer education in their communities (on health, community clean-ups, and solid-waste disposal).[24]

[23] www.seedinit.org.

[24] Taylor, S. Technical and Vocational Education for Sustainable Development in Manitoba. IISD/Manitoba Education. Draft, 2012.

The green economy is a sector-bridging, partnership economy

The 1992 UN Conference on Environment and Development held twenty years ago in Rio de Janeiro called for an equitable world partnership based on the creation of new forms of cooperation between states and social organisations (UN CSD, 2002). Since then, this vision of shared responsibility for development has gained importance throughout the development cooperation community.

The idea of partnerships as agents of sustainable development and poverty eradication was strongly promoted at the World Summit on Sustainable Development (WSSD) in Johannesburg, 2002. The United Nations Commission on Sustainable Development (UN CSD) was mandated to serve as the focal point for discussion on partnerships for sustainable development. The UN CSD has defined such partnerships as "voluntary, multi-stakeholder initiatives aimed at implementing sustainable development goals of Agenda 21, Rio+5, and the Johannesburg Plan of Implementation". The UN Millennium Development Goals (MDG) carries the concept even further, targeting the creation of global partnership for development as part of the blueprint to meet the needs of the world's poor.

Public-Private Partnerships (PPPs) and the green economy

"The scale and value of PPP projects around the globe point to the potential for stimulating green industrial growth, due to the significant profile, responsibility, value and impact often involved in large PPPs. Securing PPPs for the greening of industries or the delivery of environmental goods and services will inject finances and provide incentives for companies to invest, innovate and scale up the commercialisation of sustainable goods and services. …The involvement of a stronger green private sector with more jobs, better products and the opportunity to contribute its specialist knowledge on major public interest projects is a welcome and positive scenario."

From: Colverson and Perara, Harnessing the Power of Public-Private Partnerships: The role of hybrid financing strategies in sustainable development. IISD, 2012

Partnerships are not a new model of course, and there is considerable experience particularly in contractual and financing relationships between government agencies and private sector companies. Green economy researchers are exploring the potential of these "public-private partnerships" (PPPs): contracts between a private sector entity and the government, where the private partner delivers a desired service and assumes the associated risks. In return, the private partner receives payment according to criteria specified in the contract and assumes the financial and administrative burden of providing the service, while the government regulates and monitors performance.[25] Using public financing to contract companies for the delivery of environmental goods and services may be a significant lever for the shift to a green economy.

While these larger scale, formal arrangements may not directly involve micro and small enterprises, the possibility exists of downstream benefits: as noted in IISD's report, *Harnessing the Power of Public-Private Partnerships*, a "stronger green private sector" will introduce more products, better quality control, and more technical support that can be of real value to social and environmental entrepreneurs seeking to implement new environmental technologies and services at the grassroots.[26]

[25] Loew, J. and M. McLindon. 2002. A P3 Primer: Why Are Countries Interested in P3? Retrieved from: www.ip3.org/pub/publication002.htm

[26] Colverson, S., Perera, O. Harnessing the Power of Public-Private Partnerships: The role of hybrid financing strategies in sustainable development. IISD, 2012Harnessing the Power of Public-Private Partnerships: The role of hybrid financing strategies in sustainable development. IISD, 2012. Retrieved from: http://www.iisd.org/pdf/2012/harnessing_ppp.pdf.

The green economy is a triple bottom line economy

At its simplest, Triple Bottom Line Planning (TBL) is a planning process that helps organisations and enterprises to identify, set and monitor their work across these three dimensions of sustainable development: the social dimension, environmental impacts, protection and restoration, and the economic, or more narrowly, the business dimension.

TBL grew out of a need for the private sector to become more responsible with its practice, in terms of its environmental management and social interactions with employees, customers and communities. The majority of success in business has previously been defined through accounting mechanisms which identify financial concerns as the only relevant bottom line, and operate in markets that deal with infinite human wants on a planet of finite resources. In order to grow and evolve sustainably additional considerations and discounts must be made to bottom lines in order to accurately assess the true value of business.

Much of TBL design and practice continues to target large and medium-sized corporations. It tends to focus on those commercial enterprises that need to build environmental and social responsibility into their business model to protect the company reputation, to secure a licence to operate within the communities where they are based, to ensure that the environment and resources base upon which their business depends is not degraded, and to provide a measure of confidence to investors and shareholders that the business is in fact well and responsibly managed.

TBL for social and environmental enterprises has a somewhat different orientation. For these entrepreneurs, they already know they want to do good in their communities, and they want to protect or restore the local environment. Their primary bottom line is in most cases either the social outcome or the environmental outcome, more than the business outcome. Business practices and technologies are enabling mechanisms to help them meet their social or environmental goals, rather than social or environmental practices being the enabling mechanisms to support business goals.

There are a number of gaps in TBL practice:

1. TBL for those social and environmental enterprises whose starting point is a social or environmental goal, but who need to build business models to support those goals. Social and environmental enterprises can struggle with clear business targets: New thinking and capacity building techniques are needed on how to incorporate business planning with their social and environmental planning.

Skills shortages

Although substantial human resource capacity is available locally, a shortage of skills in certain areas is likely to constrain the development of segments of a greening economy. Hence, a coherent strategy is needed to address skill constraints that may prevent the expansion of the pertinent sectors or the introduction of new activities. This would include worker reskilling programmes towards greener disciplines and activities.

From: Maia, J. et al. Green Jobs: An Estimate of the direct employment potential of a greening South African economy. IDC/DBSA/TIPS, 2011.

2. TBL for SMMEs that are mainstream small businesses that may be financially viable but need new thinking about their social responsibilities to the individuals and groups they interact with; and about how their business extends into and impacts its surrounding environment.

3. All micro enterprises, which need planning tools to be as simple as possible.

The green economy is an economy in which jobs will change and new jobs may be generated

At a macro level, a "green job" has been defined as an outcome of economic development focused on long term environmental improvement: "A green job can just as easily be created in a traditional "brown" sector as a "green" sector, provided the job itself is the product of an investment in development of long-term environmental improvement". [27] In other words, a "brown" job can become a "green job". In looking at green jobs through a lens of local economies and local entrepreneurship, a green job can be defined as:[28]

- Having direct or indirect impact on the well-being of people and the planet
- Including a variety of occupations from many sectors and can be both technically and non-technically oriented, as well as in the professions, trades and services sectors.
- A good job and involving decent work

The link between the green economy and the potential for job creation was discussed at length in the first SEED Symposium. Speakers noted that growth alone has not led to poverty eradication and that unemployment is high across Africa. The linkages between poverty and the protection of natural capital must be better understood; and economic growth strategies must be inclusive and address unemployment.

Two caveats emerged from the discussion:

First, skills development will be critical. If the green economy is dependent in no small part on smart technologies, there may be a green job "divide" – a few very high end jobs that are knowledge and innovation based, separated from a shrinking demand for unskilled labour. According to IISD's Mark Halle, "I think these are precisely the implications for green jobs. The high-end is relatively easy to figure out, but the low end is worrisome."[29]

Second, "green jobs" must also be "decent jobs". "Decent jobs" include access to basic social protections such as health care, the elimination of child labour, worker safety and protection of workers' rights. There are many examples of jobs that could be considered part of the green economy but are not in fact decent, such as day labourers in biofuels agriculture as well as workers involved in handling hazardous waste in recycling ICTs. This nexus of "green" and "decent" must be investigated at the SME level, and that a focus on SME development (both in shifting mindsets about decent work and providing support) will help to promote the creation of green and decent jobs.

27 Presentation, "Enabling a Green Economy in Manitoba". P.Gass, IISD. October 28, 2010.

28 Swayze, N. Green jobs and sustainable development careers. In press: Winnipeg, IISD and Manitoba Education, 2011

29 Internal correspondence, M.Halle, IISD March 9, 2011

Questions for reflection during Symposium 2012

1. To what extent have countries in the African region set out aspirations for their green economy, especially in the low carbon and agriculture sectors? What are the relative roles of government and the private sector in promoting the Green Economy in Africa?

2. What do we know currently about the contribution of SMMEs to the green economy? Is the growth of green businesses greater in particular sectors and/or countries or regions?

3. In particular, are there significant differences between those working in the climate change and energy sector and those in the agriculture/food security sector? Are their needs for support similar or different?

4. Some SMMEs are innovating technologies and processes, and others are introducing products and services that are new to a community. In both cases, access to technical and research partners can be crucial. How can they gain access more effectively?

5. All SMMEs become involved in skills training in their communities. What are the skills necessary at the local level and the problems in developing them; how can these problems be overcome?

6. All SMMEs are trying at least to create new revenue streams within their communities, to supplement other income. What are the drivers for SMMEs to create even more green and decent jobs? What is their potential for job creation, and how does this compare with large corporations? What would be needed to enhance that potential? Are more jobs likely to be created in micro and small enterprises?

7. All SMMEs struggle with business sustainability. Is there a serious gap in financing for small and micro-enterprises seeking to scale up to small and medium-sized businesses? How can this be addressed?

8. Given the increasing attention being paid to triple bottom line reporting for large corporations in the Rio+20 context, could a mechanism for reporting by small and micro-enterprises help to raise standards and stimulate movement towards a triple bottom line? If so, what would be the potential elements of (a) reporting mechanism(s)?

Annex 2: SEED Symposium Agenda

SEED Symposium

The Green Economy in Africa: Climate Change and Energy, Agriculture and Food Security, and the Role of Grassroots Entrepreneurs
Pretoria, South Africa, 29th March 2012

SEED Initiative
supporting entrepreneurs for sustainable development

Time	Activity
08:00 - 09:15	**Registration**
	Chairman Mounkaila Goumandakoye, Regional Director, UNEP Regional Office for Africa
09:15 - 09:25	**Introduction** Helen Marquard, Executive Director, SEED Initiative
09:25 - 09:45	**South Africa Green Economy: Perspective and Action** Mapula Tshangela, Director, Sustainable Development and Green Economy, Department of Environmental Affairs
09:45 - 10:05	**Keynote Address: The Green Economy – A Global Responsibility Expectations of the Rio+20 Summit** Nick Nuttall, Spokesperson, on behalf of Achim Steiner, UN Under-Secretary General and UNEP Executive Director
10:05 - 10:25	**The Green Economy in Africa** Dr. Agostinho Zacarias, UN Resident Coordinator and UNDP Resident Representative
10:25 - 10:45	**Green Economy in SA-EU Partnership** Richard Young, Head of Development Cooperation, EU Delegation to South Africa
10:45 - 11:30	**Media Brief**
10:45 - 11:30	**Coffee Break**
11:30 - 12:30	**Panel 1: The Green Economy in Africa - Climate Change, Agriculture and Energy – Visions and Perspectives** **Panel Moderator:** Nick Nuttall, UNEP **Participants:** Cecilia Njenga, Regional Programme Coordinator, Southern Africa UNEP; Andreas Klemmer, Enterprise Development Specialist, ILO; Nicola Jowell, SAB Foundation Manager, The South African Breweries Ltd; Godwell Nhamo, Professor and Programme Manager, Exxaro Chair in Business & Climate Change, University of South Africa; Sepo Hachigonta, Climate Change Coordinator, Food, Agriculture and Natural Resources, Policy Analysis Network (FANRPAN)
12:30 - 14:00	**Lunch and Marketplace with SEED Winners**
14:00 - 14:20	**The Roles of African SMMEs in Advancing the Green Economy** Valerie Geen, Director, Climate and Energy, National Business Initiative
14:20 - 14:40	**Climate Change and the Need for Gender Perspectives** Nomcebo Manzini, Regional Programme Director, UN Women
14:40 - 15:50	**Panel 2: Experiences from the Ground: SMMEs Aiming to Drive the Green Economy in Africa** **Panel Moderator:** Helen Marquard, SEED **Participants:** Leticia Greyling, Senior Lecturer, Rhodes University Business School; Rentia van Tonder, Head Green Business Unit, IDC; Michael Feldner, Investment Advisor, E+Co; Heather Creech, Director, Global Connectivity, International Institute for Sustainable Development
15:50 - 16:10	**Summary and Closing of Symposium** Mounkaila Goumandakoye
16:10 - 17:00	**Coffee and Post-Symposium Networking Session**
	By invitation only:
18:30 - 22:15	**SEED South Africa – A New Venture** Helen Marquard and Thembi Nwedamutswu, CEO, Independent Development Trust **SEED International Awards Ceremony & Gala Dinner** Sponsored by SEED's Corporate Partner, Hisense

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