

LED AND THE BIODIVERSITY ECONOMY: WHO BENEFITS MOST?

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Abstract

This briefing explores how biodiversity can be the basis of viable economic opportunities that benefit the previously disadvantaged in rural areas. The relevance of a biodiversity economy for local government is to place it squarely in the context of the two core challenges of sustainability: the fight against poverty and exclusion, and a growing environmental crisis. In South Africa, these two challenges coalesce in a particularly unique way. South Africa is distinct in that its world-renowned biodiversity, which is under significant threat, coexists with a history of land dispossession that produced widespread rural poverty. A strategy to address both issues is now being pursued in the Western Cape and parts of the Eastern and Northern Cape, holding new opportunities as well as challenges for rural municipalities around the country in supporting local economic development (LED).

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Introduction



South Africa ranks third in the world in terms of its biological diversity. It also has the highest known concentration of threatened plants, and the highest extinction estimates anywhere in the world (Wynberg 2002). The Cape Floral Region (CFR), with its spectacular coastal and mountain fynbos and other botanical treasures, attracts millions of visitors each year. It is a global biodiversity hotspot, because of exceptional natural diversity on the one hand and dangerously high levels of habitat destruction on the other. Major threats include loss of habitat to agriculture, rapid and insensitive development, indiscriminate burning, overextraction of water and the spread of alien species. At least 70 per cent of the 9 600 plant species in the CFR are found nowhere else on earth - conserving this diversity is essential not merely for its aesthetic beauty but also for its economic contribution. A recent natural resource economics study estimated the total economic value of the CFR as at least R10 billion per year, equivalent to over 10% of the regional Gross Geographic Product for the Western Cape (Ashwell et al. 2006)

As elsewhere in South Africa, the region reflects the apartheid legacy of enormous disparities in access to land and resources, and a highly skewed distribution of population and wealth. The land that makes up the CFR is mostly agricultural land, owned predominantly by white people. Interspersed in this landscape are scattered rural communities of mostly coloured people. In addition, a significant number of farm dwellers live on commercial farms, in insecure circumstances on land that does not belong to them (Hall 2004). These communities have been hard hit in recent years by a declining agricultural economy, associated job losses and evictions (CRLS 2003). Unemployment runs high, and many people live below the poverty line.

In a bid to tackle both challenges, the government has initiated an ambitious long-term programme - known as Cape Action for People and the Environment (C.A.P.E.) - to protect the CFR in a manner that recognises and addresses the livelihood needs of poor communities in the area. Fundamental to its approach is a commitment to ensure that biodiversity conservation is mainstreamed into local economic development and poverty reduction efforts.



A burgeoning biodiversity economy



Conservation used to be equated with 'fences and fines' whereby nature reserves were fenced off and people kept out except for entrance fee-paying visitors. This has attracted much criticism for ignoring the plight of poor people, or worse, bringing them significant costs as a result of displacements or lost livelihoods. The C.A.P.E. strategy takes a very different perspective. There has been a general perception that conservation, or the work of preserving biodiversity, is non-productive, not profitable and takes away much-needed revenue from other socio-economic imperatives like education and housing. Conservation agencies increasingly want to change this perception to an understanding that conservation work is the basis from which other economies evolve and cannot function without, and that it can in fact be highly productive (CNC 2003).

Ecosystems supply a range of services and goods that underpin the economy: essential processes like water purification, soil generation, erosion control, pollination and pest control that well-functioning natural systems carry out automatically. Extractive uses include wildflower harvesting, medicinal plant cultivation, and the livelihoods that are maintained from marine and coastal services. This resource-based production forms the basis for subsistence at the local economic level, and is said to have accounted for more than 11 per cent of total GDP and employed more than 33 per cent of the labour force in South

Africa in 2000. According to Hassan and Blignaut (2002) "when the contribution of tourism is accounted for, the total value of natural resources and environmental services in South Africa jumps to more than one third of GDP, and more than 50 per cent of export earnings and total employment." It isn't easy to put a monetary value to biodiversity and such estimations will vary, but whatever the figures are there is little doubt that it forms an essential basis of our economy.

The concept of a biodiversity economy is quite simply that local economic development should be supported in a manner which does not harm biodiversity, and in which biodiversity resources are developed into economic opportunities. This means looking beyond nature reserves, parks and other protected areas in terms of planning, conservation and economic development. In the CFR this is being attempted by stimulating partnerships with private landowners to promote alternative productive land uses and the sustainable utilisation of biodiversity assets. This can include ecotourism and associated enterprises, sustainable harvesting of fynbos wildflowers, dried fynbos flower enterprises, production of plant extracts, essential oils, herbal teas and others. The vision is to create a range of business and employment opportunities which collectively support the development of an environment-based economy.



Helping the rich or helping the poor?



Most development professionals agree that poverty reduction requires economic growth. But there is a growing recognition that growth alone is not enough. What is needed is economic growth that specifically benefits poor people. Pro-poor growth is possible if it increases the flow of income poor people derive from their assets, or increases the number or value of their assets. One of the difficult challenges faced by advocates of the biodiversity economy approach lies in the fact that most entrepreneurial opportunities in areas of high conservation value are land-based, and most of the land belongs to a small privileged group. In terms of LED planning, a key issue therefore is how to ensure that the economic benefits flowing out of such enterprises accrue to poor people who mostly lack access to land, rather than merely relying on assumptions that the benefits will eventually 'trickle down' to the poor. How to make pro-poor commercial activity an integral part of normal business operations?

While a biodiversity economy approach is still relatively untested, several initiatives point to its potential for LED and the promotion of sustainable rural nature-based livelihoods. A few examples below highlight some of the key issues and possible solutions.

➤ **Flower Valley Conservation Trust (FVCT)** - Situated in the Agulhas Plain, the FVCT was founded in 1999 when it acquired the Flower Valley Farm. Since then, the trust has worked together with previously disadvantaged local communities to integrate business, conservation and community development, based on the sustainable harvesting and marketing of wild fynbos products. Local picking teams harvest wildflowers under strict sustainability guidelines, not only from the farm at Flower Valley but also from a supply network of privately owned farms and state conservation areas covering 20,000 hectares. Without this income farmers would most likely sacrifice the natural flora for other agricultural uses.

A Community Forum, comprising elected representatives from every component of the project, enables the community to take part in the decision-making process. Development activities include a thriving community organic vegetable garden, an Early Learning Centre for young children, and training for women. There are plans for a Community Arts Programme in which theatre, music and dance is used to address social and environmental concerns.

The core business operation of the FVCT is contracted out to a private company. While this is meant to raise the level of efficiency and thus the likelihood of commercial success, it has its own shortcomings. For example, other than the employment it creates, the commercial benefit of the fynbos business accrues not to the community but mainly to surrounding landowners who generate income from the flowers harvested on their land, and to the company from any profits it makes. To redirect some of this commercial benefit to the community, the Trust is now trying to raise capital to purchase a shareholding in the company (FVCT online). But it

does underscore the continuing legacy of dispossession and the challenge of addressing persistent inequities faced by landless rural people. (see www.flowervalley.org.za).

➤ **Heiveld Cooperative** - The Suid Bokkeveld in the northern reaches of the Greater Cederberg Biodiversity Corridor is a poor remote area where wild rooibos, locally known as 'veld' tea, has been harvested for generations amongst the local people. What they lacked was markets and business skills. That began to change in 2001, when they formed the Heiveld Cooperative. With support from NGOs and other programmes, business is growing rapidly. Due to a profitable European market, this historically marginalised community is for the first time benefiting economically from the sale of certified organic rooibos tea. External support also includes research aimed at promoting sustainable harvesting practices and preventing over-harvesting of the natural veld.

When the Coop was founded the members wanted to build an organisation that promoted social justice. Its Constitution specifies that thirty per cent of the Coop's profits will be used for the benefit of people who have been disadvantaged on account of their gender or race. Members are also currently developing a scheme to employ women in the community to produce packaging materials for the Coop's products.

It is important to note that the majority of members own the land they farm. Unlike elsewhere in the Cape, land in this area was considered of such low value that even under apartheid African farmers were not dispossessed. Ownership is a key factor that has enabled them to increase their income flow from this vital asset. But even here, unless these small-scale rooibos tea farmers can access more land, the business will not be able to grow and will be in danger of stagnation. (see www.heiveld.co.za).

➤ **Witfontein Traditional Medicinal Nursery** - As part of CapeNature's Siyabulela programme¹, a traditional medicinal plants nursery was established at the Witfontein station on the Outeniqua Nature Reserve outside of George. Six women were identified by the Southern Cape Traditional Healers and currently run the nursery. The nursery is expected to reduce harvesting pressures on wild plant populations by propagating those that are in high demand in the traditional African medicinal plant industry. At present, twenty different bulb, shrub and tree species are being cultivated, with a view to supplying local traditional healers with plant material. Negotiations are underway with the Traditional Healers Association to establish a market for the medicinal plants from the nursery to ensure commercial viability. In the near future, children from local schools will be brought to the nursery on excursions and will be introduced to both biodiversity conservation and to the cultural use of plant medicines.

➤ **Longmore Flower Estates** - Longmore Flower Estates near Port Elizabeth was started by four dynamic black people - three women and a man - who pooled their severance

¹ The Siyabulela Programme was launched by CapeNature with initial funding from the Western Cape Department of Environment Affairs and Development Planning, with the aim of forging nature-based livelihood opportunities for poor rural people in four regions in the Western Cape (Garden Route, Little Karoo, Boland and the broader West Coast area).

packages to buy a failed State-owned flower plantation from their previous employer Safcol. Within four months the new owners turned the business around. With 30ha of proteas and other indigenous flowers under cultivation, mainly for export to Europe, they are now a profitable enterprise generating employment in surrounding areas. In a region where unemployment runs at more than sixty per cent, the Longmore team is not just focused on producing rare export quality flowers, but is also committed to growing people. With funding from the Cacadu district municipality, Longmore is spearheading the development of satellite flower-growing centres in poor communities in the Thornhill and Tzitzikamma areas. The team has launched satellite cut flowers skills training programmes in these outlying centres, supported by the agriculture sector education and training authority and aimed at equipping previously disadvantaged farmers to become flower producers. In turn, this increases Longmore's overall production capacity and allows it to expand its plantings to 100ha, making the venture more price-competitive overseas.

(see www.longmoreflowers.co.za).

The cases discussed here derive their economic potential from the unique environmental assets of CFR and exemplify a deliberate strategy adopted by the C.A.P.E. programme. But the underlying principle, that it is possible to link local economic development with biodiversity conservation, is applicable in many other places. For example, South Africa's land reform programme offers similar opportunities. In spite of the slow pace of progress made towards the goals the state has set in this regard (Hall 2004), land claims under the restitution programme in various parts of the country suggest significant scope for stimulating local economic development to the benefit of communities behind these claims. In the Kruger National Park almost half of the land is under claim. In Limpopo about a third of private game reserves are under claim. In KwaZulu Natal about 90 per cent of state-owned conservation land and 80 per cent of private nature reserves are under claim. Again, statutory conservation authorities are conscious of the need to merge their mandate to protect the nation's biodiversity assets with the rights and interests of local communities. According to Hector Magome, executive director of conservation services in SANParks, "we are likely to have a model in South Africa where communities are going to be at the core of viable, business-oriented conservation" (Schoeman 2007:47). Recent legislation makes provision for this. The Biodiversity Act (2004) considers community participation in conservation as an alternative way of securing poverty alleviation, while the Protected Areas Act (2003) provides for co-management and contractual parks where local communities are granted entitlements to benefit sharing (Algottsen 2006). However, the complexity of getting these arrangements to stimulate LED that is genuinely pro-poor should not be underestimated. Reflections on actual experience in the Kruger and Richtersveld National Parks, Kgalagadi Transfrontier Park and Mkambati Nature Reserve (see for example Grossman & Holden, 2006; Kepe et al. 2005) suggest a host of challenges: divergent agendas of the multiple actors involved; unequal power relations between communities and conservation agencies; resistance by conservation staff to surrendering sole control; and a lack of internal cohesion in rural

poor communities who tend to be politically weak and poorly organised. There are no fast and easy answers to any of these factors, and much sensitivity is required to steer and support marginalised communities through the lengthy negotiation processes involved, and ensure that economic opportunities arising from these cases are not hijacked by local elites.

Poverty relief programmes funded by government are sometimes hailed as a significant driver of biodiversity-related job creation. Programmes such as Working for Water, Working for Wetlands, and Working on Fire offer temporary employment and skills development opportunities for tens of thousands of unskilled and unemployed people. Conservation agencies also use poverty relief and other sources of funding in and around conservation areas to run employment schemes. These include the removal of invasive alien trees; reintroduction of locally indigenous plants; development of nurseries and fire management - all aimed at restoring the natural functioning of various ecosystems - and also trails and roads maintenance; boardwalks, fencing, signage and other infrastructure maintenance geared towards the ecotourism industry. In this way, the biodiversity economy can make a further contribution to job creation, albeit of a temporary nature. Beyond an immediate wage transfer to address poverty, skills transfer is a structural element in these programmes where participants accumulate training entitlements in the course of each four-month work cycle. In theory, this means people should become more skilled and qualified over time, and thus increase their chances of employment beyond the poverty relief programme. Critics however have observed that these programmes are often implemented in ways that undermine this strategic aim. Studies in the Western Cape, KwaZulu-Natal and Limpopo suggest that, with an average employment period of just four months, the training people receive typically does not exceed eight days and is not enough to differentiate them from other people in the labour market who have not received that training (McCord 2007). To address this, programmes should seek to retain workers to the maximum period of two years, thereby increasing the training component, and also tailor skills transfer to subsequent entrepreneurial opportunities.

No discussion of the economic value of the natural environment is complete without reference to ecotourism - particularly for South Africa where tourism is the fastest growing sector and where nature-based activities feature on the top of the 'to-do' list of most foreign tourists. Certainly it can offer job and enterprise opportunities, as well as direct access to 'rich' tourists who are often keen to buy local goods and services. Examples are training and employing local people as field guides, or empowering local women to run a tea garden such as in the Diepwalle Forest near Knysna. But without active intervention, opportunities for poor rural people to benefit from ecotourism are easily missed, especially since they are often physically separate from the private land where tourist accommodation is located. Location is critical: communities must rely on selling complementary goods and services, and tourists need to be close by for this to happen. Commercial activity has to be proactively stimulated: to ensure a sustainable supply of local income local people must sell crafts, food, or nature-based products to tourists.



Local Government and a pro-poor biodiversity economy



The emergence of a pro-poor biodiversity economy is in an early stage, but already there are concrete examples that provide pointers for the role of local government. It is evident that initiatives to forge economic opportunities from spaces of particular natural value and beauty necessarily involve numerous parties. Among key actors are private landowners, businesses and entrepreneurs, local leaders, community groups, NGOs and various state agencies. The latter can - depending on the circumstances - include the local conservation authority, the department of agriculture's LandCare programme, training authorities, the department of land affairs (where it concerns restitution claims) and of course the municipality. Local municipalities, being the designated authority to develop LED strategies in the context of their Integrated Development Plans (IDP), have a critical role to play as facilitator, networker and monitor in all these multi-stakeholder processes. Within this web of inter-institutional complexity, keeping an eye on the ball in terms of ensuring that poor people are placed centre-stage in participating in and drawing benefit from the biodiversity economy, is a huge challenge. Not only are rural municipalities hampered by limited skills and capacity to run effective LED strategies (see Goldman et al. 2006), institutional complexity and power asymmetries between the different actors often lead to continued marginalisation of poor communities. This makes it all the more important that local government consistently champions the rights of the poor to take direct part in economic initiatives around any conservation-driven enterprise.

Building frameworks for collaboration between local government, conservation authorities and other relevant state agencies, private enterprises, land owners and representative community structures is therefore an essential pre-condition, as is finding mechanisms for meaningful contribution by poor communities to planning and decision-making. This can range from availing transport to enable rural people to attend forum meet-

ings, to ensuring open and transparent communication channels in which the voice of poor people can be clearly expressed and heard. It is also necessary to be open and flexible with time - authentic public participation is neither a predictable nor efficient process.

Local government can further contribute to building grassroots models of pro-poor enterprise and employment development connected to biodiversity, by ensuring that their LED strategies emphasise initiatives which:

- ▶ Support the development of business and marketing skills, infrastructure and systems of small-scale producers involved with nature-based enterprises;
- ▶ Develop commercial activity in rural communities in proximity to ecotourism establishments, whether state or privately owned;
- ▶ Build community organisations and nurture leadership that can increase poor people's participation in the biodiversity economy;
- ▶ Focus on innovative ways of increasing ownership of economic assets by poor people - including land, property, businesses;
- ▶ Support skills development especially of young people in ecotourism and other nature-based industries;

In addition, municipalities should play a proactive role in engaging with conservation authorities and the department of land affairs to ensure that all land restitution claims involving protected areas and nature reserves are built into their LED strategies, and that the communities involved are able to exercise genuine influence in the associated planning and decision-making processes.



Conclusion



This briefing has sought to demonstrate how biodiversity conservation might be a force for rural development, by leveraging economic and social benefits at local level.

To realise this vision requires a confrontation with our historical tendency to see biodiversity as the exclusive domain of the privileged few and the dualism of our developmental and environmental policy frameworks. This includes an understanding that two paradigms which are typically held quite separate and seen

as mutually exclusive - growth and development at any cost on the one hand, and conservation and environmentalism for its own sake on the other - are out of step with the reality of increasing rural poverty, underdevelopment and growing environmental crisis. The potential of a biodiversity economy to marry commercial expertise with the sustainable use of natural resources in ways that give black economic empowerment a new dimension is there to be explored. Who is up to the task?



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