

Eco-tourism and botanic gardens – An education perspective

A case study of education programmes at Kirstenbosch National Botanical Garden and how they are used to promote eco-tourism

Donavan Fullard

South African National Biodiversity Institute, Claremont, South Africa

Introduction

Kirstenbosch National Botanical Garden, the flagship of the South African Biodiversity Institute – was established in 1913 to conserve and promote the indigenous flora of Southern Africa. The garden is internationally acclaimed as one of the great botanical gardens of the world. Being part of the Table Mountain National Park, it has been inscribed as South Africa's sixth World Heritage Site in 2005. This is the first time that a botanical garden has been recognized as a natural World Heritage site. World Heritage sites are described as places on earth that are considered to be of outstanding universal significance to humanity. The garden is also perceived as the gateway to the Cape Floristic Region and therefore is ideally situated as a tourist destination and to promote eco-tourism.

In South Africa currently, the challenges of the high rate of unemployment, poverty and the devastating impact of HIV AIDS are the social realities that affect the lives of the majority of the people of the country. People and specifically those living in rural and peri-urban areas, rely on the South African natural resources or heritage for survival and this, inevitably results in the exploitation of natural resources. Trees and plants are amongst those that are mostly targeted for building materials, woodcarving, firewood, food and for medicinal purposes. This inevitably results in some plant species being threatened with extinction, endangered or extinct in some instances.

Educating people about non-consumptive means of benefiting from their natural heritage has proven to be less effective unless the targeted audiences are exposed to these initiatives or until they are directly engaged in the actual implementation and be direct beneficiaries to such initiatives. Eco-tourism is one of the non-consumptive means of benefiting from the natural resources especially plants. Botanical gardens play a crucial role in demonstrating to communities from all walks of life that they can benefit from plants and natural resources without degrading them to a point of extinction as most consumptive activities are.

Tourism vs Eco- tourism

From an education perspective – tourism is defined in the National Curriculum Statement of our National Education Department as a subject that “involves the study of a broad and dynamic industry that includes the understanding of cultural diversity in South Africa and highlights the importance of environmental sustainability for the benefit of all citizens. The following definition of eco-tourism was developed in 1991 by the American Ecotourism Society and is internationally accepted: “Eco-tourism is purposeful travel to natural areas to learn about the cultural and natural history of the environment, while taking care not to alter the integrity of the environment and contributing to the economic welfare of the local people”. (Enviroteach , March 2004).

In today's world of growing tourist statistics, eco-tourism is seen to be the fastest growing part of the tourism industry. The growth of this industry brings with it a need to protect the environment to ensure its future success – as a large part of the industry exists chiefly because of the attractiveness and quality of the environment (Stabler, 1997). Eco-tourism is distinct from other forms of nature based tourism in that it involves

interpretation of natural and cultural environments and ecologically sustainable management of the natural area being visited. It supports conservation and brings benefits to the local community (Beeton, 1998).

The focus of this paper will be on the eco-tourism aspects of the Kirstenbosch National Botanical Garden (Gardens directorate perspective) and how the Education and awareness programmes that are implemented by the Goldfields Environmental Education Centre located in this botanical garden can be used to promote eco-tourism and the non-consumptive use of plants as a contribution to the *Global Strategy for Plant Conservation* (GSPC) in the Western Cape Region of the Republic of South Africa.

How does Kirstenbosch NBG promote eco-tourism?

Kirstenbosch NBG, by nature of the operations itself is a multipurpose destination. The original attraction was always the garden displays and horticultural collections complemented by the landscape features (lawns) making it attractive for visitors to spend a significant amount of time at the garden, instead of the current tourism models focusing on short, intense and expensive experiences e.g. Robben Island, etc. The garden is a place where visitors can spend a day and as such, it is the access to this unique experience that makes it a favourite destination. The secondary attractions of Kirstenbosch NBG are our events, facilities, concerts, but it is the garden and its uniqueness that makes it so special and so high in demand. As such the garden uses numerous promotional means from email databases, media (newspapers, magazines, radio) advertising, website and most importantly, word of mouth to promote the garden. The return visits of our visitors and the good promotion through word of mouth comes from visitors having a good experience. Thus our services need to be highly professional.

The garden also hosts an action oriented and learner-centred Environmental Education programme based at the Gold Fields Centre. The aim of the programme is *“To use the garden and the resources of SANBI to inspire and enable people from all walks of life to take responsibility for their environment”*. The Environmental Education programme targets learners and educators in particular as well as other adult and youth groups. The programme has three key focus areas which include a garden-based school programme, teacher professional development and the outreach greening programme. Each of these programmes has as its goal, promoting the awareness of the indigenous plant diversity and plant conservation. Through the garden-based school programme thousands of learners and specifically those from disadvantaged communities on the Cape Flats visit the garden for a 2-3hour structured guided lesson. The lessons are all curriculum linked, but is a fun filled activity based programme with experiential learning taking place. The programme has shown tremendous growth from 8542 learners in 2000 to 15885 learners per year in 2006. This increase is due to a range of factors, such as the fact that the centre has a bus which transports learners to the garden, funding made available through the National Lotteries board to sponsor free visits, a curriculum-linked and quality education programme.

Through the teacher professional development programme, workshops are offered to educators and capacity is built to strengthen the environmental education processes back at school and to empower the educators to deal with issues of biodiversity and sustainable living confidently. Through both the above mentioned programmes the understanding of the holistic nature of the environment, which is characterized by inter-relationships between economic, social, cultural, ecological and political issues in local, national and global spheres is promoted. The outreach greening or school indigenous greening programme promotes the development of indigenous water wise gardens at schools and within local communities and encourages ecological awareness and environmental responsibility which results in local environmental action. Participants also develop gardening skills to enable economic empowerment. Learners at schools who have indigenous gardens show a great sense of action competency – they are capacitated to develop skills and knowledge, which include a deepened understanding of plant conservation and diversity, horticulture and tour guiding.

When visitors are brought to schools, it's these learners that confidently accompany visitors on a guided tour, sharing their knowledge they've acquired through the training programme and the efforts of their teachers. The implication of this is that learners are exposed to various careers within biodiversity conservation and eco-tourism. Thus, the learners, teachers and other members of the communities on the Cape Flats who get the

opportunity to visit the Kirstenbosch NBG and participate actively in the environmental education programmes are exposed to their natural heritage -the magnificent fynbos biodiversity – as well as issues of plant conservation and hopefully take with them the knowledge, skills and values to start making informed decisions and lifestyle choices required for sustainable living and be the custodians of their natural heritage which can be beneficial and contribute to their economic welfare.

How does Kirstenbosch NBG connect with tourism offices and travel agencies?

SANBI is a state aided organization and promoted through SA Tourism, an affiliate of the Department of Environmental Affairs and Tourism (DEAT). Kirstenbosch NBG is also a member of two tourism organizations, Cape Town Tourism (a destination and marketing organization for Cape Town and the Western Cape) as well as Cape Town Routes Unlimited. These organizations have visitor's services organizations or offices throughout the Western Cape and they promote Cape Town destination attractions, services and products. The garden is promoted as part of the Big 6 Partnership and has been extremely useful in enhancing the profile of the garden. The critical feature of this partnership lies in the fact that these 6 destinations in Cape Town openly advertise each other and share information to improve services for visitors to Cape Town. Essentially the pitch of the Big Six, is that if you are a visitor to Cape Town and you had a little time, the top six destinations to visit in Cape Town would be the six members of the Big Six: Kirstenbosch, Robben Island, Cape Winelands route, Cape Peninsula National Park, Table Mountain Cable Way and Victoria and Alfred Waterfront.

As a destination, the provincial and local government offices use the success and uniqueness of Kirstenbosch to sell the city in their respective marketing strategies. The travel agencies also use the success of Kirstenbosch to improve their marketing strategies to attract foreign markets. In essence, if Kirstenbosch NBG was not in Cape Town, Cape Town would have one less, very popular destination that these agencies would be able to use to conduct their business. Through the SAACI – the garden is also promoted to the conference market which opens up more opportunities for the garden or for potential eco-tourists to visit the garden.

What activities are run at Kirstenbosch NBG that are connected with eco-tourism and what are the implications for the site?

The garden as a whole is an eco-tourism destination – it boasts a cultivated garden (36ha) and a nature reserve. The developed garden displays collections of Southern African plants including many rare and endangered species. Theme gardens include the Fynbos garden, Braille Trail and Fragrance garden, Useful plants garden, a Water wise Demonstration garden and the Botanical Society Conservatory. The events, conferences and concerts form part of the secondary market developed over time. Visitors come to Kirstenbosch for its ecological integrity, developed and natural landscapes and botanical diversity. The botanical industry and interest is a huge market globally, segmented into different interest groups from growing plants to botanical art to collectors. But the majority of visitors come to Kirstenbosch for the total package - sweeping landscapes, a mountain back drop...in a world where everyone lives in a concrete jungle, time spent in the green and colourful Kirstenbosch is highly sought after - an opportunity to escape from reality.

If properly designed and the services are orientated correctly, Kirstenbosch is truly a new world on it's own that visitors would like to escape to, regularly. Obviously by inviting visitors to access the garden, the impact has to be managed. This implies the development of footpaths, interpretation or signage systems, restriction on numbers, etc. This also implies a visitor orientation by staff and garden rules to regulate bad behaviour by staff and visitors alike which requires significant training and meeting interventions to build the capacity of staff and facilitate change management. Kirstenbosch also has a no-bin policy and visitors are encouraged to take their waste with them for recycling. The challenge though, is for the garden to demonstrate their own sustainability in order for visiting tourists to see how waste is recycled on site.

The hosting of events such as the music concerts have become an important source of income generation for the garden as well as attracting an increased number of visitors to the garden. Both local and international visitors are attracted in this way to the garden and these events provide them with the opportunity to be exposed and

learn about the indigenous plants of South Africa including their value, conservation status and uses through the innovative and stimulating interpretation system developed throughout the garden. The income generated from these events are utilized to improve the infrastructure of the garden and to support programmes like the outreach greening programme, thus ploughing back into the local communities contributing to awareness and growth in the local communities.

Professional tour guiding is offered and the garden has three registered and trained tourist guides as well as a group of trained volunteer guides (± 30) from the Botanical Society. They are co-ordinated by an experienced SANBI staff member who co-ordinates the requests for guided visits from tour operators and companies, consulates, high profile tourists and business people, safari type tourists, etc. The guides are experienced and well capable of giving the eco-tourist value for their experience in the garden. The information desk co-ordinator has also, over time developed relationships with various operators, but essentially her job is to know what is happening within the garden so that she can keep the information staff informed and up to date and also to keep management informed of what is happening on the visitor front, which obviously covers the tourism aspects. Visitor numbers have also increased steadily over the years with an average increase of 5,4% the last three years. 653 580 people visited the gardens in 2006 excluding the concerts.

Other activities which promote the garden as an eco-tourist destination include activities like the participation in flower shows internationally and locally. International audiences are targeted through the participation in the Chelsea Flower show, Tourism Indaba, Japanese Association of Travelling (JAT), Ratchatreuk (2006) Flower show in Thailand as well as local flower shows eg. Cape Town flower show, Trade and Consumer shows eg. Getaway show. Exhibitions of Botanical Art through partners such as Botanical Society of SA. (Botsoc) bring people to the garden thus exposing them to the indigenous plant diversity and promoting plant conservation.

How was the decision made to develop this eco-tourism role for Kirstenbosch NBG?

The hard and fast answer would be around sustainability. The location of most of our botanical gardens is really unsuitable and when first established it had more of a scientific focus than anything else. However, budgets are needed to grow and develop the scientific work and thus accessing markets became important to raise funds. Thus landscaping the garden, developing the garden features became important and gardens were then opened to visitors - as this was a market where funds could be raised. As the benefits of tourism started to develop, so did the opportunity to access other markets. Services were developed as the interaction with visitors became more frequent and soon, the popularity of the garden's beauty coupled with the services provided made Kirstenbosch a popular destination.

How was the eco-tourism importance recognised by the management and staff?

The garden estate manager, Mr. A. Morkel said when asked this question that he does not think there was any actual realisation of importance, but more the identification of value relative to the increased demand by markets. Opportunities became evident when visitors started communicating with managers of the gardens and the managers responded appropriately to deliver customized services that would have visitors come back for more. This is how any importance is realised - when value is recognized. The potential of the programmes, specifically the education programme to contribute to promote eco-tourism through their activities is phenomenal.

How were changes implemented?

Kirstenbosch has grown tremendously and rapidly. The success of the growth was in the facilitation of the change process by keeping the tourism services (those functions that focus on the experience of the visitors) and the operations independent but well co-ordinated. In this way, the horticultural and botanical integrity of the garden was never compromised and visitors were always kept happy. This had a very much top - down management approach with a history of strong leaders taking the reigns to take Kirstenbosch through each challenging period.

Conclusion

In order to promote and ensure that Kirstenbosch NBG embraces the ethics of sustainable tourism and become a true eco-tourist destination there are main elements and related activities which need to be focussed and improved upon as highlighted by Stevens, T. 2002 in his book *Sustainable tourism in National Parks and protected areas*. Elements such as resource management, marketing, education, transport, community involvement, local benefit and the tourism industry needs to be reflected on critically and strengthened in certain areas. Environmental Education is identified as a strength in the garden and a crucial vehicle to increase awareness about plant conservation and sustainability. The challenge is to reach as wide an audience to ensure sustainable practices to respect and protect our precious natural resources for the benefit of our future generations and in so doing promote eco-tourism that supports conservation and brings benefits to the local communities.

References:

1. Beeton, S. 1998, *Ecotourism – A practical guide for rural communities*, Landlinks Press, Collingwood, Australia.
2. Enviroteach – *Ecotourism – a resource for educators*, Volume 11, pp.4, March 2004.
3. Worsman, K and Gray, K, 2004, Changing perceptions through ecotours,. *Roots* Volume 1 Number 1,
4. Stabler, M. J. 1997, *Tourism and Sustainability – Principles and Practice*, CAB International, UK.
5. Stemm, C. J., Lassoie, J.P, Lee, D.R. and Deshler, D. J. 2003, ‘*How Eco is Ecotourism? A comparative case study of Ecotourism in Costa Rica*’, *Journal of Sustainable tourism*, Vol. 11, no. 2, pp.11.

Acknowledgments:

1. Thank you to SANBI for making this opportunity possible to attend the 3rd Global Botanic Gardens Congress, Wuhan, China, 16-20 April 2007.
2. Contributions and intellectual capital:
 - Augustine Morkel – Estate manager – Kirstenbosch NBG.
 - Collette Van Aswegen – Marketing manager – Table Mountain Cable Way Company and ex-SANBI staff.
 - Christien Malan - Information desk officer – Tour guiding co-ordinator.