

The greenheart

BY LUCILLE DAVIE

In the heart of the inner city is a green project that combines community involvement and education with environmentally friendly building principles – in a small corner of Joubert Park in Johannesburg.

The project is the GreenHouse People's Environmental Centre Project, initiated in 1993 by Earthlife Africa Johannesburg, in partnership with the City of Johannesburg. The Danish Cooperation for Environment & Development provides the majority of current funding. Vanessa Black, programme co-ordinator of the project, says: "This is unique. Few educational demonstration projects are as accessible – 800 000 commuters already pass through the general area on a daily basis – or which tackle a dense, inner city environment such as that of Joubert Park."

The broad aim of the GreenHouse Project (GHP) is to develop a clear, practical knowledge base for making greater Johannesburg a green city, using principles laid out in Agenda 21, the major sustainable development document produced at the Earth Summit in Rio in 1992.

Joubert Park was one of the first open spaces to be planned for Johannesburg's inner city. Proclaimed in 1906 but planned in 1887, it was named after a Boer military hero, Commandant-General PJ Joubert.

These days it is associated with the surrounding flatlands, which have become overcrowded, and are plagued by high unemployment and crime. The park provides the residents with a quiet and tranquil place, a green oasis in which to unwind. Around 20 000 people use the park each month.

The project has three main focus areas:

- To demonstrate development practices which will sustain people and the environment;
- To support organisations working to improve

the urban environment, particularly community-based organisations; and

- to disseminate information that will enable individuals to improve the quality of life in their community in a sustainable manner.

Plans are in place to showcase the regeneration of the Joubert Park area at the World Summit on Sustainable Development, taking place in Johannesburg in August and September.

The GreenHouse Project is a section 21 company. Besides Earthlife Africa and the City of Johannesburg, its other partner is the Sustainable Energy and Environment for Development Programme (SEED).

The GHP is creating an environment resource and development centre in the north-west corner of the Park, at an estimated cost of R26-million. An old potting shed is being converted into a new project office and resource centre, using environmentally friendly principles, in the first phase of development.

The first step was to draw up a 'green' specification for the building contractor that specifies management of the site and building process. This involves minimising waste, preventing air, water, soil and noise pollution, and using labour-intensive methods.

Some serious education is going on at the site at the same time. The Project is giving on-site environmental training to the construction team, in the form of the broader environmental and health impacts of the manufacture, transport, use and disposal of the building components.

"A number of environmental interventions are being made in the renovation process," says Black. The rubble, soils and tar created from the demolition of the existing structure are being kept aside to be used again. The same applies to second-hand items like windows and doors, which are being restored for re-use. Where second-hand materials are not available, small companies and local artists are being assigned to make the materials.

The building will use energy and water efficiently – a built-in solar cooker will be used, rainwater will be saved in two large tanks, and 'grey' water, or water from hand-washing, will be cleaned of oil and soaps by sand and reeds and used on the garden. Two composting toilets are being installed.

Innovative ideas are being adopted – a straw bale wall is to be used, and a dung and earth floor is being laid throughout the building.

Thulie Manana, owner of Abathandi Construction, the company involved in the construction and renovation, says of her involvement in the project: "I have learnt so much, like not mixing soil and rubble but keeping the soil aside to mix with the cement, or breaking down walls carefully to keep the bricks for re-use."

She says her builders were initially resistant to the new ideas, but now see the advantages of them and plan to take these ideas back to their rural homes.

Both Black and Manana agree that using new methods has slowed down the operation, as a reasonable amount of the work is experimental, like trying out different mixtures of plaster for the outside walls. Different oxides have been mixed to give colour and durability so that the walls don't have to be painted.

The remaining open space on the site will be planted with vegetables, herbs and useful trees using permaculture techniques. Twelve local community members are being trained in organic growing methods to



produce food and multi plants in the confined inner city spaces they occupy.

“The current renovation is part of a longer-term plan for the development of the site, which includes many more innovative energy-generation, building, landscaping and water management methods,” adds Black.

Once the building is complete, expected in time for the World Summit on Sustainable Development in August, the nearby 99-year-old glass Victorian conservatory is to be renovated, at a cost of between R2 to R5-million. At present the conservatory is very much in use, but the timber and glass of the structure needs restoration, in addition to the system of levers and pulleys which are used to adjust the ventilation of the hothouse.

In addition to the first phase of the building, and the permaculture garden, the GreenHouse team will have an exhibition displaying the Project details, step by step, for Summit delegates to view.

The Centre is at present involved in supporting various communities in the city.

It gives support to community organisations in Soweto in their open space projects; it workshops with tenants in several high-rise buildings on energy and environmental health issues in partnership with housing NGO Cope Affordable Housing; and it is working with another housing NGO, PlanAct, to assist the community of the Muldersdrift Housing Trust to plan and implement ecological housing development in the area, 40 kilometres west of Johannesburg.

The GHP worked closely with the City of Johannesburg in 2001 in reformulating the city’s 10-year housing strategy into an Environmentally Sustainable Housing Policy for the City.

“Much of this outreach work is conducted as part of the national Sustainable Energy and Environmental for Development Programme which partners non-governmental and local authority organisations working on affordable housing and is building the capacity of young black professionals in the energy sector,” adds Black.

The Project also has a regional information dissemination strategy which aims at assisting others to replicate environmentally sound methods in other areas. In addition, it enables the built environment sector to become more environmentally conscious. Suggested ideas are installing a grey-water system in which the water can be recycled, or to re-paint with environmentally-friendly paint.

Further research into environmentally-sound materials available in South Africa and DIY methods, is being undertaken. It is hoped that this information will help built environment decision-makers to make more environmentally-sound decisions, at the same time valuing traditional skills and supporting local green businesses.

The Project also works with other civil society organisations such as Lapeng Child and Family Resource Service to service the community needs of Joubert Park by means of the Joubert Park Coordinating Forum.

Several joint activities have been undertaken: the Ziyabuya



Children’s Art and Culture Festival, the Youth Empowerment Project, and more recently, the Creative Inner City Initiative which involves “creative-ly regenerating” the environments of Joubert Park, Hillbrow and Berea.

“Many of these partnerships in themselves pilot a new approach to sustainable urban regeneration where government, business and civil society organisations work across sectors to bring about positive change; and are internationally recognised in Agenda 21 as international best practice,” explains Black.

The Johannesburg Art Gallery, also in the Park, contributes to the efforts to help regenerate Joubert Park and the surrounding flatlands.

Johannesburg News Agency

The 99-year-old glass Victorian conservatory with its system of levers and pulleys will be renovated.