Cederberg Environs Spatial Planning in the Western Cape, South Africa

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Introduction

Since South Africa's democratic election in 1994, the country has been immersed in a profound change process, defined by the need to rebuild the foundations for international competitiveness while simultaneously providing real and immediate improvements in the living standards of all citizens. In the context of the country's economic and political transformation, tourism has been accepted by the Government as one of the key drivers. The Cederberg Environs Spatial Development Framework (CSDF), having been initiated in 1997, aims at developing a concept and a practical toolkit to assist protected and recreational areas in the Cederberg, Western Cape, providing valuable input into nature tourism. The CSDF is based on the West Coast Sub-Regional Structure Plan. This plan was drafted in 1988 to address the relationship between conservation and development along the West Coast. It puts forward a framework aimed at balancing environmental conservation with tourism development. The concept presented is intended to be a work-in-progress and fits into the integrated development planning fostered by the West Coast District Municipality for the period 2002-2006. It is envisaged that South Africa would prepare a national strategy for sustainable development in nature tourism and for monitoring and management of visitor flows in recreational and protected areas. Hence the involved local municipalities and the University of Stellenbosch invited international experts to co-operate with South Africa to provide encouraging opportunities and promote new strategies. Therefore the involved parties appointed experts to assist with the preparation of a spatial

development framework for the area in accordance with the Western Cape Planning and Development Act, 1989. Another important governmental statement is the White Paper on Environmental Management Policy for South Africa 1096/1997. This was the beginning of an interesting and fruitful scientific exchange bringing mutual benefit to all parties involved.

The idea behind this international co-operation was born at the UNESCO conference held in Seville, Spain during March 1995, where a new vision of planning and implementation of the MaB Programme (Man and the Biosphere Programme) was formulated for the 21st century. It was stated there that the global community needs working examples which include ideas for promoting both conservation and sustainable development in recreational and protected areas. In the Seville vision it is said of biosphere reserves that "rather than forming islands of an increasingly impoverished and chaotic world, they can become theatres for reconciling people and nature and they can bring knowledge of the past to the needs of the future ... ". UNESCO's MaB Programme and its Biosphere

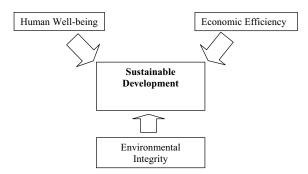


Figure 1: Three global imperatives to achieve sustainable development.

Reserve concept is a global programme of international scientific co-operation dealing with peopleenvironment interactions.

In 1995 the International Institute for Sustainable Development (IISD) pointed out that sustainable development occurs at the intersection of three global imperatives shown in the figure above (figure 1). If these imperatives are not balanced sustainable development cannot be achieved. In the case of the Cederberg Environs, this equation largely hinges on environmental integrity.

Study Area

The Cederberg Environs, a mountainous area of about 12700 km², are situated within the southwestern part of South Africa and cover areas within the Western Cape Province and the Northern Cape Province. The Cederberg Environs offer a unique diversity of cultural and natural resources that have huge potential for nature tourism. Therefore it is of national and international importance due to its exceptional conservation value (table 1). Currently 389 253 ha of the area studied has statutory conservation status. All my data presented refers to this area.

The Cederberg Environs and their proclaimed conservation areas have grown into a popular destination for tourists attracting more than 70000 visitors per annum. It is internationally known for its exceptional scenic beauty and unique flora. Many rare endemic fynbos species occur in the area studied with the Clanwilliam cedar (*Widdringtonia cedarbergensis*) probably being the most notable. Further more this area shows some important characteristics as follows:

- The Cederberg Environs comprise unique natural environmental attributes that justify their status as a national asset.
- The natural environment and its resources are susceptible to overexploitation or inappropriate use.
- The tourism sector depends on the environment.

| CONSERVATION STATUS | RESOURCE | AREA (HECTARES) |
|----------------------------|--------------------|-----------------|
| Wilderness Area | Cederberg | 71 000 |
| | Groot Winterhoek | 24 000 |
| National Parks | Tankwa Karoo | 43 000 |
| Provincial Nature Reserves | Cederberg | 2 800 |
| | Groot Winterhoek | 5 500 |
| | Matjiesrivier | 13 000 |
| | Oorlogskloof | 5 570 |
| Mountain Catchment Areas | Cederberg | 59 000 |
| | Koue Bokkeveld | 96 000 |
| Private Nature Reserves | Groenfontain | 2 400 |
| | Kagga Kamma | 6 000 |
| | Zuurfontain | 12 000 |
| Local Nature Reserves | Ramskop | 50 |
| | Akker-en-Dam | 1 800 |
| | Nieuwoudtville | 115 |
| Natural Heritage Sites | Bushman's Kloof | 7 000 |
| | Beaverlac | 2 000 |
| | Bo-Boschkloof | 1 000 |
| | Visgat | 1 000 |
| National Monuments | The Wuppertal Area | 36 000 |
| | TOTAL | 389 235 |

Table 1: Statutory Conservation Area profile.

• There is a substantial need for community development programmes.

Protected areas are of importance to all people of the world, and therefore international legal instruments give the opportunity to ensure that important sites are given appropriate recognition and support in the retention of their integrity. For example, biosphere reserves are such internationally designed protected areas, which are managed to demonstrate the value of conservation. This modern international concept of protected areas should be adopted for the Cederberg Environs.

The estimated total population of the area studied is 57000. The area is sparsely populated with 2,2 people/km2. It is described as primarily rural with 60% of the population living on farms or communal property – deriving more than 50% of their net profit from tourism.

Methods

The CSDF was drafted in accordance with the basic vision and mission set down in the provincial growth and development strategy. Additional fundamental guidance was provided by the discussion document "Towards a New Environmental Policy for South Africa" by the Department of Environmental Affairs and Tourism, 1996 stating that:

"In the process of transforming the South African society, the South African Government states as one of its priorities, that the government must ensure that all South African citizens, present and future, have the right to a decent quality of life through the sustainable use of resources. It also states that environmental considerations must be built into every decision and that current legislation should be revised with a view to establishing an effective system of environmental management in South Africa. The underlying principle of sustainable development is not only recognised as a priority by the South African Government but also internationally in Agenda 21". To balance the above aspirations with sustainable utilisation of the natural environment and its community supporting resources, this mission was applied as a guideline to the formulation of a specific vision and mission statement for the Cederberg Environs:

- Vision: creating a model of co-operative planning and management for human well-being and environmental stustainibility;
- Mission: facilitating the management and monitoring of the Cederberg Environs in order to benefit the needs of the present without compromising the ability of future generations to meet their needs.

Spatial development generally implies certain dimensions or levels of change of environment. A certain degree of change has to be accepted. It is, however, important for inevitable change to provide certain limits to protect the "sense of place" of the affected environment. This requires planners, managers and decision-makers to define natural conditions and to undertake actions to maintain or achieve these conditions. Changes to the environment could be eliminated if all use was prohibited. Such prohibitions are, however, neither possible nor feasible. The challenge is therefore not one of how to prevent human-induced change, but rather one of deciding how much change will be allowed to occur, where it will be allowed and which actions are needed to control it. Therefore co-ordinated public participation was a fundamental principle of the planning process.

Biosphere reserves provide the building blocks for bioregional planning or spatial development in a bioregion. They are the most widely implemented and recognised of the various bioregional planning programmes existing worldwide. The management objectives of these sites are to conserve the diversity and integrity of biotic communities for present and future use. At these sites emphasis is given to the integration of functions such as research, resource management, monitoring, training and education in order to help solve problems locally, nationally and internationally. Therefore it should bring together all interested groups in a partnership approach both at site and network levels. And last but not least it should improve the understanding of the tourist's relationship with the natural world through programmes of public awareness, information, formal and informal education.

| STRATEGIC PLANNING PROCESS | |
|----------------------------|--|
| Phase 1: | Step 1: Organization |
| | Step 2: Scanning of the Cederberg Environs |
| Phase 2: | Step 3: External Analysis |
| | Step 4: Internal Analysis |
| Phase 3: | Step 5: Formulation of Policy and Strategy |
| | Step 6: Final Draft |
| Phase 4: | Step 8: Implementation of Bioregional Planning Process |
| | Step 9: Recommendation for Management and Monitoring |

Figure 2: Three global imperatives to achieve sustainable development.

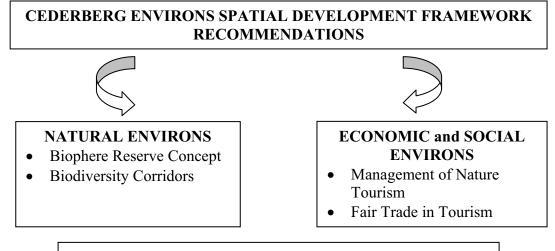
The biosphere reserve concept has been found an ideally suited mechanism to apply bioregional planning principles in an area where a variety of land uses and activities are found. Each biosphere reserve must be approved by Unesco's Man and the Biosphere International Co-ordinating Council before it is offically designated. (South Africa's first biosphere reserve, The Kogelberg Biosphere Reserve, was registered in 1998.) The biosphere reserve concept is based on a structure of interrelated zones, namely a core area, a buffer zone and transition zones. Appropriate conservation status and land use are assigned to each zone. The concept aims to ensure that all zones of a bioregion contribute appropriately to conservation and sustainable development. Furthermore human dimensions of a bioregion should be reflected in a more significant way.

The CSDF process was based on the following strategic planning process showing an iterative process (figure 2) that was based on active public participation at all levels of planning which started in 1997.

Currently the development is in phase 4. It is a process that concentrates on the selection of issues of strategic importance which have long term consequences. Emphasis is being put on practical results and it provides a mechanism for co-operation between all sectors, community groups and the general public.

Results

The project offers diverse and interesting outcomes. Some of which are being presented here having international relevance. Figure 3 gives an overview of the recommendations put forward by the CSDF.



LEGISLATIVE & INSITUTIONAL FRAMEWORK

Figure 3: CSDF: Recommendations for sustainable development in the Cederbergs.

The CSDF aims at achieving strategic goals to promote equitable access to and sustainable use of natural and cultural resources and to promote environmentally sustainable lifestyles in the area studied. Therefore it is important to integrate environmental management with all economic and spatial development activities in order to satisfy basic needs of the local people and the tourists visiting this area.

Nature tourism has been identified as one of the sectors with the largest potential for growth and development in the Western Cape. It is a major driver of post-apartheid socioeconomic growth. Nature tourism in the Cederberg is very seasonal with the main concentration of tourists visiting the region during the spring flower season. The most important problems or limiting factors of monitoring nature tourism being analysed in this study are the following:

- Shortage of appropriate tourist accommodation for nature tourism;
- Inadequate road maintenance limiting access to recreational and protected areas;
- Lack of co-operation between community tourism structures;
- Lack of guidelines for developing tourist facilities;
- Lack of human resource management skills;

Nature based tourism is one of the key economic activities that can be developed in the region. To be effective such a strategy needs to identify the potential nature based tourism opportunities that exist and correlate these areas of key importance with biodiversity conservation areas.

In 2001 the innovative project "Fair Trade in Tourism Initiative" has been established to improve tourism. The so called Fair Trade in Tourism South Africa (FTTSA) advocates equity in tourism by promoting sanctioned fair trade in tourism principles – fair share, democracy, respect, reliability and transparency and sustainibility by awarding a special label, the FTTSA trademark. FTTSA certification is based on a rigorous assessment process which tests the extent to which staff and other stakeholders benefit meaningfully from tourism activities. The trademark provides credibility while simultaneously opening up access to niche markets. This fair trade concept has newly been adopted for the Cederberg Environs. The main results FTTSA expects to achieve over the next few years include: increased awareness about fair trade in tourism in the area studied, increased demand for other FTT-SA projects in related areas.

Also the levels of social development of the people play an important role in the manner the natural environment and its resources are used. The intention would be to integrate such opportunities into a managed environment that is generating economic returns and creating jobs. It is one important goal of the study to develop human resources. The CSDF process provides guidelines to facilitate social development and economic empowerment in order to improve the well-being of the local people. Electronic medium was used to facilitate the public participation process and the collection of data. Relevant information has been put onto a geographical information system (GIS) so that information will be available for end users for different purpose (e.g. information, education, training). Further on such a system implies that information can be easily updated. Key issues within the area were photographed and video-taped. This material is used for diverse national training programmes: "Reach & Teach" is used in secondary schools newly having tourism as a subject in the syllabus; "Ubuntu-We Care" is a customer-training programme aimed at service providers. Capacity-building programmes for emerging entrepreneurs will be a specific focus of the training programmes in the next few years.

The final draft gives recommendations of scientists and practitioners from a series of workshops as well as analysis for the implementation of the biosphere concept in the Cederberg Environs as part of the Bioregional Planning Programme in the West Coast Region. The recommended zoning has been described and illustrated. A summery of the recommended land use in the respective zones is provided next. The basic principle is that the core areas have the highest conservation status and the lowest intensity land uses while transition zone 3, conversely, has the lowest conservation status and the highest intensity land uses. Conservation status decreases and land use intensity increases progressively moving away from the core area.

- The recommended core areas comprise the statutory conservation areas, namely statutory wilderness areas, national parks and provincial nature reserves. No development is allowed in these areas. It is important to know that "wilderness" represents the highest conservation status and serves as a benchmark for conservation management. The Cederberg Wilderness Area has been divided into three zones. A maximum of 50 people per day is permitted into each zone. The CSDF provides strategies for improving the core areas.
- The area comprises large tracts of proclaimed mountain catchment areas, sections of which are currently serving as unofficial buffer zones for the statutory wilderness areas and nature reserves. The purpose of buffer zones is to protect ecological and social integrity of the core area. They serve as natural corridors that are essential for the functioning of ecological systems. No large-scale development is to be allowed in the buffer zone. Any form of development must be planned by a multi-disciplinary forum to prevent environmental degradation. The CSDF provides spatial guidelines and strategies for consolidating and extending the buffer zones. The buffer zones are followed by three transition zones.
- The transition zone 1 surrounds the buffer zone and represents an area where the natural and cultural environment is of high value. Low impact land-uses are allowed (e.g. fynbos utilisation, ecotourism with small scale resort development). All development must be guided by a management plan and by regular environmental auditing in accordance with appropriate standards (refer to ISO 14001). In transition zone 2 activities that extract natural resources such as agriculture, forestry and mining are dominant activities. Small scale low impact urban development and tourism development (e.g. resorts) can be allowed. This zone has the additional role of protecting high potential agricultural areas from urban expansion. Environmental control must be exercised to regulate impacts of intensive development. In transition zone 3 large-scale urban and rural development can be accommodated. Theses zones were identi-

fied to control the negative impacts of major development (e.g. agricultural, industrial and urban development) by actively promoting cooperation between the key role players. Effective co-operation is a fundamental requirement there. Spatial guidelines and strategies for consolidating and extending transition zone 1-3 are given in the CSDF.

There are some other interesting results as shown in certain projects by various initiatives on different matters. Some of these initiatives of the CSDF are discussed as follows:

- In 2004 Cape Nature Conservation in conjunction with the Cape Action for People and the Environment (CAPE) have been launching the Greater Cederberg Biodiversity Corridor (GCBC). CAPE realised that efforts to conserve life-supporting processes should include natural corridors that stretch across habitats. These would help ensure the conservation of critical habitat types and support the concepts of holistic conservation. This initiative places emphasis on the natural and cultural resources of the Cederberg Environs. As a rule it has been established to ensure the survival of specific species and their habitats and to survey visitor flows. Though the primary aim is conservation, the corridor provides opportunities for the social and the economic "upliftment" of local communities through tourism development. Some interesting projects supported by GCBC to control visitor flows are:
- The establishment of donkey cart treks by the Wuppertal Conservancy
- Surveys of the plant and animal life of the Tankwa Karoo.
- Capacity control of visitors in the Cederberg Wilderness Area.

Conclusion

Pristine and unspoilt natural habitats supporting a diversity of plant and animal life in a landscape of scenic beauty must be considered a valuable resource for the present and even more for future generations. The conservation of the natural environment of the area studied is therefore paramount. Environmental health is the key to sustainable development in the Cederberg Environs. The primary threat to environmental health is fragmentation of the community-supporting ecosystems. Therefore the CDSF addresses issues such as biodiversity conservation, visitor management and human resources development with the aim of breaking the cycle of environmental degradation and promoting well-being of all the people of the Cederberg Environs. Rather than forming islands in a world increasingly affected by human impacts, biosphere reserves can become examples for reconciling people and nature. The CSDF gives an example how to overcome the problems of isolated hot-spots of protected areas. All the participants of the CDSF hope to stimulate further activities in this planning process for the mutual benefit of all parties affected.

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