

OFFICE MEMORANDUM

DATE: May 6, 1999

TO: Ken King, Assistant Deputy CEO, GEFSEC
GEF PROGRAM COORDINATION

FROM: Lars Vidaeus, GEF Executive Coordinator

EXTENSION: 34188

SUBJECT: *South Africa: Conservation planning for biodiversity in the Ticket Biome*
GEF Medium Size Project (MSP)

1. Please find attached the MSP Brief for the above-mentioned project. The project has been endorsed by the GEF national operational focal point (see letter also attached).
3. In accordance with operational guidance for approval of Medium-Sized Projects, we are submitting this project brief to the GEF Secretariat for action by the Chief Executive Officer (CEO). We are simultaneously circulating copies to UNDP/GEF, UNEP/GEF, STAP, and the CBD for comments within 15 working days, or by May 26, 1999.

3. We look forward to receiving the GEF Secretariat's guidance on the next processing steps for this Medium Size Project by June 9, 1999 (if not before). Thank you and best regards.

Copies:

R. Asenjo, UNDP (Fax: 212-906-6998)
A. Djoghlat, UNEP (Nairobi) (Fax: 254-2-520-825)
R. Khanna, UNEP (Washington) (Fax: 202-331-4225)
M. Gadgil, STAP (Fax: 91-80-334-1683)
M. Griffith, STAP Secretariat (Nairobi) (Fax: 254-2-623-140)
H. Zedan, CBD Secretariat (Fax: 1514-288-6588)

PROJECT SUMMARY

PROJECT IDENTIFIERS	
1. Project name: Conservation planning for biodiversity in the Thicket Biome, South Africa.	
2. GEF Implementing agency: World Bank	
3. Country in which the project is being implemented: South Africa	
4. Country eligibility: South Africa has ratified the CBD and meets all other requirements	
5. GEF focal area: Biodiversity	
6. Operational program: Arid and semi-arid ecosystems – OP 1	
7. Project linkage to national priorities, action plans and programs: The Thicket Biome is a national conservation priority. The project is closely linked to the strategic action plan being prepared for the conservation of the Cape Floristic Region, which inter-fingers with the Thicket Biome. It will provide a broader conservation planning context for other conservation initiatives in the region. It is also linked to the GEF-sponsored project on Conservation Farming, which identifies the Thicket Biome as providing one of the key study sites. It links with the national BioMap Project.	
8. GEF national operational focal point and date of country endorsement: Ministry of Environment Affairs & Tourism, Pretoria. Date: November 1998	
PROJECT OBJECTIVES AND ACTIVITIES	
9. Project rationale and objectives: A large number of public and private stakeholders are actively pursuing development initiatives which pose a major threat to biodiversity and ecosystem functioning. It is important that these initiatives be guided and regulated so as to minimize their negative impacts. Other stakeholders are committed to conserving key elements of the Thicket Biome and its biodiversity but require better information on priorities in order for them to effectively allocate resources and efforts. The proposed outcomes of this project will provide the improved information and planning capacity, and the increased awareness, to enable the guidance, regulatory and conservation actions to be effectively implemented. 1) To provide a detailed spatial analysis of the various thicket types. 2) To assess, together with key stakeholders, the extent of transformation. 3) To develop, together with key stakeholders, an understanding of the threats. 4) To locate and design, together with key	Indicators: 1) A strategic, effective and efficient approach to the protection of biodiversity in the Thicket Biome. 2) Availability of information for the establishment of a system of complementary protected areas. 3) Increased capacity and support for effective conservation planning in national, provincial and regional land management agencies. 4) Availability of information for the identification of areas suitable for natural resource-based ventures, including conservation farming initiatives. 5) Incorporation of the strategic conservation plan into the Structure Plans and the Environmental Management Frameworks. 6) Use of the strategic conservation plan by the Committee for Environmental Co-ordination. 7) Ongoing and substantial participation by key stakeholders in the project process.

<p>6) "Co-ownership" of the project with key authorities conservation and land-use planning</p> <p>5) Enhanced capacity building for Biome biodiversity.</p> <p>4) Increased support for the value of Thicket reserve utilisation activities. effective protected area system, and for off-guidance for location and design of an</p> <p>3) A strategic conservation plan, providing Thicket Biome.</p> <p>2) An understanding of the threats to the transformation of Thicket Biome vegetation.</p> <p>1) Information on the extent and</p> <p>Indicators:</p>	<p>11. Project activities to achieve outcomes (GEF costs in US\$):</p> <p>1) A GIS-based spatial analysis at the landscape level (\$276 050)</p> <p>2) Drafting of a strategic conservation plan (\$216 650)</p> <p>3) Information dissemination (\$95 000)</p> <p>4) Capacity building (\$151 250)</p>
<p>5) Development of capacity in conceptual and technical aspects of conservation planning for at least eight planning personnel at regional and provincial levels.</p> <p>4) Incorporation of the strategic conservation plan into the drafting of the Environmental Management Frameworks.</p> <p>3) Incorporation of the strategic conservation plan as an essential input into the workings of the Committee for Environmental Co-ordination.</p> <p>2) Implementation of the strategic conservation plan as a fixed component of Structure Plans developed throughout the Thicket Biome.</p> <p>1) An understanding of threats to biodiversity in the Thicket Biome, enabling a strategic approach to conservation actions.</p> <p>Indicators:</p>	<p>10. Project outcomes:</p> <p>1) The development and use of a strategic and flexible conservation plan for the protection of globally important biodiversity of Thicket Biome ecosystems.</p> <p>2) Enhanced capacity in GIS-based conservation planning among planners in national, provincial and regional land management authorities.</p>
<p>6) To provide information for incorporation into regional Structure Plans and national Environmental Management Frameworks</p> <p>7) To provide planning guidelines for the national Committee for Environmental Co-ordination.</p> <p>8) To provide a capacity building service in GIS-based conservation planning, especially in the institutionally weakened Eastern Cape.</p> <p>9) To guide investors from the public and private sectors in the selection of land for Thicket Biome-based commercial ventures.</p> <p>10) To create an awareness of the value and plight of the Thicket Biome.</p>	<p>stakeholders, potential conservation areas to achieve explicit representation goals.</p> <p>5) To suggest, together with key stakeholders, explicit conservation actions, in priority order.</p> <p>6) To provide information for incorporation into regional Structure Plans and national Environmental Management Frameworks</p> <p>7) To provide planning guidelines for the national Committee for Environmental Co-ordination.</p> <p>8) To provide a capacity building service in GIS-based conservation planning, especially in the institutionally weakened Eastern Cape.</p> <p>9) To guide investors from the public and private sectors in the selection of land for Thicket Biome-based commercial ventures.</p> <p>10) To create an awareness of the value and plight of the Thicket Biome.</p>

stakeholders.													
<p>12. Estimated budget (in US\$):</p> <table border="0"> <tr> <td>PDF</td> <td>\$ 2 000</td> <td>TERU and IPC</td> </tr> <tr> <td>Co-financing</td> <td>\$123 020</td> <td>DACST, FRD, UPE, SANP, CNC, ECNC, WDC, ADC</td> </tr> <tr> <td>GEF</td> <td>\$738 950</td> <td></td> </tr> <tr> <td>TOTAL</td> <td>\$863 970</td> <td></td> </tr> </table>		PDF	\$ 2 000	TERU and IPC	Co-financing	\$123 020	DACST, FRD, UPE, SANP, CNC, ECNC, WDC, ADC	GEF	\$738 950		TOTAL	\$863 970	
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INFORMATION ON INSTITUTION SUBMITTING PROJECT BRIEF													
<p>13. Information on project proposer: <i>Terrestrial Ecology Research Unit, University of Port Elizabeth, South Africa, in association with the Institute for Plant Conservation, University of Cape Town, South Africa.</i></p>													
<p>14. Information on proposed executing agency: <i>Same as above</i></p>													
<p>15. Date of submission of initial project concept: <i>1997</i></p>													
INFORMATION TO BE COMPLETED BY IMPLEMENTING AGENCY													
<p>16. Project identification number:</p>													
<p>17. Implementing Agency contact person: <i>Christophe Crepin – Regional coordinator –The World Bank – Tel : 202 473 9727; Fax : 202 473 8185</i></p>													
<p>18. Project linkage to Implementing Agency programs(s): <i>South Africa cluster of medium-sized and other GEF projects.</i></p>													

PROJECT DESCRIPTION

PROJECT TITLE

Conservation planning for biodiversity in the Thicket Biome, South Africa.

PROJECT RATIONALE

The Eastern Cape Province of South Africa forms a major climatic, topographical, geological and pedological transition zone and five of southern Africa's six phytoecogeographical regions converge within its borders, namely the Kalahari-Highveld, Karoo-Namib, Tongaland-Pondoland, Afriomontane and Cape Regions. The remarkable habitat diversity of this province is further illustrated by the fact that it is the only one of the nine provinces in South Africa which contains representative areas of all seven of the country's recognised biomes, these being the Fynbos, Succulent Karoo, Grassland, Savanna, Forest and Thicket Biomes. The Eastern Cape also contains more vegetation types than any other province. This proposal focuses specifically on the Thicket Biome.

The Thicket Biome is characterised by a sparse to dense spiny evergreen shrub vegetation, with a tree component of varying proportions. It is a major centre of diversity and endemism for succulents of karroid affinity, especially in the Mesembryanthemaceae, Euphorbiaceae and Crassulaceae, as well as a centre for certain bulb groups. The Thicket Biome comprises five vegetation types, four of which occur largely or entirely in the Eastern Cape (% in brackets): (a) Dune Thicket (18%); (b) Mesic Succulent Thicket (100%); (c) Spekboom Succulent Thicket (48%); (d) Valley Thicket (66%); (e) Xeric Succulent Thicket (100%). On an overall basis, the Thicket Biome is grossly under-represented in formal conservation areas, with less than 5% occurring within protected areas. The unique Noorsveld (a subdivision of Xeric Succulent Thicket) is under serious threat, especially from illegal succulent collectors, and is not represented in any of the declared conservation areas. Because the Thicket Biome contains a mixture of elements of all seven biomes, it will provide genetic material to buffer the effects of global change.

This proposal focuses on the core area of the Thicket Biome, which occurs between the Groot-Gouritz river system in the west (west of Oudshoorn), the Kei River in the east, and the Great Escarpment in the hinterland in the vicinity of Graaff-Reinet in the west to Queenstown in the east. This area of around 200 000 sq. km has been selected because it includes the Albany Centre of plant endemism and overlaps in the west with the Succulent Karoo Centre. Both are centres of diversity and endemism for succulents and bulbs and are floristically the most important parts of the Thicket Biome. The Albany Centre is a recognised WWF-IUCN global centre of plant biodiversity, and nearly all of its plant endemics are components of the Thicket Biome. The Thicket Biome in this region is thought to contain the most species-rich formations of woody plants in South Africa.

Extensive areas of the Thicket Biome are being destroyed, on a daily basis, through clearing for crop production and pasture creation, and through over-utilisation by domestic herbivores, mainly goats, in both communal and commercially farmed areas. This has led to large areas becoming totally transformed or degraded. In many cases the degradation is so severe that desertification results. By 1981 9% of the Thicket vegetation had been permanently transformed and was of no conservation value, and at least 50% was seriously overgrazed. These figures have probably increased significantly over the intervening 18 years (to 1999). Rapidly escalating pressures include clearing of Thicket for agriculture, encroachment of coastal Thicket by resort development and invasion by alien plants. A surge in applications from coastal developers, corresponding with a significant reduction in the provincial government's environmental management capacity, poses a serious threat to the remaining areas of coastal dune Thicket. Industrial expansion, with associated urban development, is an increasing threat to

thicket habitats in the Algoa Basin in the vicinity of Port Elizabeth. Research has indicated that extensive degradation of most of the vegetation types in the Thicket Biome is practically irreversible.

The vegetation of the Thicket Biome is particularly vulnerable to desertification, this being caused mainly by the replacement of indigenous herbivores by domestic ones. Given that the herbivores, and especially the megaherbivores, are considered to play an important role in shaping and maintaining floristic diversity in the Thicket Biome, the removal of many of the indigenous herbivores has had a negative impact on the dynamics of this biome. Farming with domestic herbivores, which should be viewed as an alternative to farming with domestic herbivores, has been hypothesised to be ecologically and economically sustainable.

The Thicket Biome, which plays a key role in rural development, is therefore a regional and national conservation priority. This biome is also of global importance and therefore the global significance of this proposal will be its conservation and, as such, it will contribute to integrating protection of the global environment into regional and national activities.

This project would link to national priorities, action plans and programmes in a number of ways:

- The Thicket Biome is recognised as a national priority for conservation in the White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity (1997).
- The overall aim of the project is consistent with the goals of South Africa's draft Environmental Management Bill (1998).
- The objectives of the project are entirely consistent with the letter and the spirit of the White Paper (see above) and also with the United Nations Convention to Combat Desertification, to which South Africa is a signatory.
- The project will be strongly linked to the Strategic Action Plan being prepared for the conservation of the Cape Floristic Region, which interdigitates with the Thicket Biome in the proposed study area.
- The project will provide a broader conservation planning context for other conservation projects in the region, e.g. Greater Baviaanskloof Nature Reserve, Great Fish River Reserve Complex.
- The project will be a key source of data and information on Conservation Farming, which means that it will link very closely with, and complement, the proposed GEF-sponsored MSP on this topic.
- The project will provide a linkage with the BioMap component of the Biodiversity Monitoring and Assessment Program, supported by the Innovation Fund of the national Department of Arts, Culture, Science and Technology (DACST).

Although the project will focus on a specific, but significant, part of the Thicket Biome, some of the key findings will have relevance for the remaining areas of this biome that occur elsewhere in South Africa.

The project will also address land degradation and desertification issues, both of which interface with these two focal areas.

CURRENT SITUATION

A large number of public and private stakeholders are actively pursuing development initiatives which pose a major threat to biodiversity and ecosystem functioning. It is important that these initiatives be guided and regulated so as to minimise their negative impacts. Other stakeholders are committed to conserving key elements of the Thicket Biome and its biodiversity but require better information on priorities in order for them to effectively allocate resources and efforts. The proposed outcomes of this project will provide the improved information and planning capacity, and the increased awareness, to enable the guidance, regulatory and conservation

- Indicators:*
1. A strategic, effective and efficient approach to the protection of biodiversity in the Thicket Biome.
 2. Availability of information for the establishment of a system of complementary protected areas.
 3. Increased capacity for effective conservation planning in national, provincial and regional land management agencies.
 4. Availability of information for the identification of areas suitable for natural resource-based ventures, including conservation farming initiatives.
 5. Incorporation of the strategic conservation plan into the Structure Plans and Environmental Management Frameworks.
 6. Use of the strategic conservation plan as a guideline by the Committee for Environmental Co-ordination.
 7. Ongoing and substantial participation by key stakeholders in the project process.
 8. Increased support for the conservation of thicket biodiversity amongst planners and land management agencies.

- PROJECT OBJECTIVES**
- For the Thicket Biome in the demarcated study area the project will aim to:
- provide a spatial analysis of the various thicket types (e.g. xeric, mesic),
 - provide, together with key stakeholders, an assessment of the extent, level and types of transformation of the key habitats,
 - develop, together with key stakeholders, an understanding of the threats, within both spatial and temporal frameworks,
 - locate and design, together with key stakeholders, potential conservation areas to achieve explicit representation goals, as well as to support key ecological and evolutionary processes. In particular, the reserve system should be capable of absorbing the possible impacts of global change,
 - suggest, together with key stakeholders, explicit conservation actions, in priority order, based on the biodiversity value (irreplaceability) of a site and its vulnerability to threatening processes,
 - provide information for incorporation into regional Structure Plans and provincial Environmental Management Frameworks (EMFs),
 - provide planning guidelines for the national Committee for Environmental Co-ordination,
 - to provide a capacity-building service in GIS-based conservation planning for provincial and regional planning and land management agencies, especially in the institutionally weakened Eastern Cape,
 - use this information to guide investors from the public and private sectors in the selection of land for the establishment of natural resource-based commercial ventures,
 - to provide information for creating an awareness of the value and plight of the Thicket Biome.

actions to be effectively implemented.

There are some positive developments in the Thicket Biome. The initiative to expand the present Addo Elephant National Park (AENP) into a Greater Addo National Park (GANP) has recently (February 1999) received unanimous support from the community of stakeholders. South African National Parks (SANP) has been tasked with the implementation of this proposal and the preparation of a project development application to the GEF through the World Bank. Currently land is being purchased, on an *ad hoc* basis, to incorporate additional areas of thickets vegetation into the GANP, using SANP funds (when available) and funds made available by the International Fund for Animal Welfare (IFAW). In addition, the AENP is being expanded in the north-west in the succulent karoo/thicket ecotone by funds made available by the Leslie Hill Succulent Karoo Trust (through WWF-SA). It must be noted that SANP planning and management only focuses on land that falls within the proclaimed national parks

The Eastern Cape Provincial Government (through Eastern Cape Nature Conservation) has launched a project to expand the current Baviaanskloof Nature Reserve to include extensive areas of xeric succulent thicket. However, given the lack of a comprehensive conservation plan, the extent to which this *ad hoc* initiative will improve the conservation status of the Thicket Biome is unknown. The project will provide the information required to plan the expansion in such a way as to maximise biodiversity gains.

WWF-SA is also active in making land available for conservation purposes in the Thicket Biome in the Eastern Cape. For example, the 16 500 ha Sam Knott Nature Reserve in the Xeric Succulent Thicket was donated to WWF-SA, which in turn leases it for a nominal fee to the provincial conservation agency which manages it as an integral part of the Great Fish River Reserve Complex. Both WWF-SA and the Leslie Hill Succulent Trust consider the Thicket Biome ecosystem to be a high priority for conservation attention and are actively engaged in the purchase of land for this purpose in the biome. The project will provide the necessary information to enable these purchases to focus on priority sites. *The accompanying map indicates the area of Thicket Biome covered by this project, as well as some of the major conservation areas mentioned in the proposal.*

In addition to these initiatives, an increasing number of private investors and landowners are pursuing game farming/conservation/ecotourism options in the Thicket Biome. It is essential that good information, assistance and encouragement is provided to enable these initiatives to be focused in appropriate areas, so as to achieve the greatest biodiversity benefits whilst rendering good economic returns.

There is an initiative to compile a Provincial Environmental Action Plan (PEAP) for the Eastern Cape. It is envisaged that this will be "twinning" with the PEAP that is currently being prepared for the Western Cape, as part of the GEF-sponsored initiative to develop the Cape Action Plan for the Environment (CAPE). The activities conducted for the proposed Thicket Biome project will feed directly into an Eastern Cape PEAP.

SANP is currently developing a Corporate Biodiversity Strategy (CBS), which will be a tool to enable this agency to re-evaluate the existence, size and shape of existing protected areas (national parks) and to support arguments to create new ones. In addition, it would provide a framework to guide financial decisions related to land purchases by SANP and donor organisations. The SANP's Conservation Development Directorate (Research, Development & Planning) has indicated that the CBS will rely heavily on detailed and specialised planning information being available for areas outside extant national parks. The data and information generated by the proposed Thicket Biome project will therefore make a significant contribution to the CBS.

There are, however, concerns with regard to the effective conservation of biodiversity in the Thicket Biome. Other than in the CAPS study, which covers a small part of the region, there are no detailed strategic biodiversity conservation planning initiatives taking place in the Eastern Cape. This is a serious situation, given that this province has the second lowest Human Development Index of South Africa's nine provinces and that, other than the appropriate and sustainable utilisation of its natural resources in the rural areas, there is very little potential for socio-economic development. A large part of the economically depressed Eastern Cape is characterised by Thicket Biome vegetation and a significant proportion of the population of the rural areas is dependent on it for its livelihood. Large-scale urbanisation is taking place, for example in the vicinity of the city of Port Elizabeth as a result of rural land degradation, and of expectations of job opportunities. These expectations are associated with a proposed industrial development; hundreds of rural people are moving into the precinct monthly and hundreds of hectares of pristine thicket vegetation are being destroyed to accommodate the rapid growth of informal settlements.

The lack of strategic biodiversity planning initiatives in the Eastern Cape derives from the fact that the provincial environmental agency does not have a conservation planning section. Similarly, Cape Nature Conservation, in the Western Cape, does not have a specific conservation planning section. In addition, SANP carries out planning functions mainly within the borders of proclaimed national parks. Consequently, there are no conservation planning initiatives outside the extant protected areas in the Thicket Biome. As a direct result of this, land purchases for conservation purposes do not follow a strategic plan. Similarly, purchase or rezoning of land for industrial and urban development (e.g. townships) is not taking place with the conservation of Thicket Biome vegetation in mind.

Thus, where land is being acquired or used for conservation-related or other purposes, this is being done largely in an *ad hoc* manner. For effective conservation of Thicket Biome biodiversity, and for the optimum use of scarce funds, it has now become essential that future land purchases, including extensions to current national parks and provincial nature reserves, be carried out according to a well researched plan. The compilation of such a plan is now urgent since there is potentially US\$4-5 million available for the purchase of land to establish an effective protected area network in the Thicket Biome.

In terms of the land outside protected areas, there are three reasons why the strategic conservation plan is critically important at this time. First, the cornerstones of land-use planning, especially as far as zoning and rezoning is concerned, in the Eastern and Western Cape provinces are the **Structure Plans (SPs)**. An SP is a statutory document which is compiled and implemented by the District Councils and controlled by the Land Use Planning Ordinance (LUPO) at provincial government level. The LUPO ensures that SPs are coordinated and properly reviewed, in order that the requirements of the SP process are met. SPs effectively determine what land-use type is permitted in which area; as such they have major implications for the conservation of biodiversity in the Thicket Biome (and elsewhere). Recent legislation dictates that SPs must be revised every five years (previously every 10 years). It is therefore crucial that the information from this project is available as soon as possible for incorporation into upcoming SP revisions.

Second, the national Department of Environmental Affairs & Tourism is engaged in a process to draft Environmental Management Frameworks (EMFs) for each of South Africa's nine provinces. In essence, an EMF is a spatial planning exercise aimed at steering inappropriate developments away from environmentally sensitive areas. To date EMFs for two provinces have been completed, and that for a third province is currently under way. Next in line is the Eastern Cape Province and it is therefore important that the strategic conservation plan is

available for incorporation into this EMF.

Third, the South African Government, through the Department of Trade & Industries, has recently (1997) initiated two Spatial Development Initiatives (SDIs) in the Eastern Cape, namely the Wild Coast SDI and the Fish River SDI. These two SDIs, which are underpinned by development initiatives in the fields of industry, agriculture, forestry and tourism, will have far-reaching consequences for the protection of biodiversity in the Thicket Biome. Both SDIs will have to accord with regional Structure Plans and with the guidelines provided by the Committee for Environmental Co-ordination (see later), including the EMF process, and therefore it is vitally important that the information from this project is available prior to full implementation of the SDIs.

Further, in terms of the importance of incorporating the information from this project into the SDIs, the existence of an Integrated Development Planning (IDP) process must be mentioned. The IDP is managed by the national Department of Constitutional Affairs and aims to integrate all planning actions. The SDIs are the regional spatial component of the IDP and therefore actions identified in the IDP process must be compatible with the SDIs. In addition, the national Development Facilitation Act is implemented through the provincial administrations via the Land Development Objectives (LDO) process. The Transitional Rural Councils are required to develop LDOs within the District Council areas and these LDOs must accord with the SDIs. Hence, the value of incorporating the Thicket Biome strategic conservation plan within the SDI process is obvious.

At the national level, South Africa's Environmental Management Bill makes provision for a Committee for Environmental Co-ordination (CEC). The CEC promotes the integration and co-ordination of environmental functions by relevant government departments, recommends actions to co-ordinate the application of Integrated Environmental Management, and advises the Minister on guidelines for the preparation of environmental implementation and management plans. An example of the working of the CEC is the case of the national Department of Water Affairs & Forestry, which is currently drafting Strategic Environmental Assessments for South Africa; these SEAs are being compiled with input from the CEC.

Thus, it is clear from the above that the outcomes of this project will be integrated into sectoral, institutional and legal instruments. This will happen in such a way as to enable the strategic protection of Thicket Biome biodiversity, both on and off protected areas.

Finally, there will be strong linkages between this project and the GEF-sponsored Cape Action Plan for the Environment (CAPE) project; the latter will inform the Thicket Biome project regarding the development of incentives for following sound land-use practices. The CAPE project has a distinct component that focuses on institutional and socio-economic issues; this component will operate in both the Eastern and Western Cape provinces.

EXPECTED PROJECT OUTCOMES

1. The development and use of a strategic and flexible conservation plan for the protection of biodiversity of Thicket Biome ecosystems, including:

- an objective guideline for the design of an effective and efficient protected area system, the identification of areas where land-use and management practices that provide sustainable economic benefits, while maintaining biodiversity and ecosystem functioning, could be conducted outside protected areas,
- the creation of an awareness of the value of intact systems, especially with regard to resilience in the face of global change,
- the increasing of support for the value of the resource,
- A framework for extending conservation planning in the Thicket Biome east of the Kei

river (in the former Transkei homeland).

2. Enhanced capacity in GIS-based conservation planning among planners in national, provincial and regional planning and land management authorities.

The main underlying assumption is that sufficient data and information can be obtained within a 36 month period. This assumption can be largely met by utilising extant data and modelling. No additional fundamental research is necessary for this project.

Indicators:

1. An understanding of threats to biodiversity in the Thicket Biome, enabling a strategic approach to conservation actions.
2. Implementation of the strategic conservation plan, as a fixed component of Structure Plans developed throughout the Thicket Biome.
3. Incorporation of the strategic conservation plan into the drafting of Environmental Management Frameworks by DEA&T.
4. Incorporation of the strategic conservation plan as an essential input into the workings of the national Committee for Environmental Co-ordination.
5. Development of capacity in conceptual and technical aspects of conservation planning in at least eight planners at regional and provincial levels.

PROJECT ACTIVITIES AND FINANCIAL INPUTS

In order to achieve the project objectives a four-pronged approach is required:

1. **Strategic conservation planning** is urgently required for the Thicket Biome; at present no such planning is being undertaken, especially in the Eastern Cape.
2. **Information** dissemination and awareness regarding conservation issues in the Thicket Biome to the full array of stakeholders.
3. **Capacity building** to boost the conservation planning capabilities of the national, provincial and regional conservation authorities (urban and rural).
4. Meaningful and substantial **involvement by key stakeholders** as active participants in the project process.

This will involve the following four major activities:

1. A **GIS-based spatial analysis**, at the landscape level, incorporating the following themes, based on extant data and ground-truthing:
 - (a) biodiversity entities (e.g. major habitats, selected species groups, etc.),
 - (b) transformation status (e.g. total transformation to minimal transformation),
 - (c) current and future land-use threats (e.g. industrial and urban development zones),
 - (d) current forms of land-use (including protected areas),
 - (e) infrastructure.

The financial input required from GEF to carry out this activity is US\$276 050.

2. Compilation of a **strategic conservation plan**, focusing on the following aspects:

- (a) an evaluation of the present protected area system,
- (b) identification of minimal and effective areas for a representative and persistent protected area system,
- (c) identification of areas suitable for off-reserve sustainable utilization of thicket ecosystems (e.g. conservation farming),
- (d) identification of "hotspot" fragments to include in an environmental planning grid (e.g. Strategic Environmental Impact Assessments, Environmental Assessments).

The strategic conservation plan, in all its stages, will be compiled with key stakeholders as active participants in the process.

The financial input required from GEF to carry out this activity is US\$216 650.

3. Information dissemination through:

(a) preparation for, and running of, joint workshops with conservation and planning stakeholders, and private landowners,

(b) preparation and wide dispersal of information materials (e.g. leaflets, popular and scientific articles, media items), according to the requirements of key stakeholders.

(c) making the results of the conservation planning exercise freely available in user-friendly electronic format.

The financial input required from GEF to carry out this activity is US\$95 000.

4. Capacity building for conservation and planning authorities by involving them as active participants in joint workshops dealing with GIS-based conservation planning techniques and using data and information from the project. This activity will involve the project team and land-use planners or managers employed by the national Department of Environmental Affairs & Tourism, the provincial Department of Land Affairs, Eastern Cape Nature Conservation, Cape Nature Conservation, South African National Parks and District Councils.

The financial input required from GEF to carry out this activity is US\$151 250.

SUSTAINABILITY ANALYSIS AND RISK ASSESSMENT

Sustainability of the project will be ensured through five key elements:

1. The proposed project has **strong local, regional and national support**, in particular from the national Departments of Environmental Affairs & Tourism and Trade & Industries, the provincial Departments of Economic Affairs, Environment & Tourism and Land Affairs, South African National Parks (SANP), the District Councils, the National Botanical Institute and WWF-SA.

2. Several **positive conservation interventions** are taking place in the Thicket Biome: (a) SANP is extending the Addo Elephant National Park, according to the GANP concept, (b) the Leslie Hill Succulent Karoo Trust is donating funds for land purchase for conservation purposes in the Eastern Cape, (c) WWF-SA is actively engaged in the purchase of land for conservation in the Thicket Biome, (d) Eastern Cape Nature Conservation has launched a project to expand the Baviaansklouf Nature Reserve, and (e) a growing number of local and overseas investors and landowners are seeking advice on where to purchase land for wildlife-based ventures.

3. The Eastern Cape's provincial conservation authority, which will be largely responsible for implementing the conservation plan, is in the process of **restructuring to enhance its capacity**. For example, in May 1998 this agency formed a Provincial Environmental Advisory Council (PEAC), comprising representatives from environment, labour, business, industry, local government, NGOs and universities. It is envisaged that the PEAC, together with the planned Provincial Environmental Action Plan (PEAP), will boost the sustainability of the project, through the implementation of the project findings, as they pertain to capacity, policy, incentives, institutional arrangements and community participation.

4. A **strong project team** will be put in place. The Terrestrial Ecology Research Unit (TERU), University of Port Elizabeth, has made a major contribution to the planning of the Greater Addo National Park. Both TERU and the Institute for Plant Conservation (IPC), University of Cape Town, have conducted fundamental and applied research in the Addo Elephant National Park, and elsewhere in the Thicket Biome. The IPC has recognised capacity in the field of conservation planning. Furthermore, this partnership (TERU and IPC) has been boosted by the addition of an operational node associated with the BioMap Project, supported by the Innovation Fund of the DACST. This will contribute human and technology resources in GIS to the project. A combination of the respective skills of TERU and IPC is best placed to implement the proposed project.
5. **Ongoing and meaningful stakeholder involvement.** Key stakeholders will be substantially involved throughout the project process. They will work closely with the project team, thereby ensuring a two-way transfer of data, information, insights and skills.

The risks of failure of the project are considered to be low for the following reasons:

- (a) Key stakeholders have strongly endorsed the project by providing letters of support, and commitments of co-financing.
- (b) Through working closely on the project, key stakeholders will have developed a sense of “co-ownership” of the project.
- (c) The project team have proven abilities in project management, conservation planning, capacity building and information dissemination.
- (d) The key planning and conservation agencies are either institutionally strong and/or committed to improving their capacity.

STAKEHOLDER INVOLVEMENT AND SOCIAL ASSESSMENT

The expanded project concept was provided to a range of appropriate roleplayers and stakeholders, and comments and suggestions were requested, as a contribution to assisting in the design of the project. The following organisations and institutes were approached:

- Provincial government ministries
- Departments of Agriculture & Land Affairs and Economic Affairs, Environment & Tourism (both Eastern Cape) and Department of Environmental & Cultural Affairs (Western Cape).
- National government ministries and parastatals
- Department of Environmental Affairs and Tourism; Agricultural Research Council; South African National Parks; National Botanical Institute, Department of Trade and Industries (via the Fish River Spatial Development Initiative [SDII])
- Local government
- Western, Amatola and Stormberg District Councils (Planning and Nature Conservation Sections)
- NGOs and others
- Wildlife & Environment Society (Eastern Cape Branch); Endangered Wildlife Trust; WWF-South Africa; Eastern Cape Game Management Association; Eastern Province Agricultural Union; Botanical Society of South Africa; International Fund for Animal Welfare (IFAW)
- Academic institutions
- Agricultural & Rural Development Research Institute (University of Fort Hare)
- Department of Pasture & Livestock Science (University of Fort Hare)

A key to the success of the project will be ongoing and meaningful participation in the project process by key stakeholders, especially representatives from national, provincial and regional conservation and planning agencies. It is envisaged that through regular informal contact, and especially through more formal contact, e.g. workshops, the project team and the key stakeholders will **jointly** identify and capture data relating to the extent of transformation of the Thicket Biome, develop insights and information regarding threats to the biome, construct

planning scenarios, and discuss the form and relevance of the products.

Thus, the development of enhanced capacity in GIS-based conservation planning, through in-service training, will take the form of a "hands-on" process, whereby key stakeholders will learn through active participation in the project process.

The effectiveness of the two-way interaction between the project team and the key stakeholders will be evaluated by the independent project reviewer (see later).

INCREMENTAL COST MATRIX

	BASELINE	ADDITIONAL	INCREMENT
Global environmental benefits	<p>(1) Protected area system being expanded in an <i>ad hoc</i> manner, resulting in an ineffective and inefficient system in the Thicket Biome, leading to loss of globally significantly biodiversity. (2) Limited awareness of the value and plight of the Thicket Biome. (3) Lack of capacity in strategic conservation planning in the Thicket Biome</p>	<p>(1) A conservation plan for the Thicket Biome. (2) Improved awareness of the benefits of the sustainable use of Thicket Biome products. (3) Improved capacity in conservation planning in the Thicket Biome</p>	<p>(1) Protected area system being expanded in a strategic manner, resulting in an efficient system in the Thicket Biome, leading to conservation of globally significant biodiversity. (2) Increased buy-in to conservation-related land-use within the Thicket Biome (3) Conservation planning carried out by trained planners in land management agencies</p>
Costs	US\$ 48300	US\$ 328350	US\$ 276050
1. Spatial analysis.			
2. Strategic conservation plan.	10000	229650	216650
3. Information dissemination	0	98000	95000
4. Capacity building	0	205970	151250
TOTALS	58300	861970	738950

The baseline for this project is low, comprising largely contributions from the BioMap Project, supported by the Innovation Fund from DACST (\$28 300) and research results from the Foundation for Research Development (FRD) and UPE grants (\$30 000). Both the DACST and FRD/UPE contributions are of the "in kind" nature. However, the additional funds requested from GEF will result in a substantial increment, leading to effective biodiversity conservation interventions, with the capacity to implement these interventions greatly enhanced through the capacity building component. The relatively small contribution by local land management

agencies is a highly essential and effective domestic component of the additional costs.

BUDGET

The budget (in US\$) includes the PDF, staffing, consultants (including a scientific and progress reviewer), equipment, running expenses and administrative fee. A detailed budget can be provided on request.

PROJECT BUDGET (EXCLUDING CO-FINANCING)				
	YEAR 1	YEAR 2	YEAR 3	PROJECT
TA				
Personnel (+10% per yr)	5000	5500	6050	16550
Subcontracts	13350	11040	9340	33730
Workshops	800	1300	2000	4100
Sub-total	19150	17840	17390	54380
GOODS				
Vehicle and accessories	3800			3800
Equipment	2540			2540
Books	120	800	500	2500
Sub-total	6460	800	500	6590
OPERATING COSTS				
Airfare & accommodation	10000	11000	11400	32400
Vehicle running costs	7500	8500	10400	26400
Office costs	5500	6200	7000	18700
Miscellaneous	10500	4600	3650	18750
Accounting and auditing	11000	11000	11000	11000
Sub-total	44500	41300	43450	129250
TOTAL	300600	220500	217850	738950

Domestic funding contributions (see Table below)

Approximately US\$2000 has been spent by domestic agencies on project development. SANP has initiated and funded some conservation planning on the periphery of the present Addo Elephant National Park (AENP). TERU and the IPC have conducted conservation-related research in the study area, and particularly in the AENP. The University of Port Elizabeth is providing office, library and laboratory facilities, as well as other departmental facilities, for the project. The Innovation Fund of DACST is providing personnel and equipment, estimated to be worth US\$28 300, for approximately four months per year, over three years, for capacity and technology in spatial analysis. The FRD and UPE are providing funds (in the region of US\$30 000) for research which directly contributes to the compilation of data coverages for this project; these are in kind contributions. The provincial and regional land management agencies have committed personnel to participate in the project by identifying and capturing data, by providing insights and information on threats to the Thicket Biome, and by co-developing planning scenarios. These are in the form of in kind contributions.

DOMESTIC FUNDING		
ITEM	CONTRIBUTING AGENCY	AMOUNT (US\$)
Compilation of GIS data dictionaries	BioMap Project, supported by the Innovation Fund of the Department of Arts, Culture, Science &	28300

PROJECT ACTIVITY						MONTHS		
Completion of project activities	6	12	18	24	30	36		

The project is designed to reach completion after 36 months.

PROJECT IMPLEMENTATION PLAN

Because of the nature ("in kind") of the domestic funding, it will be reflected in the overall project audit via a series of appropriate statements.

ALLOCATION OF CO-FINANCING TO BUDGET CATEGORIES	
TA	
Personnel	20000
Subcontracts	15000
Workshops	56720
Sub-total	91720
GOODS	
Vehicle and accessories	
Equipment	16300
Books	
Sub-total	16300
OPERATING COSTS	
Airfare & accommodation	2500
Vehicle running costs	2500
Office costs	5000
Miscellaneous	5000
Accounting and auditing	
Sub-total	15000
TOTAL	123020

The co-financing has been allocated to the project budget categories as follows:

TOTAL	
Technology (DACST)	
Research: threats and transformation	30000
Foundation for Research Development (FRD) and University of Port Elizabeth (UPE)	
Office space, laboratory and library facilities	10000
Personnel for participation	8640
South African National Parks (SANP)	
Personnel for participation	12960
Eastern Cape Nature Conservation (ECNC)	
Personnel for participation	17280
Western District Council (WDC)	
Personnel for participation	8640
Amatola District Council (ADC)	
Personnel for participation	7200
Cape Nature Conservation (CNC)	
TOTAL	123020

				X	X	X	
1. GIS-based spatial analysis							
2. Strategic conservation plan			X	X	X		X
3. Information dissemination			X	X	X		X
4. Capacity building			X	X	X		X

The project will be managed by a small Steering Committee consisting of a Project Manager (assisted by an administrative/technical person), the Head of SANP's Southern Parks Conservation Development Directorate, a representative of ECNC's Scientific Services Section (Western Region) and the Head of the WDC's Nature Conservation Division. All members of the Steering Committee, which will meet twice a year, reside in Port Elizabeth: this will facilitate the effective running of this committee, and reduce costs. In addition, there will be a small Technical Committee, which will meet about once every two months (or as necessary), to deal with technical matters.

Criteria for the awarding of subcontracts (including consultants) and procurement of equipment will be established in consultation with the GEF implementing agency and presented in the Project Brief.

PUBLIC INVOLVEMENT PLAN Stakeholder identification

A broad range of stakeholders and roleplayers has been identified during the project development phase. It represents governmental and non-governmental agencies, organisations, institutes and societies which have an important impact on land-use and land-management, especially in the fields of research, conservation, agriculture, and urban and rural planning and development.

The key stakeholders are: the provincial Departments of Agriculture & Land Affairs and Economic Affairs, Environment & Tourism; national Department of Environmental Affairs & Tourism; South African National Parks; Cape Nature Conservation; National Botanical Institute; District Councils (Planning and Nature Conservation Sections); Wildlife & Environment Society (Eastern Cape Branch); WWF-South Africa; Eastern Cape Game Management Association; Eastern Province Agricultural Union; Botanical Society of South Africa; Fish River SDI; Agricultural Rural Development Research Institute (University of Fort Hare).

Stakeholder participation and information dissemination

The important issue of ongoing stakeholder participation in the project process has been addressed earlier under "Stakeholder involvement and social assessment".

Within two months of the commencement of the project, a workshop will be held with key stakeholders (including a representative of the Committee for Environmental Co-ordination) to jointly finalise a detailed implementation plan for the project; this will address core issues such as components, methods, products and formats. Similar workshops will be held at approximately six-monthly intervals in order to jointly assess the progress of the project, especially with regard to the relevance and format of the project deliverables. For the duration of the project, the project team will, as far as possible, be guided by the requirements of the end users of the information.

In terms of information dissemination to the broader public, appropriate media releases will be compiled and provided to local and regional newspapers, news agencies and radio services. Steps will be taken to have news items broadcast on SABC TV news and magazine programmes. A number of short inserts and a 20 minute documentary will be prepared with the assistance of SABC TV's environment programme. A number of popular and scientific articles will be written and submitted to appropriate magazines and journals.

Social and participation issues

The project will identify areas where a variety of sustainable land-use types, particularly in the form of natural resource-based commercial ventures (e.g. game farming, ecotourism) can be conducted. These ventures will create job opportunities in rural areas where poverty and unemployment levels are high and increasing, with a concomitant increase in urbanisation. Information will be made available to government bodies and NGOs dealing with bioregional planning and the design and implementation of rural development and social upliftment programmes.

MONITORING AND EVALUATION PLAN

An independent reviewer will be contracted to ensure that the scientific content of the project is satisfactory and to review the achievements of the project by comparing measurable products against baseline information, using the project indicators as guidelines. Relevant information will be provided to the reviewer via the Project Manager. In addition, the reviewer will be required to conduct a beneficiary assessment wherein stakeholders will be required to evaluate the implementation of the project and the relevance of its products.

The reviewer will be required to provide a report to the Project Steering Committee at the end of each year. This report will provide information which will assist the Project Steering Committee to take appropriate steps (if necessary) to ensure that the project activities are carried out and that the project objectives are timeously met. Provision has been made in the estimated budget for the contracting of an independent reviewer.

Financial and progress monitoring will take place quarterly and according to the Project Management Report (PMR) procedure.

ADMINISTRATIVE ISSUES

Procurement and contracting practices and procedures, financial recording and auditing will be carried out by the Financial Administration Section of the University of Port Elizabeth, Port Elizabeth, South Africa and conducted according to procedures specified in the World Bank's guidelines.

