

A PRELIMINARY ASSESSMENT OF THE FINANCIAL VALUE OF THICKET

Thicket vegetation contains biodiversity of global significance, and provides the resource base for a wide range of economic activities that provide employment for many thousands of people. This summary highlights the potential financial value of thicket in terms of existing economic activities associated with it. In other words, what would society lose if the thicket vegetation became degraded or lost due to unsustainable land use practices?



MOHAIR INDUSTRY

South Africa is the most important producer of mohair, and in 2000 provided 62.3% of world production.

- More than 80 % of the national mohair production comes from the Thicket Biome area.
- A gross income of R192 million (Source: Mohair SA) was generated during 2000 in the STEP planning domain.
- It is estimated that 9 000 jobs are directly involved in the production of mohair, with 2 000 producers operating within the core production area. When secondary processing and brokering is taken into account, it is estimated that between 25 000 and 30 000 jobs are generated through the mohair industry.
- Using the upper Albany (Grahamstown) area as a case study: an income of R155/ha is generated per annum.



ECO-TOURISM

The eco-tourism industry is heavily reliant upon an intact environment in order to provide both the means to support the wildlife that the public wishes to see, as well as to provide a true "wilderness experience". Eco-tourism is a service provided by both private- and public-sector driven operations

Private Game Reserves – e.g. an upmarket reserve in the STEP planning domain.

- Caters for the more affluent sector of the market, with the principal aim of turning a profit.
- Gross annual income: R30–40 million
- Employment: 100 skilled and 140 unskilled (jobs/ha = 0.01)
- Gross income/ha: R1 944.

Public Conservation Areas – e.g. a National Park

- Primary goal is to ensure the continued protection and management of the environment into the future.
- Gross annual income: R6.8 million
- Gross income/hectare: R485
- Employment: jobs/ha 0.005
- Various social benefits provided by the park are not reflected in the above financial income. The importance of acknowledging such benefits was emphasized when Geach (1997) estimated the recreation value of the park to be over R300 million/annum (R21 428/ha).

Change in land-use from commercial livestock to eco-tourism – e.g. tourism venture west of Port Elizabeth.

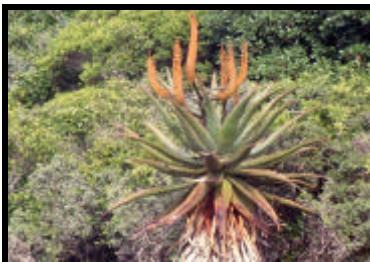
- Income quadrupled from R100/ha to over R400/ ha.
- 16 additional jobs were created, of which 4 were skilled and 12 unskilled.



HUNTING

The Eastern Cape is a major role-player in the South African hunting industry, and is the preferred destination of overseas hunters.

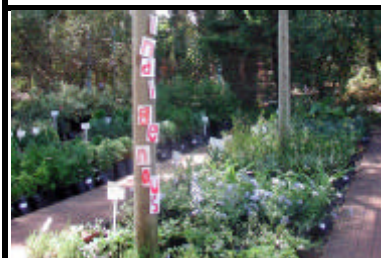
- 8 943 animals were hunted (by professional hunters) in the 2000/2001 hunting season, generating funds in excess of R44 million.
- Downstream economic activities resulting from overseas hunters visiting the Eastern Cape in 2000/2001 brought the total gross income generated to R118 million.



ALOE SAP INDUSTRY

Aloe products are obtained from a single species of *Aloe*, namely *Aloe ferox* (products include aloe sap which is a bitter yellow juice tapped from just below the leaf surface, and aloe gel which originates from the inner fleshy part of the leaf).

- In the Eastern Cape and former homelands, the raw aloe products are harvested in an informal manner with casual labourers collecting the products for entrepreneurs, which are then sold to manufacturers and retailers.
- During peak periods up to 6 000 tappers may be active, and can extract up to 20 liters of bitter sap per day.
- Buyers include pharmaceutical companies, cosmetic manufacturers and raw product exporters.
- The quantity bought by an individual company ranges between 2 500 kg to 80 000 kg/annum.
- Price paid for raw products ranges from R3.20 to R18 per kg.
- Total turnover per annum for a single company ranges between R24 000 – R256 000/annum.



HORTICULTURE

In this industry, all species are propagated in-house, including the cycads, and no species are collected in the wild.

A survey undertaken with two Port Elizabeth nurseries indicated that:

- A total of 71 indigenous thicket species are sold
- The sale of thicket species yields in excess of R72 000/ha/annum/nursery.
- The industry generates on average 4.9 jobs/ha.



Medicinal plant trade

The trade in medicinal plants is generally through informal street markets or small shops known as *Amayeza* stores (Xhosa) or *Muthi* shops (Zulu). It is estimated that this industry is worth between R750 million and R1 billion/annum in South Africa (Cocks & Dold 2000).

- Within the Eastern Cape 166 plant species are exploited for medicinal purposes, of which 38 species are thicket species.
- In terms of quantities traded annually, 24% is harvested from thicket areas with an additional 14% harvested from both thicket and forest areas.
- Popular thicket species include *Rhoicissus digitata*, *Haworthia attenuata*, *Rubia petiolaris*, *Gasteria bicolor* and *Bulbine alooides*. Typically, *Gasteria bicolor* sells at R29/kg and *Bulbine alooides* at R31/kg.
- It is estimated that 165 tons of thicket plant material is traded in the six city centres in the Eastern Cape every year, generating an income of R7 million/annum.
- Despite this high total income value, the average monthly income per capita is between R150 and R500 (Dold & Cocks 2001).

Note: While the current report does consider the potential financial value of thicket vegetation, it does not provide a comprehensive economic valuation of thicket. The economic activities associated with the thicket vegetation are briefly highlighted and the gross financial incomes associated with them are indicated. Non-Use Values are not included in the report. In addition, this is not a comparison of profitability of different land-use types, but a simple indication of the gross income generated by a resource. Also, because the above activities are often integrated with other economic activities, which do not utilize thicket, net incomes (i.e. expenditures removed) are not discussed.

