

Impact of 20 years of Conservation



In September 2011, Rhino Ark commissioned an independent study to assess the full impact of 20 years of conservation efforts in the Aberdares. The study's objectives were also to guide the future management of the Aberdare fence, as well as to provide an in-depth review of fencing as a tool to help sustainably manage a conservation area adjoining settlements, such as the Aberdare but also Mt. Kenya and the other main water towers. *The Environmental, Social and Economic Assessment of the Fencing of the Aberdare Conservation Area*, was funded by the Rhino Ark, UNEP and the Kenya Forests Working Group and supported by the Kenya Wildlife Service, the Kenya Forest Service and the Greenbelt Movement.

Key findings

The study, conducted by a team of independent experts, concluded that the 400km electrified fence enclosing the Aberdare Conservation Area (ACA) **has improved the livelihoods of millions of people in central Kenya.** It affirmed that the fence has been instrumental as a management tool in addressing the challenges that were affecting the Aberdare ecosystem. Specifically, the study revealed:

- a 20.6% increase in forest cover between 2005 and 2010;
- a 54% decrease in open areas (grassland and cultivation) inside the now fenced 2000 km² Aberdare Conservation Area;
- and a 47% increase in exotic plantations outside the fenced area.

These improvements are attributed to the effects of the fence and associated fence management practices as well as more assertive policy interventions. The report's economic analysis estimates the total values of products and environmental services provided yearly by the fenced ecosystem at KES 39.3 billion (US\$ 467 million) with an additional KES 20 billion (US\$ 238 million) for biodiversity conservation, amounting to an overall total of KES 59.3 billion (US\$ 706 million).

“The Aberdares conservation efforts underline the extraordinary and wide-ranging returns possible when a more creative, decisive and sustainable approach to managing nature is undertaken—they also offer a model for exemplary public-private partnerships.”

Achim Steiner, United Nations Under-Secretary-General and Executive Director of UNEP

Socio-economic benefits

The study recorded **higher household incomes and land values** (as high as **300%** in some cases) due to improved farmland security, crop yields and safer living conditions. Wildlife crop destruction has been all but eliminated and children travelling to school face fewer risks from animals. The number of fence edge communities growing wood lots for farm fuel is increasing. In some areas, communities have initiated indigenous tree re-planting inside the fence where previously illegal logging, uncontrolled cattle grazing and indiscriminate cultivation were rampant. Cattle rustling, using the forest as an escape route has ceased and disease transmission between wildlife and livestock has greatly reduced.

Water resources benefits

Data indicates that the Aberdares' rivers are “more stable than the Mount Kenya rivers” – a fact it attributes to better land cover in the ecosystem. The report's economic analysis gives a breakdown of identifiable benefits provided by the Aberdares to many parts of Kenya. The value of providing domestic water supply to central Kenya, parts of the Rift Valley and the Tana River valley, for example, is estimated at KES 646 million (US\$ 6.9 million) annually. For Nairobi, where almost all the water supply comes from above and below ground Aberdare sources, the value given is KES 1.46 billion (US\$ 15.6 million).

Carbon sequestration benefits

On carbon sequestration and soil erosion control, the report assesses the annual value at just under KES 1.9 billion (US\$ 20.3 million). Carbon credits account for KES 450 million (US\$ 5 million) annually.

Recommendations

The report emphasizes that there should be an integrated management plan for the Aberdares and by inference that future government policy should incorporate holistic approaches to the way high value mountain forest ecosystems are managed.

Although wildlife populations have increased, poaching remains a threat. Whilst the fence protects farmers' land, it is not, nor was it designed, to be human proof. The report calls for stricter gate access policies to regulate access to the Aberdare Conservation Area and to tackle illegal activities inside the indigenous forest areas.

It recommends that the Ministry of Finance be further sensitized as to the value of the Aberdare ecosystem and to provide appropriate budget allocations to its overall contribution to the economy and GDP of Kenya.

