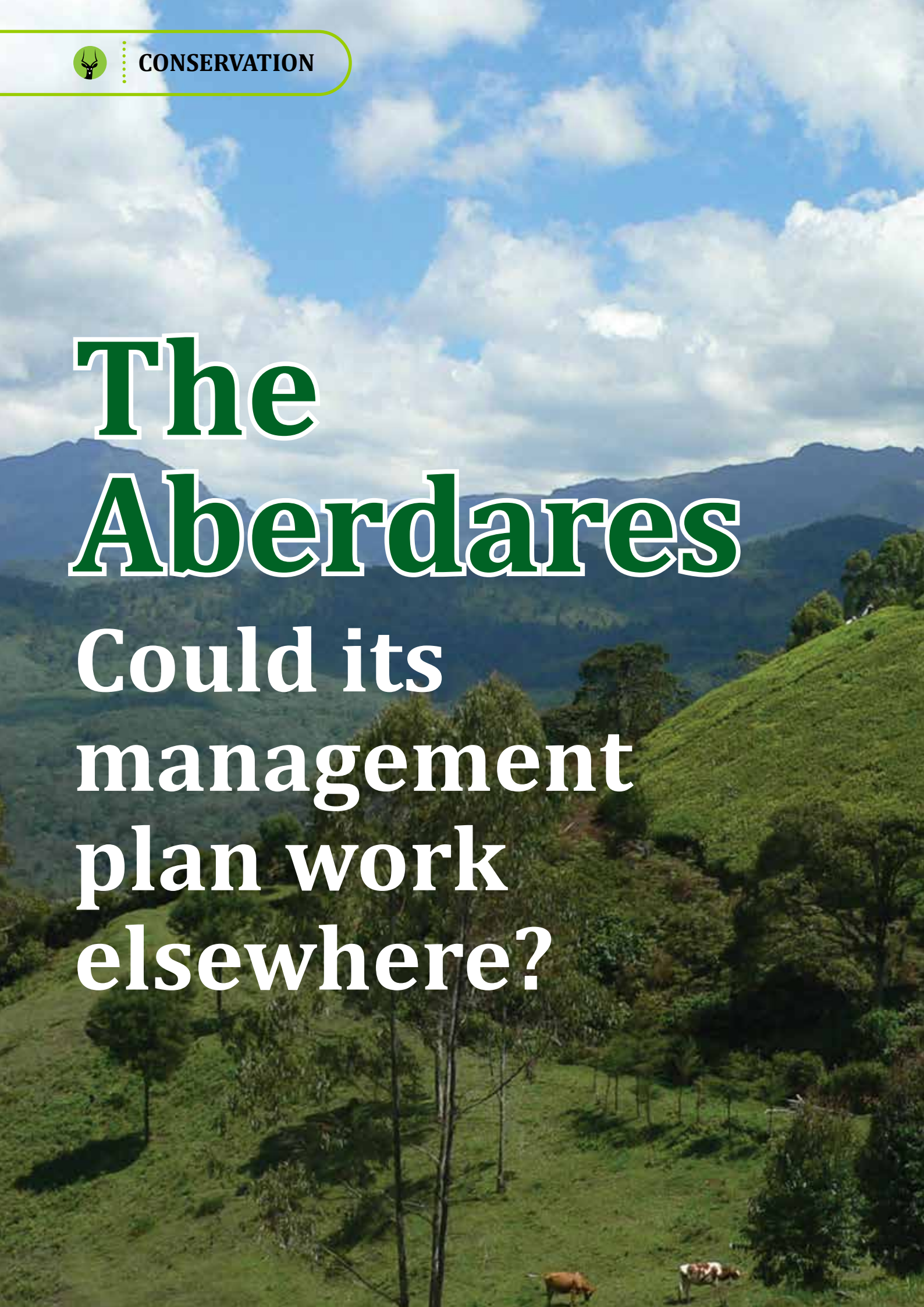


The Aberdares

Could its management plan work elsewhere?

In Kenya, much work has been done to raise awareness about the fact that we face a very difficult set of forest management options – none of them easy.

BY COLIN CHURCH

Forests in tropical Africa carry a much greater burden of climatic responsibility than those in the world's temperate zones. Indeed, this reality embraces the tropical waistline of the entire world.

Temperate zone economies have either cut down forests or, in areas where they are so vast and take so long to re-grow, treated them as resource centres for the unlimited and 'sustainable' extraction of timber. In both cases, these forests do not affect climate as dramatically as those in the tropics.

Perceptions die hard. Since developed economies have entrenched attitudes to forests, the understanding of tropical belt forests – mountain and low-land – has incorporated the same attitudes for the past 100 years. Such attitudes are at the heart of a catastrophic problem in 21st century Africa.

People need to be educated about different kinds of forests. Forest authorities continue to consider indigenous forests as centres of extraction, instead of focusing their considerable knowledge and energy on extension work with farmers, primarily to develop sustainable wood lots on farm land.

The challenge for African governments is to turn indigenous mountains' 'forest value' on its head. Put in simple terms - store indigenous trees in precious water catchment forest highlands. Do not cut them.

To reach this mindset requires those living near, and in various ways 'living off', indigenous forests to believe storage is better than liberal extraction. But with more and more people forced to 'use it to live', things are at a breaking point in many highly stressed mountain forest zones.

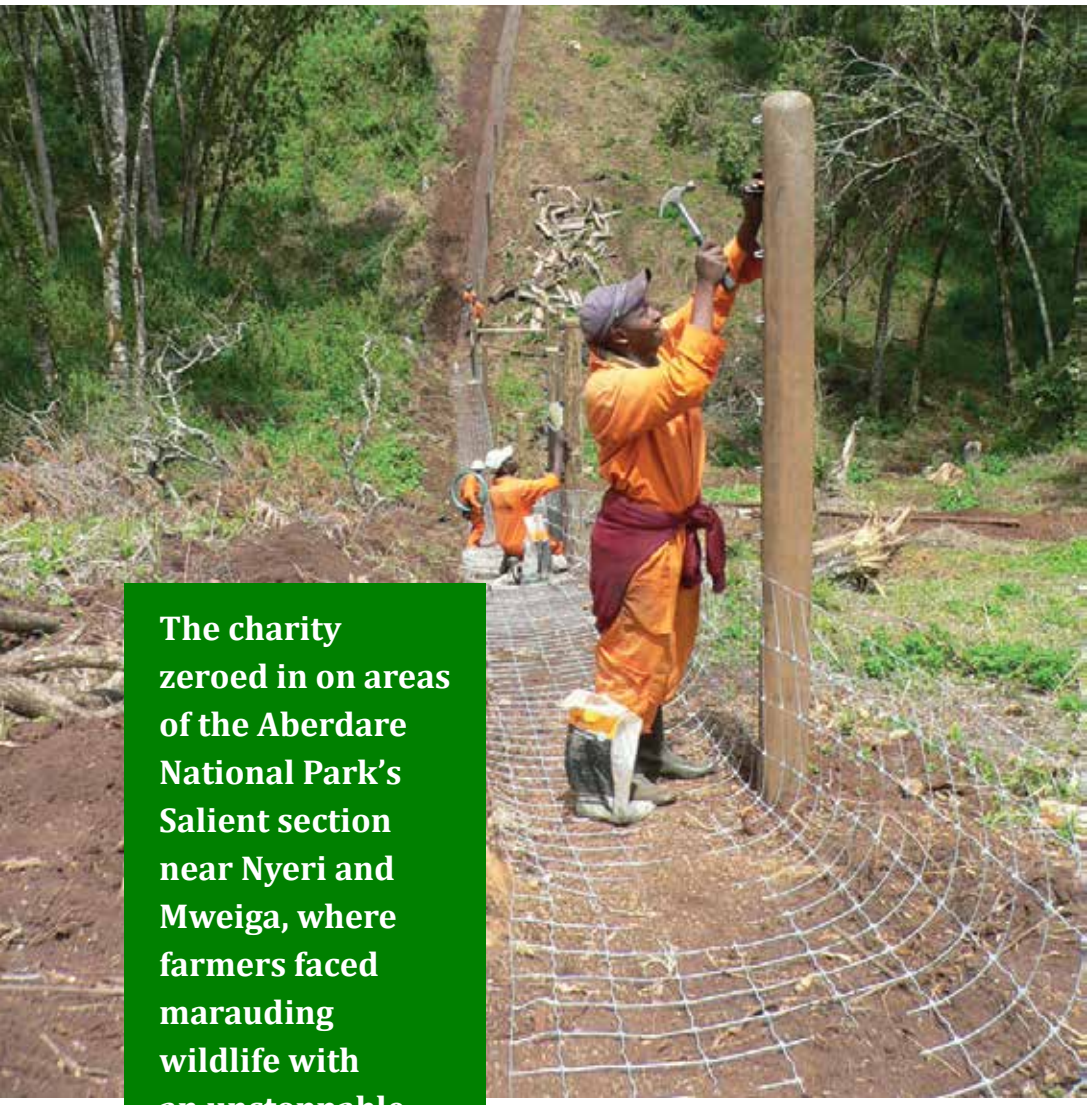
Above:
Kinankop·tea hill with tea plantations on one side and the Aberdares wilderness beyond.

Pictures by:
Rhino Ark

In Kenya, much work has been done to raise awareness about the fact that we face a very difficult set of forest management options – none of them easy.

So could the experience of the Aberdares – certainly the most stable mountain forest system in Kenya today - be applied to other forests? If so, what has driven this effort and what are the secrets of its success?

The Aberdare range plays a pivotal role in the complex geo-physical mix and climatic conditions on the east side of the Great Rift Valley in Central Kenya. It is one of many ranges formed from the upheavals following the



The charity zeroed in on areas of the Aberdare National Park's Salient section near Nyeri and Mweiga, where farmers faced marauding wildlife with an unstoppable desire to eat their hard-worked crops.

Above: Puttting up the Aberdares fence.

formation of the Gregorian and Albertine rift valleys millennia ago.

Within the Aberdares' mass of sweeping valleys and peaking ridges covered with an outstanding variety of indigenous trees, shrubs, and flora, lies one of Kenya's most precious ecosystems. Marked by great sweeps of high moorland and craggy peaks (up to 4000, metres above sea level), this area is the fountainhead of a huge number of streams and rivers which flow north, east, south and west, providing essential water supplies to a vast area of Kenya. About one in three Kenyans is dependent, in some way, on the rivers, forests, flora, fauna and climatic impact on rainfall patterns that this almost 160 km-long range provides.

Its fertile soils enable millions of farmers to secure a living from a valuable variety of food and commodity products. Its wildlife and unique habitat are one of the country's prime tourist attractions, bringing further jobs and benefits to thousands of people.

So were these the issues foremost in the minds of those who founded Rhino Ark, 21 years ago? The charity raised funds and built a trusted relationship with the government, creating a partnership that resulted in a stable forest ecosystem – 2000 km^2 of pristine forest and moorland.

Did the Rhino Ark's founders consider how best to ensure the Aberdares benefited from sound conservation initiatives to protect the area and ultimately allow a sustainable level of resource extraction from its rich biodiversity?

To a degree, yes. But only in the context of the human and wildlife pressures for resources that manifested themselves along the boundary between forest and farm land. The charity zeroed in on areas of the Aberdare National Park's Salient section near Nyeri and Mweiga, where farmers faced marauding wildlife eager to eat their crops.

In the Salient, this conflict was fierce, and destructive to farm incomes. It even cost farmers' lives. It put at risk the huge benefits wildlife was providing to the tourist industry through the renowned Treetops and Ark Lodges. It is often forgotten that Treetops, when it was first started 78 years ago in 1932, was the first tourist lodge in Kenya. Today, 21 percent of Kenya's foreign exchange earnings and 12 percent of its gross domestic product is derived from tourism.

Something had to be done and money had to be found to resolve the human-wildlife conflict. Previously, different systems had been tried, including a game moat which proved very expensive to maintain, was easily breached and inefficient.

An electrified fence was considered the best, swiftest option. The Salient area became the focus of attention as, in addition to crop destruction by wildlife, the resource value of wildlife was creating jobs for the same farmers who were losing crops.

So the early initiatives were entirely community-driven. Fence-edge communities began to understand the true value of the forest, which helped stabilise rainfall and river outflow, and see it as a heartland for the valuable water, wildlife and flora inside the proposed fence.

The fence is no ordinary one. It was carefully designed by Rhino Ark's founder and engineer, Ken Kuhle, so that it was not only electrified with impulse currents to a height of seven feet above the ground but also implanted

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three feet below the ground, using tight-lock meshing wire to prevent wildlife from burrowing underneath. Slowly at first, the donations trickled in. The pace has accelerated in recent years as the funding drive caught national and international attention. The fence was completed slowly, first in the Salient and then it began to weave its way around 400 km of rugged mountain hillsides.

Several forces came into play as the fence-line communities, with their competing interests, began to wake up to the benefits. Forest- and national park-edge farmers were securing 100 percent crop offtake. Land values rose by up to 300 percent in some areas. Farmers could sleep peacefully at night, there were no more deaths from attacks by wild animals and children could walk safely to school. These were all very simple benefits but when added together, they resulted in a huge change in lifestyle and incomes.

In the longterm, these changes outweighed the unsustainable benefits gained from dead wood offtake, logging and poaching. Human nature is such that these negative activities never cease immediately, or totally. They continue today. But the success of the fence in resolving human-wildlife conflict has dramatically reduced the motivation for unsustainable 'extractions' of forest products.

For the past 20 years, we have been in an interim period – forest-edge farmers' benefits are real and flora and fauna are better secured.

As the fence gradually snaked around the vast mountain range, community after community woke up to the benefits and experienced them first-hand. During this process, demand from communities living without a fence rose sharply.

Above: Good fences making good neighbours.

But the money to build the fence was still only coming from the wider tax-paying society, who suddenly realised that a dramatic change was happening. One of Kenya's precious 'water towers' was being secured and made safe from land-grabbers – all too often business interests in cahoots with unscrupulous civil servants and politicians, the very people charged with upholding forest and park values.

So the farmers began to take part in building the fence, to speed it on its way to their shambas. Rhino Ark encouraged people to volunteer to help as part of the buy-in process. Communities began to realise that this was their fence and their problem to solve, rather than leaving it to the government, whose track record on forest border integrity was under pressure. Rhino Ark had to fight attempts by vested interests to alter the fence-line

The Kenya Wildlife Service and Kenya Forest Service, the state agencies charged with the management of the forest and park, now have a more defined area to run.

and turn a blind eye to various excisions. Efforts to consider areas of old coniferous plantations, deep inside the 'water catchment' zones, for excision treatment were challenged and their promoters eventually silenced.

The fence helped farmers understand that land inside the barrier was state land. So those managing the forest and national park found themselves with a valued management tool, in which the communities had a vested interest. Even more telling, the wider society in Kenya demonstrated its interest in the Aberdares' fence by raising over Ksh 750 million (nearly $10 million), mainly through a truly Kenyan event, the Rhino Charge. The off-road endurance event was dreamed up by the founders of the Rhino Ark fund as a novel, and soon to become hugely popular, way to raise the money needed to build the fence. Every one of the limited number of entrants have to pledge a significant sum towards the Rhino Ark in order to compete. The race is full every year.

Above:
Rhino living free and safe within the fenced boundary.

The Kenya Wildlife Service and Kenya Forest Service, state agencies charged with the management of the forest and national park, now have a more defined area to run. The cost-benefits soon became evident. People had to enter the Aberdares National Park through access gates, rather than sneaking in at random points to cut trees for charcoal. The fence became a cost asset.

Rhino Ark's outreach as a successful body making a tangible difference to ecosystem integrity and poverty eradication has been well recorded. It is regarded internationally as one of Kenya's most specifically focused conservation activities, one that makes a difference from the bottom up.

What are the secrets of the plan's achievements? First, the project is community-driven. Forest-edge farmers see that the fence keeps wildlife away from crops and shows clearly what belongs to the state – indeed all

Left:
The fence, and a river runs through it.

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taxpayers – on the other side. This management tool has totally stopped encroachment and land-grabbing – problems that bedevil other similar mountain forests. In the Aberdares, the original threat - crop destruction by wild animals - became a key selling-point to communities.

Other forest systems have precious flora and fauna and, even if there are fewer elephants and other crop-eating animals, the importance of creating a barrier so that all know what they own and what belongs to all Kenyans is a necessary requirement in today's society.

Secondly, the fence alignment was professionally planned, taking into consideration the need to cater to all aspects of forest (indigenous and potentially commercial) management and to create a clear demarcation for non-exploitative use of forest products. People realised that forest-edge, community-based activities and the equally necessary needs of national and international conservation practices can exist harmoniously, side-by-side.

The Forest Act 2005 and the Wildlife Act give management agencies KWS and KFS a mandate to ensure proper policies are put in place for all non-exploitative activity. Much will depend on the maintenance and management of the Rhino Ark Aberdare Fence. The boards of the KFS and KWS have approved the creation of a Trust, to include Rhino Ark and the fence-line communities. It would be formed as a public-private partnership (PPP) and would be empowered to run the fence. It would also help to develop a holistic master plan for the entire ecosystem. Water extraction, indigenous forest replanting in historically damaged and logged - out areas, leisure, tourism, flora-based extractions and cultural pursuits – all based upon the premise of non-exploitative but sustainable development- will be addressed by the Trust.

A PPP requires equal funding from private and state sources. The Kenyan Treasury has begun this process, and by matching what Rhino Ark has raised by way of an endowment fund, it could garner enough annual interest revenue to cover the core costs of the fence. But the Trust will have a vibrant public face and could also benefit from further special project support funds, such as carbon offsets, endangered species special projects funding and research grants - indeed anything that seeks to secure the mountain ecosystem for the benefit of the millions who depend upon it.

The Aberdares is a vibrant model which offers millions living near, or off, threatened mountain ecosystems encouragement and hope for their future.

COLIN CHURCH is chairman of the management committee of Rhino Ark. A former journalist, radio commentator and public relations guru, he was president of the global professional PR body, the International Public Relations Association in 1996, and co-authored IPRA's charter for environmental corporate practice in 1991. He was a founder member and past chairman of the Public Relations Society of Kenya.