



Why Rhino Ark Focuses on Kenya's Montane Forests

Kenya's forests are primarily located in mountain areas, including Mt. Kenya, the Aberdares, the Mau Complex, the Cherangani Hills and Mt. Elgon. These critical ecosystems are recognized as the Kenya's "water towers" because they form the upper catchment for nearly all the major rivers in Kenya. Despite covering less than 2% of the total land area in Kenya, these forests provide invaluable services to the people of Kenya, the economy of the country and its wildlife.



Beyond sustaining Kenya's national water supply, these forests also support transboundary water bodies, underlining their regional and international importance. The water towers are vital national assets, in terms of climate regulation; water storage; recharge of groundwater; river flow regulation; flood mitigation; control of soil erosion and reduced siltation of water bodies; water purification; conservation of biological diversity; carbon storage and sequestration; nutrients cycling and soil formation. These services support key economic sectors, including energy, tourism, agriculture (cash crops, subsistence crops, and livestock) as well as water supply to urban centres and industries.

Several studies have been undertaken to estimate the annual contributions of the ecological services provided by key mountain forest ecosystems. Based on these studies, the present value of the benefits provided by the five main 'water towers of Kenya', namely Mt. Kenya, Aberdare, Mau Forests Complex, Cherangani Hills and Mt. Elgon, are estimated at KES 611 billion (USD 4.7 billion) per year.



Water supply for urban centres and industries

The water towers are Kenya's primary source of water for human consumption and industrial use. Many urban areas, particularly Nairobi, rely heavily on these forests for their water supply. Over 50% of Kenya's Gross Domestic Product is generated in Nairobi underscoring the importance of the capital city's stable water supply.

Rural livelihoods

The livelihoods of millions of Kenyans, especially farmers living on the slopes of these mountains, depend on the forests' rich soils and micro-climatic conditions, that support agricultural production. Sustainable conservation efforts ensure that these communities continue benefitting from these natural resources.

Rhino Ark's contribution to 'water towers' conservation

RhinoArk has been actively involved in the protection and restoration of Kenya's water towers, by developing and implementing high-impact forest, water catchments and endangered wildlife conservation initiatives that tangibly support adjacent local communities. The organization's core work includes electric fence-building projects to mitigate human-wildlife conflict, forest restoration, and community engagement programmes. These conservation efforts span key mountain ecosystems, including Mt. Kenya, the Aberdares, and the Mau Complex, aligning with Kenya's Vision 2030 and global frameworks such as the Sustainable Development Goals (SDGs) and multilateral environmental agreements (MEAs).



Through its long-term commitment to the conservation of mountain forests, Rhino Ark directly contributes to SDG 6 (Clean Water and Sanitation), SDG 13 (Climate Action), and SDG 15 (Life on Land). By protecting and restoring degraded forests, these efforts help to enhance carbon sinks and increase ecosystem resilience to the impacts of climate change.

Energy

The water towers also provide water to all hydro-power plants that represent 30% of Kenya's total installed electricity capacity. Protecting these forests is crucial for maintaining a stable energy supply.

Kenya's development blueprint

Looking ahead, environmental stability and secured provision of ecological goods and services, such as those provided by the montane forests, will remain essential to attain sustainable development in Kenya. They are cross-cutting, underlying requirements to achieve the Sustainable Development Goals and Vision 2030 - Kenya's development blueprint aimed at making the country a newly industrialized, middle-income nation.

Recognizing their critical role in socio-economic development, the rehabilitation of the five major water towers has been identified as one of the flagship projects under the Vision 2030. In this context, Rhino Ark remains at the forefront of the conservation efforts in the three largest of the five main water towers to address the conservation challenges in these mountain ecosystems.

