

Importance of Kenya's Water Towers

Most of Kenya's forests are in mountain areas, in particular Mt. Kenya, Aberdares, Mau Complex, Cherangani Hills and Mt. Elgon. These areas are known as the "water towers" of Kenya as they form the upper catchment of all but one of the main rivers in Kenya. Although these "water towers" cover less than 2% of the total land area in Kenya, they provide invaluable services to Kenya's inhabitants, economy and wildlife. They 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.

Water to urban centres and industries

The water towers are the single most important source of water for direct human consumption and industrial activities. Most urban areas depend upon their water, in particular the City of Nairobi where over 50% of Kenya's Gross Domestic Product is derived.

Rural livelihoods

The majority of Kenyan livelihoods depend in some way upon the rivers, climate, forest and wildlife of these mountain forest ecosystems. Millions of farmers live on the slopes of these mountains and depend on their rich soils and their micro-climatic conditions that are most favourable for crop production.

Wildlife and tourism

The water towers' forests are rich in biological diversity, not only in terms of habitats, but also in terms of species. Although they cover less than 2% of Kenya's total land area, they host a disproportionately high percentage of the flora and fauna species (40% of the mammal species, including 70% of the threatened mammal species, and 30% of the bird species, including 50% of the threatened bird species).

The rivers flowing from the water towers are the lifeline for major conservation areas in the lowlands. These are key tourism destination areas, such as Maasai Mara National Reserve, Lake Nakuru National Park and Samburu National Reserve. These conservation areas host a high diversity of fauna and flora. Some of them are classified as Important Bird Areas as they host a rich avifauna.

Energy

The water towers also provide water to all hydro-power plants that represent 57% of Kenya's total installed electricity capacity.

Kenya's development blueprint

Looking forward, environmental stability and secured provision of ecological goods and services, such as those provided by the water towers, will remain essential to attain sustainable development in Kenya. They are cross-cutting, underlying requirements to achieve the Millennium Development Goals and Vision 2030 - Kenya's development blueprint aimed at making the country a newly industrializing middle income nation, providing a high quality of life for all citizens in a secure and healthy environment.

The water towers and their forest ecosystems are fully recognized as a key component of the economic, environmental and social pillars. In recognition of their importance in socio-economic development, the rehabilitation of the five water towers is one of the flagship projects in the Vision 2030.

In this context, Rhino Ark is firmly on the ground in the three largest of the five main water towers to address the management challenges in these mountain ecosystems.

