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Kenyas Natural Capital

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Kenya's Natural Capital - National Policy Makers

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Natural capital underpins Kenya's prosperity

Kenya is endowed with rich natural capital[1] and biodiversity[2]. Its diverse landscapes range from the Chalbi Desert in the north to the snow-clad peaks of Mt. Kenya, from the white beaches of the Indian Ocean to the shores of Lake Victoria, and from the rolling plains of Maasai Mara to the floor of the Great Rift Valley. The interactions between topography, soils, hydrology, plants, animals and peoples within each eco-climatic zone create locally distinctive ecosystems, including different types of forests, woodlands, shrublands, grasslands, deserts, wetlands, lakes and rivers, montane, afro-alpine and marine ecosystems. Kenya, ranks among the world's richest biodiversity nations and hosts over 35 000 species, including more than 7000 plant species and many endemic, rare, endangered and threatened species.

1 The stock of living and non-living natural resources (e.g. plants, animals, air, water, soils, minerals) yielding a flow of benefits, such as ecosystem services, to people.

2 According to the Convention on Biological Diversity, biodiversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems. Biodiversity represents the foundation of ecosystems that, through the services they provide, affect and critically contribute to human wellbeing.

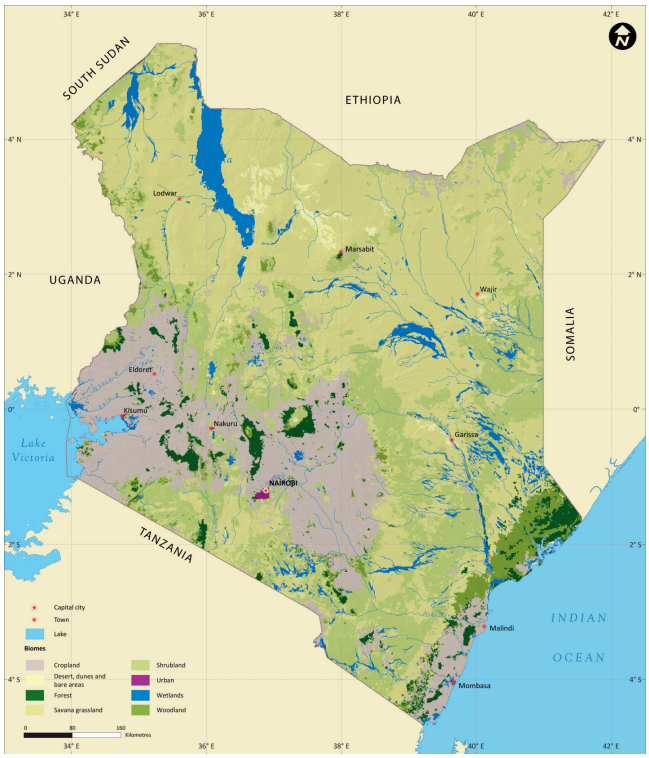

Figure 1: The structure and distribution of Kenya's major ecosystems reflect local climate, topography, soils and biota, modified by human activity.

Kenya is also home to over forty ethnic groups with varied cultures and lifestyles rooted in the productivity and diversity of its landscapes. Kenyans from every walk of life depend on ecosystem services for their livelihood and well-being. The services include wild and cultivated foods, medicinal plants used by 80 percent of Kenyans, soil erosion control, crop pollination, and cultural services such as the spiritual kayas of the coastal Mjikenda, outdoor recreation and enjoying nature. Kenya's forests and woodlands provide timber,

fibre and fuelwoods to urban and rural communities. Acting like water factories, forests are the main source of water for industry, farmers, beverage producers, and supply over half the country's electricity from hydropower. Wetlands support fisheries, control floods and decontaminate polluted water. The diversity and abundance of Kenya's world renowned wildlife is the main lure of the US$1.3 billion tourist industry.

In short, natural capital and biodiversity underpin Kenya's economic growth and the wellbeing of its citizens.

Kenya's natural capital is under threat

Although Kenyans depend on natural capital for their livelihoods, human impact is rapidly depleting our natural resources and biodiversity. The main causes of loss are:

- Habitat conversion to cropland, urban areas and other human-dominated landscapes. More than 60 percent of land with 900mm and more annual rainfall has been converted to agriculture;
- Overexploitation and illegal offtake of renewable resources such as water, forestry, fisheries and wildlife. Forest and woodland cover has been severely depleted by cutting for fuelwood and charcoal. Fisheries stocks are falling due to unsustainable offtake and wildlife due to poaching, leading to a loss of range and migratory routes;
- Water, soil and air pollution, especially in urban and industrial areas of Nairobi and Mombasa;
- Invasive species such as water hyacinth, Nile perch, cactus species and Lantana.

Several factors acting in tandem drive the loss of natural capital. They include a growing human population, poverty, inequality in access to resources and lack of regulatory capacity. Changes in production and consumption patterns, human population and settlement as well as environmental deterioration all contribute to the decline of

Table 1: Summary of main threats to vertebrates, per group

Taxon	Habitat	Over-exploitation	Invasive species	Pollutants	Climate change
Large mammals	High	Intermediate	Low	Low	Intermediate
Small mammals	High	Intermediate	Low	Low	Intermediate
Birds	High	High	Low	High	Intermediate
Reptiles	Intermediate	Intermediate	Low	Low	Low
Amphibians	High	Intermediate	Intermediate	High	High
Fish	High	High	Intermediate	High	High

Low Intermediate High

natural capital and affect livelihoods and business. Simply put, Kenyans are no longer living off the dividends of natural capital and are eroding the natural capital assets themselves.

The Kenya Government recognizes that the sustainable management and conservation of natural capital and biodiversity is essential for maximizing production of natural resources and sustaining growth. To this end, Kenya drew up the Environmental Management and Coordination Act of 1999 and other legislation after extensive public consultation in order integrate environment and development plans. Kenyan legislation falls in line with international treaties such as the Convention of Biological Diversity (CBD), the Convention on International Trade in Endangered Species, the Ramsar Convention and the Migratory Species Convention. Although much progress has been made in the way of a protected area network, the conservation of threatened and endangered species and reforestation programs, much more needs to be done to draw up policies and strategies to encourage public and private sector activities and investments in sustaining natural capital and biodiversity as a shared responsibility.

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estation programs, much more needs to be done to draw up policies and strategies to encourage public and private sector activities and investments in planning the use, conservation and restoration of biodiversity and natural resources.

National policies and accounting for natural capital gains

Kenya's government plays a critical role in designing and implementing cost-effective public policies, including the provision of enabling institutions and a conducive environments for the all sectors of society to incorporate biodiversity considerations in their activities. Four recommendations will strengthen the role of government in policy formulation.

1. Incorporate Natural Capital Accounting in all sectors and at all levels of public and private decision-making. Valuation and auditing procedures outlined in the MA 2005, TEEB 2010 and the draft Intergovernmental Platform for Biodiversity and Ecosystem Services valuation guidance (IPBES 2015) offer a suitable framework using a public participation and robust quantitative and qualitative analysis.

2. Adopt an ecosystem approach to biodiversity conservation. Management of ecosystems, implicit in the Kenya Constitution, has been initiated in efforts such as the Amboseli Ecosystem Management Plan and being adopted in many countries, such in the Yellowstone to Yukon Conservation Initiative in Canada and the United States and the Fynbos ecosystems of South Africa. Tangible benefits from ecosystem services should flow to resident and local communities and private landowners

3. Incorporate green economy practices in Kenya's national planning and budgeting and development process. Eliminate perverse subsidies inimical to the sustaining Kenya's natural capital bases and create an enabling environment for green businesses. Promote programs to increase the flow of ecosystem services and ensure the sustainable use of land, energy and water, and mitigate pollution and dispose and recycle waste using green businesses and environmentally friendly household practices

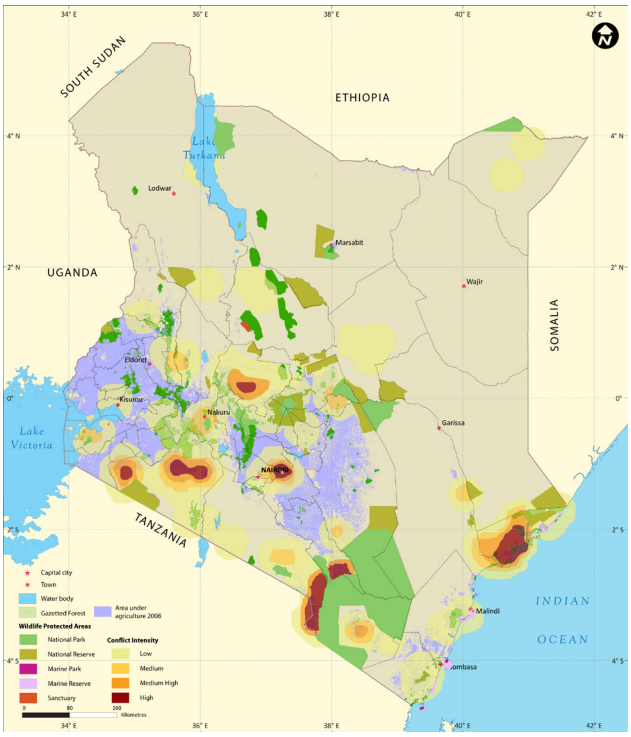

Figure 2: Human–wildlife conflict has increased with growing human pressure on land and wild species. A conflict map shows the hotspots across Kenya in relation to national parks. The heaviest conflicts are in Laikpia, Mau, Transmara, Tsavo, Athi plains and Lamu. Source: KWS.

4. Promote private sector engagement and investment in natural capita. Such engagements should include:

   Natural capital reporting requirements and guidelines for large corporations and sectors with important ecological footprints;

   - A national impact mitigation strategy targeting net biodiversity gains;
   - Subsidies for research and innovation in ecological design of products and services and,

- Innovative market-based instruments rewarding conservation and restoration measures such as water efficiency, a national carbon market and wetland, forest and rangeland mitigation banks.

The further loss of biodiversity will irretrievably damage the natural capital and biodiversity of counties, impoverish livelihoods and undermine the goal of creating the green economy outlined in Vision 2030. Taking action now to incorporate natural capital planning into the county policy, planning and budgeting process will increase the productivity of natural resources, ensure their sustainable use and conserve Kenya's unrivalled natural heritage underpinning its economy.

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