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AFRICAN CONSERVATION CENTRE

Kenyas Natural Capital

Policy Brief for County Decision Makers

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Kenya's Natural Capital - County Decision Makers

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Natural capital underpins urban and rural livelihoods

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.

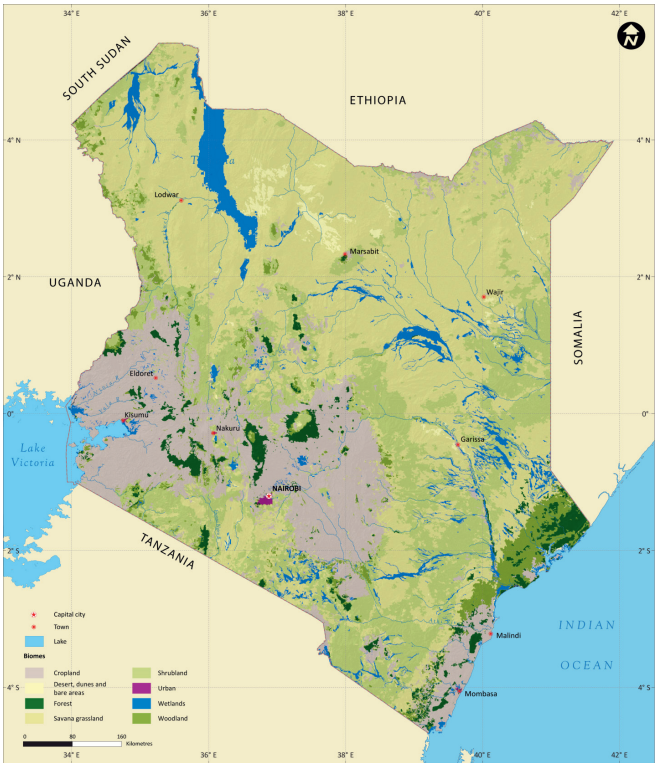

Figure 1: The structure and distribution of Kenya's major ecosystems reflect local climate, topography, soils and biota, modified by human activity.

Not all counties have the same levels of biodiversity and stocks of natural resources or enjoy the same ecosystem services. Counties in the western and central Kenya are rich in agricultural, montane, wetland, woodland and forest ecosystems, those in northern counties dry savannah grasslands and shrublands, and the coastal counties forests, mangroves, estuaries and coral reefs. Nairobi County has little remaining natural resource and imports most ecosystem services.

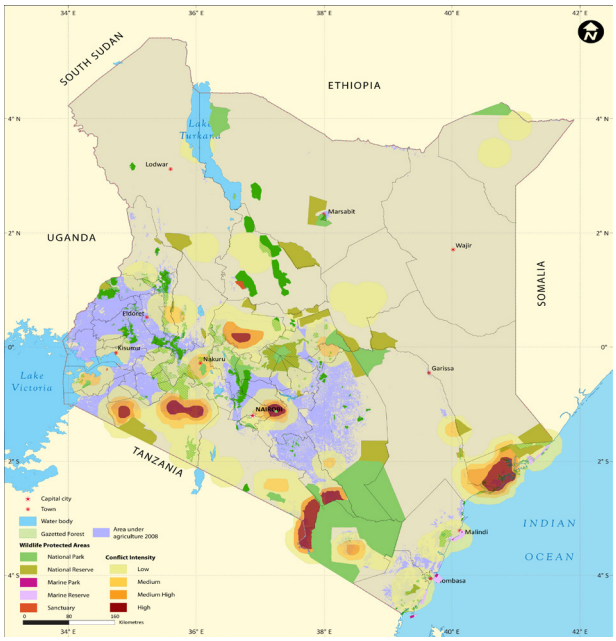

Figure 2: Human–wildlife conflict has increased with growing human pressure on land and wild species. A conflict map shows the hotspots across Kenya in relation to national parks. The heaviest conflicts are in Laikpia, Mau, Transmara, Tsavo, Athi plains and Lamu. Source: KWS.

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.

County 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. The rates of biodiversity loss are not the same for all counties. Counties with higher human population densities and rainfall are particularly affected. Changes in production and consumption patterns, human population and settlement as well as environmental deterioration all contribute to the decline of 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.

Although addressing the threats to Kenya's natural capital and biodiversity is a shared responsibility of the public and private sectors and civil society at a local, national and international level, counties governments play a key role in planning the use, conservation and restoration of biodiversity and natural resources.

County Natural Capital Action Plans

High priority should be placed on developing and implementing County Natural Capital Policy and Action Plans. Such policies and plans using the TEEB 2012 framework will save costs, boost revenues, improve businesses and livelihoods and reduce poverty and inequality The TEEB approach can also help address poverty issues by focuses attention on the distribution of scarce and essential resources and the ecosystem services which people depend on. Four recommendations arising out of the Natural Capital Atlas of Kenya are proposed to improve county planning:

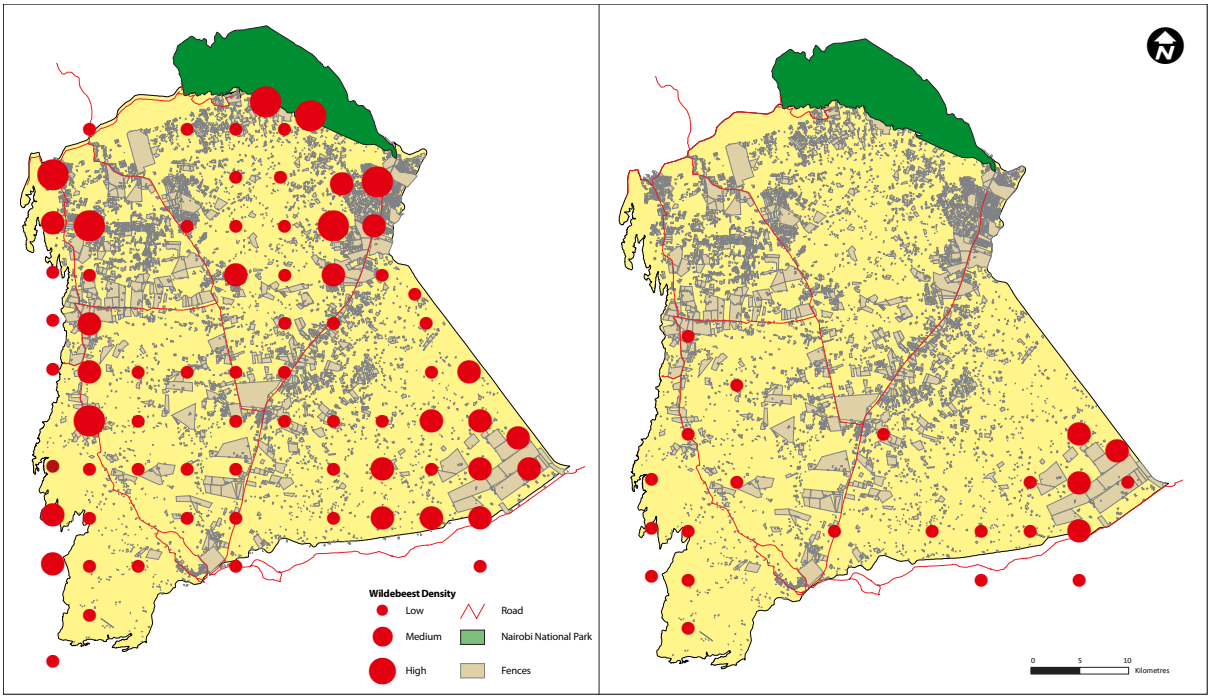

Figure 3: Wildebeest distribution, 1970s–1980s, indicating a wide distribution across the whole ecosystem. b) Wildebeest distribution, 1990s–2000s, showing heavy declines of wildebeest south of Nairobi Park with remnant populations located in the southern plains where fencing is sparse. Source: ILRI, DRSRS

1. Incorporate Natural Capital Accounting in all sectors of the economy 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 based on broad participation and a robust quantitative and qualitative analysis.

2. Use county-level Natural Capital Accounting to improve land use planning by incorporating participatory decision-making, community empowerment and shared values. Such a planning framework and environmental impact assessments should document natural capital assets and the ecosystem services they provide.

3. Adopt an ecosystem approach to biodiversity conservation. Ecosystem management, implicit in the Kenya Constitution, has been adopted in the Amboseli Ecosystem Management Plan and other regions internationally, including the Yellowstone to Yukon Conservation Initiative in Canada and the United States and the Fynbos in South Africa. Tangible benefits from ecosystem services should flow to local communities and landowners

4. Incorporate green economy practices in county policies, planning, budgeting processes and programmes. Develop strategies, incentives and promotional programs to increase the flow of ecosystem services and ensure the sustainable use land, energy and water, and mitigate pollution and dispose and recycle waste using green businesses and environmentally friendly household practices

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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