

Arduous climb for Kenya in its quest for 10pc tree cover by 2022



Felled trees in Sabor Forest in Elgeyo-Marakwet County on March 18. Kenya's forests are threatened with agricultural expansion and unsustainable use of forest resources. Picture: Jared Nyataya

The country will need to engage in an exercise that will result in deforested and degraded forests and other landscapes restored to 5.1 million hectares

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In line with its Constitution that sets a target of a minimum 10 percent tree cover, Kenya devised the National Forest Programme 2016-2030 for the implementation of key tree growing and conservation programmes.

In the programme, Kenya aimed to attain a national tree cover of 10 percent by 2030, from the current 7.2 percent (which puts it in the low tree cover countries in the world). About \$438 million is needed for this task.

That was until President Uhuru Kenyatta issued a directive to have the target date moved forward by eight years.

“We have now been instructed through a directive that we must achieve that by 2022,” said the head of forest conservation directorate at the Ministry of Environment and Forestry, Alfred Gichu, who also doubles as the coordinator of the REDD+ readiness activities in the country.

What this means is that Kenya will need to engage in an exercise that will result in deforested and degraded forests and other landscapes restored to 5.1 million hectares by 2022.

Ecological support

Forest ecosystems are the foundation for the success of other productive sectors such as agriculture, wildlife, tourism, industry, water, energy and infrastructure. Forest habitats support a wide variety of ecological niches and are rich in flora with about 7,000 indigenous plant species.

But Kenya’s forests are threatened with agricultural expansion, over-exploitation and unsustainable use of forest resources what with population increase and widespread unemployment.

According to the United Nations Development Programme (UNDP) Resident Representative in Kenya, Walid Badawi, Kenya loses about 12,000 hectares of

forest each year through deforestation while the world loses about 4.7 million hectares of tropical forest every year.

Surveys have shown that about 12 percent of the land area which was originally covered by closed canopy forests has been reduced to about 1.7 percent of its original size. It is estimated that Kenya’s current situation leads to an annual reduction in water availability of approximately 62 million cubic metres.

Forested water towers and other catchment areas supply rivers and lakes – representing over 75 percent of the country’s renewable surface water resources – besides providing more than 15.8 billion cubic metres of water per year.

The government says it is determined to see the current plan – 10 percent forest cover by 2022 – through. After all, the country is itself party to the same global commitments that have place a rein on Kenya’s wood resources trade partners including the UN Decade on Ecosystem Restoration, Africa Forest Landscape Initiative (AFR100), Nationally Determined Contribution (NDC)—that seeks to achieve a 30 per cent emission reduction by the year 2030, and the United Nations Convention to Combat Desertification under the Paris Agreement.

“Kenya will have to invest \$438 million on implementation of its tree cover strategy. If you don’t give the sector this amount then the cost of inaction is \$1.5billion,” warned Mr Gichu.

“We’ll have to invest in the production of a minimum of two billion tree seedlings by 2022 if we have to achieve the presidential directive,” he said.

A co-ordinated approach is being put in place to plant trees, conserve forests and reduce greenhouse gas emissions.

“The objective is to increase tree cover and reverse forest degradation through sustainable forest management and have well managed forests that can be sustainably utilised for forest-based economy, keeping in mind the environmental benefits but without neglect-



The Kenyan government wants corporate entities to adopt and rehabilitate forests that have for long been destroyed by charcoal makers and illegal loggers. Picture: AFP

| Kenya imports of wood and wood articles | |
|---|----------|
| Tanzania | \$38m |
| Uganda | \$31m |
| DR Congo | \$7.2m |
| Malawi | \$0.55m |
| Nigeria | \$0.31m |
| S. Sudan | \$0.042m |
| Ethiopia | \$0.034m |
| Rwanda | \$0.018m |

\$438m
Amount needed for reforestation

7.2pc
Kenya's current forest cover

ing the developmental role too, including by improving the livelihoods of forest-dependent people,” said Ministry for Environment and Forestry, Principal Secretary, Dr Chris Kiptoo.

The government is now calling on corporate organisations to adopt forests to rehabilitate, private commercial owners to increase their acreage, and government organisations with land including public schools, prisons, and Kenya Railways to dedicate at least 10 percent of their land to forestry.

It also says it will fence off degraded areas especially in protected areas to allow regeneration.

Dr Kiptoo, said the focus was beyond restoration of public forests.

“Private commercial forestry can play a key role in closing the wood supply gap by offering fast-growing and renewable alternatives to natural forest felling.

“The ministry is looking to promote forestry as a viable commercial enterprise,” said Dr Kiptoo.

According to Mr Gichu, Kenya has a demand gap for wood and timber resources of above 30 percent.

“Kenya has a demand of about 45 million cubic metres sawn timber and wood against a supply of 30 million cu-

bic metres, which means we have an annual deficit of 15 million cubic metres,” he said.

Industrialisation and urbanisation are predicted to increase demand for sawn timber and wood to 66 million cubic metres by 2030. This would see the annual deficit rise to 36 million cubic metres.

Part of the plan is to increase the Kenya Forestry Research Institute seed centres from the current six to 16 centres.

Assessment of forest resources

But Kenya has to significantly invest in a system that will aid in assessing forest resources, after all the country has committed to REDD+ (Reducing emissions from deforestation and forest degradation) as a climate change mitigation mechanism. Currently, gaps exist in information on forest resources in terms of quantity, quality, growth and yields.

REDD+ was developed by Parties to the United Nations Framework Convention on Climate Change to create a financial value for the carbon stored in forests and incentivise developing countries to reduce emissions through forested lands and investments in low-carbon paths.

DEFICIT

In Kenya, about 90 percent of rural households use firewood for cooking while 80 percent of urban households depend on charcoal as the primary source of energy for household needs. Consumption of wood fuel in Kenya is estimated to be 40 million cubic metres annually while the national wood deficit is projected to increase from 10 million cubic metres to about 15 million cubic metres per year by 2030. Industrialisation and urbanisation are predicted to increase demand for sawn timber and wood to 66 million cubic metres by 2030 pushing deficit to 36 million cubic metres.

Forests play an important role in carbon sequestration and in climate change mitigation and adaptation as they provide a major carbon dioxide sink that helps stabilise the global carbon balance.

At an event attended by *The EastAfrican*, Dr Kiptoo said the United Kingdom had accepted to support Kenya in acquiring a satellite-backed National Forest Monitoring System (NFMS). He however did not mention any timelines.

Mr Badawi said that UNDP would help Kenya achieve its NDCs.

“UNDP hopes that the ongoing NDC enhancement by Kenya places premium on Nature Based Solutions, especially the forestry sector to achieve the increased ambition which UNDP will support the Government of Kenya to achieve.”

At the regional level, UNDP has successfully supported National REDD+ readiness processes in Cote d’Ivoire, Ethiopia, Democratic Republic of Congo, Ghana, Republic of Congo, Nigeria, Uganda and Zambia among others.

According to the UN-REDD programme, developing countries would receive results-based payments for results-based actions. REDD+ includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

Scientists’ alarm over the clash of species

Scientists are warning of the effects that dissimilarities between tree species in ongoing reforestation efforts and the indigenous trees that preceded the degradation in parts of Africa’s forests could have on ecosystems.

Geobiologists analysing tree species compositions of older and former forests on the continent in respect with ongoing reforestation efforts across the continent have warned that each is extremely different, and could be a threat to African ecosystems.

“When we analyse the assemblage of tree species in each biome, we find that each is extremely different,” says geo-ecologist Julie Aleman, a visiting researcher in the geography department of Université de Montréal.

“Reforestation with tropical forest species in areas that are more associated with savannahs would therefore be a mistake.”

The 30 scientists advise that the original ecosystems must be taken into account before reforestation or else there will be environmental issues.

AFR100 restoration drive

Activities are in high gear on the continent to bring 100 million hectares of deforested and degraded landscapes into restoration by 2030, under a continental vehicle dubbed African Forest Landscape Restoration Initiative (AFR100).

To date 29 African nations have signed onto AFR100 and committed a combined 125 million hectares of land to be restored.

Participating nations are set to receive technical and financial support to the tune of \$1.5 billion in development finance. Germany’s Federal Ministry for Economic Cooperation and Development supports the AFR100 platform and in-country engagement, alongside partners including the World Bank, which has earmarked \$1 billion in development finance through the Africa Climate Business Plan, and impact investors, which have earmarked \$481 million in private finance for restoration from at least 12 financial partners.

All East African Community countries are among 29 African countries that have committed to participate

in the exercise according to Food and Agriculture Organisation of the United Nations.

Africa has approximately 624 million hectares under forestry, which comprise 20.6 percent of the continent’s land area and 15.6 percent of the world’s forest cover. However, Africa’s forest area has declined by about 2.8 million ha between 2010 and 2015, a much higher rate than in any other region in the world, and this has been mainly due to deforestation and forest degradation.

Introduced species

According to FAO’s ‘The State of the World’s Forests 2020’, over 70 percent of tree species in regenerated African forests are ‘introduced species’.

But the major new scientific study designed for African biomes south of the Sahara and published recently in the *Proceedings of the National Academy of Science*, raises concern over how countries are going about this restoration. The team that also involved the University of Liege, in Belgium, also traced the past of biomes and assembled the floristic, environmental and paleoecological data to understand the ecological functioning of the forests and savannas.

The scientists advise the teams involved in the restoration to study forest and savanna biomes and their overlaps and to analyse the differences in tree species composition from species lists assigned to either forest or savanna by old authors or by the data contributors who conducted original floristic surveys according to vegetation structure, species composition, and ecosystem functioning of affected forests.

“For instance, acacias are more associated with open environments whereas celtis trees are specific to forests. In some cases, eucalyptus plantations have proved to be ecological disasters,” says Aleman.

Each site consists of a species list assigned to either forest or savanna by the original authors or by the data contributors who conducted the floristic surveys according to vegetation structure, species composition, and ecosystem functioning.

Pauline Kairu

JULIUS BARIGABA
THE EASTAFRICAN

Environmentalists have launched a regional resource hub for protected areas and biodiversity to support 24 countries in eastern and southern Africa in conservation.

The resource hub, which is based in Nairobi, was unveiled in a virtual launch on November 24, at a time when the state of global biodiversity “is an unfolding crisis,” according to recent reports.

“This is the first time we are doing something like this,” said Trevor Sandwith, director of Global Protected Areas Programme at the International Union for Conservation of Nature (IUCN), during the launch. “There never has been this much data on conservation. We are now going to agree on what needs to be conserved and what need to be protected.”

Mr Sandwith encouraged conservation activists, government agencies and academia to use the regional knowledge hub to address future needs.

“The last thing we want to see is a box of data, but rather for this to inform decision making...not a reporting mechanism but a tool for analysing the future and responding to future needs,” he said.

For example, what attention will the hub put on information about illegal wildlife trade, which hampers global conservation efforts?

Beryl Nyamgeroh, also from IUCN, told *The EastAfrican* that there are discussions with key donors to have information about illegal wildlife trade on the regional resource hub (RRH).

Partnerships

“We have linkages with partners on this area. We are discussing with USAid VukaNow programme to have information about this shared through the RRH portal.”

Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan are already beneficiaries of interventions aimed at controlling illegal trade in wildlife. However, the Democratic Republic of Congo, which shares protected areas such as Greater Virunga

Landscape with the East African Community is not covered by the hub.

According to Ms Nyamgeroh, the RRH will also share data on transboundary protected and conserved areas.

Head of sector biodiversity and ecosystem services at the European Commission Philippe Mayaux, said transnational protested areas such as Virunga would be handled at regional or global level.

“When such a landscape is shared between different countries of the same region (for example Mount Elgon and other Water Towers), specific analysis should be conducted at regional level, while when it covers more than one region, it can be analysed at central level and transferred to the

two regional hubs,” he said.

The RRH is already hosting the Southern Africa Transfrontier Conservation Areas portal and plans something similar in the Eastern Africa region.

The hub – which is hosted by Nairobi based Regional Centre for Mapping of Resources for Development – includes an information system, co-developed with the European Commission, which helps track conservation targets, and protected and conserved areas in the region.

Similar hubs have been established with Biodiversity and Protected Areas Management programme’s support in western and central Africa, the Caribbean and the Pacific.



The hub will also pay attention to conservation and information on illegal wildlife trade. Pic: File