

# TMG Global Soil Week 2021

Kenya Pilot Study - Info Brief

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September 2021

## **AUTHORS**

Oscar Schmidt  
Serah Kiragu-Wissler

## **ACKNOWLEDGEMENT**

We would like to thank Brian Washe Kazungu, Harry Stopes, William Onura, Kai Siong Chong, Anna Kramer, Frederike Klümper and Nelson Muiru for their valuable contributions to this report.

## **PUBLISHED BY:**

TMG Research gGmbH, Berlin.

## TOWARDS AN ENABLING ENVIRONMENT FOR GREEN RECOVERY

Sustainable land use has a key role to play in solving many of the most pressing socio-ecological challenges of our time. As the United Nations Convention to Combat Desertification (UNCCD) states, ‘healthy and productive land can play an unparalleled role as an engine of economic growth and a source of livelihood for billions worldwide, including the most vulnerable populations. Achieving land degradation neutrality can become an accelerator of achieving SDGs across the board’ (UNCCD, 2021).

While the importance of land can hardly be overestimated, today already 33% of the Earth’s soils are degraded and over 90% could become degraded by 2050 (FAO and ITPS, 2015; IPBES, 2018). In this context the achievement of the SDGs will require reaching Land Degradation Neutrality (LDN), a state whereby the amount and quality of land resources, necessary to support ecosystem functions and services and enhance food security, remains stable or increases.

In many countries suffering from high degradation levels, such as in Asia and Sub-Saharan Africa, sustainable land use will become widespread only by the efforts of smallholder

farmers. Their importance in this respect parallels their pivotal roles in achieving global food security and providing rural employment, which are widely recognised (IFAD, 2011). However, smallholder farmers’ efforts in these directions are hampered by the fact they often lack secure access to land and other natural resources and are excluded from the processes through which land is managed and land rights asserted. As a direct consequence, many smallholder farmers find their ability to invest in sustainable land use is severely curtailed.

For smallholder farmers to become the drivers of the transformation of land management, as well as for them to be the beneficiaries of its sustainable use, it is therefore essential to support the establishment of responsible land governance structures. This means also guaranteeing tenure security for smallholder farmers and other marginalised natural resource users. It is against this background that the UNCCD’s land tenure decision [26/COP.14](#) explicitly recognises the relevance of legitimate tenure rights, according to the Voluntary Guidelines on the Responsible Governance of Tenure of Soil, Land, Fisheries and Forests (VGGT) for the implementation of Land Degradation Neutrality (LDN) measures.

## THE GLOBAL SOIL WEEK: A PLATFORM FOR JOINT ACTION AND POLICY ON SUSTAINABLE SOIL MANAGEMENT AND RESPONSIBLE LAND GOVERNANCE

The Global Soil Week (GSW) is organised by TMG Research in close partnership with the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). It is a unique international platform bringing together a diverse range of actors to develop new policies, and strengthen existing actions, on sustainable soil management and responsible land governance. The GSW’s transdisciplinary format allows sustainable soil management and responsible land governance to be addressed with an integrated approach that acknowledges their closely related character and thereby contributes to innovative solutions.

Since its launch in 2012, the GSW has systematically built a large volume of knowledge and experience from both its practical and theoretical work, while its focus and design have continuously evolved in response to ongoing policy debates and land management programming. In this context the approaching 10th anniversary of the VGGT in 2022 represents a reminder of the importance of implementing LDN measures through responsible land governance approaches, prioritising tenure security for smallholder farmers and other marginalised natural resource users. TMG’s commitment to this approach provides the thematic focus of Global Soil Week 2021 “Creating an enabling environment for green recovery”.

## GSW 2021: LINKING LOCAL KNOWLEDGE WITH INTERNATIONAL POLICY MAKING ARENAS

The GSW 2021 aims to contribute to the creation of an enabling environment in which the rights of vulnerable communities will be protected in LDN initiatives. The GSW's approach combines the pro-active generation of local knowledge and experience-based action research through participatory mapping, with the platform's longstanding expertise in feeding local lessons back to international policy making arenas in the field of sustainable development.

The first component, action research, aims to empower civil society organisations to monitor the effects of LDN measures on the tenure rights of affected land users. The participatory use of a customised digital mapping tool empowers marginalised land users, especially women, to monitor potential or existing conflicts between forest restoration goals and their tenure rights to forest resources. The participatory tenure mapping approach is applied in two case study regions in Kenya and Benin.

The second component, linking local knowledge with international policy making, is a direct

contribution to the UNCCD 26/COP.14 decision on land tenure. The GSW pilot studies accordingly provide the basis for an empirically sound reporting on land governance and tenure rights at the upcoming UNCCD COP 15. Beyond the reporting at the UNCCD COP, the approach described here can also serve to point out the cross-cutting relevance of land governance and tenure rights in the context of the other two Rio Conventions, i.e. the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC).

TMG Research follows the concept of a counter current principle, reasoning that international reporting processes require well-founded contextual information generated from experience and local knowledge. At the same time, local knowledge and experience, for example generated through participatory tenure mapping, can better inform and shape policies at national and international level thereby increasing accountability at various levels.



GSW 2021 – Community sensitisation workshop at Nyanduma community, Kenya.  
Credit: William Onura, TMG Research.

## KENYA'S LDN TARGET SETTING PROGRAMME

Land degradation remains a key challenge to Kenya's socio-economic development and ecosystems sustainability. The country is estimated to have lost the equivalent of US\$1.3 billion annually between 2001 and 2009 from the costs of land degradation due to land use and land cover changes (Mulinge et al., 2016). In efforts to curb land degradation, Kenya has made several international, regional and national political commitments, amongst them the ratification of UNCCD, and commitment to the Bonn Challenge and African Forest Landscape Restoration Initiative (AFRI100).

Under the UNCCD commitment, Kenya aims to achieve Land Degradation Neutrality by 2030, alongside the improvement of an additional 9% of the national territory as a net gain. The country's specific targets to avoid, minimise and reverse land degradation include: (i) increasing forest cover through afforestation/ agroforestry by 5.1 M ha., (ii) increasing net land productivity by 16% through sustainable land management (SLM) practices, (iii) increasing soil organic carbon by 319,626 total tonnes in cropland land use, (iv) halting the conversion of forests to other land cover classes by 2030, and (v) rehabilitating all abandoned mining and

quarrying areas through the enforcement of by-laws. Furthermore, subnational LDN targets have been set for achieving a neutral (no net loss) or improved (net gain) state. This allows the overall LDN target setting programme to focus on areas that have been identified as degradation "hot spots" and/or are considered as high-value priorities in achieving LDN.

The main strategy for implementing Kenya's LDN targets entails mainstreaming them into national land use planning, alongside harmonisation with other relevant land degradation initiatives, and exchange of best practices between the various local actors. In addition, five large LDN projects and programme opportunities have been identified as significant in contributing to achieving land degradation neutrality, ecological restoration, and food security. The country's commitment to overcoming land degradation is accompanied by several policies supporting LDN implementation (summarised in box 1 below). A critical risk in the implementation of these commitments is the potential for the overriding of the tenure rights of local communities who depend on those land-based resources, particularly forests, that are the focus of restoration.

### KENYA'S POLICIES SUPPORTING LDN

#### **The Economic Blueprint Vision 2030**

requires the country to work towards achieving forest cover of at least 10 percent of the land area and to ensure sustainable resource use, growth and employment creation.

**The Green Economy Strategy and Implementation Plan (GESIP)** seeks to facilitate a transition to a green economy.

**The National Forest Policy 2015** supports the rehabilitation of degraded dryland forests and encourages tree planting in the arid and semi-arid lands.

#### **The National Environmental Policy of 2013**

proposes implementing soil conservation mechanisms, for example to enhance the protection of slopes to prevent soil erosion.

**Kenya National Climate Change Action Plan 2018-2022 (NCCAP)** addresses the options for a low-carbon, climate resilient development pathway.

**Kenya's National Action Programmes (NAP) 2015** creates an enabling framework for LDN implementation and captures information on best practices used in Kenya to address Land Degradation, Droughts and Desertification (LDDD), and livelihoods in Arid and Semi-Arid Lands (ASAL).

## RISK OF TENURE CONFLICTS IN LDN TARGET AREAS

Actions to meet the LDN targets are implemented in all three of the land tenure systems present in Kenya, namely public lands, private lands, and community lands. Potential tenure conflicts are likely to arise in public and community lands due to the contested nature of ownership or user rights to natural resources. Forest reserves comprise the bulk of the public lands subject to the LDN targets (others include riverine lands, lakes, and wetlands). Many forests serve as sources of key livelihood resources for communities living either inside or adjacent to them. Forests support livelihoods by, among other uses, serving as pasture for livestock or land for cultivation, or as sources of water, herbs for food or medicine, honey, fuelwood, mushrooms, or recreation.

The forest law allows that forest-adjacent communities can co-manage and co-protect public forests through Community Forest Associations which enter into participatory forest management agreements with the Kenya Forest Service (KFS). Under these agreements,

communities are entitled to use forests in a number of agreed ways, as they also contribute to their conservation. However, often KFS does not fulfil their part of the bargain by letting the communities enjoy the agreed rights. This makes any forest where communities have entered an agreement with KFS worth monitoring, to assess whether the agreed user rights have been realised or not.

Efforts to implement LDN related measures have from time to time resulted in severe tenure conflicts. According to the Kenya's Forest Conservation and Management Act 2016 and its predecessor laws, protecting gazetted (public) forests from degradation can only be achieved with total exclusion of any human settlement within them. Implementation of these laws has witnessed long running struggles between the state and forest-dwelling communities such as the Endorois, Ogieks (Domínguez & Luoma, 2020) and the Sengwer community (International Human Rights Clinic, 2017). Cases of forceful eviction and even killings by state agents have been reported in the past.

*“Efforts to implement LDN related measures have from time to time resulted in severe tenure conflicts.”*

## THE KEREITA FOREST PILOT STUDY

Kereita Forest is in Lari sub-county of Kiambu County about 50 km north-west of Nairobi City. To the south, the forest has been greatly fragmented, and there are only scattered remnants of trees and shrubs towards its limits. The Kereita block neighbours the Uplands Forest Station to the East and Kinale Forest Station to the North. To the west it borders farmlands that are under food crop production. The forest forms part of the Kikuyu escarpment forests within the Aberdare Forest Reserve and covers a total of 4,722 hectares. It was gazetted under legal notice No.7 of 1943 for the purpose of conservation. The forest forms one of the most important catchment areas in Kenya that

provide water to neighbouring communities and urban centres including Nairobi.

Kereita Forest neighbours five main villages: Kambaa, Bathi, Magina, Gatamaiyu and Nyanduma. A significant proportion of the population in these villages relies on the forest; it is a vital resource for extraction of forest products such as timber, wood fuel, construction material, fodder, herbal medicine, and as a grazing ground among other uses. The forest-adjacent communities in Kereita Forest, defined as those living within 2km of the forest boundary, is estimated to comprise 41,680 people in 14,126 households.

## BIODIVERSITY AT KEREITA FOREST

The soils in the forest area are highly fertile and suitable for agriculture. The forest block also hosts the sources of several rivers – Bathi, Githoito, Nduriri, Karatina, Wanjura, Gatamaiyu, Kiruiru and Komothai among others. The main vegetation in Kereita is indigenous forests, followed by forest plantations. Bushland, grasslands and Nyayo Tea form less than 6% of the plant cover. The forest is also host to large mammals such as the African elephants, black

and white colobus monkey, sykes monkeys, small antelopes, bush babies, porcupines, and several carnivores. It is classified as an Important Bird Area (IBA) due to its rich avifauna, hosting over 138 bird species. At least 39 of Kenya's 67 Afrotropical highlands biome species occur in this forest. The forest hosts a diverse variety of other animal life including three endemic species of butterflies.

## SOCIO-ECONOMICAL VALUE AND FOREST DEGRADATION

Its rich range of resources make Kereita Forest an important source of livelihoods for the adjacent communities. The several streams flowing out of the forest provide water for the communities around, as well as those living in nearby towns and trading centres. Honey and medicinal herbs are commonly harvested by the adjacent communities. The forest has considerable ecotourism potential given its major attractions - waterfalls, caves, Gatamaiyu fishing camp, Kikuyu cultural centre, Bathi Dam, Mai ma Nyoni, elephant maternity and viewpoints. Due to the favourable climatic condition, vegetable farming in the forest under the Plantation Establishment and Livelihood Improvement (PELIS) programme is a major source of income to local communities. According to a socio-economic survey undertaken by Kijabe Environmental Volunteers (KENVO) in 2017, the average income of the communities ranges between US\$ 50 to US\$ 100 and only very few households reach a monthly income of US\$ 200.

In recent years the forest has experienced massive exploitation, which has resulted in forest degradation and the illegal logging of some of its most valuable trees. Alongside logging the main illegal activities include charcoal production and excessive fuel wood collection. According to the Kereita Participatory Forest management Plan 2017, forest degradation in Kereita has led to loss of biological diversity, reduced agricultural production, reduced income among local communities, closure of local forest-based industries due to a lack of raw materials, siltation of rivers and dams leading to water scarcity, and accelerated soil erosion.



*A woman showing proof of her right to collect firewood from Kereita Forest.  
Credit: Nelson Muiru, KENVO.*

*"In recent years the forest has experienced massive exploitation, which has resulted in forest degradation and the illegal logging of some of its most valuable trees."*

## LEGAL AND ADMINISTRATIVE STATUS OF KEREITA FOREST

Kereita Forest is managed by the Kenya Forest Service (KFS). It is managed by a Forest Station Manager who reports to the Ecosystem Conservator – Kiambu County based at Muguga. The forest block lies within the Central Highlands Conservancy. The Forest Conservation and Management Act No 34 of 2016 and its predecessor, Forest Act 2005 have provided the necessary reforms for co-management of forests

by the state and forest-adjacent communities. Kereita Forest is thus co-managed by Kenya Forest Service and the Kereita Community Forest Association. The two entered into a forest management agreement in 2010 after developing the Kereita Participatory Forest Management Plan 2010. The Kereita Forest block comprises five small administrative units namely Station, Muiri, Bathi, Gatamayu and Nyanduma.

## THE KEREITA INTEGRATED COMMUNITY FOREST ASSOCIATION

Community self-organisation leading to the present-day Kereita Integrated Community Forest Association (KICOFA) dates to 2000 when farmers living adjacent to Kereita Forest and undertaking non-residential cultivation (NRC) in the forest joined hands with KENVO to monitor and police forest destruction. At the time forest destruction occurred mainly through illegal tree cutting for charcoal production and timber. The collaboration initially gave rise to Kenya Forest and Wildlife Conservation Association (KFWCA) which was registered as a Community based Organisation (CBO) in the Ministry of gender and social services. It later transformed itself into a Community Forest Association (CFA). In 2009 the CFA merged with Kereita Forest Management and Conservation (KIFOMACO) and Gatamaiyu Wildlife Conservancy (GWC) to form KICOFA.

KICOFA envisions effective community participatory management for a better-managed forest and improved livelihoods for the communities living next to the forest. It seeks to build the capacity of its members to develop, organise, and maintain a culture of forest protection to achieve sustainable forest management. In addition to conservation activities such as establishing tree nurseries for (re)afforestation work, KICOFA collaborates closely with KENVO and other partners to engage in livelihood-improvement projects based on the forest and forest resources - among them eco-agriculture, beekeeping, forest restoration, eco-tourism and fish farming.



*Staff of Kijabe Environment Volunteers (KENVO) inspect a waterpoint inside Kereita Forest.  
Credit: Nelson Muiru, KENVO.*

## BALANCING PAPER COMMITMENTS FOR CO-MANAGEMENT WITH IMPLEMENTATION REALITIES

The Government's commitment to protect Kereita Forest is grounded in the critical importance of this forest to the economy of the country. As an internationally recognised Important Bird Area, and given its scenic beauty and location near the country's capital, the forest is an attractive source of revenue through ecotourism. The forest is a major catchment for rivers that supply water to Nairobi city and surrounding densely populated environs.

The co-management of the forest with local forest-adjacent communities through the Kereita Forest Participatory Management Plan provides for the balancing of forest protection and forest use. Through this plan, the communities has signed up to protect the

forest while sustainably using some of the resources therein. In practice, the balance between protection and use is perceived by the communities as skewed in favour of the former. For instance, the original agreement permitted the communities to establish an ecolodge. Since capacity limitations have meant that they were unable to do so within the agreed timeframe, this right has been taken away from the communities by forest managers, in violation of the terms of the agreement. Dissatisfaction on the part of the communities may hamper progress towards forest restoration if contentious issues of co-management are not transparently discussed and solutions agreed upon between the forest managers and the communities.



TMG Research staff in conversation with local smallholder farmer at Kereita Forest. Credit: William Onura, TMG Research.

Here is where the GSW's action research approach with its objective to enhance local stakeholder engagement and political accountability at various levels takes effect. As part of the ongoing GSW 2021 programme, TMG Research and its local partners have begun implementing a pilot process at Kereita Forest. The GSW's objectives are (1) to facilitate stakeholder engagement especially with respect to the genuine inclusion of marginalised communities, and (2) to enhance accountability with respect to the enforcement of rights and duties on the part of both private and public stakeholders. Both objectives are based on granting improved access to information, as well as the promotion of transparency and participation in the process of forest management and land governance. The relevant information is obtained, shared, and monitored based on a variety of methods. Of central importance is the participatory tenure mapping approach which systematically draws on the active participation of the local communities to help identify and monitor legitimate tenure rights and potential conflicts.

*“Dissatisfaction on the part of the communities may hamper progress towards forest restoration.”*

## SUMMARY

Smallholder farmers have a key role to play in international aspirations for Land Degradation Neutrality. Yet, for smallholder farmers to become the drivers and the beneficiaries of sustainable land use, it is essential to support the establishment of responsible land governance and tenure security.

The Global Soil Week 2021 focuses on linking LDN approaches with responsible land governance, with a focus on tenure security for smallholder farmers and other marginalised natural resource users. Special emphasis is put on demonstrating the potential of participatory tenure mapping approaches to enhance local stakeholder engagement, as well as political accountability for commitments to responsible land governance in the context of LDN implementation.

At Kereita Forest, Kenya, TMG Research and its local partners have begun implementing a pilot process to facilitate stakeholder engagement towards the end of a genuine inclusion of marginalised communities, and to enhance accountability on the enforcement of rights and duties on the part of both private and public stakeholders. At the heart of this pilot is a participatory tenure mapping approach which systematically draws on the active participation of the local communities

to help identify and monitor legitimate tenure rights and potential conflicts.

The Global Soil Week pilot at Kereita Forest provides a unique opportunity to analyse the complex challenges that face the implementation and monitoring of a participatory forest management plan. The results of the pilot, and the experience of the participatory process that accompanied it, represent a valuable contribution in several respects. For the forest dependent communities and other private and public local stakeholders, the pilot offers a new perspective and enhanced access to information that could ultimately facilitate a reconciliation of conservation needs and local tenure security. Beyond the local level, the Kereita pilot is also a direct contribution to the UNCCD 26/COP.14 decision on land tenure. The pilot study accordingly provides the basis for an empirically sound reporting on land governance and tenure rights at the upcoming UNCCD COP 15. Beyond the reporting at the UNCCD COP, the approach described here can also serve to point out the cross-cutting relevance of land governance and tenure rights in the context of the other two Rio Conventions, i.e. the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC).

### TMG Research

TMG – Think Tank for Sustainability  
TMG Research gGmbH  
EUREF-Campus 6-9  
10829 Berlin, GERMANY  
Telephone: (+49) 30 92 10 74 07\_00  
Email: [info@tmg-thinktank.com](mailto:info@tmg-thinktank.com)  
Website: [www.tmg-thinktank.com](http://www.tmg-thinktank.com)

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