Participatory 3-Dimensional Modelling of Cherangany Hills

REPORT

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BACKGROUND TO CHERANGANY HILLS

Introduction

The Cherangany Hills cuts across four administrative districts\(^1\) in Rift Valley Province. The hills are largely covered by a series of indigenous forests. These forests are made up of 12 administrative blocks\(^2\). The soils are well drained and moderately fertile. The Hills are important biodiversity hotspots as it harbours several forest types and regionally threatened species such as the Lammergeyer, African Crown Eagle, Red Chested Owlet, *Sitatunga* and Thick Billed Honey Guide.

Several Ecosystems depend on water originating from it, including: Lake Victoria (Shared by Kenya, Uganda and Tanzania), Lake Turkana and Saiwa Swamp national park.

The Cherangany Hills: An internationally critical Water Tower

The Nzoia a river of international importance originates from Cherangany Hills at a mean elevation of 2300 metres a.s.l. and drains into Lake Victoria at an altitude of 1000 m a.s.l. Rivers Muruny and Empoput also originating from Cherangany Hills at an elevation of approx. 3000 meters a.s.l. drains its water into Lake Turkana.

Conservation Values

The watershed of Cherangany Hills forms major conservation areas which include: Saiwa Swamp National Park known for *Sitatunga an endangered antelope species*, South Turkana National Reserve, Rimoi Game Reserve and Kerio Valley National Reserves.

The Sengwer

Sengwer (Also Known as Cherangany or Dorobo\(^3\)) is an ethnic minority hunter-gatherer\(^4\) indigenous peoples living along the slopes of Cherangany Hills. They are distributed in three administrative districts: - Trans Nzoia, West Pokot and Marakwet districts in and around Cherangany Hills. It is estimated that the current population of the Sengwer considered as one of the marginalised groups is about 30000. Their cultural administrative organization is made up mainly of sub-tribes\(^5\), clans\(^6\) and totems\(^7\).

"…Maasai laughed at us because we had no cattle, and called us Cherangany (ni)."\(^8\) "…The Dorobo problem has risen because these people, living in small scattered groups, spread over large areas without any property…lived from hand to mouth by hunting and bee keeping…"\(^9\)

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1 West Pokot, Marakwet, Keiyo and Trans Nzoia
2 Kapolet, Kapkanyar, Kipteeper, Sogotio, Chemurgoi, Kaisungor, Kerer, Empoput, Kipkunur, Lelan, Toropket and Cheboit,
3 Kenya Land Commission of 1932 and colonial District Commissioners monthly and yearly reports
4 Assistant District Commissioner, Marakwet, letter to the Provincial Commissioner, Naivasha on 1\(^{st}\) October 1918
5 Kaplema, Kamengetiony (Kopoch, Kapkotit), Kipsirat, Kapteeteeke, Kapsormei, Kimarich, Kasaango, Kaptapkutl, Kapkutung, Kapchongwony, Kaplogom, Kapumpo, Kapchepar, etc
6 Koopil, Koopon, Toyoi, Sot, Terik, Soogom, Moi, Talai, Kaplooso, etc
7 Cheptuke, Asis, Moororoch, Iilit, Chepsiriere, Chepkukwka nyi lel kat, Soo, etc.
8 Kenya Land Commission report as stated by Sengwer chief Arap Kamussein at A.C.Hoey’s farm on 2\(^{nd}\) October 1932.
9 Evidence given by Mr. C.H. Adams acting Provincial Commissioner Rift Valley Province before the Kenya Land Commission in 1932
The Sengwer livelihood, health system and culture depend on the natural resources found in the forests. Their traditional economies were based on herbal medicine, bee-keeping, hunting and gathering. The forests offer cultural rights and spiritual anchorage.

**Threats to the Cherangany Hills Water Tower**

The Cherangany Hills includes 12 forest blocks gazetted as government forests by the colonial government. The proclamation was enacted without the community’s endorsement. It prohibited anyone from residing in the forest or carrying out activities without Government’s authority. After Kenya gained independence in 1963 the Sengwer thought that better times had arrived. Every tribe was celebrating Uhuru (freedom) because they were promised their traditional land. The Sengwer were sure of getting back their land. They were disappointed when they discovered that their land was given to other tribes due to Nepotism, Corruption and Ignorance of the Sengwer. The consequences of losing land for the Sengwer were not only losing a place to hunt, to collect honey and to find their traditional medicines.

The exercise led to a dramatic loss of forest cover and to the destruction of large forest ecosystems. This has impacted tremendously on water resources and altering the flow regime of a major river feeding Lake Victoria a trend threatening the stability of the Lake’s ecosystem. The forests remained protected until 1992 when thousands of hectares of land were excised through illegal alterations of forest boundaries and irregular allocation of the land to non-Sengwer...

The exercise led to a dramatic loss of forest cover and to the destruction of large forest ecosystems. The largest excision areas extended over the top of the Cherangany Escarpment (Eastern Cherangany Forest Reserve), impacting tremendously on water resources and altering the flow regime of major rivers feeding Lake Victoria and Lake Turkana, a trend threatening the stability of the lakes’ ecosystem.

**Threats to Sengwer Community**

In an effort to conserve their territorial entitlements, which include natural resources and cultural heritage, the Sengwer Peoples has resisted the attempts of successive Governments to arbitrarily reallocate their ancestral domains. The pre-colonial and post colonial governments denied the Sengwer community rights over their ancestral domains. In fact the Dorobo Committee Recommendation during the Carter Land commission of 1933 made a blanket recommendation that Dorobo should be merged into larger tribe:

"...I agree then the recommendation reported in the prescription that – wherever possible the Dorobo should become members of and be absorbed into the larger tribe which they have most affinity."  

In view of the complication that would arise having Cherangany officially residing in 2 separate Districts and under 2 separate provinces. He would reluctantly agree to the move (of Cherangany from Marakwet to West Suk) out of sympathy with the District Commissioner, Tambach, Forest Preservation Policy, and provided that Cherangany in question will agree to surrender their tribal identity..."  

"...the Cherangany from forest areas in question should move to Suk...they should become...

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10 Memorandum by Mr. C.H. Adams acting Provincial Commissioner Rift Valley to the Kenya Land Commission of 1932
11 Captain M.R. Mahony District Commissioner, West Suk, comments during a meeting in Kapenguria on 17th September 1935.
entirely merged in the Suk, Subject to Suk Chiefs, Headmen, Tribunals, Law and Custom". Sengwer lost all their prime land to Colonial white settlers and the forests were gazetted as government forests with no consideration to have native reserve for Sengwer Indigenous Community. Kenya became independent and the status quo continued. Sengwer saw continued lost of their land to immigrants – The independent government settled immigrants into Sengwer ancestral left by colonists through SFT Programme. Portions that remained were converted into Agricultural Development Corporations (ADC) farms. In the 90s the ADC farms were further allocated to politically influential communities and individuals living Sengwer peoples landless and aliens in their own territory.

Forced evictions and displacements of Sengwer Indigenous Peoples from their ancestral land coupled with forced assimilations into dominant tribes; failure to recognise the rights of Sengwer to live in their ancestral homes – forests; and, settling other communities on Sengwer land led to an increase in deforestation and pressure on fragile ecosystems.

Besides, lack of a constitution and or national land policy that recognizes ancestral lands/community lands has led to continued marginalization, oppression and discrimination of ethnic minority hunter-gatherer Indigenous Peoples in Kenya today.

International Development Agencies e.g. World Bank, European Union, KfW Development Bank, etc. programmes on Western Kenya Community Driven Development and Flood Mitigation and Natural Resource Management (WKCDDFM/NRM); The Kenya Water Supply and Sanitation Improvement Project (WASSIP); etc which focused on the Cherangany Hills put more pressure on the survival of Sengwer peoples – since it complicated the survival of the community – This is because most of these programmes failed to recognise the fundamental freedoms, human and indigenous rights of ancestral owners of the territories they intend to carry out the development projects. It was after an extensive activism that World Bank commissioned an Indigenous Peoples Planning Framework for WKCDDFM/NRM and WASSIP. Likewise, KfW Development Bank open a door for negotiation.

PARTICIPATORY 3 DIMENSIONAL MAPPING OF CHERANGANY HILLS

Introduction
After a successful participatory 3D Modelling (P3DM) of Mau Complex by the Ogiek Community delineating their ancestral territory Sengwer community was challenged to carry out the same project to address Ancestral Land and Cultural Rights; and Natural Resource Management.

Goal
To have a tangible document for addressing Sengwer Indigenous Peoples Ancestral Land and Cultural Rights; and Natural Resource Management.

Project Purpose
To use the project output for negotiation with KfW Development Bank, Kenya Government, and other Development Partners over the use, control and management of natural resources within Sengwer ancestral territory.

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12 Mr. C.B. Thompson, Officer in Charge, Turkana district Dated 17th September 1935
13 Settlement Fund Trustees
Project Specific Objectives
1. Development of a community map by the Sengwer peoples who will be affected by the KfW Development Bank funded ‘Kapolet Water Project’ for supply of water to Kitale town; and other development programmes in Cherangany Hills.
2. Negotiation, using the map, with the government of Kenya; KfW Development Bank; the World Bank and other development partners in order to secure a just settlement for the Sengwer peoples
3. Strengthening Sengwer community’s fundamental freedoms, human and indigenous rights
4. Empower Sengwer Peoples to develop and implement an integrated management plan of their customary domains

Identification of Project Area
The construction of a dam to supply water to Kitale town by the government of Kenya with funds from KfW Development Bank (Germany) along Kapolet River in Kapolet/Kipteeper Forest within Sengwer ancestral territory prompted the community’s Elders to decide on the need of carrying out a 3-D mapping of their territory.

Kapolet River which runs through Trans Nzoia district has its source in Kapkanyar and Kipteeper forests in Marakwet and West Pokot Districts. Hence the need to encompass the three Districts in the mapping process.

Reasons for selecting the project area:
- To have a tangible document for negotiations on Sengwer Ancestral Land and Cultural Rights; and, Natural Resource Management
- Interest by Development Partners (e.g. World Bank, KfW Development Bank, European Union, etc.) to carry out their programmes in Cherangany Hills
- Its cultural and spiritual value to the community
- Availability of topographic and terrestrial components

Topographic mapsheet

The topographic map sheets were acquired from Survey of Kenya which is the government agency.
## Cherangany Hills Mapping Exercise Summary Fact Sheet

<table>
<thead>
<tr>
<th>Executing Organization</th>
<th>Sengwer Indigenous Development Project (SIDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Agency</td>
<td>Rainforest Foundation (U.K.)</td>
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<tr>
<td>Venue</td>
<td>Sengwer Cultural Centre (SCC) - Kapolet, Cherangany Hills - Kenya</td>
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<tr>
<td>Dates</td>
<td>August 16th – 28th 2007 (inclusive travel and other training related activities)</td>
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<tr>
<td>Duration of the actual P3DM exercise:</td>
<td>12 working days</td>
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<tr>
<td>Duration of preparatory work:</td>
<td>3.5 months (scattered inputs)</td>
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### Participants

| Villagers              | 65 |
| Trainees from various institutions/NGOs | 8 |
| Students and teachers (Moi University and Amani Primary School) | 14 |
| Resource persons       | 2 |

### The model

| Horizontal scale: | 1 : 10,000 |
| Vertical exaggeration: | 2X |
| Elevation contour interval: | 20 m |
| Highest elevation on the model | 3000 m a.s.l. |
| Final size of the model (two units 1.2 m x 2.2m) | 2.4 m x 2.4 m |
| Area covered (on the ground) | 576 Km² (528 sq. km) |

### Geographical coverage of the exercise

| Province: | Rift Valley |
| Districts: | Trans Nzoia, Marakwet and West Pokot |
| Forests: | Kapolet, Kipteeper, Kapkanyar |

### Participants and Trainees

Community representatives (informants and leaders), Institutions and NGOs attended the training.

### Village representatives

Representatives from 13 sub-tribes\(^{14}\) attended the training.

### Non Government Organizations (NGOs) National and Regional

- Chepkitale Indigenous Peoples Development Project
- Ugunja Resource Centre.
- Mau Development Initiative
- ERMIS-Africa

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\(^{14}\) Kaplema, Kamengeliony, Kipsirat, Kapteeteke, Kapsormwei, Kimarich, Kaasango, Kaptapkitiny, Kapkutung, Kapchongwony, Kaptokom, Kapumps and Kapchepar
Educational Establishments
- Moi University
- Amani Primary School

Resource Persons
Resource persons were provided by ERMIS Africa and SIDP.

Sengwer Community Members posing behind the completed 3 Dimensional model: Picture by Muchemi

The community participant highlighted that the model was the fruit of labour of the Sengwer peoples; it belonged to them and their future generations to use for planning and development of natural resource management.

P3DM clearly revealed the existence of a wealth of traditional knowledge and strong ties existing among Sengwer community.

Project Output
i) A 3 D Model of 24km x 24km map of Cherangany Hills
ii) Identification of sacred sites
iii) Collection of information on traditional ecological and administrative governance
iv) Intergenerational information sharing
v) Identification of fragile eco-systems
PRACTICAL USE OF THE MODEL

Negotiation with KfW development Bank
i) Recognition by KfW Development Bank, Kenya Government and Lake Victoria North Water Services Company that Cherangany Hills belongs to Sengwer Indigenous Peoples
ii) Recognition and respect that Kapolet is a river with spiritual and cultural attachment to Sengwer Indigenous peoples
iii) Acceptance by KfW Development Bank to fund community projects. Already Kshs 20 million has been set aside for the projects.

Security
Government security personnel from Kenya Army and Provincial Administration have used the model to track armed cattle rustlers routes in the Cherangany Hills Indigenous Forests.

CONCLUSION
‘This is a big achievement in the struggle for our community’s ancestral land rights. Thanks to the funding organization – Rainforest Foundation U.K. for this success. Sere, a sentiment by Sengwer elder Mr Kapkundos. Sengwer community and trainees benefited from the exercise and realised the potential of Participatory 3-D modelling / spatial information management and communication as an effective method to address environmental and social concerns as well as to reinforce bottom up development and collective decision-making.

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15 Construction of a primary school, health centre, provision of water, electrification and road construction
16 Sengwer word for blessings