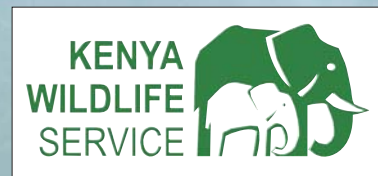
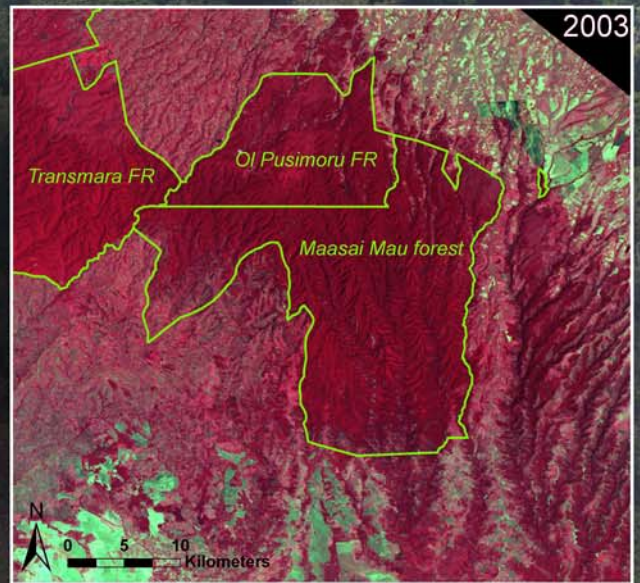
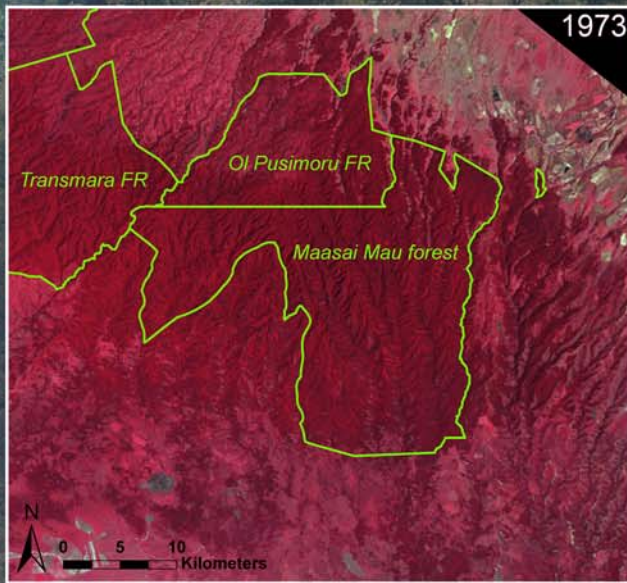


Maasai Mau Forest Status Report 2005



Maasai Mau Forest Status Report 2005

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Foreword

Loss of forest cover in the country has contributed to diminishing livelihoods of many Kenyans caused by reduced land productivity, famine and drought. The current drought experienced in the country in 2005/2006 is a case in point. Large-scale livestock deaths were reported, and in many places, incidences of resource use conflict were witnessed, leading to loss of human lives. It is therefore very important that we mitigate against such eventualities by conserving our forests and water catchment areas.

Though most of Kenya's forests have been decimated by degradation among other factors, the Mau Complex forests cover, and in particular that of the Maasai Mau Forest has been the most affected, and has receded drastically over time as revealed by this status report. As noted in the report, the major cause of the forest loss was encroachment that could have been avoided if sound management mechanisms were in place. Now that the forest land has been recovered, it is only appropriate that the responsible authority mandated to manage the forest, with support from other stakeholders, ensures that these mechanisms are put in place. I therefore urge Narok County Council and other partners to initiate the preparation of a management/_development plan for the Maasai Mau Forest as recommended by the report. We do also urge the Council and the Ministry of Lands to ensure that boundaries of the forest are well marked on the ground to avoid a repeat of the situation.

As the Minister for Regional Development Authorities, I will join hands with the Minister for Natural Resources and Environment to rehabilitate areas devoid of trees and develop the area to enable communities living adjacent to the Maasai Mau forest reap maximum benefits from the forest while assuring communities living downstream of continued water flow to sustain their livelihoods and that of livestock and wildlife. Critical areas that directly get water from Maasai Mau are the Maasai Mara Game Reserve, Serengeti National Park, Lake Victoria, Lake Natron in Tanzania and their environs. The Government is committed to guarantee continued water supply from Maasai Mau Forest to these and other areas by giving policy directions and any other support on regular basis. This is in line with the Government's commitment to the Economic Recovery Strategy for Wealth Creation and Employment and to the Millennium Development Goals.



Hon. Mohamed Abdi Mohamud, EGH, MP
Minister for Regional Development Authorities

Acknowledgments

The aerial survey would not have been possible without the support of Dr. Julius Kipng'etich, Director of Kenya Wildlife Service, and Dr. Klaus Töpfer, Executive Director of UNEP, who agreed to provide technical support and to detach Mr. Bongo Woodley and Mr. Christian Lambrechts, respectively, to undertake the survey.

We are very thankful to Ms. Janet Akinyi Ong'injo and Mr. Ambrose Oroda for their help in interpreting the satellite images under the supervision of Mr. Christian Lambrechts.

We are also very grateful to the Worldwide Fund for Nature (WWF) and Kenya government ministries responsible for land, tourism, environment, regional development, local government, Office of the President and local communities, among others, for supporting conservation of the Mau Complex forests.



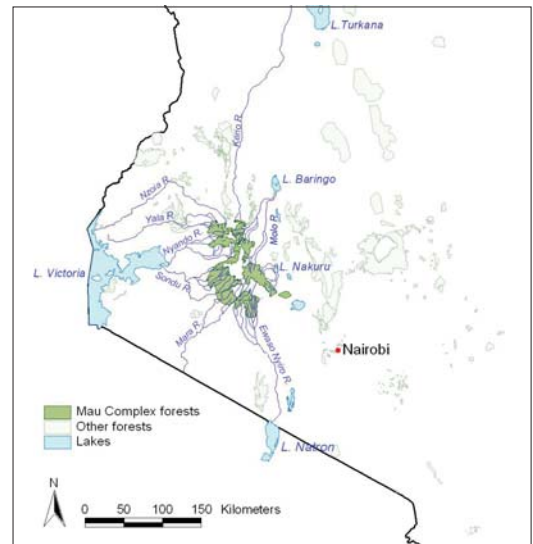
I. Background

1.1 Overview

The Kenya Indigenous Forest Conservation Programme (KIFCON) of 1991-1994 estimated Kenya's closed canopy forests to cover 1.24 million hectares, or roughly two percent of the country. Recent estimates based on remote sensing indicate that against a global forest cover average of 21.43 percent, and an average for Africa of 9.25 percent, Kenya's closed canopy forest cover stands at a critical 1.7 percent (UNEP, 2001).

The loss of forest cover has been caused by a number of factors: degradation, settlement (both legal and illegal), urbanization, unsustainable extraction of timber and forest products, lack of land use policy, and corruption, among others. During the last decade of the Kenya Africa National Union (KANU) regime there was an increase in illegal and irregular forestland allocation due to political interference, exacerbating an already critical situation. The Mau Forest Complex (MCF), and the Maasai Mau Forest (MMF) in particular, were no exception (Republic of Kenya, 2004).

At 400,000 hectares, the Mau Forest Complex forms the largest forest block in the country, and the largest single block of closed-canopy forest in East Africa. Forests that constitute the complex include Transmara, Ol Posimoru, Maasai Mau, Eastern Mau, Mau Narok, South West Mau, Western Mau, Mt. Londiani, Eburru, Molo and South Molo. The northern part comprises Tinderet, Northern Tinderet, Timboroa, Nabkoi, Kilombe Hill, Metkei, Maji Mazuri, Chemorogok and Lembus forests. The Mau Forest Complex is one of the five water towers in Kenya, providing the upper catchments of many major rivers, including Nzoia, Yala, Nyando, Sondu, Mara, Kerio, Molo, Ewaso Ngiro, Njoro, Nderit, Makalia, and Naishi. These rivers in turn feed major lakes, including Natron, Victoria, Turkana, Baringo and Nakuru (Map 1).



Map 1. Mau Complex forests are key catchments

While most of the forest blocks in the Mau Forest Complex have been gazetted and are managed by the Forest Department, the Maasai Mau Forest is Trust Land, managed by the Narok County Council (NCC). The Maasai Mau Forest covers 46,278 hectares, and is located some 17 kilometres north of Narok Town.

1.2 Maasai Mau Forest: Key values

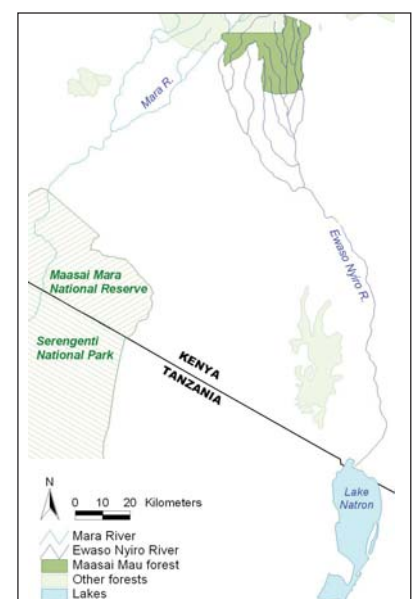
A. Water Catchment

The Maasai Mau Forest is an important water catchment area. It is part of the larger Mau Forest Complex, which is one of the five main “water towers” of Kenya, the others being Mt. Elgon, Mt. Kenya, the Aberdare Range and the Cherangani Hills.

Almost the entire Maasai Mau Forest forms the upper catchment for the Ewaso Ngiro River, while the most western part of the forest is part of the upper catchment of the Mara River. The Ewaso Ngiro River flows into Lake Natron, the main breeding ground for flamingoes in the Rift Valley. The Mara River crosses the Maasai Mara National Reserve and Serengeti National Park, both world famous for big game. Both are also Important Bird Areas (IBA) with 450 and 540 bird species, respectively. The Ewaso Ngiro and Mara rivers provide much needed water to pastoralist communities, agriculture and urban areas in Narok and Kajiado districts (Map 2).

B. Biodiversity

The biodiversity in the Maasai Mau Forest has not been documented recently. Being a Trust Land forest, it was not covered by KIFCON. Studies have shown, however,



Map 2. Maasai Mau catchment

that the Mau Forest Complex is an important bird area, with over 450 species. Two ungulates - the Bongo and the Yellow-backed Duiker, two carnivores - the Golden Cat and the Leopard, and the African Elephant are known to occur in Trans Mara and South Western Mau forest reserves, which neighbour the Maasai Mau Forest.

Glover & Trump (1970) listed additional animals of special interest that inhabited the higher moist forest zone of the Mau Complex, including the Maasai Mau: Giant Forest Hog, Colobus Monkey, Potto, Sotik Bushbaby and the Greater Galago. In the other forest formations animals commonly found included lions, leopards and hyenas, Grant Gazelle, Coke's Hartebeest, giraffes, Cape Buffalo, hippopotamus, rhinoceros and African Elephant (Glover & Trump, 1970).

The Maasai Mau is comprised only of indigenous forests and associated vegetation. It presents a beautiful mosaic of cedar and podocarpus forests with scattered natural glades.

C. Tourism potential

The Maasai Mau Forest could be a major asset for tourism development. It could become a twin conservation area with the Maasai Mara National Reserve, which is a major source of revenue for Narok and Transmara districts. Such potential was highlighted in the 1988 study "Maasai Mau National Reserve: Proposed Development Plan," commissioned by the Narok County Council, which states that the Maasai Mau "will serve as a great contrast when visitors leave the Maasai Mara [National Reserve] or Nakuru [National] Park, which are lowlands parks, to enter into a highland Reserve with a variety of birds and abundance of animals." Game and bird watching and walking safaris were identified among the initial activities. Accommodations would include self-service bandas and a small lodge to be located at the waterfall near Imbenek Dapashi.

During a workshop on tourist attitudes and use impacts in the Maasai Mara National Reserve (Wildlife Conservation International, 1992), Dr. David Western noted that "the Loita Hills, Nguruman and the Mau Escarpment are obvious locations of great intrinsic value, and diversifying tourism to these sites could relieve pressure on the Maasai Mara, and at the same time increase the overall visitor flow throughout the district."

The Maasai Mau, as well as the Maasai Loita and Suswa caves, have been identified for tourism development. Such development could open up a tour circuit that would relieve the Maasai Mara National Reserve of the burden of being a dead-end tourist destination. It will be important to conduct research and develop inventories before opening up these three sites.

D. Environmental and other economic benefits

Narok District is known for wheat production. This crop, as well as others, benefits from the essential environmental services provided by the Maasai Mau Forest, in terms of water from the streams and rivers flowing from the forest and favourable micro-climatic conditions around the forest. The Maasai Mau provides non-timber forest products, including medicinal plants, wild honey and wild fruits, many of which are consumed locally. Local communities also use the forest as dry season pasture.

1.3 Recent Developments in the Maasai Mau Forest

The Maasai Mau Forest is one of the most threatened forest blocks within the Mau Complex. When members of the public raised their concerns over its destruction to the Kenya Forests Working Group (KFWG) in 2003, KFWG undertook a fact finding mission and made a formal complaint to the Public Complaints Committee (PCC) of the National Environment Management Authority (NEMA), on 6 May 2003.

In response to the KFWG complaint, the PCC sent an assessment mission to the Maasai Mau on 29 May 2003, which established that irregular settlement was contributing to significant forest destruction. They recommended, *inter alia*, that:

- a) All title deeds that were irregularly issued to individuals be revoked forthwith.
- b) Prosecution of any offenders be commenced forthwith.
- c) There should be no new excision of forest.
- d) Immediate plans to restore and regenerate the forest should be commenced forthwith.
- e) All people who have settled in the forest should be evicted.

These recommendations were presented to the National Environment Council (NEC), but no government institution took action to address the problem. This failure led KFWG to launch a Mau Forest Complex media campaign aimed at addressing forest destruction in the Complex in 2004. Due to the vast size of the ecosystem, the campaign focused on the most threatened forests; Maasai Mau Forest was identified as requiring urgent attention.



A number of strategic assessment, advocacy and consensus building activities took place between July 2004 and December 2005. Two presentations on past and on-going forest destruction in the Mau Complex were made before the Minister for Environment and Natural Resources and his senior staff in July and August 2004. These presentations were followed by two stakeholder workshops organized by the Ewaso Ngiro South Development Authority (ENSDA) and KFWG in Narok on 21 August and 27 November 2004.

The second workshop focused specifically on past and recent destruction in the Maasai Mau Forest, and on the forest's boundaries. It was attended by over 270 people, including high-level government officials: Hon. Ole Ntimama, Minister of State, Office of the President; Mr. J. Ole Kirorei, Chairman, ENSDA; Mr. Gideon Gathaara, Senior Deputy Secretary, Ministry of Regional Development Authorities (former Chief Conservator of Forests); members of the Narok County Council, including the representative of the Chairman, the Clerk and the Chief Forester; Narok district government officials, including a representative of the District Commissioner and the District Forest Officer; as well as a number of local chiefs. Representatives of non-governmental organizations and many community members attended as well. The workshop agreed on the following:

- a) Narok County Council has never passed a resolution to give out forestland. All allocations in the forest are thus illegal and all title deeds are null and void.
- b) Boundaries set by the Presidential (Ntutu) Commission of 1986 should be maintained.
- c) All people living inside Maasai Mau Forest should vacate the forest.

In line with the outcome of the workshop, the Government resolved to remove the people living inside Maasai Mau Forest. Early efforts to remove people from the forest were stopped, among others, by a High Court injunction granted to seven individuals on the strength of their title deeds. It later appeared that the court case was not representative and as such the injunction applied only to the seven applicants.

Meanwhile a number of additional presentations on past and on-going forest destruction in the Mau Complex were made before the Minister for Lands and Housing and his senior staff, the Minister for Wildlife and Tourism and the Water Services Management Board. In addition, the Kenya Wildlife Service and the United Nations Environment Programme conducted an aerial survey of the Maasai Mau Forest in February 2005 to accurately document recent forest destruction. The findings from the aerial survey were incorporated in a new Mau Complex status report that was sent to all government ministers and their permanent secretaries.

Later, based on increasing consensus among the Cabinet on the need to conserve the Maasai Mau, and further to the realization that the injunction granted against the eviction was not representative, the Government decided to move ahead, evicting 10,290 people in May and June 2005.

This report aims to provide information on the current status of the Maasai Mau Forest and the origins of settlements. The report forms a good base for monitoring forest cover changes and the effectiveness of management. The report is divided into four sections: II. Past forest destruction based on satellite images; III. Recent forest destruction revealed by aerial survey; IV. Illegal settlements; and, V. Conclusions and recommendations.

II. Past Forest Destruction Based on Satellite Images

Satellite images enable the assessment of land cover changes over time, and in particular changes in forest cover. Based on six satellite images, changes in the Maasai Mau Forest were assessed between the years 1973, 1986, 1995, 2000, 2003 and 2005.

The year 1973 was selected for the first image as it is the oldest Landsat image available and provides a baseline against which changes can be assessed. 1986 was selected as the year in which the Ntutu Commission delineated and established the forest boundaries; this image shows the status of the Maasai Mau when the boundaries were set. The other images were selected to show the progressive changes between 1986 and 2005.

Since in 1973 many forests existed outside the Maasai Mau Forest, within a distance of ten kilometres from the boundaries, changes in these perimeter forests were also assessed. They will be referred to as forest “outside the boundaries.”

A. Overall Forest Cover Changes: 1973 - 2005

The Maasai Mau Forest has been impacted heavily by encroachment, especially on the western side. Analysis of 1973 and 2005 satellite images shows that about 8,214 hectares of forest cover was lost inside the Maasai Mau Forest, and about 31,755 hectares lost outside the forest boundaries. This totals 39,969 hectares – representing about 39% of the total forest cover inside and outside the boundaries of the Maasai Mau (See Map 3).

B. Progressive Forest Cover Changes: 1973 - 1986 - 1995 - 2000 - 2003 - 2005

Between 1973 and 1986, some 14,805 hectares (on average, 1,139 hectares/year) of forest were destroyed outside the boundaries. Such high levels of destruction triggered the establishment of the Ntutu Commission to set the boundaries and help conserve the forest. Inside the boundaries, some 462 hectares of forest were clear-felled during the same period (Table 1).

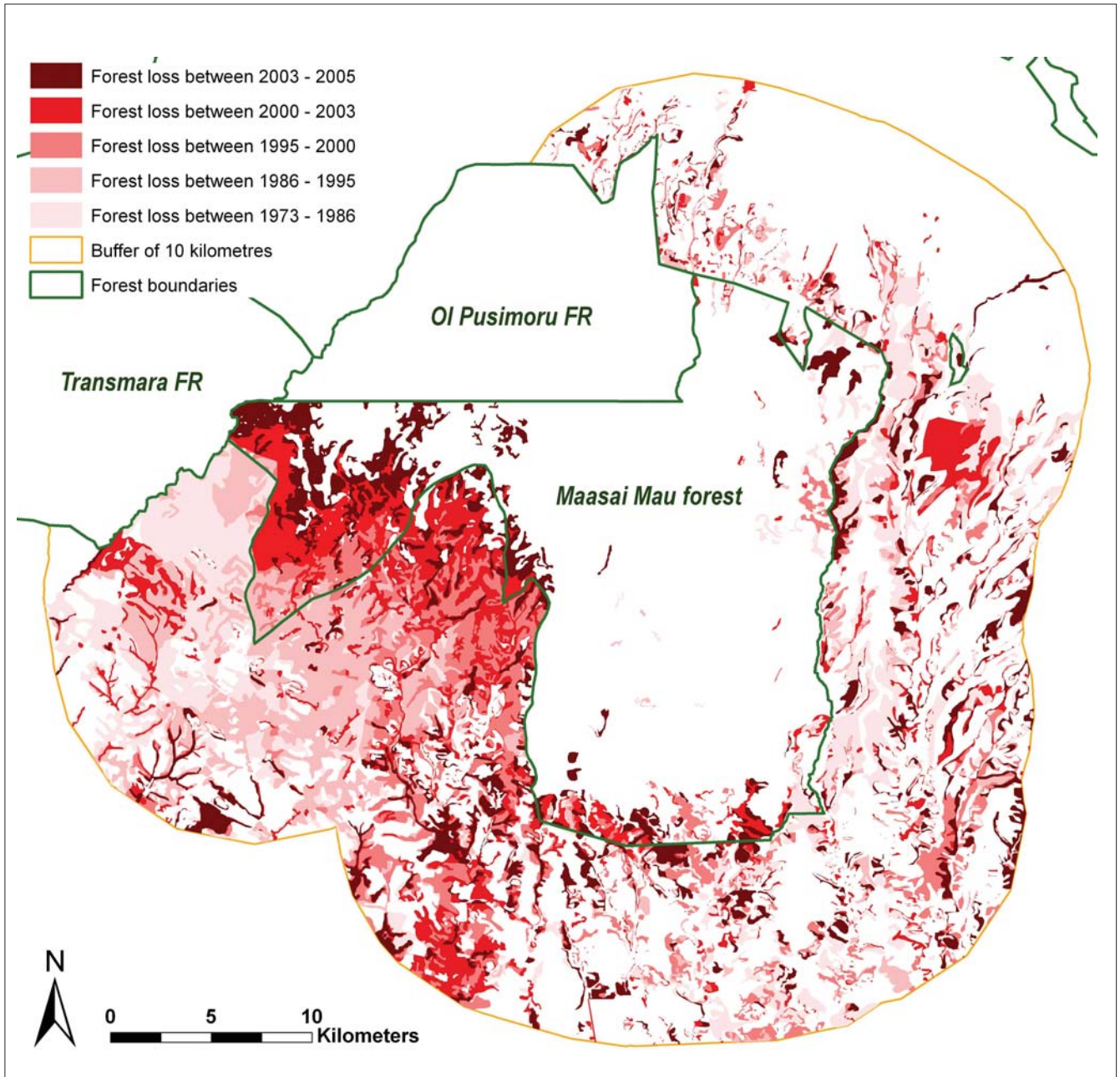
Table 1: Forest cover loss inside and outside Maasai Mau					
Forest cover loss [Ha]	1973-1986	1986-1995	1995-2000	2000-2003	2003-2005
Outside the boundaries	14,805	3,297	8,044	1,684	3,925
<i>(yearly average)</i>	<i>1,139</i>	<i>366</i>	<i>1,609</i>	<i>561</i>	<i>1,963</i>
Inside the boundaries	462	98	1,344	2,800	3,510
<i>(yearly average)</i>	<i>36</i>	<i>11</i>	<i>269</i>	<i>933</i>	<i>1,755</i>

Since 1986, forest destruction outside the boundaries recorded two major peaks: between 1995 and 2000, with an average of 1,609 hectares/year, and between 2003 and 2005, with an average of 1,963 hectares/year.

Forest destruction within the boundaries increased exponentially, from less than 40 hectares/year before 1995, to 269 between 1995-2000, 933 between 2000 and 2003 and 1,755 between 2003 and 2005.

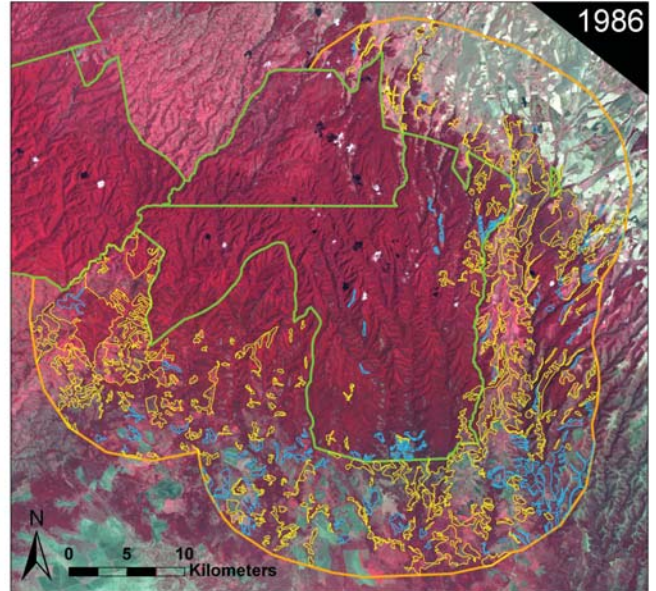
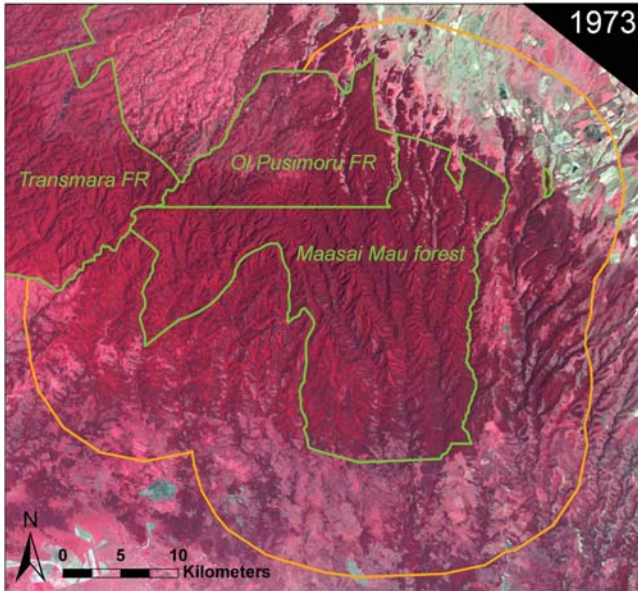
Although much of the destruction took place before 2003, the rate of forest destruction was highest both inside and outside the boundaries during the 2003-2005 period.





Map 3. Forest cover changes between 1973 and 2005

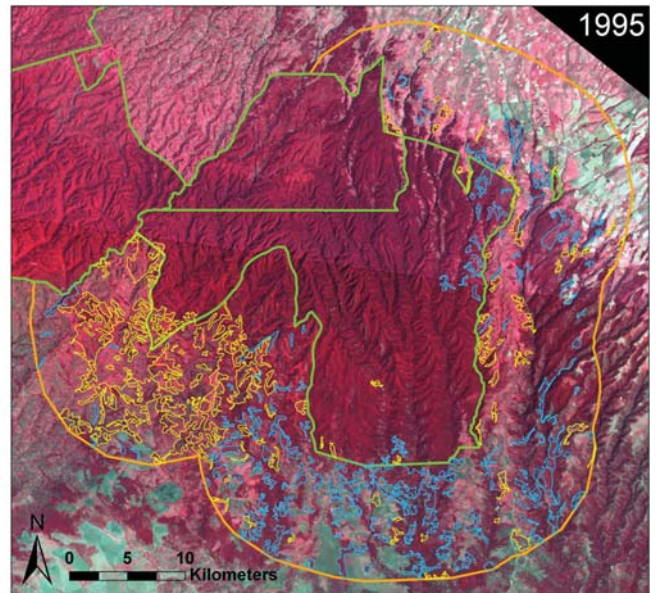
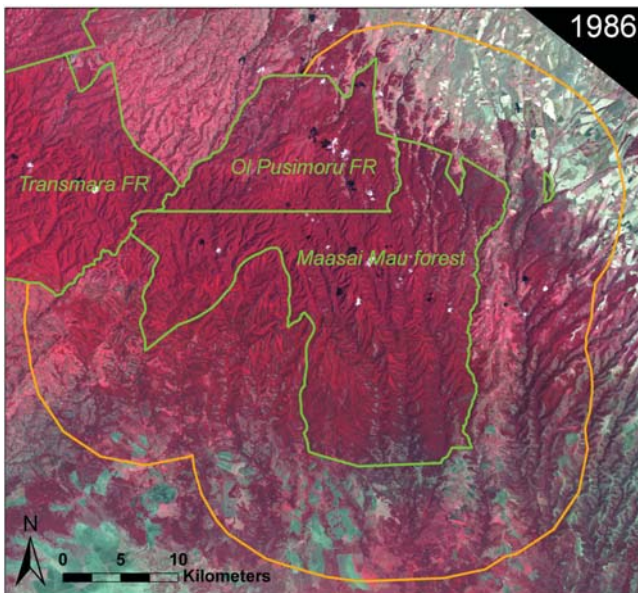
Forest cover changes between 1973 and 1986



▭ Forest boundaries ▭ Major forest cover loss areas
▭ Buffer of 10 kilometres ▭ Major forest / vegetation cover regeneration areas

Net forest cover loss (inside boundaries): 462 hectares
 Net forest cover loss (outside boundaries): 14805 hectares

Forest cover changes between 1986 and 1995

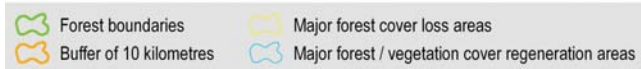
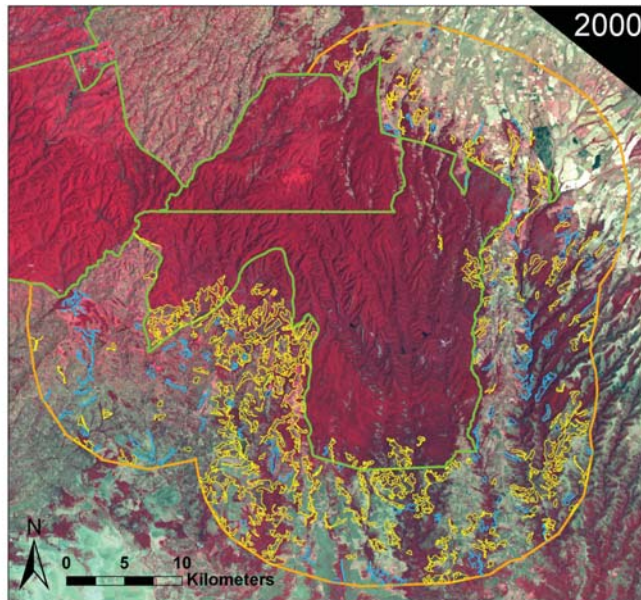
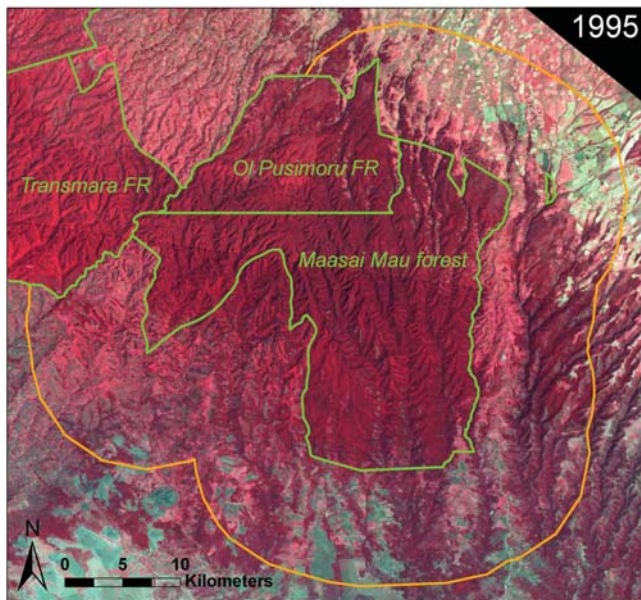


▭ Forest boundaries ▭ Major forest cover loss areas
▭ Buffer of 10 kilometres ▭ Major forest / vegetation cover regeneration areas

Net forest cover loss (inside boundaries): 98 hectares
 Net forest cover loss (outside boundaries): 3297 hectares

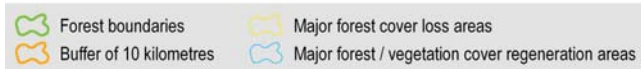
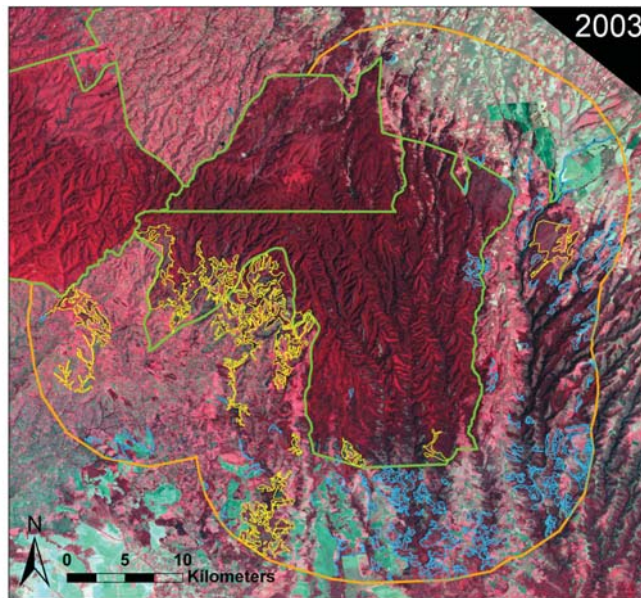
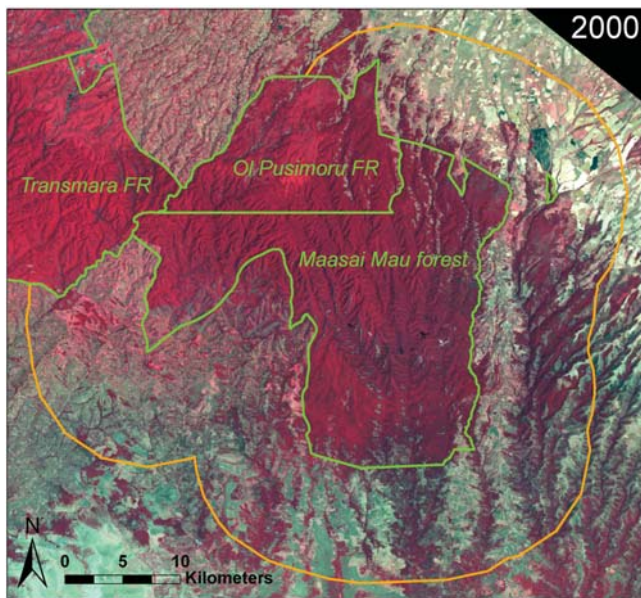


Forest cover changes between 1995 and 2000



Net forest cover loss (inside boundaries): 1344 hectares
 Net forest cover loss (outside boundaries): 8044 hectares

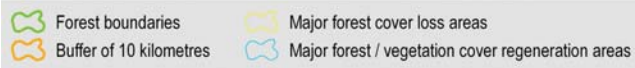
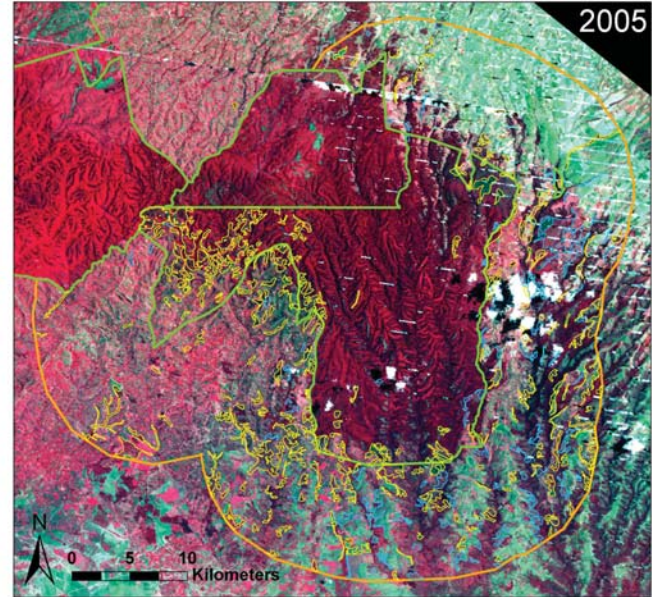
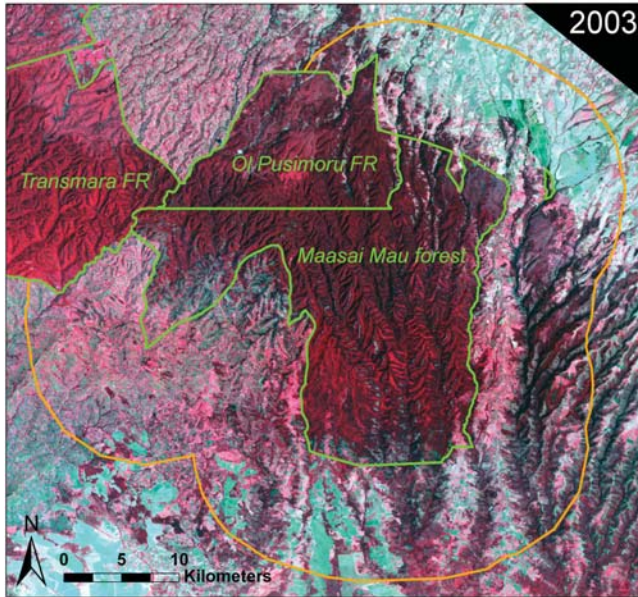
Forest cover changes between 2000 and 2003



Net forest cover loss (inside boundaries): 2800 hectares
 Net forest cover loss (outside boundaries): 1684 hectares



Forest cover changes between 2003 and 2005



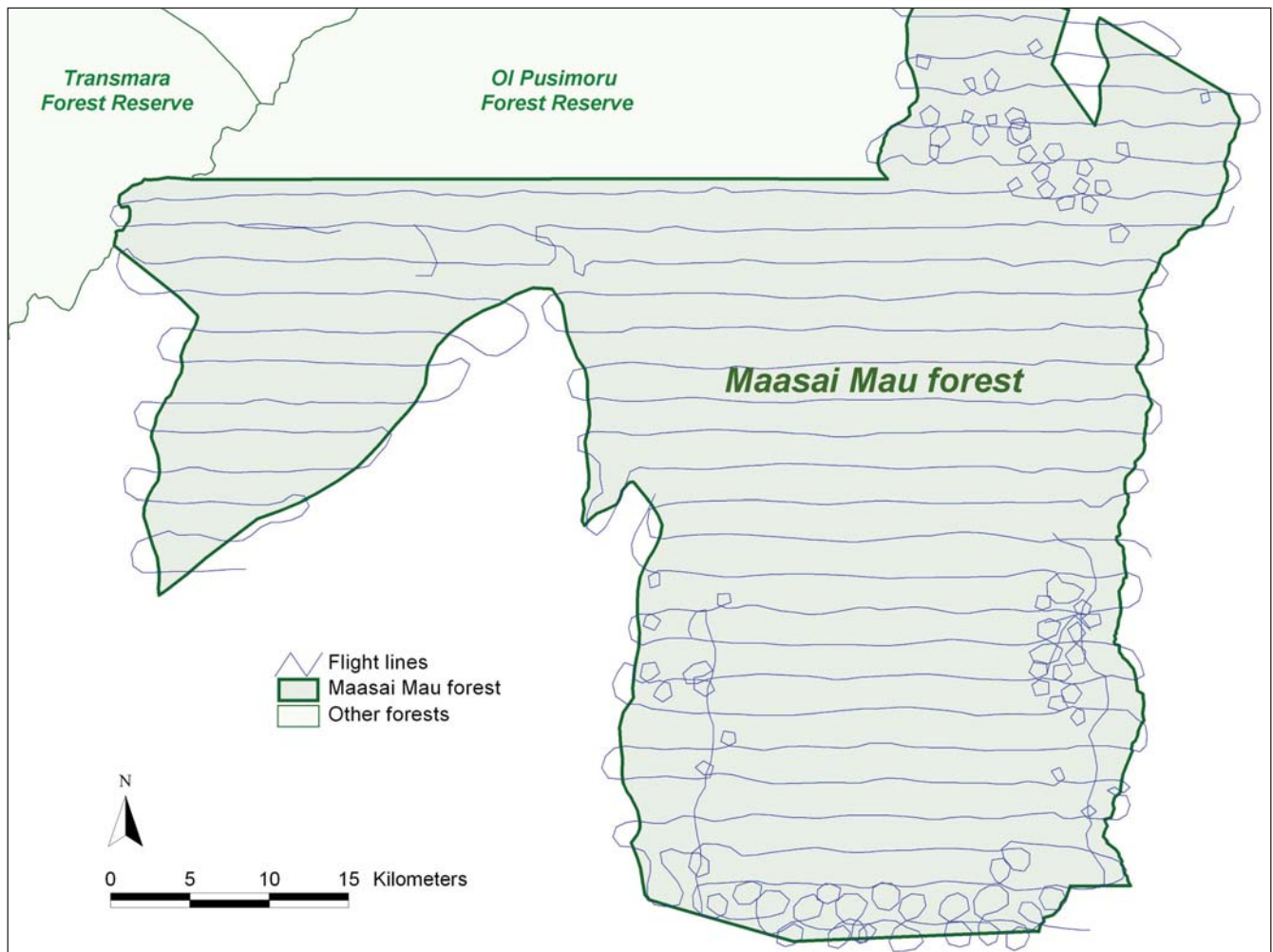
Net forest cover loss (inside boundaries): 3510 hectares
 Net forest cover loss (outside boundaries): 3925 hectares



III. Recent Forest Destruction Based On Aerial Survey

An aerial survey of the Maasai Mau Forest was carried out between 16-21 February 2005. The survey was designed to provide factual documentation of recent forest destruction, in particular to determine the type, magnitude and location of forest destruction activities.

The aerial survey consisted of flying at low altitude along parallel transects above the entire forest (Map 4) and to record with a GPS and a digital camera all destructive activities or threats to the forests, including large-scale encroachment, charcoal production, logging of indigenous trees, livestock grazing, burnt forest areas and landslides. The methodology derives from the long experience gained by East African wildlife departments in counting animal numbers from an aircraft following set transects. This methodology was further adapted during aerial forest surveys of Mt. Kenya (1999), Mt. Kilimanjaro (2001) and the Aberdare Range (2002) (see Annex I).



Map 4: Flight path as recorded during the survey

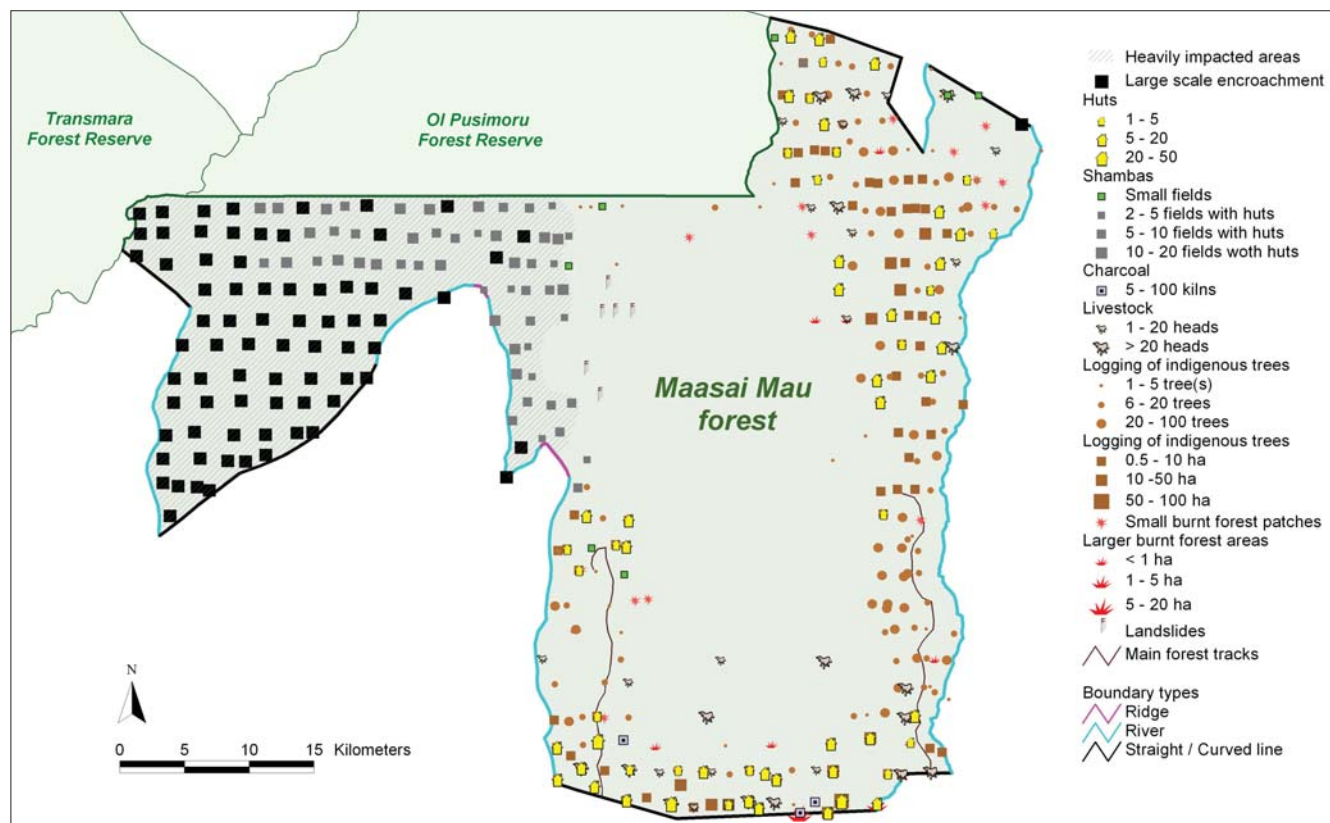
A. Overall description of threats to the forest

The aerial survey shows that approximately 11,095 hectares in the western part of the Maasai Mau Forest (Narok South Constituency) was destroyed or heavily impacted by settlements. At the time of the survey, the forest was being actively cleared, with numerous plumes of smoke billowing out of the remaining forest canopy (Photograph 1 on next page).



Photograph 1: Plumes of smoke above the western part of the Maasai Mau Forest

The eastern part of the Maasai Mau Forest is much less impacted, although a number of destructive activities or threats were recorded, including 555 huts/houses, 2,343 logged indigenous trees and 1,055 head of livestock (Map 5).



Map 5: Threats to the Maasai Mau Forest



B. Encroachment

Large-scale encroachment was observed on the western side of the Maasai Mau Forest, where 11,095 hectares has been heavily impacted. On the lower slopes of the western section, over 90 percent of the forest canopy has been destroyed (Photograph 2). Destroyed forest cover decreases progressively from approximately 90 to 50 percent towards the upper slopes, while clearing activities intensify tremendously (Photographs 3 and 4).



Photograph 2: Almost completely cleared forest on the lower slopes of the western part of the Maasai Mau Forest



Photograph 3: Forest heavily impacted by encroachment on the western part of the Maasai Mau Forest



Photograph 4: Forest heavily impacted by encroachment on the western part of the Maasai Mau Forest





Photograph 5: Logging of indigenous trees on the eastern side of the Maasai Mau Forest

In the eastern part of the Maasai Mau Forest, some 555 individual huts or houses were recorded, mostly located along the southern and northeastern forest boundaries. No encroachment was observed in the core of the eastern part of the forest.

C. Logging of indigenous trees

The second major threat to the Maasai Mau Forest is the logging of indigenous trees. In the western part of the Maasai Mau affected by large-scale encroachment, recent and on-going felling of trees was so intense that it was impossible to count logged trees individually. In the eastern part of the forest, some 2,343 recently logged indigenous trees were counted, in addition to some 578 hectares where heavy logging made it impractical to count felled trees individually (Photograph 5).



D. Other threats in the eastern part of the Maasai Mau Forest

The level of destruction in the western part of the Maasai Mau made it impossible to count other threats individually. However, in western part of the forest, where the pressures are much lower, it was possible to count them individually. They include:

- 1,055 heads of livestock mostly in the south and northeast;
- 36 burnt forest areas, mostly in the south and northeast (Photograph 6);
- 148 charcoal kilns, mostly on the lower slopes;
- 9 landslides in the northwest.



Photograph 6: Large burnt forest area in the northeast Maasai Mau

It is worth noting that many destructive activities on the lower slopes are in close proximity to two main forest tracks. These two tracks were recorded during the survey as shown on Map 5 on page 14.



IV. Illegal Settlements

The major threat to Maasai Mau Forest was identified as encroachment for settlement, which dates back to early 1980s when part of the forest was settled and destruction began. Following environmental concerns, e.g., water conservation and deforestation, the Presidential (Ntutu) Commission was formed in 1986 to review the boundaries in order to conserve the water catchment areas and recover lost forest areas. As recommended by the Commission, a total of five regions were reclaimed from Ol Posimoru 'A', Kamrar, Olokurto, Nkareta and Naisoya Adjudication Sections.

Pressure on Maasai Mau Forest started again in 1999 when five forest adjacent Group Ranches that had been adjudicated in 1970s, applied for consent from the local Land Control Board to subdivide their land among members. The affected ranches were Sisiyan (Ilmotiok Adjudication Section), Nkaroni, Enoosokon and Enakishomi (Ololulunga Adjudication Section) and Reiyo (Nkoban Adjudication Section). The boundaries of these sections were well defined during land adjudication and therefore adopted at First Registration.

After consents were issued, government officers, politicians, private surveyors and influential people irregularly increased the sizes of the Group Ranches far in excess of their registered areas. After expansion, this added land, all in the Maasai Mau Forest, was sold to unsuspecting outsiders who had no information on the status of the forest. The new members were referred to as "acceptees." Most of these people obtained title deeds fraudulently, while others squatted, awaiting ratification of their occupancy. By 2005, illegal extension into the Maasai Mau Forest due to expansion of Group Ranches had created 1,962 parcels of land, amounting to 14,103.7 hectares of the forest. No resolution to give away the forestland was made by the Narok County Council (NCC), as required by law. However, letters of no objection by the NCC were fraudulently obtained stating that the areas to be subdivided did not encroach onto Council land, including the forest.

Table 2 presents the illegally increased sizes of Group Ranches. A detailed account of the allocations is presented in Annex 2.

Table 2: Illegally increased sizes of the Group Ranches						
No. Group Ranch	Adjudication Section	No. of parcels	Registered area [Ha]	Increased area [Ha]	Excess area [Ha]	No. of illegal plots in forest
1 SISIYAN	Ilmotiok	375	447.5	1,215.6	768.1	340
2 NKARONI	Ololulunga	188	1,597.5	5,582.5	3,985.0	676
3 ENOSOKON	Ololulunga	110	155.0	6,53.0	498.0	158
4 ENAKISHOMI	Ololulunga	115	1,748.5	9,748.5	8,000.0	452
5 REYIO	Nkoban	34	26.0	878.6	852.6	336
			3,975.5	18,078.2	14,103.7	1,962

NB: The Registered area is the legal area at First Registration for Title. The excess areas were expanded into the Maasai Mau Forest illegally. The number of illegal plots shows the number of people with plots in the forest.

In addition to the 1,962 illegal plots allocated in the western side of the Maasai Mau Forest, the forest is also impacted by illegal encroachment, although to a lesser level, on its eastern side, in particular along Nkareta and Olokurto adjudication sections. During the aerial survey, some 555 huts or houses were counted in those areas. It was reported that a number of illegal allocations were made in those areas, but no detailed information could be obtained.

Though banned by Presidential Decree in 1986, logging of Podo, an indigenous tree, is the second most important contributor of forest cover loss in Maasai Mau Forest. No exceptional licenses have been given for the Maasai Mau Forest, but most of the culprits who are caught produce licenses issued by the administration indicating that the produce is coming from individual land in group ranches. If not contained, logging of indigenous trees in Maasai Mau is expected to affect the integrity of the entire ecosystem, as selective logging of Podo depletes existing stands, affecting its regeneration and that of other species.

V. Conclusions and Recommendations

Maasai Mau is a forest under siege which has lost closed to one third of its forest cover due to illegal settlements. These settlements resulted mainly from illegal extension of neighbouring Group Ranches into the forest. Such illegal process process was made possible through conspiracy. The findings of this report indicate that due process was indeed not followed in allocation of the forestland and the eventual issuance of title deeds. The commitment by the Government to contain forest destruction and recover forestland should be applauded. The Government should ensure that no further encroachment takes place and that appropriate measures are put in place for the conservation and management of the Maasai Mau Forest. Towards this, the following measures are recommended:

- The perimeter boundaries of the Maasai Mau Forest should be established and marked on the ground based on the agreed boundaries delineated by the 1986 Presidential (Ntutu) Commission.
- The Narok County Council should put in place effective management measures to secure the MMF.
- An integrated management plan for the MMF should be developed in consultation with all main stakeholders, taking into account the potential for ecotourism in the forest.
- The Narok County Council should empower and engage the local community in the management of the MMF to ensure that benefits accruing from the forest are sustained.
- The potential for ecotourism in the MMF is high, especially as it is located near the Maasai Mara National Reserve, and should be exploited. The initial step is preparation of an ecotourism business/development plan.
- Any settlement for the evictees should be done outside forest reserves.
- The Government should prosecute government officials, private surveyors and leaders involved in illegal forestland allocation.

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ANNEX 1.

Methodology of the aerial survey

The methodology for the aerial survey of the Maasai Mau Forest was derived from long experience gained by East African Wildlife departments in counting animal numbers from an aircraft following set transects, and was developed further through forest surveys of Mt. Kenya in 1999 (Gathaara, 1999), Mt. Kilimanjaro in 2001 (Lambrechts, 2002) and of the Aberdares in 2002 (Lambrechts, 2003). The principal difference in this case was that the occurrence of forest destruction often had to be viewed from directly overhead, necessitating a series of continuous loops on either side of the transect in a 'figure eight' pattern.

The aircraft used was a tandem-seat Aviat Husky. The crew consisted of a pilot and a rear-seat observer (RSO), who were based at the Serena Hotel, Maasai Mara National Reserve for the duration of the survey.

The aircraft was equipped with a Global Positioning System (GPS) Garmin GPSMap76S receiver, able to track the flight path of the aircraft on a "rover file", and set to record position every five seconds. This system recorded a detailed and accurate map of the actual flight paths and included the exact flight pattern each time the aircraft left the transect in order to get a better look at the extent of damage or observed threat. The exact position of each observation was recorded as waypoint in the GPS waypoint file, which was later downloaded into a Geographical Information System (GIS) database. The data from the survey is deposited at the UNEP/DEWA office in Nairobi. The types of damage and threats to the forest were recorded as follows:

- Large-scale encroachment;
- Shambas;
- Charcoal production;
- Logging of indigenous trees;
- Livestock grazing;
- Burnt forest patches;
- Landslides;
- Forest tracks.

A. Reconnaissance flights

Prior to the aerial survey, a reconnaissance flight familiarized the crew with the forest areas to be surveyed. On the basis of that flight, the crew became familiar with the topography of the area and the forest boundaries. Pre-assessments of the level of disturbances were made to help select the most appropriate flight paths.

B. Survey blocks

The aerial survey covered the entire Maasai Mau Forest as delineated by the Ntutu Commission in 1986. The surveyed area was divided into two blocks, demarcated by an easily discernible boundary, namely a river. The actual survey occupied 12 hours of flight time, including just over 6 hours of count time (see Table 1).

Date	Count ON	Count OFF	Count time (hours)	Block
16 Feb 05	13:38	15:45	2:07	West
17 Feb 05	12:36	14:05	1:29	East
21 Feb 05	13:59	14:06	0:07	East
21 Feb 05	14:06	16:25	2:19	West

C. Selection of flight paths

Flight paths were selected in order to limit climbing or descending along each transect, and ran east to west (or vice-versa), spaced one kilometre apart. In heavily disturbed areas, figures of eight were carried out on either side of the transect to enable a more thorough survey of the disturbances. Overlapping between “figures of eight” carried out on adjacent transects was avoided thanks to the display features of the GPS.

D. Data recording

The pilot navigated and recorded each observation into the GPS receiver. The RSO took photographs, and recorded the information related to each observation on a data sheet in consultation with the pilot. Both crew attempted to spot and assess disturbance in the forest.

GPS positions of observed disturbances are affected by inbuilt imprecision of the GPS system and the time lapse between eye observation and subsequent logging of the actual position into the GPS. As a result, GPS positions of disturbances may be slightly off the actual position on the ground; the GPS positions of disturbances on the edges of the forest reserves may appear on the maps slightly outside the boundaries.

The recording of disturbances was restricted by visibility from the aircraft, since disturbances concealed by the canopy were not seen. Tall trees, deep valleys, obscured angles and sunlit tree tops that enhanced dark shadows all affected what was actually seen and recorded. As a result, the recorded observations provide an indication of the extent of the actual disturbance rather than a complete and accurate picture. For each observation, the following data were recorded:

- Waypoint number as indicated on the GPS;
- Type and extent of disturbance;
- Frame numbers;
- Comments made by the pilot or the RSO.

E. Photo records

Most observations are illustrated by photographs. In particular, large encroached areas are documented by at least one photograph. Photographs were taken with a digital still camera, Fujifilm model S7000.

F. Data processing in the field

Immediately on landing, the RSO downloaded the digital photographs, the GPS rover files and the observation waypoint files into a lap-top computer using the software ArcView version 3.2 and the extension DNRGarmin version 4.4.2 developed by the Minnesota Department of Natural Resources. Maps of the flight lines and the observation waypoints were then printed to identify any double observations within each block and to cross check with the flight lines to determine whether or not the area to be surveyed had been completely covered.

G. Data interpretation and analysis

Further analysis was carried out in Nairobi. All data were copied from the data-sheets to an MS-Excel spreadsheet, where they were merged with the GPS data (position, date and time). All the MS-Excel data records were then transferred into a GIS using ArcView version 3.2 software. Digital photographs were used to cross-check the information recorded on the data sheets.



ANNEX 2.

Illegal acquisition of forest Trust Land

This annex highlights the illegal expansion of five Group Ranches into the forest.

1. INTRODUCTION

The Maasai Mau Forest borders Ol Posimoru to the North and five Adjudication sections to the South. Amala and Enkare Sikinter rivers form the western and eastern boundaries of the forest respectively.

2. ORIGIN OF ILLEGAL SETTLEMENTS IN THE MAASAI MAU FOREST

2.1 Reasons for expansion into forests

There are a number of reasons for excisions and settlement in the Mau Forest Complex, and in particular the Maasai Mau Forest (MMF). These factors include the following:

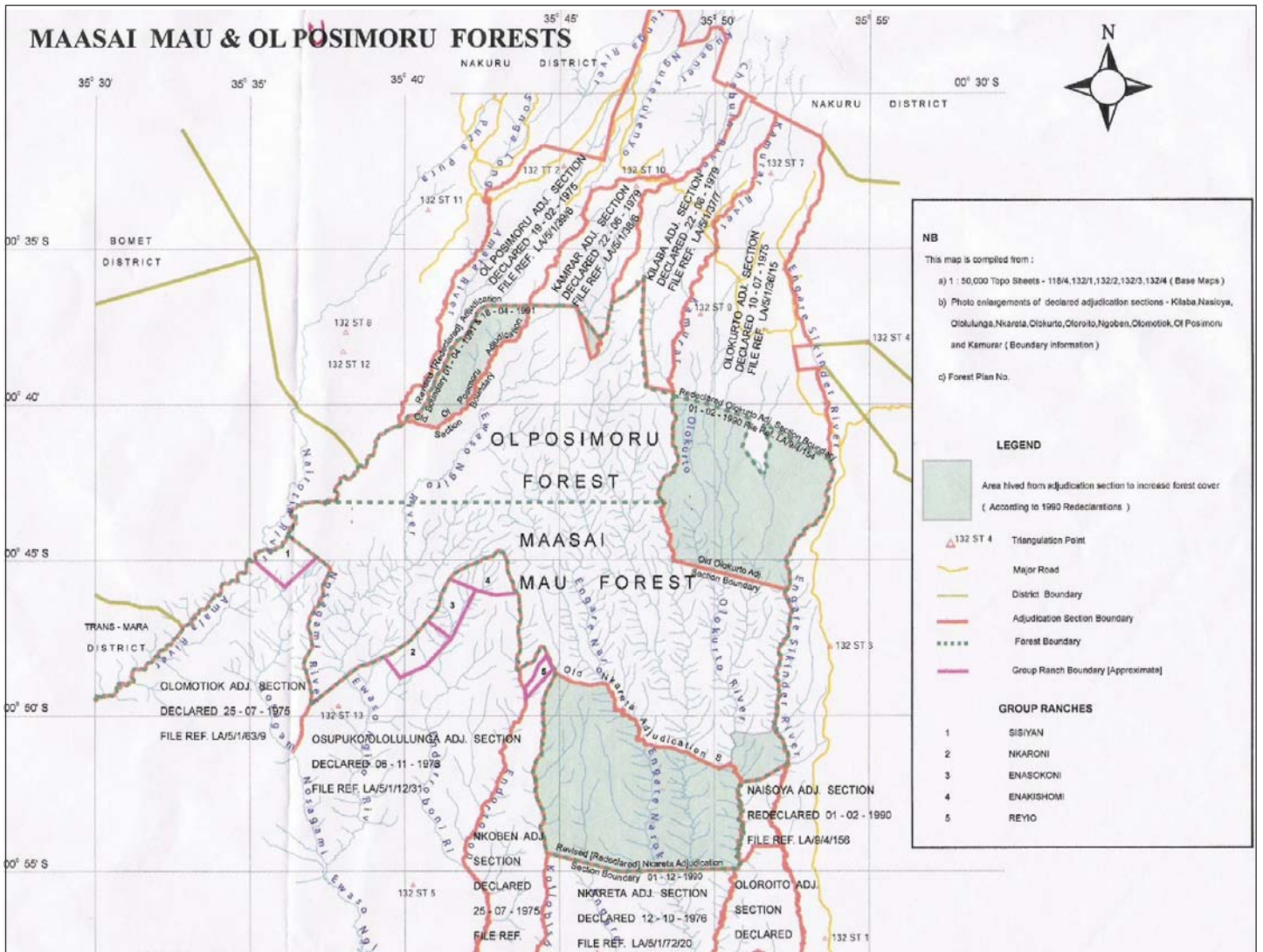
- Past political weakening of government institutions and systems;
- Corruption and abuse of offices by, among others, surveyors, Land Control Board officers, forest officers, land officers, council officers, individual buyers of land;
- Alleged settlement of the landless and the poor including the Ogiek;
- Acquisition of land for speculation;
- Illegal sale of forest resources, especially timber;
- Political reward, abuse of land to secure political support; and
- Illegal immigrant settlements for political purposes.

2.2 Declaration of adjudication areas

Declaration under the Land Adjudication Act, section 5, means that an area is defined for an adjudication process. This entails:

- Establishment of an adjudication section within an adjudication area;
- Ascertaining and recording of rights and interests to land; and
- Publication of notices for adjudication sections.

In the mid 1970s, the Government declared five adjudication sections to the North of Ol Posimoru and Maasai Mau forests. These are Ol Posimoru 'A' and 'B', Kamrar, Kilaba and Olokurto. Five other adjudication sections were declared to the south of these forests. They are Ilmotiok, Ololulunga, Nkoban, Nkareta, and Naisoya adjudication sections (Map 1). The boundaries of the above mentioned adjudication sections were clearly described in the notices issued and were marked on the ground (Map 1).



Map 1: Location of the Maasai Mau, Ol Posimoru forests and adjacent adjudication sections and boundaries

This map shows:

1. **Ol Posimoru Forest**
2. **Maasai Mau Forest**
3. **Adjudication sections and declaration notices**
4. **Group Ranches**
5. **Amended Boundaries under the Ntutu Commission**
6. **Rivers and their sources**



2.3 The Presidential Commission on Boundary Review of the Maasai Mau Forest (The Ntutu Commission)

The MMF was invaded and settlement established illegally in early 1980 with the support of some politicians, government officers, land speculators and other land dealers. Wanton forest destruction ensued, sparking environmental and political problems. Following environmental concerns - water conservation, deforestation and forest degradation - the Presidential (Ntutu) Commission was formed in 1986 to review the boundaries in order to conserve the water catchment areas and recover lost forest. As recommended by the Commission, a total of five regions were reclaimed from OI Posimoru 'A', Kamrar, Olokurto, Nkareta, and Naisoya Adjudication Sections back to the forests. Later, however, the illegal settlements extended into the forest beyond the boundaries set by the Ntutu Commission.

2.4 Legal adjudication section boundaries after the Ntutu Commission

The boundaries of all the adjudication sections, including those that had been revised, were clearly defined in accordance with the provisions of Land Adjudication Act Cap 284, Laws of Kenya, and the Ntutu Commission (Table 1).

No.	Adjudication section	Date of declaration	Date of boundary amendment (according to Ntutu Commission)	Area (ha) at completion of land adjudication
1	OI Posimoru "A"	19/2/75	1/2/90	11,000
2	OI Posimoru "B"	18/4/91	-	3,305
3	Kamrar	22/6/79	1/2/90	4,730
4	Kilaba	22/6/79	1/2/90	Not finalized
5	Olokurto	10/7/75	1/2/90	Not finalized
6	Ilmotiok	25/7/75	-	16,086
7	Ololulunga	6/11/73	-	56,154
8	Nkoban	25/7/75	-	12,026
9	Nkareta	12/10/76	1/12/90	15,301
10	Naisoya	7/3/75	1/2/90	Not finalized

NB: Some these boundaries were later illegally extended into the MMF

2.5 Illegally extended Group Ranches within Adjudication sections

Some Group Ranches within adjudication sections (Table 1) were illegally expanded into the MMF, as shown in Table 2. The illegal extensions into the forest created 1,962 parcels of land amounting to 14,103.7 hectares.

Table 2: Illegally extended Group Ranches							
No	Group Ranch	Adjudication section	No. of parcels	Registered area (ha)	Increased area (ha)	Excess area (ha)	No. of illegal plots in forest
1	SISIYAN	Ilmotiok	375	447.5	1,215.6	768.1	340
2	NKARONI	Ololulunga	118	1,597.5	5,582.5	3,985.0	676
3	ENOSOKON	Ololulunga	110	155.0	653.0	498.0	158
4	ENAKISHOMI	Ololulunga	115	1,748.5	9,748.5	8,000.0	452
5	REYIO	Nkoban	34	26.0	878.6	852.6	336
				3,975.5	18,078.2	14,103.7	1,962

NB: - The registered area is the legal area at 1st Registration for the Titles, which was not in the MMF

- The excess areas were expanded illegally into the MMF

- The number of illegal plots shows the number of people with plots in the forests, i.e. a total of 1,962 plots

3. SPECIFIC CASES OF ILLEGAL GROUP RANCH EXPANSION INTO THE MMF

A piece of land whose ownership exceeds five people is registered during land adjudication as a Group Ranch (Republic, 1977). Upon issuance of the title deed, it is administered under the Land (Group Representatives) Act, Cap 287, until members decide to subdivide. Below is an account of transactions on each of the five Group Ranches, which led to the generation of dubious title deeds and extension of private land into the MMF.

3.1 Genesis of encroachment on the MMF

The encroachment began when members of five communally owned parcels of land known as Group Ranches bordering Maasai Mau Forest applied for consent from the local Land Control Board to subdivide their land among members. After consents were issued, surveyors and other government officers, politicians, private surveyors and influential people irregularly expanded the Group Ranches far in excess of their registered areas.

The additional areas were illegally excised from the forest without Narok County Council (NCC) Resolution, as stipulated under the Trust Lands Act. However, letters of no objection by the NCC were fraudulently obtained stating that the areas to be subdivided did not encroach onto council land, including the MMF.

The affected Group Ranches in various adjudication sections were Sisiyan, Nkaroni, Enosokon, Enakishomi and Reiyio. In addition, the number of Group Ranch members was also increased, presumably by those who purchased the land from unscrupulous people. The new members were referred to as “acceptees.” Most of these people obtained title deeds fraudulently, while others squatted, awaiting ratification of their ground occupancy.

The areas that encroached into Maasai Mau Forest were located in three adjudication sections (Ilmotiok, Ololulunga and Nkoban) whose boundaries were well defined during land adjudication and therefore adopted at First Registration as shown in the descriptions below.

3.2 Ilmotiok Adjudication Section and Sisiyan Group Ranch

3.2.1 Ilmotiok Adjudication Section

According to the Declaration Notice Ref. No. LA/5/1/63/9 dated 25th July, 1975, of the Ilmotiok Adjudication Section, the perimeter boundaries were clearly defined and registered according to the notice as shown in Box 1. It is important to note that the Sisiyan Group Ranch was part of this adjudication area.

Box 1: Boundary description of Ilmotiok Adjudication section - Sisiyan Group Ranch

“Commencing at a point where Mara River meets with Ngito River, the boundary follows Ngito River in a North-East direction up to where this river meets Ololulunga boundary. Then follows this boundary in an Easterly direction up to where this boundary touches Nosangomi River. Then follows this river in a Northerly direction up to where this river touches Oltiyani boundary. Then turns to North-west, following this boundary up to where this boundary touches Mara River then follows this boundary then follows this river in a South –west direction up to the place of commencement.”

- NB:**
- *The Group Ranch boundaries are within the declared boundary*
 - *The ranch is just one parcel, among others, located within this adjudication section.*
 - *This does not include the MMF, which the Group Ranch later encroached upon*

3.2.2 Sisiyan Group Ranch

The Sisiyan Group Ranch is within the Ilmotiok Adjudication Section. It was registered as Narok/Cis-Mara/Ilmotiok/375 with an area of 447.5 ha. It had an initial membership of nine people. Later, in the annual general meeting of 5th August 1999, an unspecified number of new members was accepted to the group.

Officials of the group applied to the Cis-Mara Land Control Board for consent to subdivide their land to individual members on 29th November, 1999. Consent was granted on 8th January, 2000.

At this juncture, on 19th June, 2000, the surveyors illegally increased the area of the group ranch from 447.5 to 1,215.64 ha. The area was allegedly excised from the Maasai Mau Forest far beyond the official, gazetted adjudication perimeter boundary. The registration number was also changed from 375 to 3491 without any justification and allegedly ratified upon registration on 6th September 2000. This plot (3491) was further subdivided into 383 sub-plots on 27th July, 2000 after the Cis-Mara Land Control Board granted consent.

Among these subplots was plot number Narok Cis-Mara 3742, whose area was 6.28 ha, subdivided into 45 parcels. Strangely, the total area of the plots was enhanced from 6.28 ha to 101.28 ha. The survey overlapped and was a source of conflict among landowners in the locality, commonly known as Sierra Leone. It is worth noting that the area of the group ranch was enlarged before subdivision to individual plots, most of which were sold to individuals who were not members of the Group Ranch.

3.3 Ololulunga Adjudication Section, Nkaroni, Enoosokon and Enakishomi Group Ranches

3.3.1 Ololulunga Adjudication Section

According to the Declaration Notice Ref. No. LA/5/1/12/31 dated 6th November, 1973, the Ololulunga Adjudication Section perimeter boundaries were clearly defined and registered according to the notice as shown in Box 2.

Box 2: Boundary description of Ololulunga Adjudication Section - Nkaroni Group Ranch, Enoosokon Group Ranch and Enakishomi Group Ranch

“Commencing at a point where the two streams meet Sikirrar and Nkiito River following Nkiito River in the Northern direction to Ilmotiok cattle dip. Then the boundary turns western side following the second Nkiito valley following the same valley Northwards via Marinua until it touches the first boundary of Mr. Cheluget farm where two paths meet. Hence the boundary turns South-eastern side following the said footpath up to the junction of another two footpaths near Sogoo Escarpment. Hence the boundary turns North-eastern side following the footpath until it touches Endorrobani stream. The boundary follows the said stream in a Southern direction until the said stream joins Enkare Uaso Nyiro River; the boundary follows the said river until it touches the external boundary of Koyaki adjudication section. The boundary turns Western direction following the same boundary until it touches Narok/Kericho road. The boundary turns North-western direction following the said valley until it meets the point of commencement.”

- NB:**
- *The Group Ranches’ boundaries are within the declared boundary*
 - *The ranches are just three parcels, among others, located within the adjudication section.*
 - *This does not include encroached MMF land.*

3.3.2 Nkaroni Group Ranch

The Nkaroni Group Ranch falls within the Ololulunga Adjudication Section, and was registered as Narok/Cis-Mara/Ololulunga/118 with an original area of 1,597.5 ha. The Cis-Mara Land Control Board gave the Group Ranch consent to subdivide their ranch on 4th February, 1992. On 9th April, 1999, the ranch was subdivided into 1,668 parcels. The aggregate area of the subplots is 5,582.51 ha, not including road reserves. The excess acreage was irregularly excised from the Maasai Mau Forest.

Other subdivisions followed with consent from the Land Control Board. This caused large chunks of land to be irregularly excised from the forest and annexed to Nkaroni Group Ranch before subdivision. The Narok County Council gave two 'No Objection' letters, NCC/LM/VOL.X/204 and NCC/LM/VOL.III/12, to Nkaroni Group Ranch, stating that the boundaries of the Group Ranch did not encroach onto Council forestland.

NB: - *These letters did not specify the boundaries being referred to.*

- *They also did not constitute authority for annexing forestland to the Group Ranch, as they were issued by officials who were not authorities on boundaries.*
- *There was no Council resolution supporting the annexation of the Maasai Mau Forest.*

3.3.3 Enoosokon Group Ranch

The Enoosokon Group Ranch was registered as Narok/Cis-Mara/Ololulunga/110, with an area of 155 ha. The Land Control Board gave consent to subdivide on 23rd January, 1997. This land was irregularly combined with plot number Ololulunga/157&198 to make 602 ha. Another portion measuring 498 ha was excised from the forest and consolidated with them, expanding Ololulunga/110 to cover 1,100 ha. Further subdivisions were undertaken with the consent of the Cis-Mara Land Control Board.

3.3.4 Enakishomi Group Ranch

Enakishomi Group Ranch was registered as Narok/Cis-Mara/Ololulunga/115. Four other plots were added to the Group Ranch to form a total area of 1,807.5 ha. The added plots are numbers 359 (336.4 ha), 360 (161.9 ha), 361 (60.0 ha) and 362 (404.7 ha). This was followed by subdivision of the combined area into Ololulunga/115 (1,748.54 ha) and Ololulunga/361 (58.96 ha). The combination of the plots necessitated Chief Koriata to surrender his plots to Enakishomi Group Ranch and be allocated equivalent land elsewhere. The surveyor illegally increased the area of the Group Ranch from 1,758.54 to 9,748.54 ha. The extra land was illegally excised from the Maasai Mau Forest.

3.4 Nkoban Adjudication Section and Reyio Group Ranch

3.4.1 Nkoban Adjudication Section

According to the Declaration Notice Ref No LA/5/1/66/4, dated 25th July, 1975, the Nkoban Adjudication Section perimeter boundaries were clearly defined and registered according to the notice as shown in Box 3.

Box 3: Boundary description of Nkoban Adjudication Section - Reyio Group Ranch

“Commencing at a point where Enoonkopit boundary meets with Kilopish River, the boundary follows in a northerly direction up to a point where this boundary meets with Nkareta boundary. Then turns in a westerly direction following this boundary up to a point where it touches this river. Then turns in a northerly direction following this river up to where this river meets Endorrobni Forest boundary. Then turns in a westerly direction following this boundary up to appoint where this boundary touches Endorrobni River. This follows the said river in a southerly direction up to where this river meets with Ewasongiro River, then follows the said river in southeast direction up to a point where Ewaso Ngiro River touches Oloisiusiu Adjudication Section boundary. Then turns along this boundary in an easterly direction up to a point where this boundary touches Kilopish River, then turns in a southerly direction following this river to the point of commencement.”

- NB:**
- *The Group Ranch boundary is within the declared boundary*
 - *The ranch is just one parcel, among others, located within the adjudication section.*
 - *This does not include encroached MMF land.*



3.4.2 Reyio Group Ranch

The Reyio Group Ranch, Narok/Cis-Mara/Nkoben/34, was initially 26.0 ha. This was increased to 878.59 ha by the surveyor irregularly, extending the Group Ranch into the Maasai Mau Forest. The Group Ranch officials applied for consent for subdivision of the enhanced land (878.59 ha) into 400 portions, and the Cis-Mara Land Control Board granted consent on 22nd April, 2003. The subplots were registered on 23rd March, 2004.

3.5 Process used to acquire illegal title deeds by beneficiaries of MMF land

The process used to acquire illegal title entailed the following:

1. **The Seeds of Corruption:** Powerful and influential people, including some government and Group Ranch officials, connived to extend the boundaries of already registered Group Ranches within finalized adjudication sections.
 - a. *Although, legally, the boundaries of such finalized sections cannot be altered.*
2. **Application to the Land Control Board for consent to subdivide the Group Ranches:** They applied for and were granted consent.
 - a. *The Boards were chaired by District Commissioners who had vested interests and also represented other interests.*
3. **Surveying and Extension of Group Ranches:** The surveyors, including government surveyors, conspired to illegally extend the Group Ranch boundaries beyond the adjudication sections into the forest.
 - a. *This was an illegal process, amounting to professional misconduct.*
 - b. *The MMF boundaries were not amended by the authorities to accommodate the changes.*
4. **Land Registration:** Then the surveyors submitted the subdivision maps (mutations) for registration and issuance of title deeds.
 - a. *A total of 1,962 title deeds (parcels) were illegally registered in the MMF.*
 - b. *Those registered included individuals, companies and other groups.*
 - c. *The Land Registrar was party to the illegal process. The Registrar was supposed to be guided by official declaration notices, showing the defined perimeter fences.*
 - d. *From the outset, the titles were illegal because the process was fraudulent.*

3.6 Recovery and realignment of the MMF

Later, however, the illegal settlements extended into the forest beyond the boundaries set by the Ntutu Commission. The Government, as of November 2005, had identified 1,962 illegally registered parcels.

There are number of reasons why the government was able to reclaim the MMF and other forests in the country:

- Change of regime and government, with a clear mandate to repossess grabbed forests;
- Political support at all levels, from local leadership up to the Cabinet level;
- The Narok County Council, as trustees and management, supported the reclamation;
- Many NGOs, such as the East African Wild Life Society, the Kenya Forests Working Group, and WWF, as well as UNEP and private individuals, raised serious concerns over the settlement and the forest destruction;
- Government ministries and agencies such as the Ewaso Ngiro South Development Authority supported the recovery of the forest and provided technical support.

4. IDEAL PROCEDURE TO BE FOLLOWED IN ALLOCATING TRUST LAND SUCH AS MAASAI MAU FOREST

4.1 What is Trust Land?

Trust Land is held by the local County Council on behalf of the local inhabitants of the area (Republic of Kenya, 1970). For as long as Trust Land remains unadjudicated and unregistered, it belongs to the local communities, groups, families and individuals in the area in accordance with applicable customary law. Once registered under any of the land registration statutes, Trust Land is transformed into private land. It then becomes individual or group property for whom it is registered. Trust Lands are set apart according to the constitutional provisions (See section 114-118 of Constitution of Kenya, Republic of Kenya, 1992) and the Trust Land Act Cap 288, Laws of Kenya (Republic of Kenya, 1970).

4.2 Allocations of Trust Land

Trust Land can be allocated legally through the following process:

- A case is presented to the Council;
- Sub-committees make recommendations to the full Council;
- The Council makes recommendations by resolution to set the land aside for specific purposes;
- The Council should then apply to the Minister responsible for local government for concurrence and approval, especially concerning sensitive areas;
- Then the Council applies to the government for authority to change the land use of such sensitive areas for the allocation process to commence;
- The land adjudication process under the Land Adjudication Act Cap 284 (Republic Kenya, 1977) commences through the issuance of notice for the survey and demarcation process;
- The Land Adjudication Officer appoints a Land Adjudication Committee;
- Surveying, demarcation and resolution of disputes;
- The Director of Survey publishes maps; and
- Registration of land and issuance of title deeds for specific land use.

4.3 Setting Apart Trust Land

Setting Trust Land apart transfers the land from community ownership to private ownership. The local community must be the beneficiary, for example through the establishment of schools, market centres and dispensaries. This process should not be for the benefit of an individual.

The Government may also set apart Trust Land for other public benefits, for example to establish military camps, learning institutions, etc. The County Council must publish the notice in the gazette and a copy must be displayed on the District Commissioner's notice board.

4.4 Ideal land adjudication process and the MMF scenario

All land adjacent to Maasai Mau Forest was individualized through the land adjudication process under the *Land Adjudication Act, Cap 284, Laws of Kenya*. Land Adjudication is *the ascertainment of rights and interests to land in Trust Land*. The process is applicable in *adjudication areas*. These areas (Districts) are gazetted by the Minister for Lands. Within these areas, smaller portions known as *adjudication sections* (normally the size of the administrative unit, either location or sub-location) are declared.

At this juncture the land ceases to be Trust Land and the process of individualization starts. Courts are not supposed to entertain any land disputes in such areas (unless with the consent of the Land Adjudication Officer) until the process is final in all respects. Once an adjudication section is finalized, its acreage cannot be increased. Box 4 on the following page shows the ideal process, and compares this with what happened in Maasai Mau Forest.



Box 4: Comparison of ideal land adjudication procedure and the reality of MMF		
ACTIVITY IN IDEAL LAND ADJUDICATION PROCESS	COMMENTS ON MAASAI MAU FOREST	REMARKS
Minister for Lands gazettes adjudication area	The forest falls within the <i>Narok Adjudication Area</i>	
Minister appoints a Land Adjudication Officer	N/A	N/A
The Land Adjudication Officer declares an adjudication section and appoints a <i>Land Adjudication Committee</i> and his/her subordinates to work in the section. Gives notice of demarcation.	MMF is Trust Land. The forest has never been declared an adjudication section. Boundaries of adjudication sections were amended to return erroneously-declared areas to the forest.	While in adjudication section land goes to clan members identified by the committee, though beneficiaries of Maasai Mau Forest plots came from elsewhere.
The Provincial Commissioner appoints an <i>Arbitration Board</i> .	No Committee or Board were appointed.	N/A
Demarcation/survey commences Disputes arising are resolved by the <i>Committee</i> . Dissatisfied parties appeal to the <i>Arbitration Board</i>	N/A	N/A
Adjudication Register is published and a sixty-day notice issued for inspection.	No Adjudication Register was published.	N/A
Dissatisfied parties file objections, which are heard and determined by the Land Adjudication Officer.	N/A	N/A
Dissatisfied parties appeal to the Minister.	N/A	N/A
Maps are published by Survey of Kenya. The Director of Land Adjudication issues a Certificate of Finality and forwards the adjudication register to the Chief Land Registrar for issuance of title deeds. Parcels affected by appeals to the Minister are restricted pending hearing and determination of the cases.	The Director of Survey did not publish forest maps. These offices were not involved in the goings on in Maasai Mau Forest.	Titles issued in the MMF are not genuine because they were not subjected to the land adjudication process.



5. References

- Republic of Kenya 1970.** *The Land (Group Representatives) Act, Chapter 287.* Revised Edition. Government Printer, Nairobi, Kenya.
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- Republic of Kenya 1977.** *The Land Adjudication Act, Chapter 284.* Revised Edition. Government Printer, Nairobi, Kenya.
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