Strategic Environmental Assessment of the Mbirikani Group Ranch Landuse and Subdivision Plan, Kajiado South Sub-County, Kajiado County



DRAFT SEA REPORT
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ACRONYMS & ABBREVIATIONS

AEMP	-	Amboseli Ecosystem Management Plan
AET	-	Amboseli Ecosystem Trust
ALOCA	-	Amboseli Landowners Conservancy Association
ASALs	-	Arid and Semi-Arid Lands
BLF	-	Big Life Foundation
CGK	-	County Government of Kajiado
CMS	-	Convention on Migratory Species
DSWT	-	David Sheldrick Wildlife Trust
EIAs	-	Environmental Impact Assessments
EMCA	-	Environmental Management and Coordination Act
GAE	-	Greater Amboseli Ecosystem
GoK	-	Government of Kenya
HWC	-	Human Wildlife Conflict
KENHA	-	Kenya National Highway Authority
KFS	-	Kenya Forest Services
KWS	-	Kenya Wildlife Service
LSP	-	Land use and Subdivision Plan
MEAs	-	Multilateral Environmental Agreements
MGR	-	Mbirikani Group Ranch
MWCT	-	Maasai Wilderness Conservation Trust
NBSAP	-	National Biodiversity Strategy and Action Plan
NCCRS	-	National Climate Change Response Strategy
NEMA	-	National Environmental Management Authority
NGOs	-	Non-Governmental Organizations
NIA	-	National Irrigation Authority
NRM	-	Natural Resources Management
PEIA	-	Plan Environmental Impact Assessment
PPP	-	Policies, Plans and Programmes
REDD+	-	Reducing Emissions from Deforestation and Forest Degradation
SEA	-	Strategic Environmental Assessment
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
WCMA	-	Wildlife Conservation and Management Act
WRA	-	Water Resources Authority
WRUAs	-	Water Resources User Associations

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NON-TECHNICAL SUMMARY

1. BACKGROUND

The promulgation of the National Constitution of Kenya 2010 which created three types of land tenure, namely, public, community and private land has recently accelerated winding up of group ranches in Kenya through their transformation from community to private land tenure. This is likely to affect wildlife conservation and communal pastoralism by privatization of rangelands which might restrict seasonal livestock movement in private land parcels. The land reform is likely to trigger a wide range of environmental and social transformations such as increased fencing of individual land parcels, further land subdivision, and sale of land to outsiders. Apart from increasing dispossession of land from the Maasai people, the transformation will likely lead to increased introduction of landuse practices which are incompatible with traditional livestock husbandry and wildlife conservation.

2. MBIRIKANI LANDUSE AND SUBDIVISION PLAN (LSP)

The need for Mbirikani LSP arose following the desire of the Mbirikani Group Ranch (MGR) landowners to subdivide their ranch and acquire individual title deeds. In line with the resolution, the group ranch representatives subsequently applied for and obtained consent from the Director of Land Adjudication and the Settlement Officer to dissolve the incorporated group representatives and subdivide the land among members. Consequently, the MGR management prepared the Landuse and Subdivision Plan (LSP) to facilitate issuance of individual land titles to members. The LSP was necessary to guide the land subdivision and the subsequent registration of land rights for private landowners . The aim of the LSP was to fulfil the desire of members to own individual land, while ensuring sustainable conservation and management of natural resources to secure communities' livelihoods now and in the future. The principal role of the LSP is to serve as an important governance tool for regulating landuse in the new private tenure regime. The LSP was prepared in close reference to the Mbirikani Conservation and Development Plan of 2017-2027. The LSP lifespan was set at five years from 2020 to 2025 which was considered ample time for implementation before review. The LSP was approved by the County Government of Kajiado (CGK), and the primary ownership and responsibility for implementation of the LSP is vested in the Mbirikani Board of Trustees and Cooperative Society.

The zoning plan used for the Mbirikani LSP was aimed at achieving prosperity, efficiency, equity, and sustainable development by promoting and accommodating competing landuses. The zoning strategy is expected to promote socio-economic growth while ensuring effective conservation of the environment and natural resources. It seeks to reduce human-wildlife conflicts through active interventions that maintain and protect the ecosystem through adoption of the following landuse zones:

a) *Settlement zone*: This zone has been set aside for the settlement of members. It comprises the existing settlement areas where members are residing, mostly along the Emali–Loitokitok road and along the Namelok, Isinet and Ilchalai water ways.
b) *Pastoralism development and wildlife zone*: This is the zone in Mbirikani where pastoralism will be actively promoted and developed. However, the zone is important for wildlife conservation and has key wildlife dispersal areas and movement corridors that should be actively managed and protected through co-existence of livestock and wildlife conservation.
c) *Conservation and tourism development zone*: The primary focus of this zone is achievement of Mbirikani's conservation goals and development of tourism enterprises as

an alternative source of revenue for members. It has four or more wildlife conservancies that the LSP proposes to be established after the land reforms are completed .

d) *Cultivation zone*: This zone focuses on irrigated agricultural areas in the south-east and east of Mbirikani that have already been sub-divided. All forms of agriculture will be permitted in this zone.
e) *Physical and social infrastructure zone*: The zone has been designated for development of transport, communication and related infrastructure to spur socio-economic development of the community
f) *Mining and industrial zones*: These areas have been set aside for limestone harvesting including cement manufacturing and establishment of light industries.

The LSP has clearly prescribed the permitted activities and landuse restrictions for each of the above zones.

3. JUSTIFICATION FOR STRATEGIC ENVIRONMENTAL ASSESSMENT

The SEA is one of the tools used to protection the environment for the benefit of present and future generations as enshrined in Articles 42, 69 (a & g), and 70 (2b) of the National Constitution of Kenya 2010. Article 42 of the National Constitution of Kenya 2010 pertains to the right to a clean and healthy environment, which can be violated through implementation of policies, plans and programmes which are environmentally unsustainable. The Mbirikani LSP SEA is in compliance with S57A(1&2a) which requires all new policies, plans and programmes (including those from local communities like MGR) to be subjected to strategic environmental assessment., The purpose of the LSP SEA is to reinforce and legitimize the LSP beyond the County Government of Kajiado (CGK) approval by legalizing it under section 57A (1) of the Environmental Management and Coordination Act (Amendment Act 2015) by subjecting the LSP to comprehensive environmental and social screening for effective environmental and natural resources governance. The SEA would ensure that the LSP is well aligned with relevant policies, legal frameworks and subsidiary regulations at local, county and national levels for ease of implementation and enforcement as the principal landuse governance instrument under the private land tenure regime. The gazettement of the SEA report will legalize the Mbirikani LSP and support its application including legal enforcement of landuse restrictions to avoid landuse disorder and irreversible environmental and social problems that are likely to be triggered by land sub-division and land reforms such as widespread land disposal, land leasing, fencing, charcoal burning and landuses which are incompatible with pastoralism and wildlife conservation.

The Mbirikani LSP SEA will address management gap associated with the emerging and inevitable challenge of land subdivision and landuse change in the Amboseli ecosystem. The issue was not considered in the 2014 Plan SEA for the AEMP (2008-2018) because the SEA was mainly commissioned in response to the one-year Amboseli Moratorium of 2013 which suspended all development activities especially in the tourism sector until AEMP was gazetted so that it could serve as a regulating instrument for development activities in the ecosystem. The 2014 Amboseli ecosystem-wide Plan SEA did not consider the issue of group ranch land sub division which mainly started after 2019. Prior to that land sub division had only occurred in the Kimana Group Ranch without a SEA which culminated in a wide range of negative environmental and social impacts (including widespread land dispossession through mass acquisition of land by "outsiders", fragmentation of pastoral and wildlife landscapes through fencing, loss of critical wildlife habitats

and migratory corridors, and degradation of environmentally sensitive environments such as the Kimana wetland and wildlife sanctuary). The Mbirikani LSP SEA and other similar interventions will reinforce the Amboseli Ecosystem SEA by the AET which was not covered in the umbrella SEA.

4. APPROACH AND METHODOLOGY FOR THE STRATEGIC ENVIRONMENTAL ASSESSMENT

The ex-post plan SEA was undertaken in accordance with the National Guidelines for Strategic Environmental Assessment in Kenya and the standard best practice roadmap as highlighted below:

- Screening and scoping to determine the specific issues to be considered in the SEA,
- Preparation of a PPP Brief (LSP Brief) and submission of the same to NEMA for the records,
- Preparation of a screening and scoping report and ToRs for submission to NEMA for approval,
- Preparation of a comprehensive environmental and social regulatory framework for the SEA through identification of relevant PPPs for the SEA and collation and review of PPP documents,
- Detailed PPP analysis to determine the environmental regulatory framework for the SEA,
- Compliance assessment of Mbirikani LSP against relevant environmental regulatory benchmarks,
- Establishment of a suitable stakeholder's engagement and participation strategy to be used in the SEA process,
- Stakeholders consultations and public participation,
- ield missions and case studies for baseline situation analysis,
- Plan Environmental Impact Assessment (PEIA) and mitigation,
- Identification of plan alternative options,
- Preparation of a comprehensive Environmental Management and Monitoring Plan, and
- Compilation and validation of the LSP SEA report.

5. ENVIRONMENTAL REGULATORY FRAMEWORK AND PPP ANALYSIS

The Mbirikani LSP was screened against the environmental and social obligations in relevant frameworks at local, county, national and international levels as highlighted below:

Framework level	Relevant frameworks
Local	1. MGR Landuse and Sub-Division Plan 2. MGR Management Plan 3. MGR Conservation Plan 2017-2030 4. Amboseli Ecosystem Management Plan 2020-2030
County	5. Kajiado County Land Sub-Division Guidelines 2018 6. Kajiado County Spatial Plan 2019-2029
National	7. National Constitution 8. National Environment Policy, 2014 9. EMCA Cap 387 10. National Landuse Policy, 2017 11. Integrated National Landuse Guidelines, 2011 12. National Wildlife Policy, 2020 13. WCMA 2013 14. National Climate Change Framework Policy, 2016 15. Kenya Vision 2030 16. Kenya National Spatial Plan 2015-2045 17. National Water Master Plan 2030

	18. National Biodiversity Strategy and Action Plan (NBSAP 2021-2030) 19. National Climate Change Response Strategy (NCCRS) 2010
Regional & global	20. EAC Protocol on Environment and Natural Resources 21. Convention on Migratory Species (CMS) 22. UNESCO's Programme on Man and the Biosphere (MAB)

6. SEA FINDINGS

The potential positive impacts expected from implementation of Mbirikani LSP after land subdivision will include:

- Higher land value,
- Security of land tenure,
- Absolute land ownership rights,
- Individual right for individual landowners to enjoy the right to freely own, use, gift or bequest land,
- Provision of individual landuse freedom,
- Benefits of more diversified livelihood opportunities beyond traditional pastoralism,
- Freedom from an ineffective group ranch governance and management regime,
- Improved and well-planned human settlements,
- Improved provision of infrastructure and essential services,
- Evolution of a vibrant economic zone along the Emali-Loitokitok road corridor,
- Increased employment and business opportunities,
- Improved cushioning of households against low livestock returns through introduction of alternative economic options, and
- Sustenance of wildlife conservation under the new land reforms.

The potential negative impacts and mitigation options are highlighted below.

Landuse zone	**Potential negative impacts with violation of landuse restrictions**	**Mitigation options**
Pastoralism and wildlife zone	• Uncontrollable land subdivisions and disposal • Fragmentation of pastoral and wildlife landscapes through fencing • Mass acquisition of land by non-members and "outsiders" • Introduction of land activities which are incompatible with nomadic pastoralism and wildlife conservation • Disputed land sales leading to disinheritance, loss of family wealth, numerous clan or family feuds • Introduction of a desperate class of landless Maasai • Dilution of the norms and values of the Maasai culture and traditions • Curtailing of traditional livestock mobility networks in pursuit of pasture and water • Collapse of traditional pastoral practices • Increased crime and indecency due to collapse of traditional customary systems • Escalation of rangeland degradation • Reduced capacity to cope with and adapt to climate change • Increase in human-wildlife conflicts and retaliatory attacks against wildlife	• Controlling of further land subdivision and disposal • Regulating land disposal without the consent of family members, especially women and youth • Creating private land as common land for shared use for communal livestock grazing and wildlife use • Establishing conservancies in the pastoralism and wildlife zone • Regulating livestock population by introducing improved breeds • Preventing collapse of the REDD+ carbon credit project

	• Increase in illegal bush meat activities	
Conservation and tourism zone	• Lower aesthetic appeal of Mbirikani as a tourism hub in the Amboseli ecosystem due to negative visual impacts of landscape change • Curtailing of traditional livestock mobility networks in pursuit of pasture and water • Collapse of traditional pastoral practices • Collapse of the Chyulu Hills REDD+ carbon credit scheme in Mbirikani • Collapse of existing tourism revenue-generating opportunities • Increased wildlife-related conflicts • Increased wildlife crimes	• Conversion of the conservation zone into a conservancy • Ensuring equitable sharing of benefits accruing from wildlife conservation and tourism • Regulating livestock population by introducing improved breeds • Preventing collapse of the Chyulu Hills REDD+ carbon credit project in Mbirikani
Cultivation zone	• High influx of high-end irrigation farmers from agrarian regions • Mass acquisition of land by non-members and "outsiders" • Increased water demands and scarcity • Increased siltation and water pollution • Increased water-related conflicts • Increased human-wildlife conflicts • Encroachment of swamps and riparian zones	• Regulating water abstraction to prevent drying up of rivers, springs and swamps • Regulating encroachment of agriculture into riparian buffer zones through proper zoning • Regulating new irrigation farms on private land • Mitigating water-related conflicts • Limit use of agrochemicals especially pesticides
Settlement zone	• Uncontrolled land subdivisions and disposal • Mass acquisition of land by non-members and "'outsiders" • Disputed land sales leading to disinheritance, loss of family wealth, numerous clan or family feuds • Introduction of a desperate class of landless Maasai • Dilution of the norms and values of the Maasai culture • Increased crime and indecency due to collapse of traditional customary systems • Lower aesthetic appeal of Mbirikani as a tourism hub due to negative visual impacts • Increased water demand and scarcity • Increased wildlife crimes	• Controlling land disposal without the consent of family members, especially women and youth • Controlling the sale of settlement land to outsiders • Addressing the potential problem of increased crime and social vices in the zone • Addressing the potential problem of inadequate water supply for mushrooming settlements • Controlling illegal bush meat activities • Controlling solid waste disposal
Physical infrastructure	• Fragmentation of grazing and wildlife landscapes by construction of access roads • Obstruction of wildlife and livestock movement corridors by roads • Increased vehicle-wildlife-livestock collisions • Increased crime including wildlife crimes due to opening up of the area	• Controlling obstruction of wildlife-livestock corridors by roads • Addressing potential risk of vehicle-wildlife-livestock collisions • Addressing the potential problem of increased crime including wildlife crimes due to greater landscape accessibility and penetration
Industrial and limestone mining zone	• Increasing number of decommissioned and unrehabilitated quarries • Impaired movement of livestock and wildlife in the area • Increased colonization by invasive species especially *Nicotiana glauca* along access roads to new limestone mining sites	• Entering into agreement with Simba Cement regarding compliance with the requirement for proper mine-closure and site restoration in accordance with:-

	• Increased air pollution from dust by limestone transport trucks	- s72, s77, s89, s140, s179 and s180 of the Mining Act No.2 of 2016 - s8 (4k) of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) - s2 of the Mining (Mine Support Services) Regulations, 2016 (LN No. 151) • Controlling the spread of invasive species especially *Nicotiana glauca* along the mining access roads • Controlling air pollution in the factory site and access roads

7. STAKEHOLDER VIEWS AND CONCERNS

The findings showed that the Mbirikani landowners were aware of the subdivision process and were conversant with the five landuse zones that have been created and were in agreement with the landuse zones. The consultations established that prior to the subdivision process, a verification of the official and bona vide MGR members was done to ensure non-members were not sneaked in. It was also established that landowners were adequately informed about, sensitized on and agreed with the permitted activities in each zone. Similarly, landowners were aware about the land restrictions in the five landuse zones. The consultations indicated landowners and their leaders had agreed the duration for the landuse restrictions should be 30 years with a review after 10 years. Some landowners however suggested that the review should be done after five years to enable people experience private land tenure and make amendments without overburdening them.

8. ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN

A detailed Environmental Management and Monitoring Plan (EMMP) has been prepared to support effective implementation of the Mbirikani LSP as an instrument for land sub-division and landuse governance after the land reform and transition into private land tenure regime. The EMMP will support the long-term management, monitoring and evaluation of the environmental and social status in the landuse zones.

9. CONCLUSIONS

The promulgation of the National Constitution of Kenya 2010 which created three types of land tenure classes, namely, public, community and private land will continue encouraging winding up group ranches in Kenya through their transformation from community to private land tenure. Although the land reforms from communal to private land tenure will enhance land rights for pastoral communities, it is likely to trigger a wide range of negative environmental and socio-economic transformations including land dispossession and introduction of incompatible landuse in the rangelands which will disallow traditional co-existence of livestock husbandry and wildlife conservation.

The PPP analysis for the Mbirikani LSP SEA showed that the LSP is compliant with environmental and social obligations in relevant frameworks at local, county, national and international levels. Demarcation of landuse zones in the LSP is compliant with the landuse zones, permitted activities and landuse restrictions in the Amboseli Ecosystem Management Plan (AEMP) 2020-2030.

However, the LSP has prescribed licensed non-commercial harvesting of natural products (such as medicinal plants and firewood) in the pastoralism and wildlife zone but the licensing criteria has not been spelt out. It has also prescribed undertaking of scientific research in the conservation and tourism development zone but the approval modalities for these activities is unclear. The Mbirikani LSP is aligned with the Kajiado County Land Sub-Division Guidelines of 2018. The guidelines advocate for retention of the group ranches in their traditional state. Similarly, the LSP is well aligned with the Kajiado County Spatial Plan of 2019-2029.

At the national level, the Mbirikani LSP is compliant with relevant environmental and social governance frameworks. However, the permitted activities in the industrial and limestone mining zone does not include the requirement for the limestone mining companies to submit mine-closure plans and ensure effective site restoration as required in s72, s77, s89, s140, s179 and s180 of the Mining Act No.2 of 2016, s8 (4k) of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) and s2 of the Mining (Mine Support Services) Regulations, 2016 (LN No. 151). It does not indicate how mushrooming of borehole drilling will be controlled and regulated to conform with the National Water Master Plan 2030.

The overall impact analysis for the Mbirikani LSP including the environmental scenario building clearly showed that the negative environmental and social impacts of land subdivision in the group ranch might exceed the positive impacts. The findings are consistent with the findings of many scientific research studies which have been undertaken on the subject both locally and abroad. The desire of the landowners to subdivide their communal land is strong and resolute. This interest is probably due to strong desire for absolute land ownership rights by the landowners and the systemic weaknesses in the group ranch regime including poor transparency and accountability The landowners are also learning lessons from other group ranches where sub division has already occurred.

The Mbirikani LSP offers suitable landuse prescriptions for each zone as key pillars for effective planning and sustainable management of land for current and future generations. There is no guarantee, however, that these restrictions won't be challenged and violated. The violation can be mitigated through firm decrees and agreements among the private landowners on compliance with gazetted restrictions including fines and penalties for restriction violators.

10. RECOMMENDATIONS

The headline recommendations for each landuse zone are highlighted below.

10.1: Pastoralism and wildlife zone

a) Landowner owners in this zone can enter into a legally binding agreement to transfer their property rights to the Mbirikani Land Trust and the Cooperative Society for governance and management as shared common land for pastoralism and wildlife use and the collective interests of Mbirikani landowners.
b) Access to conservation fees, carbon credit revenue and mining royalties should be linked to preservation of private land through a signed agreement.
c) Conservancies can be established in the pastoralism and wildlife zone through conservation easement agreements between willing private landowners, AET and other conservation partners with clear strategies to ensure that private landowners earn good revenue failure to which they might decide to dissolve them.
d) The REDD+ carbon credit project in Mbirikani should be sustained by entering into lease agreements with beneficiary landowners outlawing further subdivision and rampant vegetation clearance.

e) Licensing criteria for non-commercial harvesting of natural products in the pastoralism and wildlife zone should be developed.

10.2: Conservation and tourism zone

a) The private landowners through Mbirikani Land Trust and Cooperative Society can consider gazettement of the entire zone as a conservancy under the WCMA 2013 for which a management plan will be developed.
b) The constitution for Mbirikani Land Trust and/or the Cooperative Society will clearly define the formula for an equitable sharing of benefits accruing from wildlife conservation and tourism including a clear strategy for dispute resolution.
c) The REDD+ carbon credit project should be sustained by entering into lease agreements with beneficiary landowners outlawing further subdivision and rampant vegetation clearance.

10.3: Cultivation zone

a) Establishment of new irrigation farms on private land should be controlled through involvement of *Nyumba Kumi* groups which should approve leasing of new farms in their local areas and regulate the number of water abstraction pumps and pumping hours through common agreements.
b) WRUAs in Mbirikani should clearly delineate and beacon the riparian buffer zones according to relevant legal frameworks in partnership with private landowners through *Nyumba Kumi* groups and enter into common agreements to control encroachment by irrigation farms.

10.4: Settlement zone

a) Land disposal without the knowledge and approval of family members, including women and youth, should be controlled by enforcing the Land Control Board disposal consent requirement for involvement of family members as prescribed in the Land Act.
b) Sale of settlement land to outsiders by private landowners should be controlled through gazettement of restrictive regulations and signing by landowners at issuance of title deeds on the following:-
    i) Restricted sale of settlement land and migration to the pastoralism and wildlife zone,
    ii) Forfeiture of conservation fees and carbon credit revenue benefits accruing from the communal land in the pastoralism zone, and
    iii) Grazing prohibition rules for private landowners who dispose their land in the settlement zone and migrate to the pastoralism zone

10.5: Industrial and limestone mining zone

a) Restoration of decommissioned limestone quarries and controlling of the spread of invasive species (especially *Nicotiana glauca*) should be undertaken through binding agreement with National Cement Company Ltd regarding implementation of mine-closure and restoration of decommissioned quarries in accordance with:- i) s72, s77, s89, s140, s179 and s180 of the Mining Act No.2 of 2016, ii) s8(4k) of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) and iii) s2 of the Mining (Mine Support Services) Regulations, 2016 (LN No. 151)

It is recommended that the review of landuse restrictions should be undertaken after 10 years after gazettement of the Mbirikani LSP SEA based on recommendations of a wide section of stakeholders. The Mbirikani LSP SEA and other similar interventions will reinforce the 2014 Amboseli Ecosystem SEA by the AET in terms of addressing the potential negative impacts of land

sub division which was not covered in the umbrella SEA which was not covered in the umbrella SEA. It is therefore necessary for the recommendations of the Mbirikani LSP SEA especially regarding the landuse restrictions to be annexed to the Amboseli Ecosystem SEA by the AET.

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1. INTRODUCTION AND BACKGROUND

1.1: Group Ranch Land Sub-division in Kajiado County

The promulgation of the National Constitution of Kenya 2010 which created three types of land tenure classes, namely, public, community and private land has recently accelerated winding up group ranches in Kenya through their transformation from community to private land tenure. Kajiado County in southern Kenya has traditionally been associated with communal land tenure through the group ranch framework which was previously authorized by the Group (Land Representatives) Act of 1968, and which was later repealed by the Community Land Act, No. 27 of 2016. The group ranch model enabled communal pastoralism as the dominant landuse practice in the dryland rangelands (ASALs) which are often too dry for rain-fed agriculture.

Rangeland communal pastoralism relies heavily on extensive opportunistic movement of household livestock in shared common land based on the availability of pasture and water (BurnSilver & Mwangi 2007, Thornton *et al*, 2006, Ntiati 2002). Land subdivisions in Maasai group ranches is likely to affect wildlife conservation and communal pastoralism through privatization of the rangelands which might restrict seasonal livestock and wildlife movement in private land parcels. At the same time, the land reforms from communal to private land tenure is likely to trigger a wide range of environmental and socio-economic transformations including increased fencing of individual land parcels, further land subdivision, and sale of land to outsiders. Apart from increasing dispossession of land from the Maasai people, the transformation is likely to result in increased introduction of landuse practices which are incompatible with traditional livestock husbandry and wildlife conservation through encroachment into livestock grazing and wildlife conservation areas.

1.2: Mbirikani Landuse and Subdivision Plan (LSP)

The need for the Mbirikani LSP arose following the desire of the Mbirikani Group Ranch (MGR) landowners to subdivide the ranch and acquire individual title deeds. The push for the subdivision of the group ranch was influenced in part by the experience of neighbouring group ranches such as Kimana and Mailua which had been subdivided and members issued with title deeds for their respective land parcels. It was also influenced by increased awareness on land rights as guaranteed in the National Constitution of Kenya 2010. In line with members resolution to subdivided the group ranch, the Mbirikani representatives subsequently applied for and obtained consent from the Director of Land Adjudication and the Settlement Officer to dissolve the incorporated group representatives and subdivide the land among members.

Subdivision of MGR was guided by and implemented in line with the principles and provisions of the relevant laws, namely, the National Land Policy, the Land (Group Representatives) Act, the Community Land Act, the Physical Planning and Landuse Act, the Survey Act, the Land Act, the County Government Act, the Urban Areas and Cities Act, the Wildlife Conservation and Management Act, and the National Land Commission Act.

In 2021, the Mbirikani management commissioned Kolmans Geomatic Consultants to prepare the Landuse and Subdivision Plan (LSP) to facilitate issuance of individual land titles to members. The LSP was necessary to guide the land subdivision and subsequent registration of land rights for private landowners. The aim of the LSP was to fulfil the desire of members to own individual land, while ensuring sustainable conservation and natural resource management to secure the communities' livelihoods now and in the future.

The overall purpose of the Mbirikani LSP was to:-

a) guide land surveying and issuance of title deeds for registration of individual land rights,
b) ensure sustainable development especially with regard to the following considerations:
    i. organized distribution of human settlements,
    ii. allocation of land for various landuse activities especially pastoralism, agriculture, and tourism,
    iii. preserving land for environmental conservation including protection of wildlife corridors, habitats and dispersal areas, and
    iv. land allocation for essential infrastructure and social services, and
c) serve as a tool for the overall governance of the area after dissolution of the group ranch management.

The specific objectives of the LSP are to:-
a) manage human settlement by creating liveable and functional centralized places for Mbirikani members to live, work and play to forestall the possibility of spontaneous and unregulated settlements,
b) provide social and physical infrastructure proximate to population concentration areas and commensurate to the demand,
c) spur economic development of Mbirikani by expanding livelihoods and income-generating options and opportunities by:-
    i. improving pastoralism practices,
    ii. strengthening tourism in the area, and
    iii. developing intensive crop and fodder farming,
d) protect and conserve the fragile natural environment including wildlife heritage and improve use of land and land-based resources in Mbirikani including preservation of local and regional ecological connectivity to improve the quality of life and livelihoods of the community, and
e) promote good governance by mainstreaming transparency and accountability and by institutionalizing community participation in management of the affairs of Mbirikani's development after the dissolution of the group ranch.

Land subdivision in Mbirikani will transform traditional communal land into multiple parcels of private land through issuance of titles to individual members. The land subdivision will mark the dissolution of the group ranch leadership (the incorporated group representatives) following transition from a communal to a private tenure regime. The principal role of the LSP is to serve as an important governance tool for regulating landuse in the new private land tenure regime.

The LSP was prepared in close reference to the Mbirikani Conservation and Development Plan of 2017-2027. The LSP lifespan was set at five years from 2020 to 2025 which was considered ample time for implementation before review. The LSP was approved by the County Government of Kajiado (CGK), and the primary ownership and responsibility for implementation of the LSP is vested in the Mbirikani Board of Trustees which can appoint a Technical Officer in form of an Operations Manager to take the overall responsibility of daily operations in Mbirikani including the direct implementation of the LSP.

1.3: Justification for Strategic Environmental Assessment (SEA)

The SEA is one of the tools used to protect the environment for the benefit of present and future generations as enshrined in Articles 42, 69 (a & g), and 70 (2b) of the National Constitution of Kenya 2010. Article 42 of the National Constitution of Kenya 2010 pertains to the right to a clean and healthy environment, which can be violated through implementation of policies, plans and programmes which are environmentally unsustainable. Article 69 (a) is aimed at ensuring

sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensuring equitable sharing of accruing benefits, while 69 (g) aims at eliminating processes and activities that are likely to endanger the environment. Article 70 (2b) of the constitution empowers relevant public officers to take measures to prevent or discontinue any act or omission that is harmful to the environment.

The purpose of the Mbirikani LSP SEA was to reinforce and legitimize the Mbirikani LSP beyond the CGK approval by legalizing it under section 57A (1) of the Environmental Management and Coordination Act (Amendment Act 2015) by subjecting the LSP to comprehensive environmental and social screening for effective environmental and natural resources governance. The SEA was expected to ensure that the LSP is well aligned with relevant policies, legal frameworks and subsidiary regulations at local, county and national levels for ease of implementation and enforcement as the principal landuse governance instrument under the private land tenure regime. Gazettement of the SEA report would legalize the Mbirikani LSP and support its application including legal enforcement of landuse restrictions in order to avoid landuse disorder and irreversible environmental and social problems that are likely to be triggered by land subdivision and land reforms including widespread land disposal, land leasing, fencing, charcoal burning and other landuses which are incompatible with pastoralism and wildlife conservation. The aim of the SEA was to legalize and legitimize the LSP through its gazettement to instil the required muscle to prevent negative landuse changes. These changes are likely to accelerate land degradation and permanently obstruct and eliminate wildlife corridors and dispersal areas thereby reducing wildlife habitats outside protected areas in the greater Amboseli ecosystem. The changes are likely to affect community livelihoods in a negative way.

2. MBIRIKANI LANDUSE SUBDIVISION PLAN

2.1: Background

Mbirikani Group Ranch (2^{o},22'S, 2^{0}44'S; 37^{o}24'E, 37^{o}52'E) with an approximate total area of 316,562.18 acres and 4,300 registered members is registered under Land Title No. Kajiado/Mbirikani/733) under the Land Group Representative Act 287 (Revised 2010). According to the contracted surveyor, however, the actual ground acreage is 335,175.18 acres translating to an extra 20,000 acres above what is in the registered land title (Kolmans Geomatic Consultants Ltd 2021). Preparation of the Mbirikani LSP was guided by the following principles (Kolmans Geomatic Consultants 2021):

a) The need to maintain ecological integrity of the area for continued flow of environmental services including continued provision of livestock pasture, sustenance of traditional wildlife migratory routes and dispersal habitats for tourism revenue, exploitation of alternative socio-economic opportunities including agriculture, commerce, and industry,
b) The desire to reduce incidences of human-wildlife conflicts, while at the same time maintaining wildlife and livestock interactions,
c) Ensuring rational use of land for socio-economic development.

To conform with the above guiding principles, the zoning plan combined traditional and cultural norms with contemporary natural resource management concepts to arrive at a rationalized model for the optimum use of land resources for optimum with conflict-free gains by the community, taking into consideration space requirements for wildlife.

The LSP was further informed by:-

a) the desire by Mbirikani landowners to maintain an ecologically sound environment without further land sub-division to allow continuation of traditional pastoralism practice,
b) the knowledge that pasture management and livestock numbers are critical to socio- economic development and socio-economic sustainability of Mbirikani members
c) traditional ecological knowledge and analysis by wildlife ecology experts, both of which indicate that the corridor to the Chyulu Hills National Park through Kimana and Mbirikani plays a crucial role in preserving the landscape connectivity and free movement of wildlife in the eastern part of the larger Amboseli Ecosystem especially in the dry season, and
d) the desire by Mbirikani landowners to continue accessing wildlife-related tourism benefits.

2.2: Designated Landuse Zones

The zoning plan used for the Mbirikani LSP was aimed at achieving prosperity, efficiency, equity, and sustainable development in the area by promoting and accommodating competing landuses. The zoning strategy is expected to promote economic growth while ensuring effective conservation of the environment and natural resources. It seeks to reduce human-wildlife conflicts through active interventions that maintain and protect the ecosystems through the adoption of the following landuse zones:

a) *Settlement zone*: This zone has been set aside for settlement of members. It comprises the existing settlement areas where members are residing, mostly along the Emali–Loitokitok road and along the Namelok, Isinet and Ilchalai water ways. Each landowner was allocated 10 acres in this zone with a title deed.
b) *Pastoralism development and wildlife zone*: This is the zone in Mbirikani where pastoralism will be actively promoted and developed. However, the zone is also important for wildlife conservation and contains key wildlife dispersal areas, habitats and wildlife movement corridors that should be actively managed and protected through co-existence of

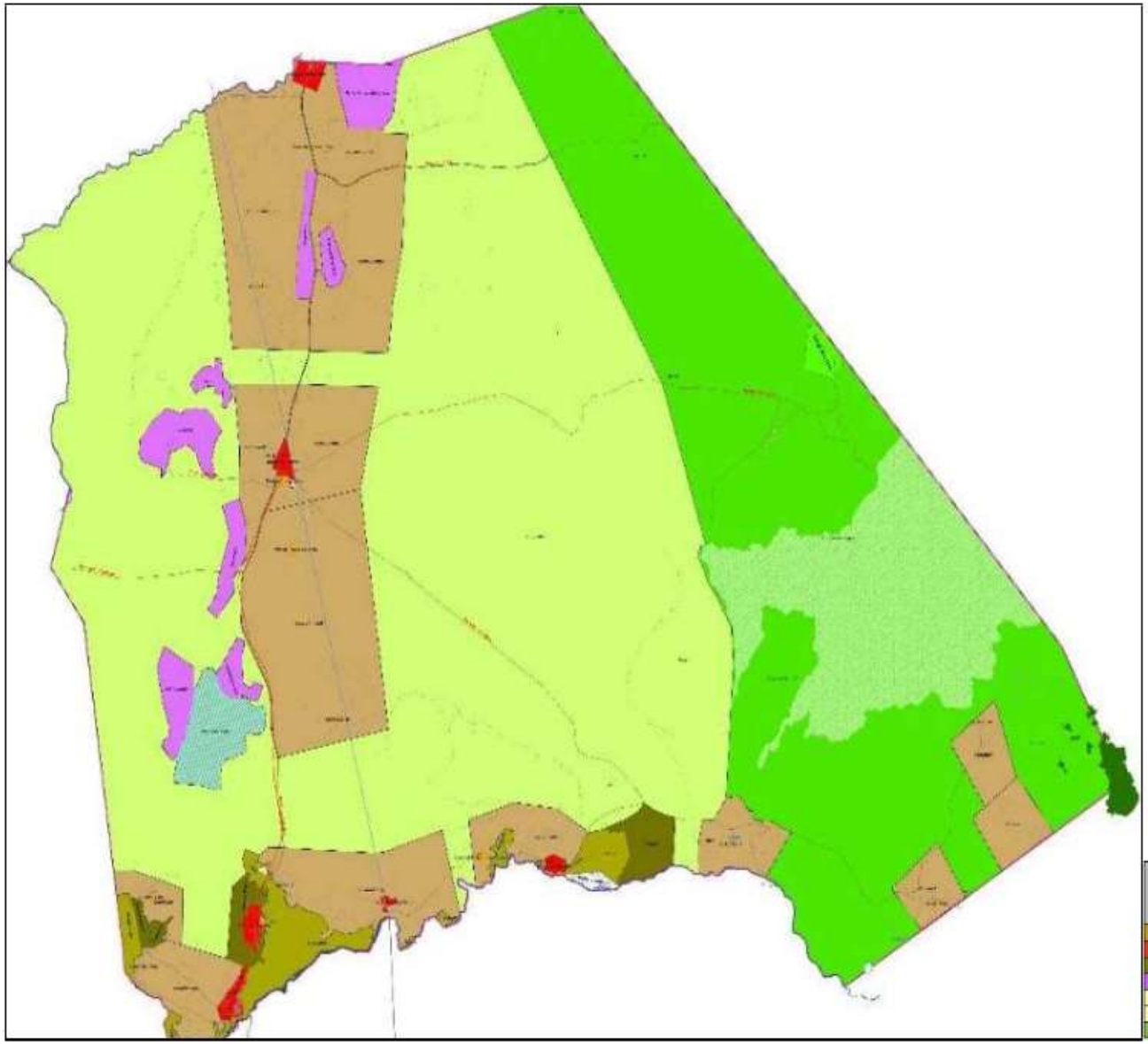
livestock and wildlife. Each landowner was allocated 31 acres in this zone with a title deed.

c) *Conservation and tourism development zone*: The primary focus of this zone is on the achievement of the Mbirikani's wildlife conservation and tourism development goals. The zone has four or more wildlife conservancies that the LSP proposes to be established after the subdivision process is over . Each landowner was allocated 26 acres in this zone without a title deed.
d) *Cultivation zone*: This zone focuses on irrigated agricultural areas in the south-east and east of Mbirikani that have already been sub-divided. All forms of agriculture will be permitted in this zone. Each landowner was allocated two acres in this zone with a title deed.
e) *Physical and social infrastructure*: The zone has been designated for development of transport, communication and related related infrastructure to spur socio-economic development of the community.
f) *Mining and industrial zone*: These areas have been set aside for limestone harvesting including cement manufacturing and establishment of light industries. Each landowner was allocated one acre in this zone without a title deed.

Figure 2-1 shows the spatial location and area (acres) for each of the 5 land subdivision zones**.**

2.3: Designated Landuse

Table 2-1 shows the designated landuse zones, their permitted activities and landuse restrictions including per capita land allocations as provided in the Mbirikani LSP.



Landuse zone	Approximate area coverage (Acres)	Land allocation per individual (Acres)
Settlements	43,000	10
Market centres & public utilities	7,548	
Cultivation	8,600	2
Mining & industrial areas	3,698.18	1
Pastoralism & wildlife use	133,300	31
Wildlife corridors	4,082	2
Conservation & tourism areas	118,648	26

Figure 2-1: Distribution of the Mbirikani Landuse Zones

Table 2-1: Designated landuse zones, permitted activities and restrictions in the Mbirikani LSP

Landuse zone	Permitted landuse activities	Restricted landuse activities	Management standards
1. Rangeland pastoralism and wildlife zone	a) Livestock grazing b) Construction of traditional temporary *manyattas* and livestock *bomas* that do not remain in one place for more than four months c) Installation of livestock watering points d) Cattle dips e) Fodder storage stores f) Legal harvesting of natural products (such as medicinal plants and firewood) for household use only g) Non-permanent tourism activities (such as game driving and overnight camping) h) Controlled construction of cultural *manyattas*	i. Permanent settlements including construction of permanent *bomas* or buildings, where "permanent" is defined as a structure that is made of brick and motor and permanently remains in existence ii. Crop farming ii. Permanent fencing except for natural bush fences around temporary *bomas* v. Further land subdivision v. Change of ownership vi. Change of user ii. Road construction ii. Commercial harvesting of natural products (such as firewood and sand) unless a permit has been issued by the authorized body x. Dumping of waste	• Rotational grazing plan to be established and adhered to, in accordance with traditional grazing practices, with grazing committees responsible for the implementation and penalties set for non-compliance • Establishment of communal grass banks • Sustainable carrying capacities of herbivores to be established • Sensitization on carrying capacities and modern livestock husbandry practices • Livestock marketing association to be assessed and, if practical, established, as a way to add value to Mbirikani landowners livestock • Partnerships with government and NGOs for the provision of livestock extension services • The cultural *manyatta* be based on the Maasai traditional *manyatta* concept • The number and location of cultural *manyatta* to be determined by the Mbirikani Trustee Board and the county government
2. Communal grazing, conservation area, buffer zones, wildlife corridors	a) Controlled grazing of livestock according to a grazing plan b) Temporary night-time livestock enclosures c) Wildlife viewing d) Bird watching e) Ecological research	i. Location of tourist accommodation facilities except in approved sites ii. Bed capacity of tourist accommodation facilities restricted to approved limits iii. Permanent human settlement or buildings where "permanent" is defined as a structure in one place for more than four months	• Bed capacity of tourism accommodation facilities restricted to 24 beds per facility. • Location of tourism accommodation facilities to be determined through consultations between an authorized management committee, conservation experts and investors and the county government

	f) Construction of infrastructure necessary for conservation activities (such as community ranger camps) g) Controlled photography h) Filming a) Drawing water from the rivers, so long as its extraction is approved by the WRA and the relevant WRUAs b) Construction of tourist accommodation facilities with limited environmental footprint i) Laying of underground infrastructure	iv. Crop farming v. Harvesting of natural products vi. Road construction vii. Construction of dams and weirs viii. Fencing ix. Exotic tree species x. Change of user xi. Further land subdivision x. Visual intrusive infrastructure (such as power lines)	• Game viewing to be done by four-wheel drive vehicles to forestall the need for permanent road construction • Filming rights to be granted by Mbirikani Cooperative Society Board for the purpose of revenue generation for the community • Only buffering roads to the conservancies may be opened and graded to serve as a delineation of conservancy blocks **Note**: • Prior to establishing the tourist accommodation facilities, development approval shall have to be granted by the competent planning authority
3. Cultivation zone	a) Cultivation of high value crops such as tomatoes, onions, capsicum, coriander, and herbs b) Farming and bulking of livestock fodder c) Perimeter fencing of the irrigation block d) Laying of irrigation infrastructure a) Fencing to reduce human-wildlife conflict	i. Change of ownership ii. Change of user iii. Construction of permanent *bomas* or buildings iv. Road construction i. Tree cutting	• Control of soil erosion and water conservation to be prioritized • Water-use technologies that limit waste to be promoted • No-till and organic agriculture to be encouraged, to minimize damage caused by synthetic chemicals • Agricultural marketing associations to be created to ensure maximum returns to farmers • Minimum stream flow through wetlands to be established and maintained
4. Clustered Settlements and market centres	a) Commercial buildings b) Residential buildings c) Light industries d) Social amenities such as educational, health, community halls, play grounds, administration buildings,	ii. Row housing ii. Burial sites only in the designated areas v. Dumping of waste outside designated areas	• Access routes to be maintained for livestock to move from places of residence to the designated grazing zones • Management standards for urban agriculture in terms of type, location and management of wastes of activity

	churches, shops, hotels, open-air markets, sports fields, and parks e) Installation of social infrastructure utilities including electricity, water supply, and sewage and waste management structures f) Permanent buildings by Mbirikani members g) Semi-detached bungalows and flats h) Burial sites i) Access roads j) Street lighting k) Green belts l) Fencing of residential and commercial properties m) Wildlife exclusion fences around nucleated settlements n) Urban agriculture - kitchen gardening and small scale poultry industry **Note**: • Prior to undertaking any of the above activities, development approval shall have to be granted by the competent planning authority • Development applications seeking for approval or development permission shall be sought from the competent planning authority in a manner prescribed by the law		to be provided as development conditions prior to approval • Conformity to eco-friendly standards such as use of iron sheets for roofing and rainwater harvesting, use of solar panels/renewable energy and eco-friendly waste disposal using oxidation ponds • Setbacks – Front 3m, side 2m, back 2m for residential areas • Plot ratio of ground to first floor for all users • Plot coverage of 50% for residential. • Setbacks - Front 2m for commercial • Plot coverage of 75% for commercial. • Plot ratio ground to first floor for all users • Site master plans should be prepared for education, health, recreation and social infrastructure prior to construction, taking into account current and future population needs including environmental considerations to forestall haphazard development and sprawling of the nucleated settlement • The use of green energy; solar and wind are recommended • Adequate water provision and reticulation are recommended for nucleated settlement • A management committee for each of the nucleated settlements shall be established including a resident association

5. Physical and social infrastructure	a) Only primary, secondary and roads in the nucleated settlement shall form the backbone of transportation in the Mbirikani b) The purpose of tertiary/access roads within the pastoral and conservation zone is only to facilitate the approval of the scheme plan for the issuance of titles and registration of land rights c) Only the classified roads which are primary roads and roads in the nucleated settlement may be bituminized or gravelled d) The secondary roads may be gravelled e) Primary, secondary and nucleated settlement road reserves may be used in laying utility and services f) Airstrips may be improved to bituminized surface and auxiliary utilities may be constructed including perimeter fencing	i. Tertiary and access roads shall not be opened, constructed and used for transportation purposes to forestall serious degradation of the natural environment ii. No road construction of any form shall be undertaken on the primary and secondary road reserve iii. Tree planting is not allowed on the primary road except in nucleated settlement iv. Bituminization of secondary roads v. The roads reserves provided in terms of primary, secondary and tertiary shall not interfere with any form of development vi. Only classified roads shall be bituminized. The rest of the roads shall be gravelled. Access roads in human settlements are exempted from these regulations	• The widths of primary and secondary roads reserve shall be maintained at 40m, 36m and 25m as per the zoning scheme • Nucleated settlement roads shall be maintained at 25m, 18m, 15m to 9m as per the scheme plan
6. Industrial and limestone mining areas	a) Mineral exploration b) Mine development c) Feasibility studies d) EIAs e) Land acquisition by leasing f) Change of user g) Vegetation clearing h) Construction of roads and other amenities i) Mine closure j) Decommissioning k) Rehabilitation works	i. Settlements ii. Construction of permanent 'bomas' or buildings iii. Construction of schools and health centers iv. Further subdivision v. Change of ownership vi. Passenger vehicles	• Soil erosion control and water conservation works • Development of green belt along with 7.5m safety zone • Haul roads used for transportation of limestone • Dust control measures • Landscaping of decommissioned site

3. APPROACH AND METHODOLOGY FOR THE STRATEGIC ENVIRONMENTAL ASSESSMENT

3.1: SEA Objectives and Scope

The motivation for the ex-post plan SEA was associated with the decision by the Mbirikani landowners to subdivide the group ranch land following the land reform from communal land tenure to private land tenure. Subsequently, the Mbirikani LSP is expected to serve as an important governance tool for regulating landuse under the new private land tenure regime. Consequently, there was need to ensure proper integration of all the necessary instruments of environmental and social governance and control in the LSP.

The aim of the plan SEA was to interrogate the effectiveness of the LSP as the governance tool for regulating landuse after the transition to the private land tenure regime. The overall aim was to strengthen the legal status of the LSP through gazettement by NEMA under EMCA Cap 387 in order for it to serve as the long-term landuse governance tool under the new land tenure dispensation.

The key objectives of the plan SEA was to:-

a) Undertake compliance screening of Mbirikani LSP against relevant environmental and social policies, laws, guidelines and standards both at local, county and national levels for sustainable development,
b) Consult Mbirikani landowners and partners in order to ensure they understand the necessity of the SEA for the legalization of the LSP under the new land ownership arrangements associated with private land owner driven landuse management regime,
c) Create awareness on the LSP as the principal instrument of land governance as opposed to the group ranch governance regime with emphasis on:-
    - Awareness and acceptance of the LSP,
    - Awareness and acceptance regarding the land subdivision zones,
    - Awareness and acceptance regarding the permitted activities in each landuse zone,
    - Awareness and acceptance regarding the restrictions in each zone with emphasis on the pastoralism and wildlife conservation zone as well as the conservation and tourism development zone,
    - Acceptable duration after which the restrictions should be reviewed.
d) Prepare a comprehensive SEA report which:- i) demonstrates the compliance of LSP to environmental and social frameworks, ii) demonstrates the LSP acceptance by all the stakeholders, and iii) addresses any LSP gaps especially with regard to compliance with environmental and social frameworks as well as any disregarded stakeholders interests and concerns, and
e) Facilitate gazettement of the Mbirikani LSP SEA under s57A of EMCA Cap 387 for legitimate enforcement of permitted landuse activities and restrictions.

3.2: Terms of Reference

a) *Review of the LSP and other documents*: The documents included Kajiado County Land Sub-division Guidelines of 2018, Kajiado County Spatial Plan of 2019-2029, Amboseli Ecosystem Management Plan Group Ranch Management Plan of 2020-2030, among other relevant frameworks including MEAs. The aim of this was to identify areas of interface and linkages between the LSP and other binding frameworks for effective governance and management of the group ranch after its subdivision,

b) *Determining the scope of the SEA*: This was undertaken through the standard participatory scoping approach as provided in the National Constitution, EMCA Cap 387 and National SEA Guidelines of 2012, among other guidelines,
c) *Gathering baseline information and situation analysis*: The aim was to provide a thorough understanding of the potential environmental and social risks (including unsustainable landuse) which are likely to emerge during implementation of the LSP. The SEA was then expected to recommend suitable mitigation for any potential risks and impacts,
d) *Exploiting participatory approaches to effectively engage relevant stakeholders*: The main aim was to ensure effective and sustained public engagement during the SEA process including adequate engagement with vulnerable and marginalized groups (e.g., women, youth, elderly). The SEA engagement process was expected to ensure a clear understanding of the power relations between different stakeholders, and how they interact with each other and the environment in order to eventually ensure agreeable options for the smooth implementation and enforcement of the LSP,
e) *Prediction and analysis of environmental and social impacts*: The consultant was expected to undertake a comprehensive analysis of the potential short term, medium term and long-term impacts which are likely to emerge through implementation and enforcement of the Mbirikani LSP based on the review of documents, baseline surveys and stakeholder consultations. This included prediction of scale, magnitude (low, medium and high risks) and level of significance for the potential environmental (soil, water, biodiversity, climate change, etc.) and social impacts (poverty, human wildlife conflicts, gender inequality, household conflicts etc.),
f) *Identification of suitable environmental and mitigation options*: The consultant was expected to identify suitable alternative measures for addressing mitigating environmental and social impacts during implementation of the LSP including enforcement of agreed landuse restrictions in order to identify suitable trade-offs and best-fit options to avoid unacceptable and unsustainable environmental and social situations in the group ranch subdivision. The consultant was expected to rely heavily on the application of the standard impact management hierarchy for identification of the most appropriate options,
g) *Identification of measures to enhance opportunities and mitigate adverse impacts*: The Consultant was expected to focus on the realization of the positive opportunities of the plan during implementation of the LSP including the enforcement of agreed landuse restrictions especially in line with the Sustainable Development Goals (SDGs) and recommend suitable strategies for minimizing any negative risks. The aim of the SEA was to develop "win-win" situations where multiple, mutually reinforcing gains could strengthen the economic base, provide equitable conditions for all, and protect and enhance the state of environment within Mbirikani as well as the Greater Amboseli Ecosystem (GAE) and Kajiado County,
h) *Identification and gazettement of nature-based enterprises*: These include compatible landuses and sustainable income options within the wildlife conservancy and dispersal areas in Mbirikani,
i) *Developing a binding framework for coherent landuse management*:- This was to include sustainable livestock production, sustainable grazing strategy such as binding grazing regulations, approved grazing management committee and clear obligations for landowners in order to ensure sustainable landuse, equitable benefit sharing and reduced human wildlife conflicts in the wildlife conservancy and dispersal areas,
j) *Draft report on the findings of the SEA:* This involved preparation, compilation and presentation of a Draft SEA Report for review once the technical analysis and stakeholder consultations are completed. This was expected to include a succinct, non-technical summary which would be of particular use in explaining the findings to the members s, who should be

well informed about the environmental implications of the management plan in order to submit their SEA comments and validate the final document, and

k) *Final SEA report for submission to NEMA and making recommendation to decision makers*: The Consultant will prepare and present the final SEA report after incorporating the comments from all stakeholders for submission to NEMA. Thereafter, the Consultant was expected to follow-up with the NEMA Head Office in Nairobi regarding provision of the necessary approvals to support gazettement of the Mbirikani LSP including the enforcement of agreed landuse restrictions.

3.3: Approach, Methodology and Workflow

The SEA was undertaken in accordance with the National Guidelines for Strategic Environmental Assessment in Kenya and the standard best practice roadmap as highlighted below:-

- Screening and scoping to determine the specific issues to be considered in the SEA,
- Preparation of a PPP Brief (LSP Brief) and submission of the same to NEMA for the records,
- Preparation of screening and scoping report and ToR for submission to NEMA for approval,
- Preparation of a comprehensive environmental and social regulatory framework for the SEA through identification of relevant PPPs for the SEA and collation and review of PPP documents,
- Detailed PPP analysis to determine the environmental regulatory framework for the SEA,
- Compliance assessment of the Mbirikani LSP against relevant environmental regulatory benchmarks,
- Establishing a suitable stakeholder engagement and participation strategy to be used in the SEA process,
- Stakeholder consultations and public participation,
- Field missions and case studies for baseline situation analysis,
- Plan Environmental Impact Assessment (PEIA) and mitigation,
- Identification of plan alternative options,
- Preparation of a comprehensive Environmental Management and Monitoring Plan, and
- Compilation and validation of the LSP SEA report.

3.3.1. Baseline Situation Assessment

A two day intensive baseline assessment field mission was undertaken in the area in June 2022. The aim of this activity was to get a clear understanding of the LSP landuse zones and their current status as a basis for subsequent environmental scenario building. The situation analysis was carried out in order to understand the likely environmental and social impacts during the implementation of the Mbirikani LSP.

3.3.2. Identification of the Environmental PPP Framework

A comprehensive PPP framework was developed for the Mbirikani LSP SEA by considering the relevant local, county, national and international frameworks against which the LSP was interrogated. The aim of this was to ensure compliance with relevant environmental and social obligations in policies, laws, guidelines and standards. **Table 3.1** provides a summary of the PPP framework used in the Mbirikani LSP SEA.

3.3.3. Scoping Consultations

The objective of the scoping consultations was to integrate the views and concerns of all the relevant stakeholders in the entire SEA process including content of the final report. **Table 3.2** shows the engagement plan used in the SEA scoping consultations. **Plate 3.1** and **Plate 3.2** shows the engagements with the client and some of the target stakeholders.

Table 3.1: Summary of the PPP Framework for the Mbirikani LSP SEA

Framework category	Relevant instruments
Local level	23. Mbirikani Conservation Plan 2017-2030 24. Amboseli Ecosystem Management Plan 2020-2030 25. AEMP SEA, 2011
County level	1. Kajiado County Land Sub-Division Guidelines 2018 2. Kajiado County Spatial Plan 2019-2029
National level	1. National Constitution 2. National Environment Policy, 2014 3. EMCA Cap 387 4. National Landuse Policy, 2017 5. Integrated National Landuse Guidelines, 2011 6. National Wildlife Policy, 2020 7. WCMA 2013 8. National Climate Change Framework Policy, 2016 9. Kenya Vision 2030 10. National Wildlife Strategy 2030 11. Kenya National Spatial Plan 2015-2045 12. National Water Master Plan 2030 13. National Biodiversity Strategy and Action Plan (NBSAP 2021-2030) 14. National Climate Change Response Strategy (NCCRS) 2010
International level	1. UNESCO Man & Biosphere Reserves
	2. Convention on Migratory Species (CMS)

Table 3.2: Engagement plan for the Mbirikani LSP SEA scoping consultations

Zone	Coverage	Venue	Date
1. Mbirikani Taskforce	Entire group ranch	Paran Resort, Kimana	3/05/2022
2. Mbirikani Opinion Leaders	Entire group ranch	Big Life Foundation Offices	14/05/2022
3. Inkoroshoni	Imbarueitin, Inkoroshoni	Inkoroshoni KAG Church	18/5/2022
4. Isinet	Enkong'u, Nabulaa	Nabulaa Tree	19/5/2022
5. Kalesirua	Kalesirua, Olkina	Kalesirua KAG	20/5/2022
6. Enkai naibor	Enkaji naibor	E/naibor KAG	21/5/2022
7. Ilchalai	Ilchalai, Olmapitet	Ilchalai Church	25/5/2022
8. Olbili	Olbili	Olbili church	26/5/2022
9. Oltiasika	Oltiasika, Lemasusu, Leinkati	Leinkati	27/5/2022
10. Olng'osua	Olng'osua, Shilishili	Shilishili Primary School	28/5/2022
11. Mbirikani	Noosilale, Natoishe, Ilchurra, Nasipa	Mbirikani, Entepesi	1/6/2022
12. Inkoisuk	Inkoisuk, Emukutan, Olagarrama	Inkoisuk Church	2/6/2022
13. Osupuko	Kimana, Shurie, Impiron, Entarara, Kuku, Rombo, areas outside Mbirikani	Kimana Primary School	4/6/2022
14. Mbirikani partners	County Government of Kajiado (CGK), Amboseli Ecosystem Trust (AET), ALOCA, KWS	Various venues	Various dates

Plate 3.1: Inception consultations with the client







Plate 3.2: Scoping consultations



a) MGR taskforce meeting in Kimana



b) MGR opinion leaders meeting at BLF Offices in Mbirikani



c) Inkoroshoni meeting



d) Isinet meeting



e) ALOCA meeting



f) DCC Loitokitok Sub-county

3.3.4 PPP Analysis

This involved a comprehensive assessment of the Mbirikani LSP against relevant environmental and social obligations in the frameworks provided in **Table 3.3**. The PPP analysis involved a comprehensive review of relevant policies and legislation to identify all the environmental and social obligations and confirm their integration in the Mbirikani LSP.

3.3.5 Indicators and Targets for Plan Environmental Impact Analysis (PEIA)

Table 3 shows the list of environmental indicators and targets used in the PEIA. These were identified mostly from information and realities on the ground as gathered during the baseline situation assessment. This was also done with reference to the findings of the strategic environmental assessment for the Amboseli Ecosystem Management Plan which was undertaken by AET in 2011.

Table 3.3: Indicators and targets for plan environmental impact analysis (PEIA)

Impact category	Environmental indicators	Environmental targets
Physical impacts	Range degradation	Reversing current degradation
	Land subdivision	Reducing or stopping the sub-division
	Water resources	Sustainable utilization and equitable sharing
	Climate change mitigation and adaptation	Improving the level of community preparedness, coping, adaptation and resilience
Biological impacts	Protection of wildlife movement corridors	Restoration of traditional movement corridors
	Protection of threatened species	Conservation of threatened species
	Protection of springs and wetlands	Conservation of springs and wetlands
	Sustenance and expansion of conservancies	Establishment of additional conservancies for sustenance of traditional wildlife movement corridors, habitats and dispersal areas
	Ecosystem connectivity	Maintaining the traditional ecosystem landscape and ecological connectivity/linkages
	Environmental rehabilitation	Restoring high quality rangeland, riverine and wetlands
Social impacts	Sustainable alternative livelihoods	Improving community livelihoods
	Poverty reduction	Reducing poverty at household level
	Resource conflict alleviation and dispute resolution	Elimination of resource conflicts
Economic impacts	Equitable ecosystem benefit sharing	Equitable resource and tourism revenue sharing
	Boosting county economy	Vibrant county economy
	Boosting Vision 2030	Supporting realization of the goals of Vision 2030
Institutional and transboundary impacts, international implications and public interest	Regional cohesion and partnerships	Improved collaborative trans-boundary environmental management
	Implementation of MEAs	Supporting implementation of MEAs in Kenya
	Public interests	Embracing public concerns in the land subdivision management plan
	Institutional integration and capacity	Improved cross-sectoral integration

3.3.6 Identification of Alternative PPP Options

The identification of alternative PPP options was considered in order to determine the most effective way to improve the long-term outcome of the Mbirikani LSP implementation process. The identification of alternative PPP options was mostly be undertaken on the basis of the following considerations: - a) embracing the obligatory PPP environmental issues which have not been effectively embraced in the Mbirikani LSP. This is necessary in order to ensure that the LSP is properly aligned to the overall goals, principles and plans for environmental sustainability in Kenya. The identification of alternative PPPs was undertaken through a combination of methods including PPP gap analysis, expert judgment, institutional requirements and key stakeholder inputs and contributions during the SEA consultation meetings.

4. ENVIRONMENTAL REGULATORY FRAMEWORK AND PPP ANALYSIS

The Government of Kenya has put in place a wide range of policies, legal frameworks, master plans and programmes to address issues of environmental protection and conservation. The frameworks are derived from statutes in the National Constitution of 2010 as well as obligations in relevant international conventions which the state has ratified. Other environmental governance instruments include regulations, guidelines and standards all of which are implemented and enforced by different institutions and lead agencies. The role of the SEA is therefore to ensure integration of relevant environmental obligations, existing policies, plans and programs in new development policies, plans and programs such as the Mbirikani LSP. The aim of this is to alleviate, prevent or minimize the risk of environmental degradation. The role of the EIAs for the same purpose is usually implemented later on in order to screen the environmental integrity of projects which originate from development policies, plans and programmes mainly by cross-checking their compliance with specific environmental obligations as prescribed in legal frameworks.

The Mbirikani LSP was screened against the environmental and social obligations in relevant frameworks at local, county, national and international levels which are provided in **Table 3.3**. The PPP analysis involved a comprehensive review of relevant policies and legislation to identify all the environmental and social obligations and confirm their integration in the Mbirikani LSP. The findings of the PPP analysis are presented below.

4.1: Local level frameworks

Framework	Environmental & Social Obligations for the Mbirikani LSP	Compliance Status
1. Amboseli Ecosystem Management Plan (AEMP) 2020-2030 (AET 2020)	Plan Foundations (Issue 8): Land subdivision and landuse planning - Need to consider landuse models that will ensure that a viable minimum area is maintained to support viable wildlife populations as well as traditional pastoralism after the group ranches are subdivided	The Mbirikani LSP has identified and demarcated the following zones as areas to be held and used in common in order to continue supporting wildlife as well as traditional pastoralism:- a) Dry season grazing and conservation area - 118,648 acres b) Pastoral areas - 133,300 acres c) Wildlife corridors & dispersal areas – 4,082 acres The total coverage of this is 256,030 acres which is equivalent to 80.9% of the Mbirikani
	Section 3-2: AE zoning scheme - The AEMP has classified the Mbirikani as an Exclusive Use and Low-Use Zone with the following landuse prescriptions:- • Exclusive Use Zone ○ Recreational activity prescriptions: Game drives, guided nature walks, walking safaris, camel and horseback safaris, balloon safaris, bird shooting, bird watching, bush breakfast, sundowners, and dinners. ○ Permitted recreational facilities: Camping sites, lodges, eco-lodges, bandas, campsites, interpretation signs, wildlife viewing roads,	The prescribed recreational activities and facilities in the AEMP have been adopted in Mbirikani LSP

	walking trails (associated with a tourist attraction), administration buildings and compounds, bird hides • Low Use Zone ○ Recreational activity prescriptions: Game drives, walking safaris, camel and horseback safaris, balloon safaris, bird watching, visit to cultural centers, bush breakfast, sundowners, and dinners ○ Permitted recreational facilities: Accommodation facilities targeting the international market will be limited to special campsites along designated walking, camel or horseback safari routes, while accommodation facilities for the domestic market will be limited to student hostels	
	Landuse zones The Mbirikani LSP has adopted the following landuse zones as prescribed in the AEMP:- i. human settlements, ii. livestock grazing areas, iii. Agriculture zone, iv. wildlife-based tourism zone, v. social infrastructure areas, vi. commercial zones and vii. mining areas. The AEMP prescriptions for permitted activities and landuse restrictions for the above landuse zones are highlighted below. 1. Pastoralism zone: Permitted activities: Livestock grazing, construction of traditional 'manyatta's, livestock 'bomas', livestock watering points, cattle dips and fodder storage facilities Restrictions: Construction of permanent 'bomas' or buildings, fencing, further land subdivision, change of user, change of ownership, road construction	The Mbirikani LSP has adopted the permitted activities and landuse restrictions for the pastoralism zone as prescribed in the AEMP (**Table 2-1, Part 1)** Additional activities in the Mbirikani LSP:- a) Licensed harvesting of natural products (e.g. medicinal plants, firewood) for household use only Unclear issues in the Mbirikani LSP:- a) Licensing modalities for the harvesting of natural products in the pastoralism zone
	2. Conservation & tourism zone: Permitted activities: wildlife conservation, wildlife viewing and associated infrastructure, controlled construction of visitor accommodation facilities, research, controlled filming and photography, controlled construction of cultural 'manyattas', controlled livestock grazing, laying of underground infrastructure, construction of water pans, drawing water from rivers Restrictions: Location of visitor accommodation facilities, bed capacity of visitor accommodation facilities, human settlement or buildings in any form without authority, number of traditional livestock in the 'manyattas', fencing, planting of exotic tree species, change of user and further subdivision	The Mbirikani LSP has adopted the permitted activities and landuse restrictions for the conservation and tourism zone (appearing as communal grazing, conservation area, buffer zones, wildlife corridors) as prescribed in the AEMP (**Table 2-1, Part 2)** Additional activities in the Mbirikani LSP:- a) Ecological research b) Construction of community ranger camps c) Approved abstraction of water from rivers

		Additional restrictions in the Mbirikani LSP:- i. Crop farming ii. Harvesting of natural products iii. Road construction iv. Construction of dams and weirs v. Introduction of visual intrusive infrastructure (e.g. power lines) Unclear issues in the Mbirikani LSP:- a) Approval of research activities b) Water abstraction approvals
	3. Cultivation zone: Permitted activities: Cultivation of high value crops (e.g. tomatoes, onions, capsicum, coriander, herbs etc.), cultivation of subsistence crops, farming and bulking of fodder, perimeter fencing of the cultivation blocks Restrictions: Change of user, further subdivision, change of ownership	The Mbirikani LSP has adopted the permitted activities and landuse restrictions for the cultivation zone (appearing as irrigation zone) as prescribed in the AEMP (**Table 2-1, Part 3)** Additional activities in the Mbirikani LSP:- a) Laying of irrigation infrastructure b) Fencing to reduce human-wildlife conflict Additional restrictions in the Mbirikani LSP:- i. Construction of permanent 'bomas' or buildings ii. Road construction iii. Tree cutting
	4. Settlement Zone Permitted activities: Commercial and residential buildings, light industrial facilities, social amenities (educational, health, community halls, play grounds, administration, churches, shops, hotels, open air markets etc.), permanent buildings by GR members, burial sites, semi-detached bungalows and flats encouraged, road construction, street lighting, greening the residential areas and road reserves is encouraged, nucleated settlements to be protected by a wildlife fence, urban agriculture; kitchen gardening, small scale poultry industry Note: Prior to undertaking any of the above activities, development approval shall have to be granted by the competent planning authority. Development applications seeking for approval or development permission shall be sought from the competent planning authority in a manner prescribed by the law Restrictions: Further subdivision and change of user, row housing, burial will be undertaken only in the designated areas	The Mbirikani LSP has adopted the permitted activities and landuse restrictions for the cultivation zone (appearing as irrigation zone) as prescribed in the AEMP (**Table 2-1, Part 4)** Additional activities in the Mbirikani LSP:- 1. Installation of social infrastructure utilities including electricity, water supply, sewage and waste management structures 2. Green belts Additional restrictions in the Mbirikani LSP:- i. Dumping of waste outside designated areas

	5. Physical infrastructure zone Permitted activities: Primary and secondary roads in the nucleated settlement shall form the backbone of transportation in the GRs, Only the classified roads in the nucleated settlement may be bituminized or graveled, secondary roads may be graveled, primary, secondary and nucleated settlement road reserves may be used in laying utility and services, airstrips may be improved to bituminized surface and auxiliary utilities may be constructed including perimeter fencing Restrictions: The tertiary and access roads shall not be opened, constructed and used for transportation purposes to forestall serious degradation of the natural environment, No construction of any form shall be undertaken on the primary and secondary road reserve, tree planting is not allowed on the primary road except in nucleated settlement, bituminization of secondary roads is prohibited, road reserves provided in terms of primary, secondary and tertiary shall not interfere with any form of development, only the primary roads shall be bituminized - The rest of the roads shall be graveled, access roads in the human settlements are exempted from these regulations are exempted from these regulations	The Mbirikani LSP has adopted the permitted activities and landuse restrictions for the physical infrastructure zone (appearing as transportation zone) as prescribed in the AEMP (**Table 2-1, Part 5)**
	6. Industrial zone and limestone mining areas This landuse category is not reflected in the AEMP 2019-2027 but is a dominant landuse in the Mbirikani	Permitted activities:- a) Mineral exploration b) Mine development c) Feasibility studies d) Conducting EIAs e) Land acquisition by leasing f) Change of user g) Vegetation clearing h) Construction of roads and other amenities i) Mine closure j) Decommissioning k) Rehabilitation works Landuse restrictions:- i. Settlements ii. Construction of permanent 'bomas' or buildings iii. Construction of schools and health centers iv. Further subdivision v. Change of ownership vi. Passenger vehicles Unclear issues:- a) Strategies and guidelines for mine closure, decommissioning and rehabilitation works

		b) Passenger vehicles
	Community livelihoods & socio-economic programme Action 4-1: Establishing nucleated human settlements to minimize the fragmentation of sensitive environments	This has been integrated in the Mbirikani LSP as shown in **Table 2-1, Part 4**
	NRM Programme - A key action under this programme is the securing of wildlife corridors including the Amboseli NP-Olgullui North-Mbirikani corridor	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)

4.2: County level frameworks

Framework	Environmental & Social Obligations for the Mbirikani LSP	Compliance Status
1. Kajiado County Land Sub-Division Guidelines 2018 (CGK 2018)	Permissible landuses for Mbirikani area: - Pastoralism and Conservation and urban landuse (economic node) as shown in **Figure 4.3**	The Mbirikani LSP is aligned with the guidelines. However, the guidelines advocate for retention of the group ranches in their traditional state
2. Kajiado County Spatial Plan 2019-2029 (CGK 2019)	Recommended landuse for Kajiado South Sub-County (Kajiado South) is livestock, tourism and conservation as shown in **Figure 4.4**	This has been integrated in the Mbirikani LSP as part of the pastoralism, communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Parts 1 & 2**)
	Strategy for Wildlife Conservation and Tourism Promotion - Identification and zoning of corridors for wildlife to remove the encroachment - Establishing wildlife conservancies along corridors to maintain the habitat	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)
	Strategy for Conservation of Environmentally sensitive areas - Protection and conservation of Amboseli National Park, wildlife corridors and wildlife dispersal areas - Zoning and protecting wetlands, riparian areas and river banks	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)

4.3: National level frameworks

Framework	Environmental & Social Obligations for the Mbirikani LSP	Compliance Status
1. National Constitution (GoK 2010)	Article 69(a)-Conservation of the environment and natural resources	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)
2. National Environment Policy, 2014 (GoK 2014)	s4.10.2(1)-Protecting, conserving and improving habitats, corridors and wildlife dispersal areas	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)

3. EMCA Cap 387 (GoK 2015a)	s57A – Strategic environmental assessment • All Plans for implementation shall be subject to strategic environmental assessment	The Mbirikani LSP SEA was undertaken in fulfilment of this requirement
4. National Landuse Policy, 2017 (GoK 2017)	s138-Ensuring that landuses conform to the relevant landuse plans	The Mbirikani LSP is compliant with the following landuse plans:- 1. Amboseli Ecosystem Management Plan (AEMP) 2020-2030 2. Kajiado County Spatial Plan 2019-2029 3. Kajiado County Land Sub-Division Guidelines 2018
5. Integrated National Landuse Guidelines, 2011 (NEMA 2011)	3.1 Protection of rivers and wetlands • Provide buffer zones of between 2m-30m width measured from the highest water mark for rivers and streams	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)
	3.6 Conservation of biological diversity • Protection of wildlife migratory corridors and dispersal areas	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)
	3.9 Preservation of pastoral lands • Develop incentives and/or disincentives to discourage subdivision of group ranches • Promote harmonious co-existence of livestock and wildlife (e.g. avoid fencing off wildlife corridors and buffer zones)	The Mbirikani LSP has identified and demarcated the following zones as areas to be held and used in common in order to continue supporting wildlife as well as traditional pastoralism:- d) Dry season grazing and conservation area - 118,648 acres e) Pastoral areas - 133,300 acres f) Wildlife corridors & dispersal areas – 4,082 acres The total coverage of this is 256,030 acres which is equivalent to 80.9% of MGR area
	3.10 Mining and quarrying • Enforce the National Sand Harvesting Guidelines, 2008 and relevant county regulations	Unclear issues: • Measures to be undertaken in order to ensure sustainable limestone mining and cement processing • Measures to be undertaken in order to ensure sustainable sand harvesting
4 National Wildlife Policy, 2020 (GoK 2020)	4.2 Management of National Parks, Reserves and Sanctuaries - Developing incentives for landowners that host wildlife in dispersal and connectivity areas	The Mbirikani LSP highlights the following incentives:- a) Annual lease payments for landowners in the conservation area and wildlife corridors through the Big life Foundation b) The conservation area and wildlife corridors will generate carbon credits through the Chyulu Hills REDD+ Project has a clear "revenue allocation model" agreed between the other REDD+ partners who comprise KWS, KFS, MWCT, DSWT, BLF, Kuku A, Kuku B, Rombo, Mbirikani group ranches

		4.3 Wildlife Conservation and Management on Private and Community Lands - Promoting wildlife conservation as a land-use option	The Mbirikani LSP highlights the following incentives:- a) Annual lease payments for landowners in the conservation area and wildlife corridors through the Big life Foundation b) The conservation area and wildlife corridors will generate carbon credits through the Chyulu Hills REDD+ Project has a clear "revenue allocation model" agreed between the other REDD+ partners who comprise KWS, KFS, MWCT, DSWT, BLF, Kuku A, Kuku B, Rombo, Mbirikani group ranches
		• Providing incentives to support individuals, communities and other stakeholders to invest in wildlife conservation and management	The Mbirikani LSP highlights the following incentives:- a) Annual lease payments for landowners in the conservation area and wildlife corridors through the Big life Foundation b) The conservation area and wildlife corridors will generate carbon credits through the Chyulu Hills REDD+ Project has a clear "revenue allocation model" agreed between the other REDD+ partners who comprise KWS, KFS, MWCT, DSWT, BLF, Kuku A, Kuku B, Rombo, Mbirikani group ranches
		• Integration of wildlife corridors and dispersal areas	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)
5	WCMA 2013 (GoK 2013a)	s39 Establishment of wildlife conservancies or sanctuaries	The Mbirikani LSP has identified and demarcated the following zones as areas to be held and used in common in order to continue supporting wildlife as well as traditional pastoralism:- a) Dry season grazing and conservation area - 118,648 acres b) Pastoral areas - 133,300 acres c) Wildlife corridors & dispersal areas – 4,082 acres The total coverage of these areas is 256,030 acres which is equivalent to 80.9% of MGR area. It is expected that some of the landowners may aggregate their land parcels to create wildlife conservancies and sanctuaries
6	National Climate Change Framework Policy, 2016 (GoK 2016a)	S9.2.1: Promoting Public-Private Partnerships (PPPs) in climate finance	The conservation area and wildlife corridors will generate carbon credits through the Chyulu Hills REDD+ Project and has a clear "revenue allocation model" agreed between other REDD+ partners who comprise of KWS, KFS, MWCT, DSWT, BLF, Kuku A, Kuku B, Rombo, Mbirikani group ranches
7	Kenya Vision 2030 (GoK 2008)	Securing wildlife corridors and migratory routes	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife movement corridors (**Table 2-1, Part 2**)

8	National Wildlife Strategy 2030 (GoK 2018)	Goal 1 Maintain and improve habitat and ecosystem integrity to reduce biodiversity loss, protect ecosystem function, enhance connectivity, and increase resilience	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones, wildlife corridors (**Table 2-1, Part 2**)
		Goal 4 Increase access, incentives, and sustainable use of wildlife resources, while ensuring equitable sharing of benefits	The Mbirikani LSP highlights the following incentives:- a) Annual lease payments for landowners in the conservation area and wildlife corridors through the Big life Foundation b) The conservation area and wildlife corridors will generate carbon credits through the Chyulu Hills REDD+ Project has a clear "revenue allocation model" agreed between other REDD+ partners who comprise of KWS, KFS, MWCT, DSWT, BLF, Kuku A, Kuku B, Rombo, Mbirikani group ranches
9	Kenya National Spatial Plan 2015-2045 (GoK 2016)	2.8.4 – Protection of rangeland areas which host most of the country's game reserves, parks, conservancies and sanctuaries as home to more than 90% of the wild game	The Mbirikani LSP has identified and demarcated the following zones as areas to be held and used in common in order to continue supporting wildlife as well as traditional pastoralism:- a) Dry season grazing and conservation area - 118,648 acres b) Pastoral areas - 133,300 acres c) Wildlife corridors & dispersal areas – 4,082 acres The total coverage of these areas is 256,030 acres which is equivalent to 80.9% of MGR areai.
10	National Water Master Plan 2030 (GoK 2013b)	s6.2- Water allocation policy priorities 1st Priority - Water reserve (apportionment) for ecological functions and basic human needs	Unclear issue:- The Mbirikani LSP does not indicate how the mushrooming of borehole drilling will be controlled and regulated
11	National Biodiversity Strategy and Action Plan, NBSAP 2019-2030 (GoK 2021)	Goal 4: Promote and enhance fair and equitable sharing of benefits accruing from utilization of biodiversity and ecosystem services	The Mbirikani LSP highlights the following incentives:- a) Annual lease payments for landowners in the conservation area and wildlife corridors through the Big life Foundation b) The conservation area and wildlife corridors will generate carbon credits through the Chyulu Hills REDD+ Project has a clear "revenue allocation model" agreed between other REDD+ partners who comprise of KWS, KFS, MWCT, DSWT, BLF, Kuku A, Kuku B, Rombo, Mbirikani group ranches

4.4: Regional and global level frameworks

Framework	Environmental & Social Obligations for the Mbirikani LSP	Compliance Status
1. EAC Protocol on Environment and Natural Resources (EAC, 1999)	Article 12 - Management of wildlife resources • Promoting community-based wildlife conservation and management	The Mbirikani LSP has identified and demarcated the following zones as areas to be held and used in common in order to continue supporting wildlife as well as traditional pastoralism:- a) Dry season grazing and conservation area - 118,648 acres b) Pastoral areas - 133,300 acres c) Wildlife corridors & dispersal areas – 4,082 acres The total coverage of these areas is 256,030 acres which is equivalent to 80.9% of the MGR area It is expected that some of the landowners may aggregate their land parcels for creation of wildlife conservancies and sanctuaries
2. UNESCO's programme on Man and the Biosphere (MAB)	The core area of the reserve is the protected Amboseli National Park while the buffer zone comprises the surrounding areas including Olgulului-Lorarashi, Eselengei, Mbirikani, Kimana, Kuku, and Rombo	The Mbirikani LSP has identified and demarcated the following zones as areas to be held and used in common in order to continue supporting wildlife as well as traditional pastoralism:- a) Dry season grazing and conservation area - 118,648 acres b) Pastoral areas - 133,300 acres c) Wildlife corridors & dispersal areas – 4,082 acres The total coverage of these areas is 256,030 acres which is equivalent to 80.9% of MGR area. It is expected that some of the landowners may aggregate their land parcels for the creation of wildlife conservancies and sanctuaries
3. Convention on Migratory Species (CMS)	Article 2.1 - Conserving migratory species and protecting their habitats	This has been integrated in the Mbirikani LSP as part of the communal grazing, conservation area, buffer zones and wildlife corridors (**Table 2-1, Part 2**)

5. BASELINE SITUATION AND POTENTIAL ENVIRONMENTAL SCENARIOS

5.1: The Location of the SEA Area

The MGR is located in Kajiado South Sub-County which is the second largest sub-county with an area of about 6410 km^2. The sub-county borders Tanzania, Taita Taveta County and Makueni County. It hosts most of the greater Amboseli ecosystem including the world famous Amboseli National Park. The Amboseli ecosystem covers approximately 5,700 km^2 , stretching between Mt. Kilimanjaro, the Chyulu Hills and Tsavo West National Park and the Kenya/Tanzania border. It is a fragile semi-arid ecosystem that is internationally recognized as a UNESCO Biosphere Reserve under the Man and Biosphere Programme (MAB) because of its significance as an area which fulfills the three complementary roles of; conservation, research and development for the local people, Kenya and the world. **Figure 5-1** shows the location of the Mbirikani area.

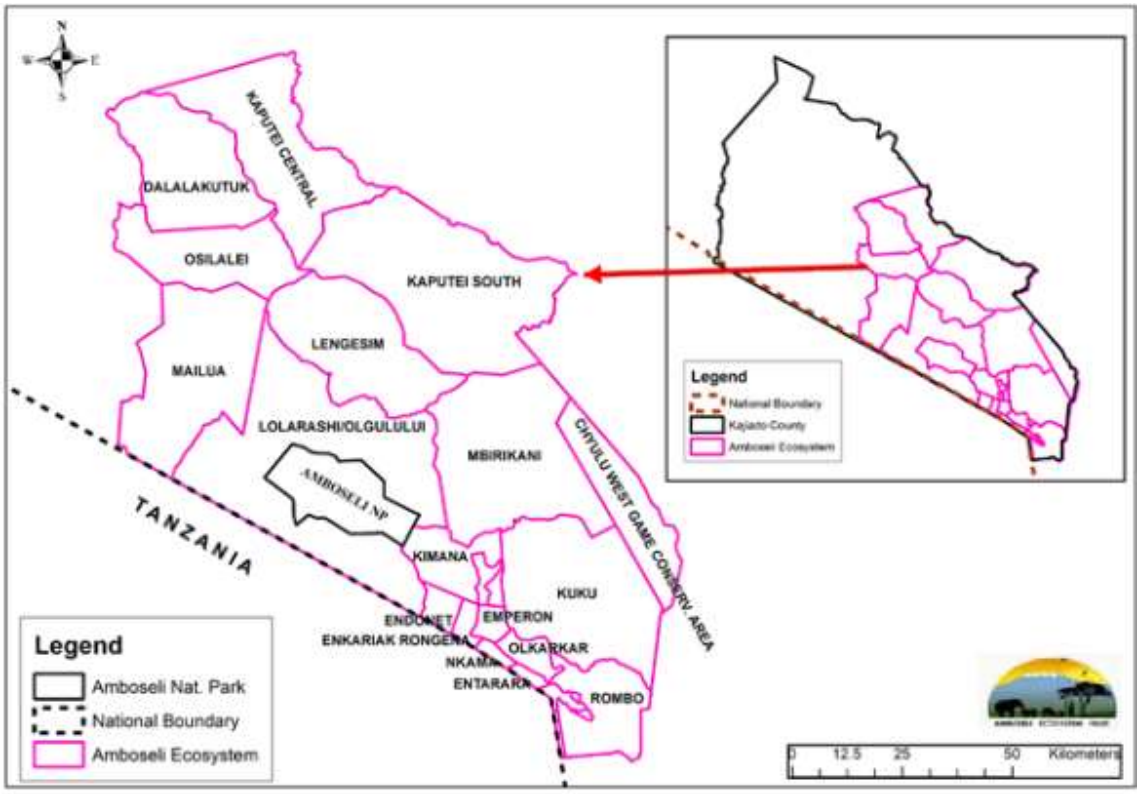


Figure 5-1: General location of the SEA area (Source: AET, 2019)

MGR is one of the group ranches surrounding the Amboseli National Park (ANP) in Loitokitok Sub-county, Kajiado County and which has recently been subdivided. Kajiado County is located in the southern part of Kenya bordering the Republic of Tanzania to the South, Nairobi County to the North East (and also considered as one of the counties in the Nairobi Metropolitan Region), Narok County to the west, Kiambu County to the north, Nakuru County to the north west, Taita Taveta County to the south east, Machakos County to the north east and Makueni County to the east. **Figure 5-2** shows a map of Kajiado County while **Figure 5-3** shows the county demographic characteristics. **Figure 5.4** shows the approved landuse zones as provided in the Kajiado County Land Subdivision Guidelines.

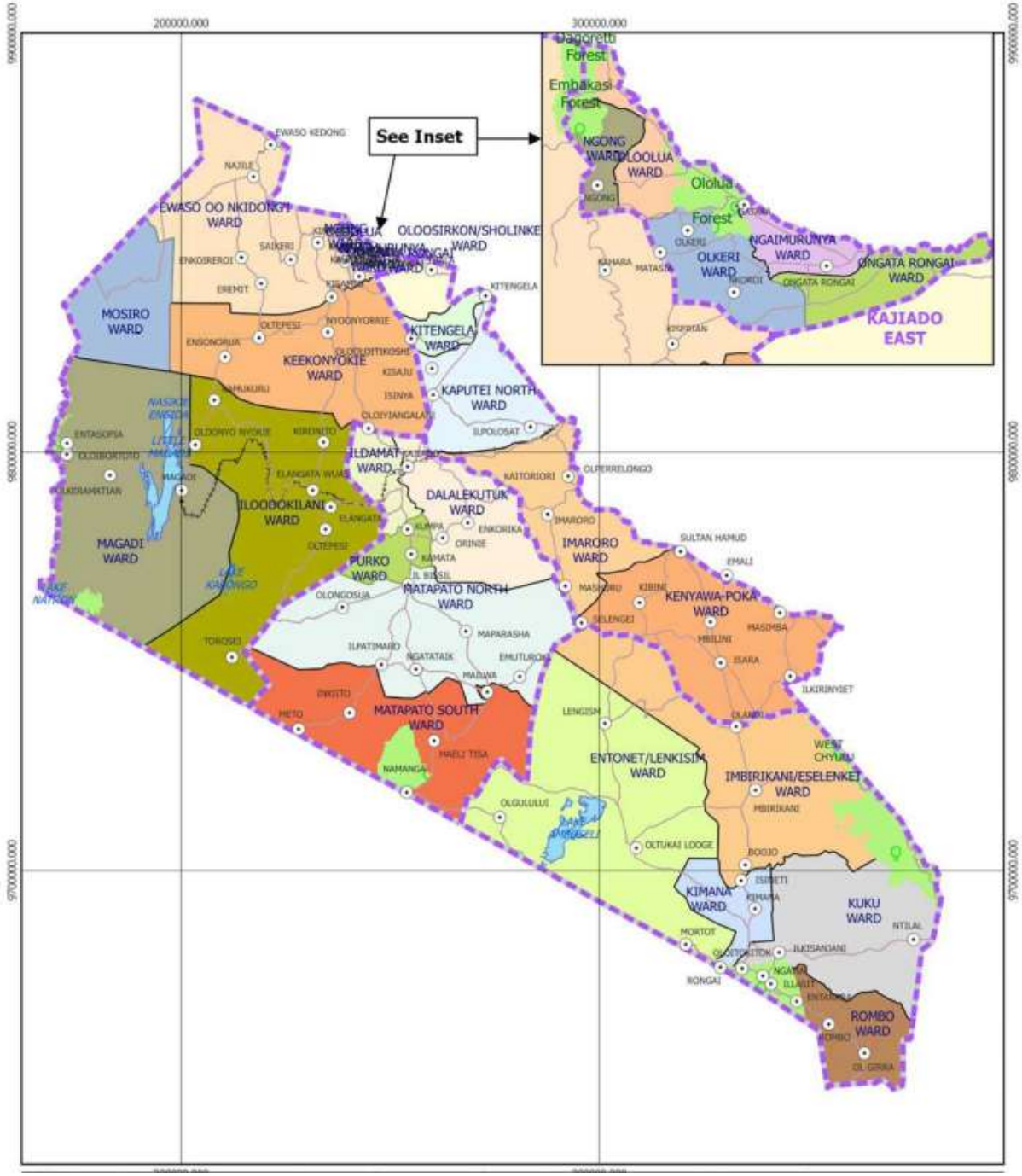


Figure 5-2: Map of Kajiado County (Source: County Government of Kajiado - CGK, 2019)

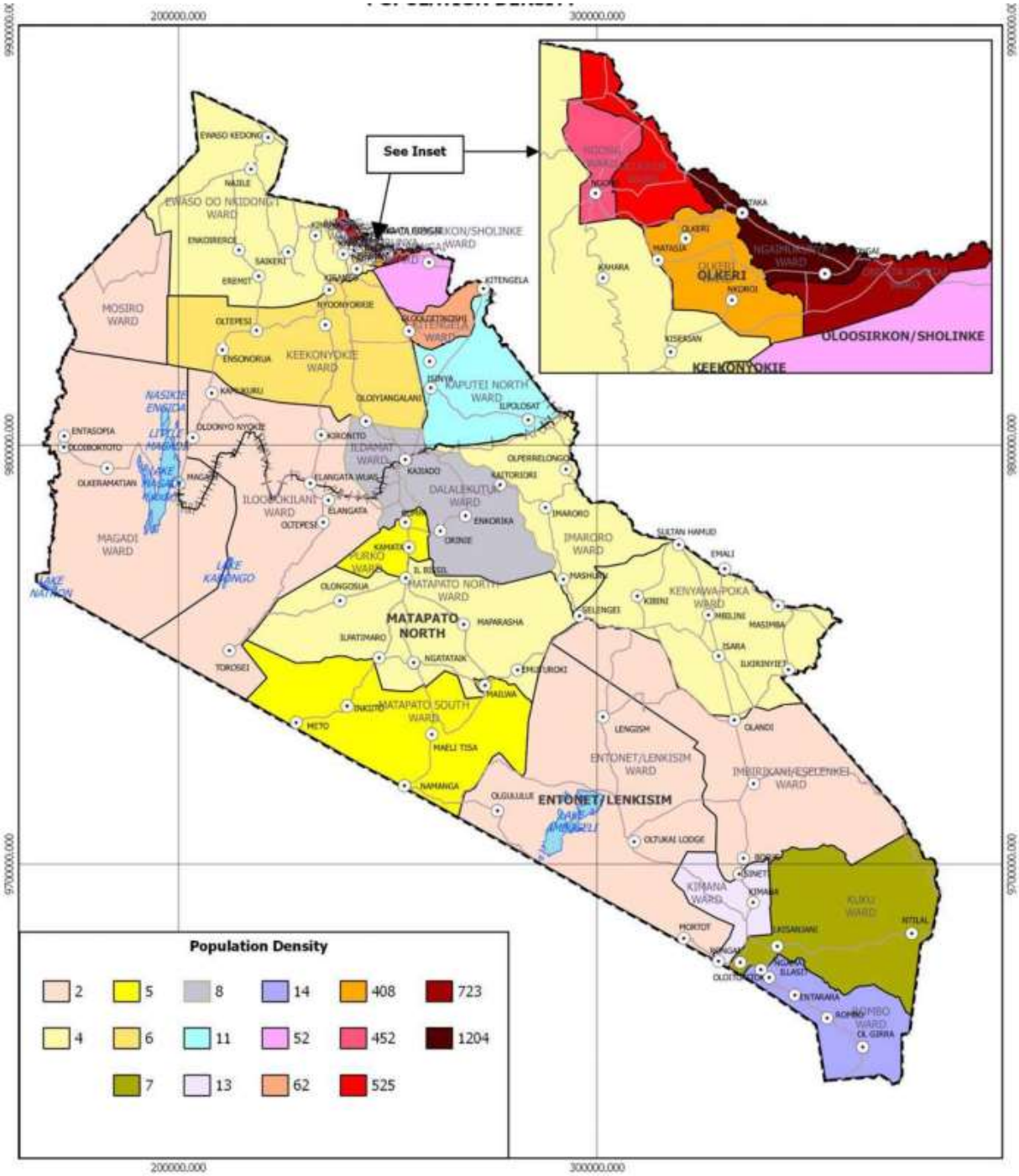


Figure 5-3: Demographic characteristics in Kajiado County (Source: CGK, 2019)

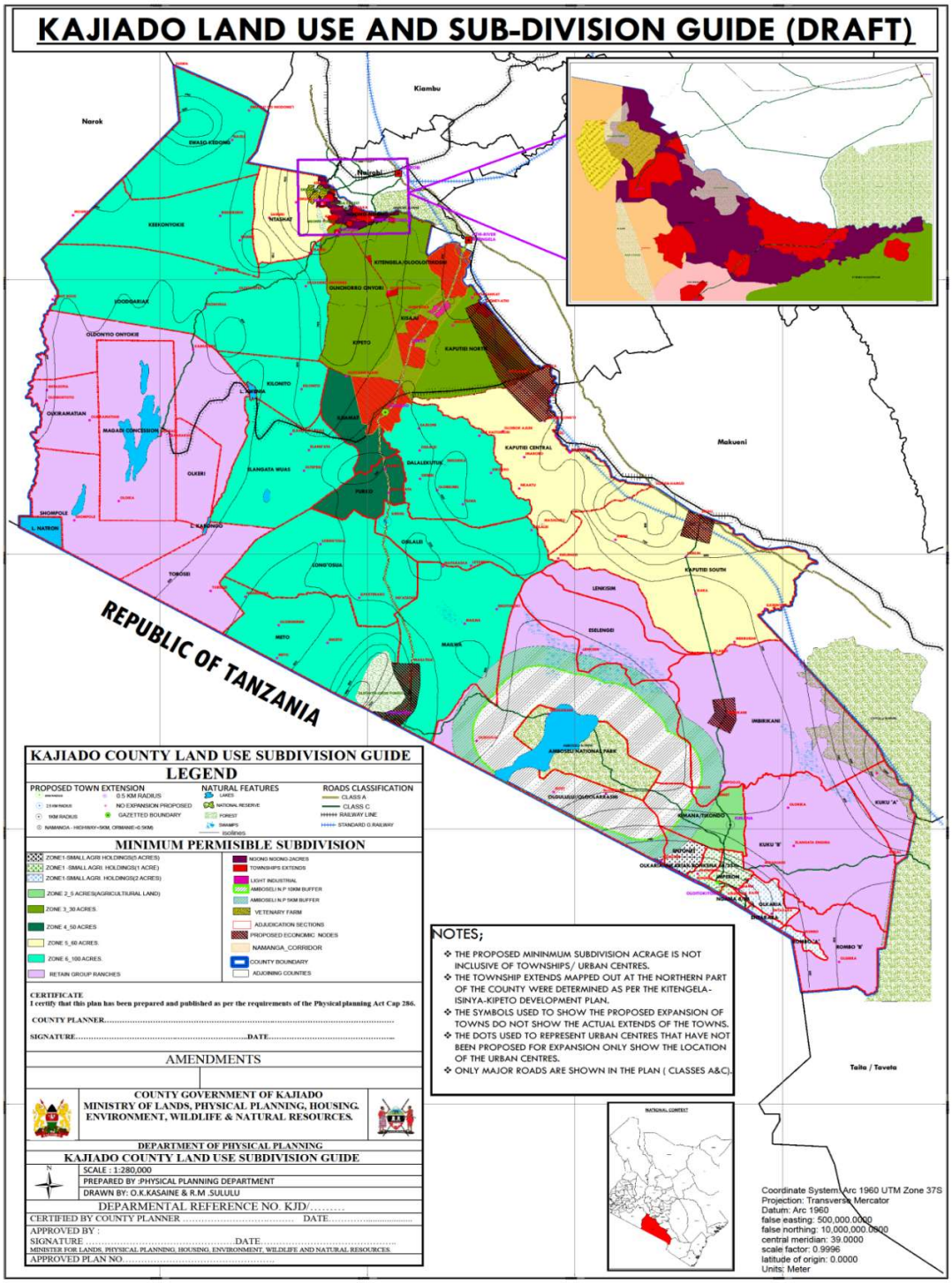


Figure 5.4: Land Subdivision Zones in Kajiado County (Source: CGK, 2019)

Within Kajiado County, Kajiado South Sub-County is the second largest sub-county with an area of about 6410 km^2. It is located in the southern part of the county bordering Tanzania, Taita Taveta County and Makueni County. The sub-county is predominantly rural having scattered

settlements with agriculture, livestock development and wildlife conservation being the the main landuses. The major urban areas in the Sub-County are Oloitokitok, Rombo and Kimana.

Figure 5.5 shows the proposed landuse in Kajiado South Sub-County as provided in the Kajiado County Spatial Plan (CSP) of 2019-2029 (CGK 2019). The dominant landuses as designated in the CSP is pastorm, wildli conservation and tourism (**Figure 5-5**).

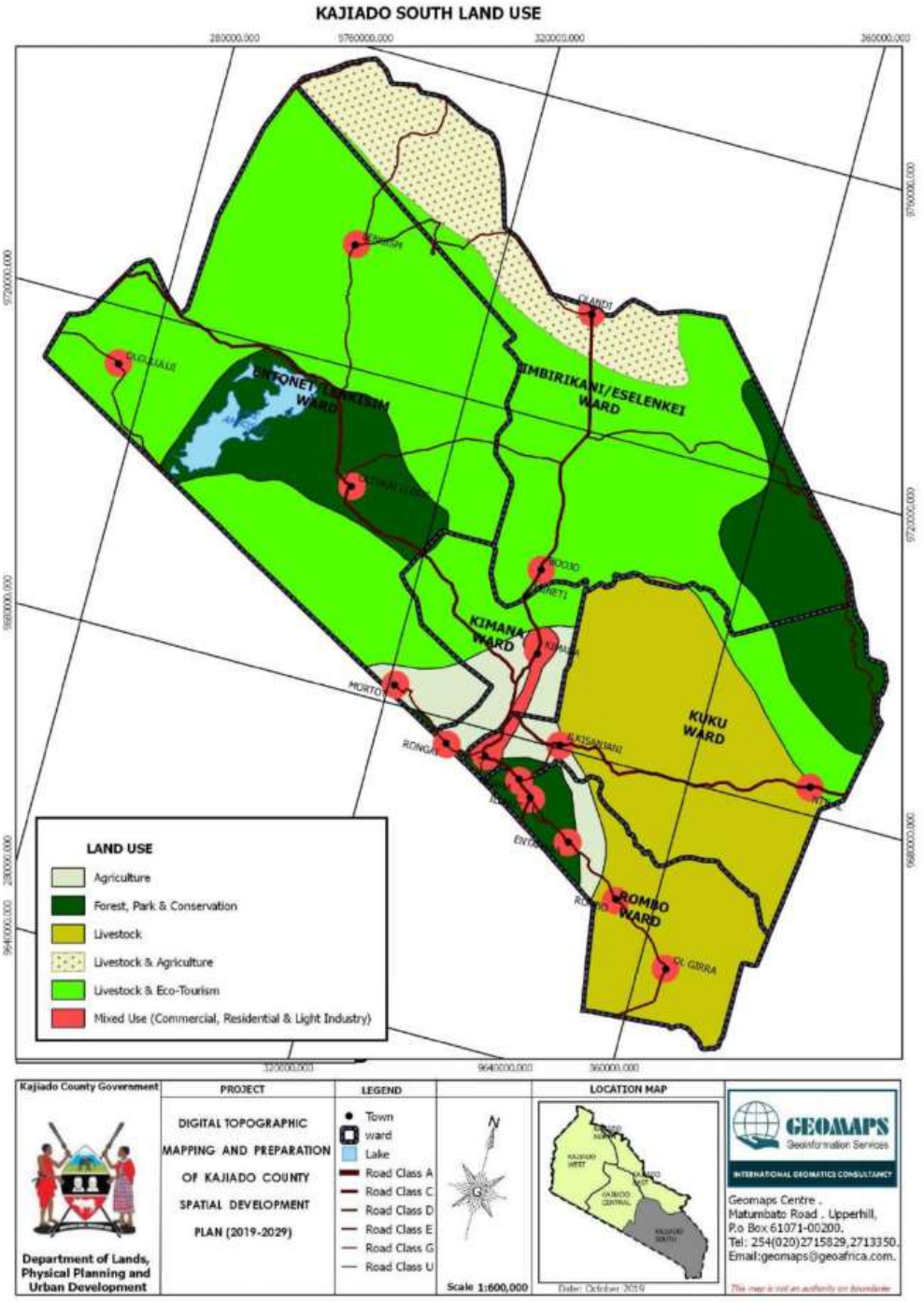


Figure 5.5: Proposed landuse in Kajiado South Sub-County (Source: CGK 2019)

The long-term vision for Loitokitok Subcounty as highlighted in the Kajiado CSP of 2019-2029 is to be:-

a) a place where environmental conservation, livestock production and modern farming are practiced to improve the living standards of the people.
b) a food basket for Kajiado county and Kenya at large, and
c) a tourism hub in the Amboseli region.

The implementation of the Mbirikani LSP is expected to support the realization of the Kajiado CSP vision.

5.2: Mbirikani area

Mbirikani Group Ranch (2°,22'S, 2°44'S; 37°24'E,37°52'E) is surrounded by Kaputie South and Eselenkei group ranches to the north, OOGR to the east, Chyulu Hills to the west, former Kimana group ranch and Kuku group ranches to the south (**Figure 5-6**). It lies a short distance to the north of Amboseli National Park. It constitutes an important wildlife dispersal and movement area for the greater Amboseli ecosystem including Chyulu Hills and Tsavo West National Parks, and is part of the wet season range of migratory large mammalian wildlife species in the Amboseli National Park, like the African elephant, wildebeest, zebra, kongoni, Thompson's gazelle, Grant's gazelle, impala, oryx, eland, buffalo, giraffe, warthog, lesser kudu and ostrich. For this reason, KWS has traditionally worked in partnership with the MGR management to ensure sustainable human-wildlife co-existence in the area. The agency supports the local people through provision of school bursaries as well as support of local development projects including borehole construction and maintenance.

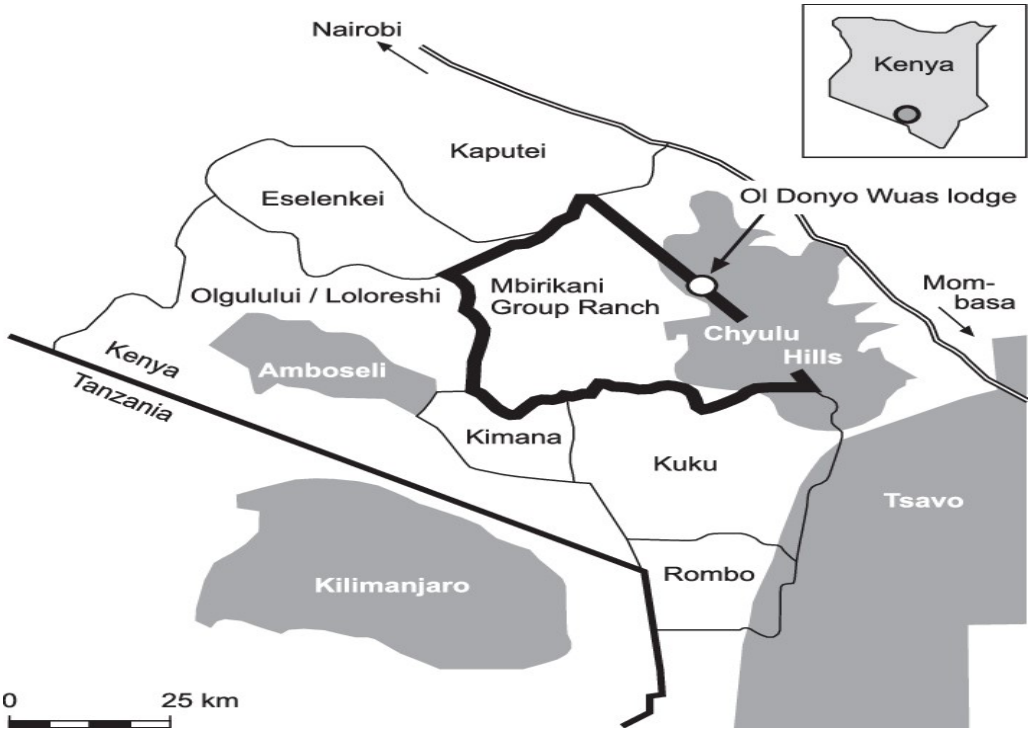


Figure 5-6: Spatial location of Mbirikani Group Ranch (Source - Anyango-Van Zwieten *et al*, 2015)

MGR is owned by the Ilkinsonko Maasai with landuse dominated by pastoralism involving raising of cattle, sheep, goats and donkeys. In recent years, a major international highway connecting Kenya and Tanzania has been constructed right across the group ranch, in addition to a major water pipeline (NolTuresh) that supplies water from the slopes of Kilimanjaro. The road and water supply from the NolTuresh pipeline have attracted human settlements and farming activities along the road and along the pipeline. In addition, limestone mining, cement manufacturing has recently been established along the Emali-Loitokitok road corridor.

The area is dominated by Acacia woodland and grassland with dense forests occurring the lower fringes of the Chyulu Hills and Oldonyo Wuas Hills. The natural woody vegetation cover has enabled integration of MGR in the Chyulu Hills REDD+ Project through coordination of Big Life Foundation (BLF). The initiative has a clear "revenue allocation model" agreed on between the REDD+ partners who comprise of KWS, KFS, MWCT, DSWT, BLF, Kuku A, Kuku B, Rombo and Mbirikani Group Ranches. It is hoped that the MGR land subdivision will not affect the carbon credit scheme in a negative way through rampant woody vegetation clearance.

5.3: Summary of Baseline Situation

The baseline situation analysis revealed that The MGR landowners have used traditional governance systems to manage the use and the access of natural resources (water, pasture, construction materials). This system has multiple benefits such as a) mitigating resource overuse and environmental degradation, b) ensuring no member is denied access to shared group ranch resources for both livestock husbandry and household's needs, c) preserving the natural state of the environment, its diversity and its heterogeneity, d) cushioning livestock and households from vagaries of climate variability especially drought, e) promoting coexistence between people and wildlife, and f) protecting ecological integrity and health of the environment which is the backbone of local livelihoods and pastoralism. Land subdivision is likely to disintegrate traditional systems in a similar way like what happened in the former Kimana group ranch and some ranches in the country. The baseline status of different land use zones as observed in May 2022 is highlighted below.

5.3.1: Settlement zone

Each member has been allocated 10 acres with a title deed in designated settlements zones. Settlement areas can broadly be grouped into three categories: a) zones close to the Chyulu Hills (Oltiasika, Olbili, and Lemasusu) which are very far from essential amenities (e.g. tarmac road, health facilities, electricity, government services, good schools, shopping centres, and markets), and water resources, b) zones close to essential services, but with limited water resources and comprise two major areas along the Emali-Loitokitok road and the Nolturesh pipeline such as Mbirikani town, Enkoisuk, Olng'orua, Simba cement and Emukutan), and c) zones lying along or close to the Emali-Loitokitok road and have access to essential services and are endowed with a lot of water resources which have made them irrigated agricultural hubs. They are also close to key government services and major markets (Kimana and Loitokitok), this category includes Namelok and Isinet and its environs (Bonjo and Kalesirua).

The Amboseli region Maasai have increasingly adopted a sedentary lifestyle. In the Mbirikani group ranch, settled areas are found along the Emali-Loitokitok road, the Nolturesh water pipeline and along water sources at Isinet, IIchalai, Enkaji naibor, Kalesirua, and Namelok**.** Other low populated settlement areas are found close to the Chyulu Hills at Olbili, Lemasusu, and Oltiasika. The current state of the environment in these zones is dependent on the density of human population and on associated activities like farming, infrastructure development and development

of social amenities. Low human populated areas like Olng'osua Olbili, Oltiasika, and Emukutan (**Plate 5.1**) are characterized by a) scanty to moderate woody vegetation cover with *Acacia mellifera, Acacia tortilis,* and *Commiphora africana* being the most common woody species, b) poor to moderate herbaceous cover and biomass, c) lots of bare ground, and d) prevalence of soil erosion including severe gulley erosion. These environmental attributes are ~~also~~ common in densely settled areas in Isinet, Kalesirua, Namelok, and Ilchalai (**Plate 5.2**).

Dry lands including rangelands in the Mbirikani GR are naturally vulnerable to environmental degradation and have low ability to withstand continuous livestock and human pressure. Sedentarization of members of the ranch has reduced their traditional mobility together with their livestock and subjects settled areas to a lot of human and livestock trampling and grazing pressure. This pressure reduces the vegetation cover and increases landscape vulnerability to erosion. Studies in Mbirikani, Kuku and the former Kimana group ranch have shown that most of the densely settled areas are highly degraded and have a lot of bare ground due to the depletion of the woody and the herbaceous vegetation cover. These studies revealed that large-scale sedentarization of the Maasai in the Amboseli group ranches and the reduction in their livestock mobility result~~s~~ in rampant environmental degradation and it is an issue of concern.



Plate 5.1: State of the environment in a section of a low human populated settlement zone at Emukutan area near the mining zone

Occasional or sporadic irrigated agriculture is found in some of the low or sparsely populated areas especially along the Nolturesh water pipeline. This is contributing to destruction of the environment through clearing of large tracks of land for growing of commercial crops especially tomatoes. These areas are used for a few seasons after which they are abandoned since they lose their fertility and ability to support crop growing very quickly. Another environmental concern in the settlement zones is poor solid waste management, which is rampant in high populated areas like Isinet, Namelok, IIchalai, and the Mbirikani town (**Plate 5.3**). The poor state of solid waste management is attributed to a) lack of waste handling facilities and services by the Kajiado County Government, b) poor waste management ethics by residents, and c) low or lack of

awareness among residents on the health and environmental dangers of mismanaging solid waste. Observations showed that wildlife tended to avoid high populated areas, but they were common in sparsely human populated areas such as Olng'osua, Olbili, Lemasusu, Oltiasika, and Inkoisuk, an observation that is supported by past studies. An increase in human-wildlife interface in settled areas enhanced incidences of human-wildlife conflicts, though the conflicts were more common in areas where farming was prevalent such as Isinet, Namelok, and IIchalai.



Plate 5.2: State of the environment in a section of a high human populated settlement zone at Isinet



Plate 5.3: State of solid waste disposal in a section of Isinet town

5.3.2: Pastoralism development and wildlife zone

This is the largest land use zone dedicated for pastoralism development and wildlife conservation, in which each member has been allocated 31 acres with a title deed. This is a relatively dry and

very fragile rangeland landscape but it is important in sustaining pastoralism. It is used by a wide range of wildlife species like the Maasai ostrich, the Thomson's gazelle, the Grant's gazelle, the common zebra, the Maasai giraffe, and the impala. In this regard, it is critical in conserving wildlife resources endowment in the Mbirikani group ranch and the larger Amboseli-Tsavo Ecosystem. It has an assemblage of different wildlife use habitats, dispersal areas, and movement corridors (**Plate 5.4**).

The biophysical status of the zone is very diverse, and prevalence of soil erosion varies across the landscape ranging from low to severe erosion manifested by gullies. Areas in the zone with steep slopes as well as places with poor vegetation cover are characterized by high occurrence of soil erosion. This is likely to negatively affect the following aspects of the zone: a) ability to support diverse vegetation assemblages, b) primary and secondary production capacity of the land which will then reduce its ability to support viable livestock and wildlife populations, c) seedbank of different plant lifeforms and ultimately the ability to regenerate various vegetation assemblages, d) a provision of vital ecological services, and, e) ecological processes and functions which support and sustain plant and animal life. Collectively, these changes will lead to a relatively homogenized vegetation largely dominated by herbaceous lifeforms.

Woody and herbaceous vegetation cover varies spatially in the zone in response to variation in soil characteristics, wildlife and livestock foraging pressure. Some areas have scanty to moderate woody vegetation cover (**Plate 5.5**). *Balanites glabra, Acacia mellifera, Commiphora africana, Acacia tortilis, and Acacia drepanolobium* are common and their abundance varies across the landscape. Herbaceous vegetation cover varies spatially ranging from poor (**Plate 5.5**) to moderate cover and it is influenced by biophysical characteristics of a given area. *Leucas jemisii* was the most common perennial herbaceous species with *Pennisetum stramineum, Pennisetum mezianum, Themeda triandra* and *Cenchrus ciliaris* being the common grasses.



Plate 5.4: A section of a key wildlife corridor in the pastoralism development and wildlife conservation zone

Large swathes of the zone were overgrazed by livestock leaving most of the landscape vulnerable to soil erosion processes. This occurrence was high and common close to the settlements zone and diminished as one moved further into the pastoralism and wildlife conservation zone. This overgrazing gradient mimicked the livestock grazing pattern used by members of the Mbirikani group ranch. Generally, livestock is grazed in designated wet and dry season grazing areas, but in the wet season it tends to spend more time around human settlements and their immediate environs. As the dry season sets in and forage resources dwindle, it is grazed further away from the homesteads, and eventually concentrates in either the furthest areas of the pastoralism zone or the conservation and tourism development zone close to the Chyulu Hills. The prevalence of overgrazing in the zone may be attributed to a reduction in livestock mobility and a reduction of suitable grazing areas coupled with an adoption of a sedentary lifestyle among the Maasai as opposed to their historical transhumance lifestyle.



Plate 5.5: A section of the pastoralism development and wildlife conservation zone with scanty woody and herbaceous vegetation cover

Another notable ecological change in the zone was a significant decline and loss of high-quality grass species, commonly referred to as decreasers. Studies in the Mbirikani, the Kuku and the former Kimana group ranches have shown there has been a notable deterioration of their range conditions. The deterioration is manifested by a) the high prevalence of native herbaceous invader species which are of little or no forage value to animals, b) the high prevalence of annuals and a lot of bare ground, c) the reduction in abundance and availability of decreaser grass species, and d) the decline in forage potential (that is, an ability of the range to produce adequate grazing food resources for grazers). These changes are partly attributed to climate change and variability in the Amboseli region, the reduction in mobility of the Maasai (sedentarization) and their livestock, and land use changes specially a proliferation of irrigated agriculture in prime rangelands used by wildlife and livestock.

5.3.3: Conservation and tourism development zone

This is the second largest subdivision zone, and each member has been allocated 26 acres but with no title deed. The zone lies contiguous to the Chyulu Hills National Park and was set aside to promote wildlife conservation and give members an opportunity to earn revenue through tourism development enterprises. It is characterized by scanty to dense woody

vegetation cover and some of its common species include *Balanites glabra, Acacia drepanolobium, Acacia mellifera, Commiphora africana and Acacia tortilis* (**Plates 5.6** and **5.7**). Generally, woody vegetation damage by human beings is very low since there are no permanent human settlements, and only temporal shelter for herders and livestock *bomas* (sheds) are permitted.

Grass cover and biomass vary across the zone (from moderate to high) and are influenced by landscape soil characteristics, the availability of rainfall, and the extent of livestock grazing. Common grasses include *Pennisetum stramineum, Pennisetum mezianum, Themeda triandra* and *Cenchrus ciliaris.* Close to the Chyulu Hills, grass cover and biomass are high (**Plate 5.6**) but declines significantly at the interface between this zone and the pastoralism and wildlife conservation zone. Due to its high altitude, the Chyulu Hills receives a high amount of rainfall ranging from 500mm to 1200 per year which enhances herbaceous plant growth and biomass production. As one moves from the hills to the low-lying areas of the group ranch, the amount of rainfall reduces substantially and leads to a reduction in herbaceous plant growth and the biomass production.



Plate 5.6: A section of the conservation and tourism development zone showing scanty woody vegetation and dense grass cover and biomass

Typically, the zone is used by livestock under extreme dry weather conditions, and it is guided by communally agreed grazing management regulations. Due to the current drought conditions in the Amboseli region, However, most of the Maasai, including those from other group ranches, had moved their herds into the zone. This movement led to widespread overgrazing with the most affected areas being areas bordering the pastoralism and wildlife conservation zone. The prevalence of soil erosion in the zone varies spatially but is generally low. Due to proximity to the Chyulu Hills National Park, a variety of wildlife species such as elephants, the common zebra, the impala, the Grant's gazelle, and the Maasai ostrich are found in the zone.



Plate 5.7: A section of the conservation and tourism development zone showing dense woody vegetation and scanty grass cover biomass

5.3.4: Cultivation zone

Rain-fed and irrigated agriculture has become popular among the Maasai of the Amboseli Ecosystem, including members of the Mbirikani GR, and it is expected to increase household's food security and provide an alternative source of income. Prior to the current group ranch subdivision and designation of cultivation zones, irrigated farming was taking place in different parts especially at IIchalai, Isinet in the Kimana swamp and Namelok which are endowed with water resources. As tomato farming became popular, irrigation activities started along the Nolturesh water pipeline but at a lower scale compared to areas which were extracting water from rivers and swamps. In all the cultivation areas, most of the natural vegetation has been cleared and replaced with crop cover (**Place 5.8**) due to intensive farming of crops like onions, tomatoes, and watermelons. These areas are characterized by high and rampant water abstraction for irrigated agriculture and use of agro-chemicals especially pesticides to manage pests. Some farms have been colonized by exotic invader species especially the Mexican poppy (*Argemone mexicana).*

Extensive destruction of key wetlands mainly the Kimana, Namelok and IIchalai swamps for irrigated farming has occurred; the destruction is a threat to water resources availability and conservation of their biodiversity. Water conflicts are common during the dry season in the lower sections of the Kimana-Kikalangot River especially at IIchalai due to upstream over abstraction for irrigated farming. As a result of water overuse along the river, a big section of the river has dried up and its waters only flow into the Tsavo River during the wet season. Water dependent wildlife species downstream such as hippos and elephants and along the river are threatened by

low or a lack of water supply. Additionally, most of the herbivorous wildlife species are usually attracted to agricultural fields which precipitates a lot of human-conflicts. This is a big threat to community lives, societal livelihoods, wildlife survival, and coexistence between local communities and wildlife.



Plate 5.8: Natural vegetation changes in IIchalai due to irrigated crop farming

5.3.5: Mining and industrial zone

Eight areas have been set aside for limestone mining and industrial development, and this land is communally owned, with members having equal shares. At the time of doing this SEA, mining was only being done at the Emukan area and its environs for cement manufacturing by the National Cement Company Ltd. This zone has been designated for limestone extraction and development of suitable industries by investors to generate revenue for group ranch members. The zones are scattered in different parts of the ranch where limestone deposits are found. Areas where limestone mining has not begun have scanty to moderate vegetation cover (**Plate 5.9**), and soil erosion ranges from low to severe in the form of gullies.

In zones where the National Cement Company (Simba Cement) was mining limestone for cement manufacturing, a lot of vegetation clearing had occurred (**Plate 5.10** and **5.11**), several open and deep excavations were in existence, environmental aesthetics of the zones was substantially reduced, and dust pollution was common. Prior to the mining activities, different species of wildlife used the zone but they have been displaced with time. The state of the environment in the current limestone mining areas is indicative on the kind of landscape changes and modifications that will occur as mining activities spread into other designated areas in the future. Accordingly, there is an urgent need to effectively mitigate the landscape changes arising from the limestone mining activities in the group ranch.



Plate 5.9: A section of a zone designated for future limestone mining near the Mbirikani town showing dense woody vegetation on the hill



Plate 5.10: Extensive vegetation clearing in a section of the current limestone mining zone behind the Simba Cement Factory



Plate 5.11: Landscape scars created by limestone mining near the Simba Cement Factory

6. STAKEHOLDER CONSULTATION FINDINGS

Comprehensive consultations with the ordinary MGR landowners was undertaken at the scoping stage to establish whether the people were aware of and conversant with the LSP including the landuse zonation. The consultations were intended to determine the level of acceptance for the permitted activities in the various landuse zones as well as the landuse restrictions. Finally, the process was intended to determine the duration of LSP implementation before a review of the landuse restrictions.

The consultations were undertaken according to the engagement plan provided in **Table 3.2.2** through public consultation meetings involving ~~a~~ groups of local people in different locations in the Mbirikani area. The minutes for the public consultation meetings are provided in **Annexes 2-14.** The findings of the stakeholder consultations are highlighted below.

6.1: Scoping Consultation Findings

The summary of a synthesis of the stakeholder views regarding the key consultation issues are highlighted below.

6.1.1: *Awareness and acceptance of the Mbirikani LSP including the land subdivision zones*

All the members consulted during the SEA process were aware about the group ranch subdivision process, land subdivision plan and the subdivision zones that were created. There was no objection to the subdivision and all members were satisfied with how the entire process was done. The overwhelming awareness and acceptance of the land subdivision plan and zones was achieved through involvement of members by the group ranch leaders and the subdivision taskforce. This was done by holding meetings in all the villages between members, group ranch leaders and the taskforce. The meetings were used as platforms to discuss and agree on the need to subdivide the group ranch, the process to be used, subdivision zones, restrictions for each zone and how much land each member was to be allocated in each subdivision zone. The entire subdivision process was therefore participatory and transparent, and involved all members and their leaders and that's why there was no objection to the subdivision plan and the designated zones.

The findings showed that the Mbirikani landowners were aware of the subdivision process and had attended several meetings with their leaders concerning the land subdivision process. Education *barazas* (meetings) aimed at sensitizing community members about the planned subdivision of the group ranch and what the subdivision would entail including the process to be used were held. The awareness meetings and programmes were done in different villages across the entire group ranch. The findings showed that the people were familiar with the LSP, and, as a community, they agreed to undertake the subdivision for easy management and utilization of their land. They were conversant with the five landuse zones that have been created in Mbirikani and in agreement with the landuse zones.

The findings showed that the landowners agreed that the decision for each member to get 10 acres per member for settlement was reached between the community members and the MGR leaders. In addition, each member would be allocated 31 acres in the rangelands (in the pastoralism and wildlife zone), two acres for farming in the cultivation zone, and 26 acres for conservation (in the wildlife corridors, conservation and tourism zone) and one acre for cement

production (in the mining/industrial zone). Regarding the allocation of the 10 acres, members and group ranch leaders agreed on some conditions and strategies since some places were densely populated and shifting of homesteads in such areas would be costly to families. They considered the cost of relocating permanent structures and buildings as well as households with elderly people.

The findings showed that the landowners were involved in the entire process by the MGR leadership, right from the time when the subdivision was proposed to the demarcation of the ranch. The participants confirmed that they were familiar, and in agreement, with the land use and subdivision plan process. They agreed members would not be charged for the subdivision and the issuance of title deeds. Instead, they agreed they would lease out part of their land to the Simba Cement to get funds for the subdivision.

The findings from the landowner consultations showed that prior to the subdivision process, a verification of genuine members including their correct names was done to ensure no new members were added. This ensured that no outsider got land since it would have created conflicts. After verification it was established that the true number of registered members was 4,227 and not 4,700 as indicated in the MGR membership register. The landowners indicated that the subdivision process started by determining the boundaries and the size of the group ranch.

6.1.2: Awareness and acceptance regarding the permitted activities in each landuse zone

The synthesis of findings showed that the landowners were adequately informed and sensitized on the permitted activities in each zone and were in agreement with the same. The permitted activities in each zone were discussed and agreed upon in several meetings held by the MGR members. Each subdivision zone has permitted activities which are meant to either protect the state and integrity of the land or promote agreed land use(s). None of the members consulted objected to any of the permitted activities in each subdivision zones nor did they mention other members were dissatisfied with the activities. Generally, all the members were aware about the different permitted activities in each zone and agreed to adhere to the same. Nonetheless this might change in the future based on the land reforms dynamics that will emerge.

The high level of awareness and acceptance of the permitted activities in each zone shows the subdivision process involved members in the entire group ranch and was done in a participatory manner. This was achieved through meetings held between members, subdivision taskforce and group ranch officials in all the villages. The meetings were used to discuss and deliberate different aspects of the subdivision process including the permitted activities in each zone and the importance of adhering to the same. Members were also given an opportunity to share their views regarding the activities, and this created satisfaction and feeling of being heard and involved in the subdivision process.

There was evidence that the landowners had resolved to ensure the preservation of the pastoralism and wildlife as well as the conservation areas in the foot slopes of the Chyulu Hills as shared common land to be protected for collective use. They indicated the need for proper strategies and mechanisms to ensure effective enforcement of the LSP. The findings showed that the landowners were aware that the "Empakaai" area associated with a huge depression to the

east of the Emali-Loitokitok road which is usually waterlogged in the rain season was left intact and reserved for both wildlife and livestock use and not allocated to any specific shareholder.

6.1.3: Awareness and acceptance regarding landuse restrictions

Various restrictions have been prescribed for each subdivision zone to optimize their utilization in a sustainable manner. The level of awareness on the restrictions by members was very high and there was no objection to the same. Members were adequately sensitized by the group ranch leaders and subdivision taskforce about the restrictions and their importance through meetings held in different parts of the ranch. This made them aware about the restrictions in each zone and the value of observing them. There was a general agreement among members it was in their interest to abide by the restrictions to continue drawing the envisioned benefits of each zone into the future given the fragile nature of their land. However, there's no guarantee that in the future the restrictions will be adhered to.

A minority of the members felt that the restrictions for the conservation and tourism development zone should not be strictly adhered especially regarding livestock grazing. This area has historically been used by members to sustain their livestock when dry spells are severe and during times of drought as they wait for the rains. They mentioned that when such weather conditions are severe, persistent, and unbearable, members will be forced to graze in the zone. This is an issue which can't be ignored given the vulnerability of pastoralism to climatic changes that have been observed in the Amboseli region. Moreover, pastoralism is a key source of livelihood and socio-economic development for members of Mbirikani. In the recent past, the Maasai of the Amboseli region including Mbirikani have lost a lot of livestock due to drought, and the socio-economic ramifications of this have been substantial for most households. This has partly continued to increase food insecurity, diminished livestock numbers per family and ability to cope and adapt to climate change and variability. In this regard and given the rampant degradation of the rangelands there's a need to critically examine how subdivision and land reforms in MGR will affect pastoralism and ultimately food security and socio-economic well-being of the members.

A few members also felt that after subdivision, individual landowners should be compensated by the Kenya Wildlife Service (KWS) for any livestock or human injured or killed by livestock. Specifically, this will apply to the pastoralism and conservation zone where members have been allocated 31 acres with a title deed. This is an issue which needs to be addressed by KWS given that after subdivision the group ranch management will be dissolved, and this was the link between the community and KWS on wildlife related matters. Human-wildlife conflicts are common in Mbirikani and are usually emotive, and the general feeling is that members don't draw any or substantial economic benefits from co-existing with wildlife. This is a serious threat to wildlife survival and its sustainable conservation, and the government through KWS must craft an effective strategy of dealing with Mbirikani members with a view of creating a favourable environment for wildlife conservation amidst the current land reforms.

The findings showed that the landowners were aware about the land restrictions in the 31 acres within the pastoralism and wildlife zone including the settlements and fencing prohibitions. Some of the landowners indicated that wildlife use should be restricted in the pastoralism and wildlife zone (31 acres) unless the KWS doubled the annual bursary fund. The people were aware that landowners will not be allowed to graze their livestock in the conservation and tourism zone (26 acres) without an agreement reached between the investor and the community members. They agreed that landowners will not graze their livestock in the zone unless an agreement is reached between the investor and the community members. They accepted that the conservation and tourism zone should mostly be reserved for wildlife use because of the benefits they were getting

in terms of school bursaries and revenue from the REDD+ carbon credits. They also knew that vegetation clearance and burning as well as charcoal burning were prohibited. It was established that some landowners were not very clear about the landuse restriction in the cultivation and settlement zones (two and ten acres). They knew and accepted cutting of trees or charcoal burning is prohibited in the zone, however. The landowners were expected to manage the land well to avoid destroying the soil structure and reducing its fertility.

6.1.4: Review of land Restrictions

Although members were aware and most of them accepted restrictions of each zone, there were variances in their views on when they should be reviewed. During the subdivision planning and sensitization meetings, it was agreed the restrictions should be in place for 30 years and would be reviewed after 10 years. It was envisaged 30 years was long enough to protect and secure member's land especially against rampant land sales that have been observed in other group ranches in Amboseli region after subdivision. It will also preserve their fragile rangelands against wanton destruction by human population changes, inappropriate land uses and activities as well as sustain pastoralism and the Maasai traditions, culture, and practices. Review of the restrictions after 10 years was meant to give the young generation ample time to mature and become more knowledgeable on land matters and its management. Moreover, it will give members ample time to check, assess, understand, cope, and learn about the impacts of the restrictions.

Some members supported having the restrictions for 30 years and their review after 10 years, while others proposed 10 and 20 years, and a review after 5 and 10 years respectively. Other members wanted the restrictions to be reviewed after 1, 3, 4, 5 and 6 years after completion of the subdivision process. In their view, it was better to do the review within a short duration other than a long one so that if there were no benefits members won't suffer for too long. Based on the outcomes, a new and better restrictions framework can then be put in place or alternatively discard the restrictions. Such a duration will also enable members address early enough any challenges and disappointments that might arise from the restrictions. It's noteworthy that these opinions were mostly for the pastoralism and conservation zone and the conservation and tourism development zone. These divergent opinions are varied but there's an urgent need to hold meetings between members, group ranch leaders and subdivision taskforce to iron-out this matter before closure of the subdivision process. The support and high satisfaction shown by members on the subdivision process should be sustained and protected and shouldn't be ruined by disagreements on the duration and review time of the restrictions.

6.2: SEA Workshops and Wider Review of the Draft Report

6.2.1: Stakeholder consultations on the draft SEA report

The draft SEA report was circulated through the Client for stakeholder views and feedback. The aim of this was to:-

a) share the findings as provided for in the Draft SEA report.
b) allow stakeholders to contribute their views for integration in the Draft SEA report as prescribed in the 2012 National Guidelines for Strategic Environmental and Social Assessment in Kenya.

The summary of findings on the stakeholder consultations is provided below.

Table 6-1: Summary of findings on the stakeholder consultations for the SEA draft report

MGR LSP Draft SEA Report Content	Stakeholder views	Revision areas
1. Awareness and acceptance of the Mbirikani LSP including the land subdivision zones	The content in the draft report reflects the views of the stakeholders	Grammar, flow and document formatting
2. Awareness and acceptance regarding the permitted activities in each landuse zone	The content in the draft report reflects the views of the stakeholders - A clear demarcation of the "Empakaai" area in the map is required	Grammar, flow and document formatting
3. Awareness and acceptance regarding landuse restrictions	The content in the draft report reflects the views of the stakeholders	Grammar, flow and document formatting
4. Review of land Restrictions	The content in the draft report reflects the views of the stakeholders	Grammar, flow and document formatting
5. SEA recommendations	The recommendations are acceptable	Grammar, flow and document formatting
6. Overall draft SEA report	The draft SEA report is acceptable	Grammar, flow and document formatting

6.2.2: Wider peer review

A 30-day widow for peer review will be undertaken in accordance with EMCA Cap 387 and the National SESA Guidelines (2012) as follows:

- A public notice inviting stakeholders to review and comment on the report will be placed in the Kenya Gazette and widely read daily newspapers.
- The draft SEA report will be uploaded on the NEMA website for free access to all interested parties.
- Hard copies of the draft SEA report will be circulated to relevant institutions for review.
- Hard copies of the draft SEA report will be circulated to relevant county offices for public review.

NEMA will share the institutional and public comments for the consultant to address in the final SEA report.

6*.2.3: Validation workshop*

A SEA validation workshop will be held after the wider peer review. The workshop will be conducted after the comments from the wider peer review have been incorporated the SEA report.

7. PLAN IMPACT ANALYSIS AND ENVIRONMENTAL SCENARIO BUILDING

7.1: ENVIRONMENTAL AND SOCIAL IMPACT ANALYSIS

Landuse zone	Permitted activities and landuse restrictions in the Mbirikani LSP	Potential positive impacts and consequences of permitted activities and enforcement of restrictions	Potential negative impacts and consequences with violation of landuse restrictions
1. Pastoralism and wildlife zone	Permitted activities: Livestock grazing, construction of traditional *manyattas*, livestock *bomas*, livestock watering points, cattle dips and fodder storage facilities, and approved harvesting of natural products (such as medicinal plants and firewood) for household use only Restrictions: Construction of permanent *bomas* or buildings, fencing, further land subdivision, change of user, change of ownership, and road construction	• Grazing pastures and wildlife habitats will be safeguarded against encroachment by settlements, towns, and industries • Continued existence of shared communal land for livestock grazing, wildlife conservation, and tourism economy • Traditional livestock rearing will be sustained • Preservation of traditional livelihood systems as well as the norms and values of the Maasai culture • Upholding tenets of collective management of rangelands to sustain pastoralism • Sustain integrity of the greater Amboseli ecosystem including ANP, Chyulu and Tsavo conservation areas • Protection and preservation of pastoral-based livelihoods • Preservation of wildlife use dispersal areas and movement corridors • Sustaining free movement of wildlife between the Amboseli and the Tsavo ecosystems to support tourism development • Preservation of the Amboseli-Tsavo landscape connectivity	• Mass land disposal will lead to introduction of landuse activities which are incompatible with pastoralism and wildlife conservation • Mass land disposal will lead to fragmentation of pastoral and wildlife landscapes, uncontrolled settlements and fencing • Non-transparent land disposal (without appropriate consent of family members, including women and youth) will lead to disinheritance, loss of family wealth, clan or family feuds and conflicts • Land disposal will introduce a class of landless Maasais • Mass acquisition of land by non-members and "outsiders" who do not share in Mbirikani vision of pastoralism and wildlife conservation • Introduction of incompatible land uses that will undermine sustainability of the Amboseli ecosystem • Private land tenure will introduce resource-intensive livelihood systems (such as hay and fodder production, milk-selling and packaging, and meat processing) which could push poor members out of the livestock value chain • Private land tenure will introduce socio-economic differences which will alienate some people from the land and escalate poverty

			• Widespread subdivision and fencing of private land will obstruct traditional livestock and wildlife movements • Increased human-wildlife conflicts • Wildlife retaliatory attacks due to increased HWCs • Decline in wildlife populations in Mbirikani • Collapse of landscape ecological linkages between Amboseli and the Tsavo ecosystems • Land degradation due to overstocking, vegetation clearance, and soil erosion • Collapse of the Chyulu Hills REDD+ carbon credit project due to woody vegetation destruction • Collapse of livestock-based livelihoods due to land reforms • Impaired capacity for people to cope with and adapt to climate change due to escalating household poverty and reduced socio-economic resilience • Increased reliance on county and national government aid and support
2. Conservation and tourism zone	Permitted activities: wildlife conservation, wildlife viewing and associated infrastructure, controlled construction of visitor accommodation facilities, research, controlled filming and photography, controlled construction of cultural *manyattas*, controlled livestock grazing, laying of underground infrastructure, construction of water pans, and drawing water from rivers Unclear omission: Carbon credit revenue	• Wildlife habitats will be safeguarded • Traditional fall-back and refuge grazing areas in prolonged droughts will be sustained • Safeguard wildlife resources and habitats • Safeguard and sustain livestock and mobility • Traditional livestock rearing practices in Mbirikani will be sustained	• Human-wildlife conflicts especially in the dry season • Increase of incompatible landuse with wildlife conservation and tourism development • Decrease in wildlife populations • Increase in HWCs • Environmental degradation • Collapse of livestock-based livelihoods due to land reforms

	Restrictions: Location of visitor accommodation facilities, bed capacity of visitor accommodation facilities, human settlement or buildings in any form without authority, number of traditional livestock in the *manyattas*, fencing, planting of exotic tree species, change of user, and further subdivision	• Preservation of traditional livelihood systems, norms and values of the Maasai culture • Safeguarding shared communal land for livestock grazing, wildlife conservation, and tourism development • Upholding tenets of collective management of rangelands to sustain pastoralism • Promotion and diversification of conservation-based enterprises for revenue generation without undermining pastoralism • Protection and conservation of natural rangeland environment • Sustain integrity of the greater Amboseli ecosystem including the ANP, the Chyulu and the Tsavo conservation areas • Tourism returns to local communities will be assured and enhanced	• Collapse of landscape ecological linkages between Amboseli and the Tsavo ecosystems • Downgrading of Mbirikani landscape as an attraction for high-end local and international tourists • Lower attraction of the Mbirikani landscape and the Chyulu Hills for tourism investors • Collapse of tourism enterprises and loss of job opportunities • Collapse of the Chyulu Hills REDD+ carbon credit project due to woody vegetation destruction • Impaired capacity for people to cope with and adapt to climate change due to escalating household poverty, and reduced socio-economic resilience • Increased household's reliance on county and national government aid and support
3. Cultivation zone	Permitted activities: Cultivation of high value crops (such as tomatoes, onions, capsicum, coriander, and herbs), cultivation of subsistence crops, farming and bulking of fodder, and perimeter fencing of the cultivation blocks Restrictions: Change of user, further subdivision, and change of ownership	• Diverse mix of land use practices for sustainable development and economic returns • Diversification of livelihoods by engaging in agriculture and related value-chain activities • Alternative employment options in addition to traditional pastoralism • Improved household food security in Mbirikani • Provision of alternative sources of household's income • Introduction of diverse business opportunities (such as residential, transport, and agrochemicals outlets)	• High influx of high-end irrigation farmers from other areas leading to capital flight • Increased water abstraction and drying up of springs, swamps, and rivers leading to loss of livestock watering sites • Widespread soil exhaustion and salinization, leading to low productivity and abandonment of farming • Increase in siltation and water pollution due to heavy use of agrochemicals • Increased waterborne diseases (typhoid and dysentery) • Increased encroachment of swamps and riparian zones (IIlchalai, Namelok, Kikarangot, and Isinet) and loss of wildlife habitats

		• Cushioning households against low livestock returns during prolonged droughts	• Slow rangeland recovery rate for abandoned farming areas • Risk of migration to other zones after farming abandonment • Increased water-related conflicts (people-people and livestock-wildlife) in places like IIchalai, Isinet, and Namelok • Food insecurity and loss of household economic opportunities due reduced or a lack of irrigation water and a degradation of farming land • Increased household's reliance on county and national government aid and support
4. Settlement zone	Permitted activities: Commercial and residential buildings, light industrial facilities, social amenities (such as educational, health, community halls, play grounds, administration, churches, shops, hotels, and open air markets), permanent buildings by group ranch members, burial sites, semi-detached bungalows and flats encouraged, road construction, street lighting, greening the residential areas and road reserves is encouraged, nucleated settlements to be protected by a wildlife fence, urban agriculture; kitchen gardening, small-scale poultry industry Note: Prior to undertaking any of the above activities, development approval shall have to be granted by the competent planning authority. Development applications seeking for approval or development permission shall be sought from the competent planning authority in a manner prescribed by the law.	• Well-planned human settlements will avoid spontaneous, unregulated development and urban sprawl • Creation of diverse economic activities (such as shops, hotels, butcheries, and markets) and employment opportunities • Improved provision of essential services and infrastructure development • Improved shelter and quality of shelter • Introduction of sedentalized lifestyles which will improve community life and governance standards	• Massive sale of land allocations in the settlement zone will trigger migration and settlement in the pastoralism zone • Mass acquisition of land by non-members and "outsiders" do not share in the Mbirikani vision of traditional pastoralism and wildlife conservation • Mushrooming of unplanned settlements and urban sprawl • Dilution of traditional Maasai culture and practices • Increased crime and social vices (such as thefts and prostitution) • Increased water demand for mushrooming settlements • Risk of increased illegal bush meat trade through the scouting role of local youth • Increased challenges of the solid waste management (SWM) especially around the market centres within the settlement zone
	Restrictions: Further subdivision and change of user, row housing, burial will be undertaken only in the designated areas		

5. Physical infrastructure	Permitted activities: Primary and secondary roads in the nucleated settlement shall form the backbone of transportation in the GRs, only the classified roads in the nucleated settlement may be bituminized or gravelled, secondary roads may be gravelled, primary, secondary and nucleated settlement road reserves may be used in laying utility and services, airstrips may be improved to bituminized surface and auxiliary utilities may be constructed including perimeter fencing	• Provision of physical infrastructure proximate to human settlement areas • Spurred economic development in Mbirikani • Improved standards of living in Mbirikani • Improved transportation networks	• Introduction of numerous access roads in the pastoralism and wildlife zone will lead to the fragmentation of livestock and wildlife grazing landscapes • Obstruction of wildlife movement corridors by roads • Increased vehicle-wildlife-livestock collisions • Increased crime and ~~other~~ social vices due to opening up of the area
	Restrictions: The tertiary and access roads shall not be opened, constructed and used for transportation purposes to forestall serious degradation of the natural environment, no construction of any form shall be undertaken on the primary and secondary road reserve, tree planting is not allowed on the primary road except in nucleated settlement, bituminization of secondary roads is prohibited, road reserves provided in terms of primary, secondary and tertiary shall not interfere with any form of development, only the primary roads shall be bituminized; the rest of the roads shall be gravelled, access roads in the human settlements are exempted from these regulations are exempted from these regulations		

6. Industrial zone and limestone mining areas	Permitted activities: Mineral exploration, mine development, feasibility studies, EIAs, land acquisition by leasing, change of user, vegetation clearing, construction of roads and amenities, mine closure, mine decommissioning, and rehabilitation works	• Provision of alternative landuse and economic opportunities • Creation of employment in new industrial ventures such as the Simba Cement and related business establishments • Turnover multiplier effects • Increase in land value • Creation of new business opportunities	• Increase in the number of decommissioned and unrehabilitated limestone quarries will downgrade the aesthetic appeal of Mbirikani as a tourism hub in the Amboseli ecosystem • The spread of access roads to the limestone quarries will increase the spread and colonization of invasive plant species especially *Nicotiana glauca* • Air pollution • Land degradation in limestone mining areas • Poor parking arrangement of cement transport trucks at the factory gate • Impaired movement of livestock and wildlife due to abandoned limestone mines • Increased crime and social vices
	Restrictions: Settlements, construction of permanent *bomas* or buildings, construction of schools and health centres, further land subdivision, change of ownership, and passenger vehicles		
	Unclear issues: Strategies and guidelines for mine closure, decommissioning and rehabilitation works		

7.2: Environmental Scenario Analysis and Mitigation Options for Negative Impacts

This section provides the environmental scenarios in Mbirikani with effective enforcement of LSP restrictions as well as with violation of the landuse restrictions.

7.2.1 Pastoralism and wildlife zone

a) Scenario with effective enforcement of LSP restrictions

The implementation of the Mbirikani LSP according to prescribed activities and enforcement of restrictions in the pastoralism and wildlife zone will maintain some parts of the area as common land which will uphold the tenets of collective land management and sustain traditional pastoralism in Mbirikani. It will also ensure that grazing pastures and wildlife habitats are safeguarded against encroachment by human settlements, towns, and industries. It will preserve traditional livelihood practices, norms and values of the Maasai culture while sustaining wildlife heritage for the tourism economy. All this is desirable for the integrity of the greater Amboseli ecosystem including the continued thriving of the Amboseli National Park and its ecological networks with the Chyulu and the Tsavo conservation areas.

b) Scenario with violation of LSP restrictions and mitigation measures

The violation of LSP restrictions is likely to trigger uncontrollable land subdivision and disposal which will lead to fragmentation of pastoral landscapes through fencing and introduction of land activities which are incompatible with nomadic pastoralism. The area will experience mass acquisition of land by non-members and "outsiders" which will ultimately dilute the norms and values of the Maasai culture. This scenario will seriously curtail traditional livestock mobility networks in pursuit of pasture and water and might eventually lead to collapse of traditional pastoralism practices due to the constriction of grazing landscapes. The scenario will mark a deviation from the long-term vision of Mbirikani to sustain communal land both for livestock grazing and for wildlife conservation.

In case restrictions are challenged and violated and people settle or sell land allocated in this zone, the scenario is likely to be a similar situation like in the Kimana area. Woody vegetation cover may decline due to charcoal burning for commercial purposes and fencing of homesteads (*bomas*) and livestock sheds. After the subdivision of Kimana group ranch there was a surge in charcoal burning by non-Maasais mainly targeting *Acacia tortilis* and *Acacia mellifera*, and this is still happening. Due to an increase in human presence and associated development activities, the human-wildlife interface will increase leading to high occurrence of human-wildlife conflicts and wildlife crime including illegal bush meat activities. At the landscape level, sedentarization in the zone and introduction of inappropriate human activities will interfere with the ecological linkages between the Amboseli and the Tsavo Ecosystems. It will encroach into the designated wildlife movement corridors and impede free movement of wildlife between the Chyulu Hills, the Tsavo West, and the Amboseli National parks. Ultimately, this is likely to undermine integrity of the two ecosystems and may lead to a serious decline in wildlife populations, which are the key pillars of tourism in the region.

Widespread land disposal without the consent of family members especially women and youth, is likely to lead to land disinheritance, loss of family wealth, numerous clan or family feuds and unmanageable disputes. The land disposal will introduce a desperate class of landless Maasai which will become a headache for the society and is likely to increase crime, indecency and a collapse of traditional customary systems. This is likely to increase wildlife crimes in the Amboseli landscape through engagement of the youth with first-hand knowledge of the terrain with wildlife poaching and trafficking middlemen and cartels.

The violation of landuse restrictions, especially settlement in the pastoralism and wildlife zone, is likely to escalate the problem of environmental degradation in the rangelands as a result of overstocking, vegetation cover loss, and soil erosion all of which could destroy the current opportunity for long-term revenue generation through the Chyulu Hills REDD+ carbon credit project. It will trigger the problem of uncontrolled settlements and unplanned urban sprawls which will have serious negative effects on the tourism sector in the greater Amboseli region. The scenario will seriously affect people's abilities to cope with and adapt to climate change due to escalating household poverty and reduced socio-economic resilience. All these transformations are likely to make household's very vulnerable and more dependent on external support especially by the national and the county governments.

Mitigation options

- Controlling of further land subdivision and disposal
- Regulating land disposal without the consent of family members, including women and youth
- Creating private land as common land for shared use for communal livestock grazing and wildlife use
- Establishing conservancies in the pastoralism and wildlife zone
- Regulating livestock population by introducing improved breeds
- Preventing collapse of the REDD+ carbon credit project

7.2.2 Conservation and tourism zone

a) Scenario with effective enforcement of LSP restrictions

Apart from its key role in protection and conservation of the fragile natural environment in the foot slopes of the Chyulu Hills, this zone will sustain the integrity of the greater Amboseli ecosystem and the Tsavo conservation area by sustaining local and regional ecosystem networks and linkages. In addition, the zone will continue serving as a traditional fall-back and refuge grazing area for livestock during prolonged droughts. This is likely to preserve the tenets of collective land tenure (common land) as well as the traditional livestock rearing practice. The zone will ensure continued promotion of conservation-based tourism enterprises as an avenue for alternative revenue generation without undermining pastoralism. The designated landuse in the zone will promote a diversification and an enhancement of tourism returns in the greater Amboseli ecosystem by enabling Mbirikani to continue attracting high-end local and international tourists.

b) Scenario with violation of LSP restrictions and mitigation measures

Various restrictions have been prescribed for the zone but if they are violated in the future, a few scenarios might be observed. Increase in human activities in the zone will lead to environmental degradation manifested by a) a decline and a loss of woody and herbaceous vegetation cover, b) high prevalence of soil erosion, c) a decline and a loss of high-quality grasses (decreasers), d) high prevalence of annual herbaceous plant species, and e) an increase in bare ground. A high influx of human beings might ~~also~~ encourage overexploitation of natural resources leading to further environmental damage and degradation. The presence of human beings will increase land uses and activities incompatible with wildlife conservation and tourism development. The violation will lead to widespread environmental degradation, vegetation destruction, and landscape fragmentation and will impend the free movement of wildlife between Mbirikani, Amboseli National Park, Chyulu ecosystem and the Tsavo West National Park. Human-wildlife conflicts, especially during the dry season, and illegal bush meat activities will intensify due to

increased contact between humans and wildlife. As the landscape gets overrun by human development and activities, its ecological ability to support and sustain pastoralism and wildlife populations will decline substantially. The landscape transformations will trigger a cascade of ecological impacts including a decline in wildlife populations and a collapse of landscape ecological linkages between the Amboseli and Tsavo landscapes.

The violation of restrictions especially through massive land disposal in the settlement zone might lead to introduction of settlements (or prolonged stays by pastoralists) in the conservation and tourism zone leading to heighted competition for shared resources by livestock and wildlife.
This competition will degrade the status of the area as a captivating wilderness area which could lead to collapse of existing tourism revenue-generating opportunities including the closing down of existing tourism facilities and relocation of investors to other areas. The conservation zone is likely to experience increased degradation through overgrazing by livestock leading to a significant loss of vegetation cover. This degradation could destroy the current opportunity for long-term revenue generation through the Chyulu Hills REDD+ carbon credit project.

Mitigation options

- Converting the conservation zone into a conservancy
- Ensuring equitable sharing of benefits accruing from wildlife conservation and tourism
- Regulating livestock population by introducing improved breeds
- Preventing collapse of the Chyulu Hills REDD+ carbon credit project in Mbirikani

7.2.3 Cultivation zone

a) Scenario with effective enforcement of LSP restrictions

The inclusion of this zone in the LSP will promote a diversification of land use practices in Mbirikani beyond traditional pastoralism by encouraging agricultural livelihoods and engagements in related value-chain activities. The inclusion will promote the farming culture among the Maasai. Apart from cushioning households against low livestock returns during prolonged droughts, agriculture will introduce a wide range of new business opportunities in the cultivation zone (such as agrochemical shops and ordinary shops, hotels, butcheries, transport service providers, rental houses, schools, dispensaries, and pharmacies). In addition to traditional pastoralism, all this will introduce alternative employment options and sources of income, and cultivation activities will ~~also~~ improve household's food security in Mbirikani.

b) Scenario with violation of LSP restrictions and mitigation measures

The inclusion of this zone in the LSP will inevitably lead to a high influx of high-end irrigation farmers from other areas where agrarian practices are widespread. Although this influx will promote the farming culture among the Maasai, it will increase water demand in Mbirikani which is a water-stressed area due to increased water abstraction for irrigation. The heavy water abstraction will lead to drying up of springs, swamps, and rivers and to a loss of livestock watering sites which will particularly affect downstream communities. This might eventuality escalate the problem of water-related conflicts (people-people and livestock-wildlife) in places like IIchalai, Isinet, and Namelok. The farming activities are likely to increase siltation and water pollution due to heavy use of agrochemicals. Continued exploitation of land in the cultivation zone for farming purposes will escalate the problem encroachment of swamps and riparian zones especially at IIlchalai, Namelok, Kikarangot, and Isinet leading to loss of wildlife habitats. In the final analysis,

a significant part of the monetary gain from the exploitation of local resources will be exported out of the area through capital flight. The farming activities in the cultivation zone are unlikely to last forever due to widespread soil exhaustion and salinization leading to low productivity and farming abandonment and collapse of the associate activities and businesses. Recovery of abandoned farming areas will take a long time which may force some of the landowners to look for alternatives including the desire to sell their land allocations in the cultivation zone. This might trigger the risk of migration to other zones after farming abandonment and collapse of the agriculture value chains.

Mitigation options

- Regulating water abstraction to prevent drying up of rivers, springs, and swamps
- Regulating encroachment of agriculture into riparian buffer zones through proper zoning
- Controlling establishment of new irrigation farms on private land
- Mitigating water-related conflicts

7.2.4 Settlement zone

a) Scenario with effective enforcement of LSP restrictions

The adherence to the permitted activities will facilitate evolution of well-planned human settlements and avoid spontaneous and unregulated development. The settlement zone will create a vibrant economic zone along the Emali-Loitokitok road corridor comprising residences and business (such as shops, hotels, butcheries, and small markets) which will create employment opportunities and improve standards of living. The zone will improve provision of essential services and infrastructure development and promote sedentalized lifestyles which will improve community life and governance standards.

b) Scenario with violation of LSP restrictions and mitigation measures

If the prescribed restrictions are violated, the future scenario in the zone will depend on a) the location of the zone within the group ranch, b) existing and potential economic opportunities of each zone, and c) the availability of water resources in each zone. Settlement zones around urban centres, especially Isinet and its environs, Namelok, the Simba Cement, IIchalai and Mbirikani, will become focal settlement areas for the Maasai and the non-Maasai. The current and the future economic opportunities provided by these towns make them attractive to people looking for better socio-economic opportunities. Isinet and Namelok have grown rapidly in the last 15 years or so due to a proliferation of irrigated agriculture especially growing of tomatoes and maize which generate substantial revenue. The two market centres have attracted some Maasai and mostly non-Maasai to settle in the area either to engage in crop farming, provide skilled and unskilled labour, or establish businesses. To cater for a demand for accommodation, some investors have constructed low and medium category residential houses for rental purposes. In this regard, Isinet and Namelok are the two fastest growing urban centres in the group ranch, and subdivision will accelerate their expansion in the near future.

The violation of restrictions in this zone is likely to lead to mushrooming of unplanned settlements which will lower the aesthetic image of Mbirikani and the greater Amboseli region as a hub for tourism. Uncontrolled sale of land allocations in the zone will trigger migration and settlement in the pastoralism and wildlife conservation zone. Mass acquisition of land by non-members and "outsiders" is likely to dilute the indigenous Maasai culture and traditional practices including the

Mbirikani vision of traditional pastoralism and wildlife conservation. The establishment of a new economic zone along the Emali-Loitokitok road corridor will ultimately lead to increased crime and social vices (such as thefts and prostitution). The development is likely to increase wildlife crimes through engagement of the youth with first-hand knowledge of the terrain with wildlife poaching and trafficking middlemen and cartels. Violation of landuse restrictions is also likely to increase water demand as well as challenges of solid waste management especially around the market centres.

Mitigation options

- Controlling land disposal without the consent of family members, including women and youth
- Controlling the sale of settlement land to outsiders
- Addressing the potential problem of increased crime and social vices in the zone
- Addressing the potential problem of inadequate water supply for mushrooming settlements
- Controlling illegal bush meat activities
- Controlling solid waste disposal

7.2.5 Physical infrastructure

a) Scenario with effective enforcement of LSP restrictions

The provision of improved infrastructure (such as roads, electricity, health centres, and schools) especially in the settlement zone will spur economic development of Mbirikani by introducing new income-generating options which will improve standards of living.

b) Scenario with violation of LSP restrictions and mitigation measures

The violation of restrictions is likely to downgrade the aesthetic standards of Mbirikani and the greater Amboseli region as a hub for tourism. Introduction of numerous access roads in the pastoralism and wildlife zone is likely to create fragmentation of grazing and wildlife landscapes. The transport networks are likely to escalate obstruction of wildlife and livestock movement corridors by roads and increase vehicle-wildlife-livestock collisions. The improved transport and communication might lead to increased crime and social vices due to the opening up of the area.

Mitigation options

- Controlling obstruction of wildlife-livestock movement corridors by roads
- Addressing the potential risk of vehicle-wildlife-livestock collisions
- Addressing the potential problem of increased crime including wildlife crimes due to greater rangelands penetration

7.2.6 Industrial zone and limestone mining areas

a) Scenario with effective enforcement of LSP restrictions

The introduction of this zone has diversified the land use mix in Mbirikani and opened a wide range of new economic opportunities. The establishment of the Simba Cement factory has created employment and opened a large number of business ventures near the site. Apart from new business opportunities, the factory has increased land value in the area. Industrial activities in

this zone will improve the national and county economy in a wide range of ways including income taxes from employees and taxes and duties from the sale of the goods.

b) Scenario with violation of LSP restrictions and mitigation measures

If the restrictions imposed on the mining and industrial zone are violated in the future, a couple of scenarios might emerge. It is envisaged there will be an increase in the number of decommissioned and unrehabilitated limestone quarries which will significantly reduce aesthetic appeal of Mbirikani as a tourism hub in the Amboseli ecosystem. Air pollution, especially dust generation due to increase in the number of trucks ferrying limestone to the cement factory, will become prevalent. Widespread mining activities will create a lot of landscape and vegetation clearance and disturbances leading to land degradation. These changes will then impede wildlife and livestock movement especially after the abandonment of the mines. Another notable environmental concern arising from increased road access to the mining areas is the colonization and spread of plant invaders particularly *Nicotiana glauca*. Observations at the current mining zone show that this species is common along the edges of roads since it prefers disturbed soils. As mining and industries continue in the future, they will attract non-members including people from other parts of the country in search of employment and socio-economic opportunities. This attraction will potentially increase social vices like prostitution, theft, and various crimes, making Mbirikani more insecure.

Mitigation options

- Ensuring the restoration of decommissioned limestone quarries in accordance with the EMCA Cap 387 and the Mining Act 2016
- Controlling the spread of invasive plant species especially *Nicotiana glauca* along the mining access roads
- Controlling air pollution in the factory site and along the access roads

7.2.3 Analysis of Alternative Options

Table 7-1 shows the alternative project options which were considered in the SEA, while **Table 7-2** shows the analysis of alternative environmental and social options for the LSP. **Table 7-2** clearly shows that negative environmental and social impacts of land subdivision in the group ranch are likely to exceed the positive impacts. However, there is a strong and resolute desire to subdivide the group ranch probably due to public urge for absolute land ownership rights by the landowners This is also based on the experience in other group ranches such as Kimana where sub division has already occurred hence the motivation to do the same.

Table 7- 1: Summary of project alternative options

Alternatives	Characteristics
A_0 – No land subdivision option or base alternative	Proceeding with Business-as-Usual (BAU) in the MGR
A_1 - Preferred option	Land subdivision in the MGR in line with the desires of the landowners

Table 7- 2: LSP alternative options analytical matrix

Project alternative	Positive impacts	Negative impacts	Preference ranking (based on landowner interests)
A_0 – No land subdivision • Proceeding with Business-as-Usual (BAU) in the MGR	• Traditional pastoralism practice will be sustained • Safeguarding of livestock grazing areas and wildlife habitats • Preservation of traditional livelihood practices, norms and values of the Maasai culture • Preservation of ecological networks between the Amboseli ecosystem, the Chyulu Hills and the Tsavo conservation areas • Continuation of conservation-based tourism enterprises as an avenue for alternative revenue • Diversification of land use practices beyond traditional pastoralism • Improved and well-planned human settlements • Evolution of a vibrant economic zone along the Emali-Loitokitok road corridor • Increased employment and business opportunities • Improved provision of infrastructure and essential services • Cushioning households against low livestock returns through introduction of alternative economic options • Increased solid waste management challenges	• Low land value • Land tenure insecurity • Lack of absolute land ownership rights • Limited right to own, use and dispose of land • Inability for individual landowners to enjoy the right ~~to~~ freely to transfer land titles through sale, gift or bequest • Land degradation as a result of overstocking • Unequitable sharing of group ranch benefits (such as tourism and conservation-related enterprises) • Inability to enjoy the benefits of more diversified livelihood opportunities • Systemic weaknesses in the group ranch regime including poor transparency and accountability	2

A_1 - Preferred option – Land subdivision in the MGR in line with the desires of the landowners	• Higher land value • Security of land tenure • Absolute landowners hip rights • Individual right for individual landowners to enjoy the right to freely own, use, gift or bequest land • Provision of individual landuse freedom • Benefits of more diversified livelihood opportunities beyond traditional pastoralism • Freedom from ineffective group ranch governance and management regime • Improved and well-planned human settlements • Improved provision of infrastructure and essential services • Evolution of a vibrant economic zone along the Emali-Loitokitok road corridor • Increase employment and business opportunities • Improved cushioning households against low livestock returns through the introduction of alternative economic options	• Uncontrollable land subdivisions and disposal • Mass acquisition of land by non-members and "outsiders" • Disputed land sales leading to disinheritance, loss of family wealth, numerous clan or family feuds • Introduction of a desperate class of landless Maasai • Dilution of the norms and values of the Maasai culture and traditions • Increased crime and indecency due to collapse of traditional customary systems • Fragmentation of pastoral landscapes through fencing • Escalation of the rangeland degradation problem • Lower aesthetic appeal of Mbirikani as a tourism hub in the Amboseli ecosystem due to negative visual impacts of landscape change • Introduction of land activities which are incompatible with nomadic pastoralism and wildlife conservation • Colonization of the Mbirikani area by invasive species • Curtailing of traditional livestock mobility networks in pursuit of pasture and water • Collapse of traditional pastoralism practices • Collapse of the Chyulu Hills REDD+ carbon credit scheme in Mbirikani • Collapse of the existing tourism revenue-generating opportunities • Increased water demands and water scarcity • Increased siltation and water pollution • Increased water-related conflicts • Increased wildlife-related conflicts • Increased air pollution • Further encroachment of swamps and riparian zones • Increased wildlife crimes • Reduced capacity to cope with and adapt to climate change	1

8. ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN

8.1: Management and Monitoring Action

The aim of the Environmental Management and Monitoring Plan (EMMP) is to recommend in detail the actions required for the effective application of the Mbirikani LSP as an instrument for land subdivision and landuse governance after the land reforms and transition into private land tenure regime. This is necessary to alleviate or minimize the risk of negative environmental and social impacts in all the landuse zones. The EMMP will support the long-term management, monitoring and evaluation of the environmental and social status in the landuse zones. It is important to note that an EMMP is a living entity in that it is to be updated and amended based on emerging situations including new policies, legal frameworks, regulations, guidelines, national strategies, and ratification of additional international agreements.

8.2: Roles and Responsibilities

The successful implementation of the Mbirikani LSP will require the involvement of various instructions at local, county and national levels. **Figure 8-1** shows the institutional framework for the implementation of the Mbirikani LSP. The roles of various players are highlighted below.

8.2.1: County Government of Kajiado

1. *CGK, Director Land Use Planning*

Responsible for upstream oversighting to ensure proper implementation of the Mbirikani LSP.

2. *CGK CECM, Lands, Physical Planning and Urban Development*

Responsible for upstream oversighting to ensure proper implementation of the Mbirikani LSP.

8.2.2: Mbirikani Landowners

1. *Mbirikani Land Trust*

The trust will be established primarily for purposes of collective governance of the common land in the pastoralism, wildlife, conservation and tourism development zones on behalf of the private landowners. It will be responsible for the overall governance of the common land owned collectively by all the members in equal undivided shares, which shares shall be the basis of allocation of benefits from investments on the land. The trust will have the direct responsibility of the implementation of the LSP and oversee the collective interests of Mbirikani landowners after the group ranch subdivision and the dissolution of the MGR management. The trust will manage the common land in the pastoralism and wildlife zone, the conservation and tourism development zone and the mining and industrial zone which will be held in the trust on behalf of and in the interest of the beneficiary landowners. The trust shall have a pre-emptive right of purchase over any shares of the common land that a member may choose to sell. Its affairs will be managed by a board of trustees, which shall, among other things, regulate use of the land, ensure equitable sharing of benefits accruing from conservation, provide oversight of residents' associations and committees, and coordinate all activities in the common land. The duties and powers of the trustee and the relationship between the trustee and the landowners will be spelt out in a constitution.

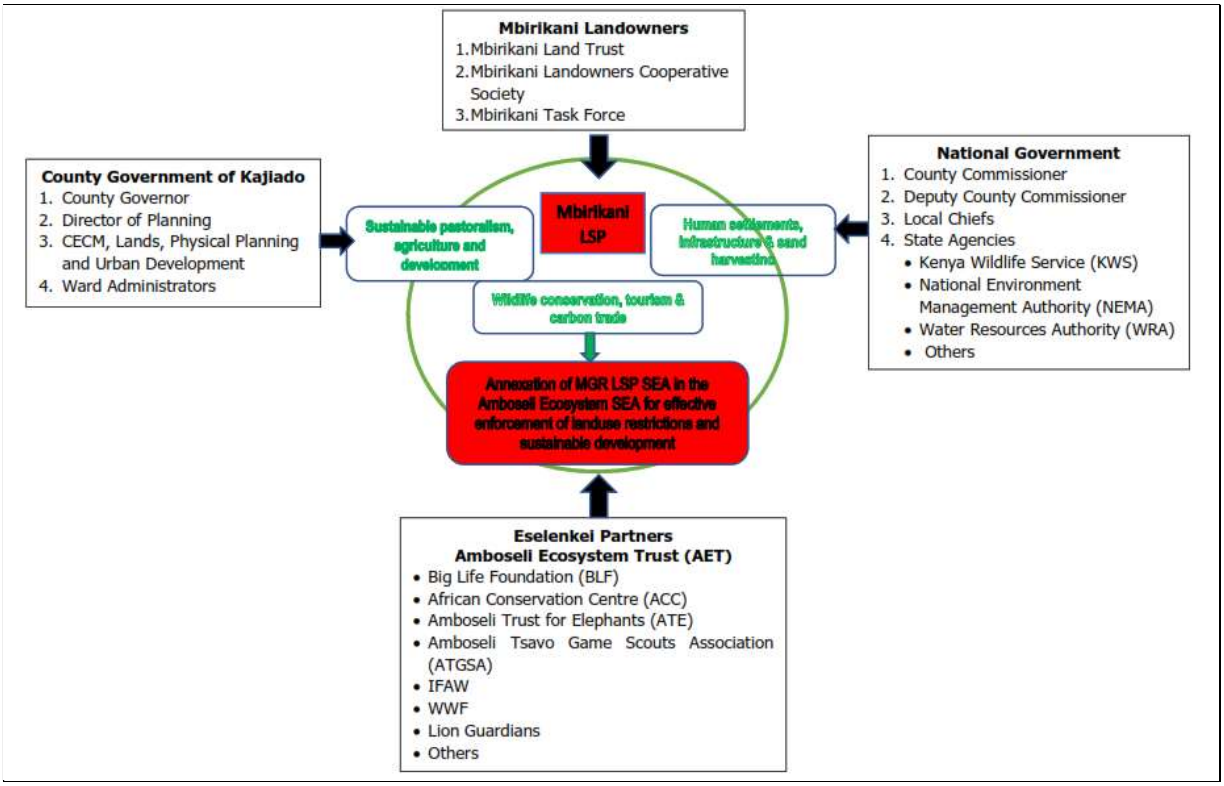


Figure 8-1: Institutional framework for the implementation of the Mbirikani LSP

2. *MGR Subdivision Task Force*

The team of highly experienced professionals will provide technical guidance and offer the required advisory support to the Land Trust and the Cooperative Society.

8.2.3: Mbirikani Partners

The role of the partners will be to support the Mbirikani landowners in the management and conservation of the common land especially in the pastoralism, wildlife, conservation and tourism development zone. The partners will be coordinated by the Amboseli Ecosystem Trust (AET) within their common mission of securing intact and healthy landscapes that support local livelihoods and conservation in the region.

8.2.4: National Government

The local administration and judiciary will support the Mbirikani landowners in the implementation of the LSP, especially by supporting the enforcement of the landuse obligations in the gazetted LSP. This will include settling landuse related disputes in accordance with the LSP prescriptions. Other state agencies such as NEMA, WRA and KWS will support the enforcement and offer technical and financial assistance for the successful implementation of the LSP.

8.3: EMMP Schedule

The schedule serves to give the list of environmental action to be undertaken. The EMMP schedule is given in **Table 8-1**.

Table 8-1: EMMP schedule

Landuse zone	Management objective	Governance and management options	Responsibility	Monitoring indicators
Pastoralism and wildlife zone	Controlling of further land subdivision and disposal	• Local consensus and restrictive covenants with private landowners against land disposal • Local consensus and binding agreement with landowner owners to transfer their land control rights to Mbirikani land trust/Amboseli Ecosystem Trust • Formulating and adopting a group constitution bestowing the Mbirikani Land Trust or Cooperative Society with the pre-emptive right of purchasing any land which the private landowners may wish to dispose • Formulating and adopting a constitution bestowing the Mbirikani Land Trust or Cooperative Society with the powers for the governance of shared common land in the pastoral, wildlife, conservation and tourism zones • Formation of a Cooperative Society for the management of the common land on behalf of the private landowners including collaborations with investors such as BLF and other partners • Local consensus on the payment of conservation fees, carbon credit revenue and mining royalties only to private land owners who refrain from settling in the pastoralism and wildlife conservation zone or disposing their land allocation in the zone • Introducing a caveat to the County Land Board against land sales in the pastoralism and wildlife conservation zone	Cooperative Society, the Land Trust, and the Mbirikani Taskforce	• Number of intact land parcels in the zone • Number of unsold land parcels in the zone
	Creating shared common land in the pastoralism and wildlife zone for communal livestock grazing and wildlife use	• Local consensus on livestock grazing rules in the pastoralism and wildlife zone	• Cooperative/land trust • Private landowners livestock grazing management committees	• Range condition • Livestock numbers • Number of grazing compliance violation cases • Revenue generation from grazing fee

Landuse zone	Management objective	Governance and management options	Responsibility	Monitoring indicators
	Regulating livestock population by introducing improved livestock breeds	• Introduction of rules on livestock numbers by private landowners in the pastoralism, wildlife, conservation and tourism based on the carrying capacity • Introducing fees and levies for the grazing of additional livestock in the pastoralism and conservation area	• Cooperative Society and the Land Trust • Private landowners livestock. grazing committees	Livestock number
	Controlling mass acquisition and dispossession of land by non-members and "outsiders"	• Local consensus and restrictive covenants with private landowners against land disposal • Introducing a caveat against the title deeds to ensure that new landowners will abide with the land restrictions as provided in the LSP • Formulating and adopting a group constitution bestowing the Mbirikani Land Trust or Cooperative Society with the pre-emptive right of purchasing any land which the private landowners may wish to dispose • Introduction of a binding requirement for new landowners to conform to the permitted activities and landuse restrictions in the LSP, AEMP, Amboseli Ecosystem SEA and Kajiado county spatial plan	Mbirikani Taskforce, the Cooperative Society, AET, CGK, and the National Government	Number of land sales
	Regulating land disposal without the consent of family members, including women and youth	Introduction of restrictive covenants with private landowners to outlaw land disposal consent without the involvement of family members in accordance with the Land Act	Mbirikani Taskforce, the Cooperative Society, AET, CGK and National Government	Number of land-related disputes
	Preventing collapse of the REDD+ carbon credit project in Mbirikani	Entering lease agreements with carbon credit beneficiary landowners outlawing further subdivision and vegetation clearance	Mbirikani Taskforce, the Cooperative Society, the Big Life Foundation, and the local administration	Number of lease agreements
	Establishing conservancies in the zone	• Entering into agreements with private landowners to create community wildlife conservancies through the AET and conservation partners • Entering into a legally binding agreement with landowner owners to permanently transfer their property rights to the Mbirikani Land Trust through easement	AET, Mbirikani Land Trust, the Cooperative Society	Number of conservancies established

Landuse zone	Management objective	Governance and management options	Responsibility	Monitoring indicators
	Keeping pastoral land open for wildlife use	Agreement between KWS and private landowners regarding wildlife conservation benefit sharing and HWC compensation strategies	Mbirikani Taskforce and Cooperative Society to negotiate with the KWS	• Number of signed agreements • Number of landowners getting annual payments
	Ensuring sustainable harvesting of natural products from the zone	Developing licensing regulations and agreement modalities for the non-commercial harvesting of natural products in the pastoralism zone	Cooperative society and Mbirikani Taskforce	Licencing framework
Conservation and tourism zone	Ensuring equitable sharing of benefits accruing from wildlife conservation and tourism	Formulation of a constitution for the Mbirikani Land Trust and/or the Cooperative Society regarding an agreeable benefit sharing formula and payment method	Mbirikani Land Trust, the Cooperative Society, and the livestock grazing committees	Conservation revenue
	Regulating livestock population by introducing improved breeds	• Introduction of rules on livestock numbers by private landowners in the pastoralism, wildlife, conservation and tourism based on the carrying capacity • Introducing fees and levies for the grazing of additional livestock in the pastoralism and conservation area	Cooperative Society, the Land trust, the private landowners and the livestock grazing committees	Stocking rate
	Conversion of zone into a conservancy	Gazetting the zone as a community wildlife conservancy under the WCMA 2013	Mbirikani Taskforce and the Cooperative Society	Conservancy gazette notice
	Mitigating land degradation	Develop, register and implement a conservancy management plan	Mbirikani Taskforce and the Cooperative Society	Registered management plan
	Mitigating HWCs	Agreement between KWS and private landowners regarding wildlife conservation benefit sharing and HWC compensation strategies	Mbirikani Taskforce to negotiate with the KWS	• Signed agreements • Annual compensation payments
	Preventing the collapse of the REDD+ carbon credit project in Mbirikani	Entering lease agreements with carbon credit beneficiary landowners outlawing further subdivision and vegetation clearance	Mbirikani Taskforce, Cooperative, the Big Life Foundation, and the local administration	Number of lease agreements
Cultivation zone	Regulating water abstraction to prevent the drying up of rivers, springs, and swamps	Controlling the number of water abstraction pumps and pumping hours through local consensus and *Nyumba Kumi* agreements with reference to the Water Act	Cooperative Society, the Land Trust, the WRA, the Nolturesh, the Namelok, and the Isinet-Kikalangot WRUAs	• Adherence to water use regulations • Number of water conflicts • Downstream water flow

Landuse zone	Management objective	Governance and management options	Responsibility	Monitoring indicators
	Human-wildlife conflict management	Agreement between KWS and private landowners regarding wildlife conservation benefit sharing and HWC compensation strategies	Mbirikani Taskforce to negotiate with the KWS	• Number of signed agreements • Number of landowners getting annual compensation payments
	Regulating encroachment of agriculture into riparian buffer zones through proper zoning	• Delineation of riparian zone by WRUAs through *Nyumba Kumi* agreements in the cultivation zone with reference to the Water Act • Enforcement of NEMA riparian zone protection regulations through *Nyumba Kumi* agreements	Mbirikani Taskforce, The WRUAs, the WRA, and the NEMA	Gazettement of Mbirikani riparian zone guidelines
	Controlling the establishment of new irrigation farms on private land	Approving of new farms through the *Nyumba Kumi* groups	*Nyumba Kumi* Groups	Number of approvals
	Mitigating water-related conflicts	Controlling the number of water abstraction pumps and pumping hours by WRUAs through *Nyumba Kumi* based agreements	*Nyumba Kumi* groups	Gazettement of *Nyumba Kumi* water abstraction regulations
Settlement zone	Controlling land disposal without the consent of family members, including women and youth	Introduction of restrictive covenants with private landowners to outlaw land disposal consent without the involvement of family members in accordance with the Land Act	Mbirikani Taskforce, the Cooperative Society, the CGK & National Government, and the AET	Number of land-related disputes
	Controlling the sale of settlement land to outsiders	Local consensus and restrictive covenants with private landowners against land disposal and migration to the pastoralism and wildlife zone	Mbirikani Taskforce, the Cooperative Society, and the AET	Gazetted regulations
		Local consensus and binding agreements with private landowner owners on the forfeiture of conservation fee and carbon credit revenue benefits accruing from the communal land in the pastoralism zone for those who dispose their land in the settlement zone and migrate to the pastoralism, wildlife, conservation and tourism zones	Mbirikani Taskforce and the Cooperative Society	Gazettement rules
	Regulating land use in the zone	Local consensus and agreement with private landowner owners to conform with the permitted activities and	Mbirikani Taskforce and the Cooperative Society	Gazettement of permitted activities

Landuse zone	Management objective	Governance and management options	Responsibility	Monitoring indicators
		restrictions in the LSP, AEMP, Amboseli Ecosystem SEA and Kajiado county spatial plan		
	Addressing the potential problem of inadequate water supply for mushrooming settlements	No construction of buildings will be approved without rainwater-harvesting facilities	CGK	Number of approvals
Physical infrastructure	Controlling the obstruction of wildlife-livestock movement corridors by roads	Restricting road construction in the wildlife corridors	Mbirikani Taskforce, the Land Trust, and the Cooperation Society	Number of intact corridors
	Addressing the potential risk of vehicle-wildlife-livestock collisions	Installation of road signage and rumble strips through KENHA and KeRRA	KENHA, KeRRa the KWS, and the Livestock Department	• Number of road signs and strips • Collison incidents
Industrial and limestone mining zone	Restoration of decommissioned limestone quarries	Entering into a legally binding agreement with National Cement Company regarding the implementation mine-closure and restoration of decommissioned quarries in accordance with:- • s72, s77, s89, s140, s179 and s180 of the Mining Act No.2 of 2016 • s8(4k) of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) • s2 of the Mining (Mine Support Services) Regulations, 2016 (LN No. 151)	Mbirikani Taskforce, Cooperative Society, AET, NEMA, and Simba Cement	Gazettement of decommissioned mine restoration requirements
	Controlling the spread of invasive species especially *Nicotiana glauca* along the mining access roads	Entering into a legally binding agreement with National Cement Company on regular manual clearance of the invasive species using local labour	Mbirikani Taskforce and Cooperative Society, AET, NEMA, and Simba Cement	Number of affected access roads
	Impended movement of livestock in mining area	Restoration of decommissioned mines	Mbirikani Taskforce, the Cooperative Society, NEMA, and Simba Cement	Number of incidents

8.4: Review of LSP Restrictions

Local consensus during stakeholder consultations showed that the review of the agreed landuse restrictions of the Mbirikani LSP should be undertaken 10 years from the gazettement date of the Mbirikani LSP SEA. This was considered as adequate duration to monitor the effectiveness and sustainability of the restrictions.

8.5: Gazettment and Enforcement of Landuse Restrictions

The Mbirikani landowners through the LSP SEA process deliberated and unanimously agreed that the landuse restrictions should be captured in the gazettement of the LSP SEA under Section 57A of EMCA Cap 387 and will take precedence of the Mbirikani LSP version already approved by the CGK. Thereafter, the gazetted landuse restrictions will be enforced as part of the AEMP 2020-2030 which is already gazetted.

8.6: Links Between Mbirikani LSP SEA, Amboseli Ecosystem SEA 2014 and AEMP 2020-2030

8.6.1. Link with AEMP SEA (Ecosystem-wide SEA)

The Mbirikani LSP SEA will address management gap associated with the emerging and inevitable challenge of land subdivision and landuse change in the Amboseli ecosystem. The issue was not considered in the 2014 Plan SEA for the AEMP (2008-2018) because the SEA was mainly commissioned in response to the 2013 Amboseli Moratorium. The moratorium was arrived at after a consultative forum attended by various stakeholders from lead agencies who included; NEMA, AET, ATGRCA, KWS, KFS, WRMA, Olkejuado County Council, Ministry of Regional Authorities, Attorney General's Chamber, Kenya Investment Authority, Ministry of Tourism, AWF, members of the local community among others. The moratorium came to effect from 28th February 2013. The implication of the moratorium was that NEMA and all other relevant lead agencies shall not issue requisite licenses for any new or proposed developments or projects as listed in the Second Schedule of the EMCA (1999) until the entire management plan has been gazetted so that it could serve as a regulating instrument for development activities in the ecosystem.

The one-year moratorium for all proposed development activities within the Amboseli Ecosystem was declared by NEMA in consultation with other relevant stakeholders including the AET until after the AEMP (2008-2018) was gazzetted prior to which a Strategic Environmental Assessment (SEA) was to be undertaken. The 2014 Amboseli ecosystem-wide Plan SEA which is considered as the umbrella or mother Plan SEA did not consider the issue of group ranch land sub division which mainly started after 2019. Prior to that land sub division had only occurred in the Kimana Group Ranch without a SEA which culminated in a wide range of negative environmental and social impacts (including widespread land dispossession through mass acquisition of land by "outsiders", fragmentation of pastoral and wildlife landscapes through fencing, loss of critical wildlife habitats and migratory corridors, and degradation of environmentally sensitive environments such as the Kimana wetland and wildlife sanctuary).

The Mbirikani LSP SEA will pre-empt a repeat of the Kimana scenario in other group ranches within the Amboseli region through the provision of site specific solutions to the risks of land sub-division for which a significant degree of local level consensus and grassroot landuse restriction enforcement is necessary. The LSP SEA will reinforce the Amboseli Ecosystem SEA by the AET which was not covered in the umbrella SEA in terms of addressing the potential negative impacts

of land sub division which was not covered in the mother SEA. It is therefore necessary for the recommendations of the Mbirikani LSP SEA especially regarding the landuse restrictions to be annexed to the Amboseli Ecosystem SEA by the AET.

8.6.2. Link with the implementation of AEMP 2020-2030

The Mbirikani LSP SEA will reinforce the implementation of the AEMP 2020-2030 by integrating the necessary landuse restrictions which will address the negative environmental and social impacts of the inevitable land subdivision in the Amboseli ecosystem. The integration will be undertaken through the gazettement of the LSP SEA and annexation of its recommendation in the umbrella Amboseli Ecosystem SEA by the AET. **Figure 8.2** shows the linkages between Mbirikani LSP SEA and other management frameworks in the Amboseli region.

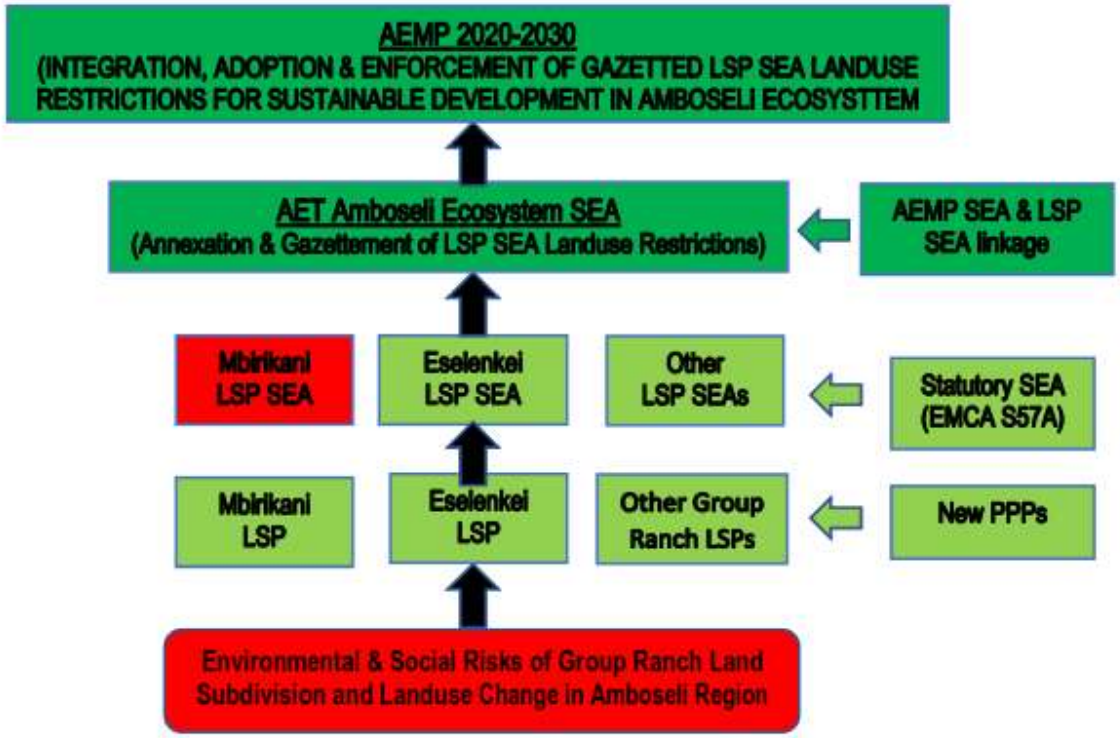


Figure 8.2: Linkages between Mbirikani LSP SEA and other management frameworks in the Amboseli region

9. CONCLUSIONS AND RECOMMENDATIONS

9.1: Conclusions

The promulgation of the National Constitution of Kenya 2010 which created three types of land tenue classes, namely, public, community and private land will continue encouraging the winding up group ranches in Kenya through their transformation from community to private land tenure. Although the land reform from communal to private land tenure will enhance land rights for pastoral communities, it is likely to trigger a wide range of negative environmental and socio-economic transformations including land dispossession and introduction of incompatible landuse in the rangelands which will disallow the traditional co-existence of livestock husbandry and wildlife conservation.

The PPP analysis for the Mbirikani LSP SEA showed that the LSP is compliant with environmental and social obligations in relevant frameworks at local, county, national and international levels. The demarcation of landuse zones in the LSP is compliant with the landuse zones, permitted activities and landuse restrictions in the Amboseli Ecosystem Management Plan (AEMP) of 2020-2030. However, the LSP has prescribed licensing of non-commercial harvesting of natural products (such as medicinal plants and firewood) in the pastoralism and wildlife zone but the licensing criteria has not been spelt out. Similarly, the LSP has prescribed the undertaking of scientific research in the conservation zone but the approval modalities for these activities is unclear. The Mbirikani LSP is aligned with the Kajiado County Land Sub-Division Guidelines 2018. The guidelines advocate for the retention of the group ranches in their traditional state, however. Similarly, the LSP is well aligned with the Kajiado County Spatial Plan of 2019-2029.

At the national level, the Mbirikani LSP is compliant with relevant environmental and social governance frameworks. However, the permitted activities in the industrial and limestone mining zone does not include the requirement for the limestone mining companies to submit mine-closure plans and ensure effective site restoration as required in s72, s77, s89, s140, s179 and s180 of the Mining Act No.2 of 2016, s8 (4k) of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) and s2 of the Mining (Mine Support Services) Regulations, 2016 (LN No. 151). Similarly, the LSP does not indicate how the mushrooming of borehole drilling will be controlled and regulated to conform with the National Water Master Plan of 2030.

The overall impact analysis for the Mbirikani LSP including the environmental scenario building clearly showed that the negative environmental and social impacts of land subdivision in the group ranch might exceed the positive impacts. The findings are consistent with the findings of many scientific research studies which have been undertaken on the subject both locally and abroad. The desire of the landowners to subdivide the communal land is strong and resolute. This interest is probably due to strong desire for absolute land ownership rights by the landowners and the systemic weaknesses in the group ranch regime including poor transparency and accountability This is also based on the experience in other group ranches such as Kiman where sub division has already occurred hence the motivation to do the same.

The Mbirikani LSP offers suitable landuse prescriptions for each zone as key pillars for effective planning and sustainable management of land for current and future generations. There is no guarantee, however, that these restrictions will not be challenged and violated. The violation can be mitigated through firm decrees and agreements among the private landowners on compliance with gazetted restrictions including fines and penalties for restriction violators.

9.2: Recommendations

The headline recommendations for each landuse zone are highlighted below.

9.2.1: Pastoralism and wildlife zone

a) Landowner owners can enter into a legally binding agreement to transfer their property rights to the Mbirikani Land Trust and Cooperative Society for governance and management as shared common land for pastoralism and wildlife use and the collective interests of Mbirikani landowners.
b) Payment of conservation fees, carbon credist revenue and mining royalties should be linked to preservation of private land through a signed agreement.
c) Conservancies can be established in the pastoralism and wildlife zone through conservation easement agreements between willing private landowners, the AET and other conservation partners.
d) The REDD+ carbon credit scheme in Mbirikani should be sustained by entering into lease agreements with beneficiary landowners outlawing further subdivision and vegetation clearance.
e) Licensing criteria for non-commercial harvesting of natural products in the pastoralism and wildlife zone should be developed.

9.2.2: Conservation and tourism zone

a) The private landowners through the Mbirikani Land Trust can consider gazettement of the entire zone as a conservancy under the WCMA 2013 for which a management plan will be developed.
b) The constitution for the Mbirikani Land Trust and/or the Cooperative Society will clearly define the formula for equitable sharing of benefits accruing from wildlife conservation and tourism including a clear strategy for dispute resolution.
c) The REDD+ carbon credit scheme in Mbirikani should be sustained by entering into lease agreements with beneficiary landowners outlawing further subdivision and vegetation clearance.

9.2.3: Cultivation zone

a) Establishment of new irrigation farms on private land should be controlled through the involvement of *Nyumba Kumi* groups which should approve leasing of new farms in their local areas and regulate the number of water abstraction pumps and pumping hours through common agreements.
b) The WRUAs in Mbirikani should clearly delineate and beacon the riparian buffer zones according to relevant legal frameworks in partnership with private landowners through *Nyumba Kumi* groups and enter into common agreements to control encroachment by irrigation farms.

9.2.4: Settlement zone

a) Land disposal without the knowledge and approval of family members, including women and youth, should be controlled through enforcement by the Land Control Board of the disposal consent requirement for the involvement of family members as prescribed in the Land Act.
b) Land sale in the zone to "outsiders" by private landowners should be controlled through gazettement of restrictive regulations to be and signing by landowners at the issuance of title deeds on the following:-
    iv) restricted sale of settlement land and migration to the pastoralism and wildlife zone,
    v) forfeiture of conservation fees and carbon credits revenue benefits accruing from the communal land in the pastoralism and wildlife zone, and

vi) grazing prohibition rules for private landowners who dispose their land in the settlement zone and migrate to the pastoralism and wildlife zone

9.2.5: Industrial and limestone mining zone

b) Restoration of decommissioned limestone quarries and controlling of the spread of invasive species (especially *Nicotiana glauca*) should be undertaken through binding agreement with National Cement Company regarding the implementation mine-closure and restoration of decommissioned quarries in accordance with:- i) s72, s77, s89, s140, s179 and s180 of the Mining Act No.2 of 2016, ii) s8(4k) of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) and iii) s2 of the Mining (Mine Support Services) Regulations, 2016 (LN No. 151)

It is recommended that the review of landuse restrictions should be undertaken after 10 years after gazettement of the Mbirikani LSP SEA based on recommendations of a wide section of stakeholders. The Mbirikani LSP SEA and other similar interventions will reinforce the 2014 Amboseli Ecosystem SEA by the AET in terms of addressing the potential negative impacts of land sub division which was not covered in the umbrella SEA which was not covered in the umbrella SEA. It is therefore necessary for the recommendations of the Mbirikani LSP SEA especially regarding the landuse restrictions to be annexed to the Amboseli Ecosystem SEA by the AET.

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ANNEXES

ANNEX A – MINUTES OF SCOPING CONSLULTATION MEETINGS

ANNEX B – ATTENDANCE LISTS

ANNEX C – HABITAT PLANNERS PRACTICING LICENSES

ANNEX A – MINUTES OF SCOPING CONSLULTATION MEETINGS

Annex 1: Minutes of the inception meeting held at Big Life Foundation (BLF) in Mbirikani Office on Monday 25th April 2022 at 10.45 am

Participants

1. Mr. Richard Bonham – Executive Chair and Founder, BLF
2. Mr. Benson Leiyan – Chief Executive Office, BLF
3. Mr. Craig Millar – Chief Operations Officer, BLF
4. Mr. Daniel Mete – Chairman, Mbirikani GR
5. Mr. Daniel Mapi – Secretary, Mbirikani GR
6. Mr. Joshua Suyianki – Treasure, Mbirikani GR
7. Prof. Francis Mwaura – Team Leader, ENRM Associates/Habitat Planners
8. Ms. Tiffany Mwake – ENRM Associates/Habitat Planners

Min 01/26/04 Mr. Leiyan opened the meeting by inviting Mr. Suyianki to open with a word of prayer. Gave apologies for Hon. Leshao who was unable to attend the meeting due to unavoidable circumstances. Welcomed the GR officials to introduce themselves, thereafter the HP team to do the same.

- Requested the HP team to explain the SEA process to the GR officials. BLF has agreed HP to carry out the SEA and the GR officials are in attendance to confirm. The assignment is to take off as soon as the signing the contract. It is a top priority for both BLF and Mbirikani GR.

Min 02/26/04 Prof. Mwaura introduced the HP team. Informed the GR officials the SEA is being done by ENRM Associates the sister company of HP. HP has already done some work in the Amboseli Ecosystem such as the AEMP SEA-2013 and the Unganisha project-2021. ENRM Associates will deal with Planning projects and ENRM Associates will deal with environment and natural resources projects.

- Applied to carry out the Mbirikani SEA and are also working on the Eselenkei SEA.
- Have met some of the GR officials during the AEMP SEA in 2013, in the stakeholder consultation through to the validation workshop where the SEA was approved. The SEA was well received by NEMA and used as a sample SEA when launching the National SEA Guidelines in Kenya held in Nairobi. The event was attended by many including officials form the TZ government. Is happy the process was successful under leadership of the proponent Mr. Leiyan (former AET Chairman) and that it is still being put to good use of solving issues within the ecosystem.
- Explained the SEA process the benefits and how it interacts with the plan. The SEA is a procedure the government has activated to ensure environmental protection and sustainability. SEA is anchored in EMCA Cap 387, section 57A. it gives the opportunity to legitimize plans, policies and programmes, which are gazetted through the SEA and as a result enforcement will be legally binding.
- SEAs work with Plans, Policies and Programmes. Policies- new ones are analysed from the environmental angle for example the mining SEA that assessed the mining policy 2015 and Programmes for example in the geothermal sector.

- SEA is different from EIA in the sense that it takes a broader and long-term perspective. The EIA is a scale down for the projects recommended within the SEA.
- Particularly where there is implementation of a new plan for example this case, a land subdivision plan, there is need to countercheck the plan on the long term and broadly, to ensure the plan is properly aligned especially with regard with environmental obligations in the country, as well as in terms of the desires of the people affected by the plan implementation. The plan can properly work if everybody is on board- consensus.
- The first step is to screen the development plan, to ensure to obligations in the plan are aligned to various frameworks -local, county and national. Consultations with the GR members must be carried out to ensure they are satisfied with the sub division plan and confirm they are ok with the zonation, the permitted activities, the restricted activities. Information gathered from screening the plan and the views from stakeholder consultations will constitute a draft SEA report. A stakeholder workshop will be called to ensure what is in the draft report is true and propose changes. This will then be submitted to NEMA who will circulate it countrywide for 30 days to solicit comments at the national level. Comments received will be integrated in the report, after which NEMA will give their approval and a validation workshop is held which will include NEMA and other national stakeholders. Gazettement will follow which is the last stage of the SEA process.
- Shared copies of the legal frameworks to be looked at while assessing the land subdivision plan.

Min 03/26/04 Mr. Leiyan thanked Prof. Mwaura for the explanation and requested for the meeting to be brief because it is back to school week. GR officials are taking their children back to school.

Min 04/26/04 Prof. Mwaura shared copies of the workplan with all the member in the meeting.

Min 05/26/04 Mr. Bohnam asked for the clarification concerning subdivision issues raised in Selenkei to which Prof. Mwaura stated that first, that did not come up overwhelmingly and secondly, further subdivision of land especially the 47/42 acres is a matter of concern among some GR members especially the elderly, due to possession of individual title deeds. They were asking for measures through the SEA which can be put in place to prevent further subdivision and sale of the land. One of the proposals to troubleshoot that came us was the use of restriction through the clan, these were seen to still hold some power, thus the blessing of the clan leaders before any land land sale before any transaction is carried out must be sought.

Min 06/26/04 Mr. Leiyan stated that the consultations must be independent so that views collected are open and from the GR members themselves.

Min 07/26/04 Mr. Bonham added that it is important that the SEA process should not be seen as the conservationist (BLF) initiative but from the GR themselves. They are elated to be able to support the process because it is something that enables and creates a conducive environment for further investment.

Min 08/26/04 Mr. Mete concurred that BLF is supporting them and they appreciate very much. As much as there are challenges in the GR, as the leaders together with BLF must find a way to push forward the GR sustainably ad be beneficial to all. Without BLF,

Mbirikani's development will move backwards. Therefore, BLF should come out as the donor supporting/facilitating the GR and not running the process.

- On stakeholder consultations, there are should be a format for engagement. The officials present in the meeting to seat with the Mbirikani GR taskforce and sensitize them about the SEA as Prof. has done in the meeting for the GR officials. Thereafter, a meeting with the HP team and the taskforce/core team should be arranged. After this, there should be the opinion leaders meeting followed by the local community meetings. This method is preferred so that the consultations move smooth and fast.
- He explained the reason for the taskforce is that initially, GR officials were compromised and politicized to serve certain interests. This brought mistrust between them and the GR members. Thus, the taskforce was created to neutralize the perception of the GR officials. There are 15 members in the taskforce who are professionals in different fields and are selected from the GR. They have their own jobs/employment therefore no salary schedule set up for them.
- Recommended that the SEA document should completely match the subdivision plans to prevent any disputed from any opposition parties that may arise. Conservation is not taken easily by the GR members hence the decision to name it conservation/common grazing areas.
- As soon as the contract is signed, the GR officials inform the taskforce the work has commenced and arrange a meeting for the consultants and the taskforce.

Min 09/26/04 Mr. Leiyan reiterated the process should be fast tracked being an election year. Be careful the process doesn't become politicized as well as the change of guard at the county might stall the process. Secondly, land sale is of great concern, any parcel sold/lost is a big deal.

Min 10/26/04 Mr. Millar recommended the community meetings should be attended by GR official, taskforce representative, zone representative and the chief of the area aside from the community members.

- Emphasized that the GR officials' meetings as well as the taskforce meetings are being funded by carbon, therefore they should ensure carbon is spoken about in every meeting. This will demonstrate the meeting addressed carbon issues and land subdivision issues because carbon is a big thing in the rangelands.
- Gave a little background of the carbon project, Mbirikani GR and BLF are members of Chyulu Hills Conservation Trust which is the entity that manages the carbon project. The trust entails 4 GRs- Mbirikani, Rombo, Kuku I and Kuku II, KWS (Chyulu Hills N.P) and KFS (Kibwezi Forest Reserve) and 3 NGOs- David Sheldrick, BLF. The land owners are the 4 GRs, KWS and KFS. Carbon is an output for a successful subdivision plan.

Min 11/26/04 Prof. Mwaura thanked the members for the opportunity to work for them and promised to give it the best.

The meeting closed with a word of prayer.

Annex 2: Minutes of the Mbirikani GR Taskforce consultation meeting held at Paran Resort in Kimana on Tuesday 3rd May 2022 at 11.00 am

Participants

1. Mr. Joel Leshao – Chairman, MGR Taskforce
2. Eng. Wilson Tikwa – KURA/ Secretary, MGR Taskforce
3. Mr. Paul Ntiati - MGR Taskforce
4. Mr. Joseph Ntiopo – Chief/ MGR Taskforce
5. Mr. Soinke Ole Karambu – Vice Chair, MGR Taskforce
6. Mr. Kidiri Dan - MGR Taskforce
7. Mr. Keen Pararian - MGR Taskforce
8. Mr. Joseph Luyiana - MGR Taskforce
9. Eng. David Kerembu – KeRRA/MGR Taskforce
10. Mr. David Kayian - MGR Taskforce
11. Mr. Ngida Oloomoni – MGR Taskforce
12. Mr. Philip Kitesho - MGR Taskforce
13. Mr. Daniel Mapi – Secretary MGR
14. Mr. Joshua Suiyanka – Teasurer, MGR
15. Prof. Francis Mwaura – Team Leader, ENRM Associates
16. Mr. James Mutimu – Environmentalist, ENRM Associates
17. Ms. Tiffany Mwake – ENRM Associates

Min 01/03/05 Hon Leshao led introductions of the MGR Taskforce. Informed the members that the chairman is late but on the way. Welcomed ENRM Associates for introductions.

Min 02/03/05 Prof. Mwaura introduced the ENRM Associates team members and explained they are consultants from ENRM Associates, based in Nairobi. Undertake assignments in environment and NRM sectors. Have a sister company Habitat Planners who did the SEA for the AEMP in 2013. Thanked the MGR Taskforce for the opportunity to consult them.

Min 04/03/05 Hon Leshao requested the consultants to discuss with the taskforce what the SEA entails. The taskforce had agreed to gazette the plan in order to protect it, because they need the allocated land uses to remain as they are. Were advised by other stakeholders in the ecosystem that they need to gazette the plan and the taskforce approached their supporters/donors that they would wish to gazette the plan for which they were told a SEA must be done. The agenda of the meeting is therefore to take the taskforce members through what it entails had how the consultants intend to carry the work forward.

Min 05/03/05 Prof. Mwaura stated that for the members to clearly understand the SEA process and the workplan they will share a few documents with them and they read through as he explains.

- To some extend it is clear why the SEA is necessary. It is because its coming as a result of the decision by the GR to subdivide the land for which they have prepared a land subdivision and land use plan. This is already done. For the plan to be effectively

implemented/ enforced it needs to be legalized as per the law. Currently the plan has been approved at the county only. Through EMCA and other national legal frameworks it can be recognized nationally.

- As a result of sub division challenges may arise because previously they have been operating the GR with communal laws and now that the lands are under individual ownership, each land owner is empowered to make their own decisions. There needs to be an instrument to guide and ensure the benefits outweigh the hazards. Most especially wildlife corridors need protection from land use changes. The land use and subdivision plan MGR LSDP is what will be used,
- This is where the SEA comes in. It becomes a governance tool used hand in hand with the subdivision plan to ensure even is there are individual titles land zoning and use must be adhered to.
- NEMA is the office dealing with SEAs and must ensure all legal frameworks are integrated in the MGR LSDP. After this is approved gazettement follows for the legalization of the MGR LSDP
- After inception meeting between MGR officials and BLF, it was agreed that the MGR Taskforce must be part and parcel of the SEA process. It was recommended before consulting GR members, the Taskforce must be consulted first for their views and assist in SEA sensitization of the members before the consultants hit the ground.

Min 06/03/05 Mr. James Ndungu discussed the procedure for the SEA. MGR members have decided to leave the GR to individual land ownership. As much as there is a land subdivision and land use plan there may be other things that have been left out of the plan. The SEA looks into these gaps and tries to address them in the long term.

- Legalization of the plan is for it to be acceptable by the government. For instance, when there is a court case any other information that is not in the plan will be captured in the SEA thus the two documents work complementarily. Land use conflicts will arise from time to time in the GR because of change from pastoralism to agriculture up to wildlife corridors. The SEA will also capture the long term and short-term benefits as well as potential conflict and challenges that need to be addressed as early as now before they happen.
- Some objectives of the SEA include compliance screening of the MGR plan against relevant legal frameworks. Kajiado county should have a spatial plan, guidelines and regulations. There are national one as well. Land subdivision should not mean these laws are disregarded. The SEA will look into all these legal frameworks to investigate what they say concerning land subdivision and land use, settlement, sand harvesting, pastoralism in a subdivided landscape and advise in the SEA report. Also determine if they were considered in the plan, if there are gaps in the plan they will be captured in the SEA. The SEA is not a duplication of the land use plan.
- The consultants are preparing the SEA on behalf of the proponent who are the GR. They are the owners of SEA.
- Creating awareness of the land subdivision plan as a principal instrument of government. This is to clearly inform them land uses will change and there will be impacts such as scale down from 700 livestock to 100.
- The draft report will be prepared by the consultants and the presented to all the stakeholders involved for the to ascertain what they said is what is in the report. This will then be submitted to NEMA for review and comments from the public-countrywide. The comments from NEMA and the public will be integrated thereafter followed by a validation

workshop called by NEMA and then gazettement. After gazettement it can be referred to in any court of law, arbitration and as a reference document to the land subdivision plan.

Min 07/03/05 Prof. Mwaura explained a flowchart showing the entire SEA process with the legal frameworks, land use zonation and the stakeholders involved who must be consulted, and the GR the 9 different locations as well as how they integrate with each other.

- Informed the members that the consultants are aware the GR is into carbon credits as a way to boost benefits to its members.
- A self-explanatory workplan was given out to the members to have a look at the timelines. The assignment is to take place in 5 months, but during the inception meeting the GR officials and donor requested the process to be fast tracked. Though this may not be possible for the mandatory 30-day nationwide review.
- The meeting was then opened for a QnA session.

Min 08/03/05 Mr. Kidiri asked whether there is a Mbirikani GR conservation Plan to which the members answered yes. It was prepared by AET.

- On the legal frameworks, are there international level obligations that can be used for instance climate change?
- How long will the SEA process take? When can they expect the final product?

Min 09/03/05 Engineer Tikwa proposed the inception and scoping reports may need a week to prepare and submit to NEMA. Screenings of the frameworks has been allocated 2 months. This may be reduced to a month bringing the timeline up by a month. The consultants having worked in the landscape there is an element of familiarization, coupled with the ENRM team the issues of time should be saved.

- Considering we are going to enter the active campaign period in a month or two, the locals and politicians mental state will have turned politics on and everything else off. Though this should not lead to a compromised report.
- The sensitization plans for the taskforce are set for tentatively May and June so that they are done with awareness creation well before the elections. The consultants may join the meetings and do their consultations during this period.
- Appreciates the in depth well elaborated presentation done by the consultants, it was very necessary.

Min 10/03/05 Prof. Mwaura informed the Taskforce that the timeline concerns have been well noted but will not give an answer at the moment, until all the SEA consultants have been brought to the loop.

- Thanked the Taskforce for the consideration to join the team.

Min 11/03/05 Prof. Mwaura explained the SEA and ESIA are different though related. The SEA is at a higher level and looks at Policies, Programmes and Plans such as the MGR LSDP. It looks are the long term and broader perspective as compared to the ESIA which is at he local/project levels to determine the impacts from individual projects. These projects are normally identified in the SEA.

- The SEA should have gone hand in hand with the preparation of the MGR LSDP so that the SEA informs the plan. The trend is that most of the times the SEA is done after the PPPs have already been prepared.

Min 12/03/05 Hon Leshao thanked the consultants for their presentation and reiterated their main concern is the time for carrying out the SEA. They are already competing with situations happening on the ground. Have already allocated 10 acres for settlement to the members and are heading to allocating 31 acres for rangeland. Both have different restrictions and were hoping the SEA will be done to prevent members from selling and farming the rangeland. As much as they are talking of electioneering, they want to address a problem that is emerging. Even if the land owner sells, the buyer will find restriction already in place that they will have to adhere to.

Min 13/03/05 Prof. Mwaura requested Hon. Leshao to be the liaison person between the consultants and the taskforce. If there are any emerging issues during the assignment, they can be addressed through him. All members agreed.

Min 14/03/05 Eng. Tikwa asked whether the consultants during the inception meeting, were briefed by the GR officials the mission and spirit of what they want Mbirikani to be. The main aim of subdividing the land into portions is to protect the lager ecosystem from interference and degradation from haphazard encroachment, urban sprawl etc. Thus, decided on 2 acres for irrigation, 10 acres for settlement, 31 acres for rangeland and the rest of the land for conservation. The gazettement is to prevent further subdivision of the 31 acres into smaller plots. Rangeland and conservation areas are strictly protected hence stronger instrument for enforcement and implementation needed. These have been left as open spaces, the land owners will be shown the location but cannot do any development to the land.

- The GR is spread east and west, the rangelands are located on both sides, settlement is allocated along the pipeline and the road. Services are available to everybody; amenities such as schools are already present in the settlement area nobody has any business in the rangelands, they are mainly to sustain pastoralism.
- Suggested that the ENRM team can always have one person in the Taskforce sensitizations so that they can understand the MGR vision better.
- Clarified that the SEA initiative is from the GR and not the BLF although they will also benefit because they have common interests as well. The proponent is the GR. All communication should be directed through the GR officials/Taskforce. Once advised to do the SEA they brainstormed on where to get the funding. Wrote a letter to BLF which was accepted and got the ball rolling. All consultations a representative from the GR officials/Taskforce must be present.

Min 15/03/05 Mr. Kidiri asked what exactly are they to communicate to the community, doesn't want to create confusion or misconceptions.

Min 16/03/05 Mr. Ndungu explained they should inform the people of the relationship between the SEA and the LSDP. Demystify the SEA, what is it? It looks at PPPs and this one is a plan. The SEA is looking at the plan ensuring it is well done and comprehensive where there are gaps, they are well addressed. It looks at the long-term issues. What are the specific impacts that come with subdivision and integrate it with the LSDP to make sure there are no issues that are left hanging?

Min 17/03/05 A small brief can be prepared highlighting what Mr. Ndungu has said which will be shared with the Taskforce.

Min 18/03/05 Mr. Kidiri suggested that if there are other discussions to be held a zoom meeting can be organized.

Min 19/03/05 Mr. Ndungu said a revised workplan will be shared with the Taskforce so that the ENRM team can join in where the meetings overlap and where they don't the EMRM team proceeds on its own.

Min 20/03/05 Thanked the Taskforce for their input which has been very useful. Have seen new and effective opportunities that will help carry out the assignment more effectively.

- The meeting ended with the members breaking for lunch.

Annex 3: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at Emukutan Area (at Simba Cement Town Centre) on Tuesday 7th June 2022

Participants

1. Mr. Nteng'ena
2. Mr. Melubo Manina
3. Mr. Keteko Backson
4. Mr. Isaac Meijo
5. Mr. Parantai Mbarnoti
6. Mr. Olomayiani Backson
7. Mr. David Backson
8. Prof. Kiringe(Rapporteur)
9. Mr. David Manoa (Rapporteur)
10. Mr. Kisimir Saibulu(Taking Minutes)
11. Mr. David Kiseyia (Translator)

Min 01/07/06: Preliminaries:

- The session started at 1.11pm with a word of prayer from Isaac Meijo and he introduced the community members attending the meeting.
- Prof. John Kiringe who was the rapporteur for the session introduced the consultants and briefed the participants on the purpose of the SEA consultation meeting and requested them to participate fully and freely in the discussions.

Min 02/07/06: Familiarity and Acceptance of Community Members on MGR Land Use and Subdivision Plan

- Parantai Mbarnoti said that members of the group ranch were aware of the land use and subdivision plan. Members agreed with the group ranch leaders on the subdivision process whereby every member was allocated 10 acres for settlements.
- Melubo Manina seconded Parantai's views and said that members of MGR were aware of the subdivision process since they attended several meetings with their leaders concerning the subdivision process. Further, as one of the community opinion leaders, he was sensitized and involved in the entire process of MGR LSP.
- Olomayiani Backson supported Mr. Mbarnoti's and Mr. Manina's views. He added community members were familiar with group ranch LSP, and as a community, they agreed to do the subdivision for easy management and utilization of their land. The rest the participants (4) also said they were familiar and in acceptance with MGR LSP.

Min 03/07/06: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- David Backson stated he was aware of the process used to subdivide MGR, and briefly explained how it was done. The group ranch is subdivided in 5 key zones where all the members got equal acreage. Further, he pointed out that there were some differences among members and the group ranch leaders on the acreage to be allocated for settlements. Some proposed 5 acres, and others 20 acres but they eventually agreed each member would get 10 acres per member was reached between the community members and the GR leaders. Each member has been allocated 31 acres in the for rangelands

(pastoralism and wildlife zone), 2 acres for farming in the cultivation zone, and 29 acres for conservation (in the wildlife corridors, conservation and tourism zone) 1 acre for cement production (in the mining/industrial zone)

- Parantai Mbarnoti added that members were informed by the group ranches leaders on the 5 zones that will be created after subdivision of MGR.

Min 04/07/06: Familiarity and Acceptance of Community Members on Permitted Activities in Each MGR Subdivision Zone

- Parantai Mbarnoti stated they were aware and in agreement of the permitted activities in each of the group ranch zones. He explained that the 10 acres given to every member was for settlements, 2 acres for farming/agriculture, 26 acres for wildlife conservation and livestock grazing under extreme dry weather conditions, 1 acre for mining (cement production) and 31 acres for livestock grazing under extreme weather conditions. Members we expected to get some benefits in case the mining zone areas were leased through MGR cooperative society.
- David Backson added that the 2 acres members were allowed to cultivate, settle and drill water. Settlements and residential development were also permitted on the 10 acres, and livestock grazing under bad weather conditions on the 31 acres. In the 26 acres, wildlife conservation was permitted while mining for cement production was permitted in the 1 acre allocated to each member, and this will be done through MGR cooperative society.

Min 05/07/06: Familiarity and Acceptance of Community Members on Restricted Activities in the MGR Subdivision Zones-Especially the Conservation and Tourism Zone

- Parantai Mbarnoti explained the 31 acres was not for sale and no permanent settlements will be allowed. He further added that he had no idea on the restricted activities on the 26 acres allocated to each member.
- David Backson added on the 31 acres which every member was to get a tittle deed, no permanent settlements, no fencing and no transfer of ownership were allowed. The agreement between the members and their leaders was that the 26 acres area/zone was for use by wildlife since it had assisted them get bursaries for educating their children. Further, he suggested that wildlife should not be allowed to use the 31 acres zone unless the Kenya Wildlife Service (KWS) doubled the annual busary fund paid to the group ranch.
- Nteng'ena Saloni stated that members were not informed about the restricted activities in the 2 and 10 acres allocated to each member.

Min 06/07/06: Community Views on Duration and Review Of Restrictions Imposed On Mgr Subdivision Zones:

- Nteng'ena Saloni explained that it was agreed that the duration for the restrictions for the subdivision zones should be 30 years and reviewed after 10 years. This intended to give ample time for the current young generation to grow and get educated on how to manage the land.
- Isaac Meijo and David Backson reiterated that the 30 years duration and review after 10years will; a) allow the current young generation to grow, learn and understand the importance of land and how best it could be managed, b) give the community a better perspective on the impacts (positive and negative) of the restrictions sand change that will occur on their land, and, c) give them an opportunity to assess and learn how human population growth and settlements will have changed on the 10 acres allocated to each member for settlements.

Min 07/07/06: Closing Remarks:

Prof. John Kiringe thanked the members for their participation in the consultations and sharing their thoughts regarding the MGR SLP. Isaac Meijo on the other hand, thanked the consultants for gathering their views and for the session held between the community members and the consultants. The meeting was then adjourned 2.15 pm after a word of prayer from Isaac Meijo.

Annex 4: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at Enkanji-Naibor Area (at Luka Lepiro's home) on Wednesday 1st June 2022

Participants

1. Mr. John Partimo
2. Mr. Luka Lepriro
3. Mr. Jonah Lepiro-
4. Mr. Jacob Lotubulua
5. Mr. Melompuki Parteri
6. Mrs. Mairiamu Jonah
7. Mrs. Penninah Luka
8. Prof. Kiringe (Rapporteur)
9. Mr. David Manoa (Rapporteur)
10. Mr. Kisimir Saibulu (Taking Minutes)
11. Mr. David Kiseyia (Translator)

Min 01/01/06: Preliminaries:

- The meeting begun at 12.15 pm with a word of prayer from Mr. Luka Lepiro who then introduced the Enkanji-Naibor area members. David Manoa who was the rapporteur for the session introduced the consultants' team and briefed the participants the purpose of the SEA consultation meeting and urged members to fully contribute to the discussion.

Min 02/01/06: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Jacob Lotubulua informed the consultants they were aware of the LSP, and members were involved in the entire process by the MGR leadership, right from the time when sub-division was proposed to the demarcation. He added they had received 10 acres for settlement, and 2 acres for irrigation. He is optimistic that the rest of the allocation of 31 acres and 29 acres will go on smoothly.
- Johan Lepiro, who added that several meetings had been held by the MGR leadership and the members.
- By show of hands**,** all the MGR Enkanji-Naibor participants confirmed that they were familiar and in agreement with the land use and sub-division plan process.

Min 03/01/06: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Jonah Lepiro confirmed that he was aware of the LSP zones. He pointed out that there is 10 acres for settlement, 2 acres for cultivation, 29 acres for conservation and tourism, 2 acres for limestone mining and 31 acres for wildlife and grazing. This was seconded by Luka Lepiro as we as all the 7 participants.

Min 04/01/06: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- John Partimo said they were aware of the permitted activities in each zone which were agreed upon during the several meetings held by MGR members. That 10 acres was settlement, 2 acres for crop farming, 31 acres for grazing during the extreme drought, 2

acres for mining limestone, 26 acres for wildlife and tourism with proceeds shared equally among members.

Min 05/01/6: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division Zones Especially the Conservation and Tourism Zone

- Luka Lepriro said members are aware of the restricted activities in each zone. Members are not allowed to graze livestock in the 29 acres reserved for conservation and tourism, unless an agreement is reached between the investor and the community members. As for the 31 acres for grazing, members are not allowed to: fence, drill water, sub-divide, transfer and settle there. For the industries and mining zone, Luka said he was aware that members are not allowed to do any development other than limestones extractions as per agreement between MGR and the investor.
- David Manoa asked how members would respond to persistent drought if the restriction to graze in the 31 acres was limited to only 4 months.
- John Partimo explained that the MGR members would hold meetings and extend the period depending on the availability of pasture and rain patterns. The 4 months was just a guide based on the past rain and dry seasons duration. He further added that, if grass is not available in both the 10- and 31-acres zone, they will approach the investor in-charge of the 29 acres for engagements to graze their livestock there.
- Prof. John Kiringe asked the participants on what would happen if members were issued with title deed and restricted from selling, which is contrary to what one can do with a title deed as per the Kenya law.
- John Partimo answered stating that members have the right to review the restrictions after some years and make necessary adjustments to benefit the members.
- All the seven members raised their hands as a sigh of agreement and acceptance on the restricted activities in each zone.

Min 06/01/06: Min 06/30/05: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- Penninah Luka suggested that the review process should last for 10 years in order to give members time to check, access, cope and learn on the restrictions. She added that after 10 years, members will be much aware of the land issues including investment and livelihoods. Penninah views were supported by John Partimo who added that after 10 years the young generation will have obtained more knowledge, skills and land experts to deduce and advise on proper land-use options and activities.
- Luka Lepiro proposed that the restriction should last 30 years, and a review done after 10 years, this will ensure that members still have land for grazing.
- John Lepiro suggested that the review should be done after 5 years because it is a short time, yet enough for members to learn and make amendments without overburdening them. He compared his 5 years review period to the different political elective positions that last 5 years in Kenya.
- Prof. John Kiringe asked the participants if the review period had been agreed upon by community and MGR leaders.
- John Partimo responded by saying that the committee members and GR leaders had already agreed on the 10 years review period but was still sensitization members and capturing their views before calling for an AGM to make a general acceptance and agreement on the review period.

Min 07/01/06: Closing Remarks

- David Manoa thanked the members for cooperation and acceptance to answer the questions and giving out the much-needed information. The meeting was adjourned at 1.10pm after a word of prayer from Luka Lepiro.

Annex 5: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at KAG Chruch, Inkoisuk on Friday 3rd June 2022

Participants

1. Mr. Jermiah Lemiti
2. Mr. Joel Kipelin
3. Mr. Samuel Saruni
4. Mr. Jacob Ntasikoi
5. Mr. Alex Panian-
6. Mrs. Naomi Saitoti
7. Mrs. Leah Komolo
8. Prof. Kiringe (Rapporteur)
9. Mr. David Manoa (Rapporteur)
10. Mr. Kisimir Saibulu (Taking Minutes)
11. Mr. David Kiseyia (Translator)

Min 01/03/06: Preliminaries

- The meeting began at 9.35am with a word of prayers by Jeremiah Lemiti who also introduced community members. He then requested Prof. John Kiringe to introduce the consultants' team and brief the participants on the aim and objective of the meeting and why the opinions will be crucial in the future in managing and utilizing their land.

Min 02/03/06: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Joel Kipelian stated members are aware of the group ranch subdivision since they had held several meetings with group ranch leaders and committee leaders prior to the process. Every member was allocated 10 acres for their settlements, and this process had gone well. They also agreed members won't be charged for subdivision and issuance of title deeds. Instead, they agreed they would lease part of their land to Simba cement to get funds for sub-division.
- Samuel Saruni mentioned that members of the group ranch agreed to subdivide together with the leaders and management committee. This was done by holding several meetings in which members were informed about the subdivision idea and the process to be used. Prior to the subdivision process, a verification of the actual and true members including their correct names was done to ensure no new members were added. This also ensured no outsider got land since it would have created conflicts. After verification it was established that the true number of registered members was 4,227 and not 4,700 as indicated in the register document.
- Alex Panian stated the subdivision process started by determining the boundaries and size of the group ranch.
- Jeremiah Lemiti said before the subdivision, members and the MGR management committee held several meetings and agreed to go ahead with subdivision. They also agreed members won't bear the cost of the process. It was agreed each member would first be allocated 10 acres for settlement, and this was based on where they were staying at the time of subdivision. In addition, to allocation of the 10 acres, members and group ranch leaders agreed on some conditions and strategies since some places were densely populated and shifting of homesteads in such areas would be costly to families. They

considered the cost of relocating permanent structures and buildings, households with elderly people and the duration a homestead was located in a given area.

- By a show of hands, all the 7 members indicated they were aware of the MGR land use and sub-division plan, and the process used.

Min 03/03/06: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Jermiah Lemiti informed the consultants that members and the management committee agreed the group ranch would be divided into 5 key zones and members would be allocated land in each zone. 10 acres (for settlements) in the settlement zone, 2 acres (for farming) in the cultivation zone, 26 acres (for conservation) in the conservation zone, 2 acres in the mining zone, and 31 acres (for pastoralism) in the rangelands/pastoralism and wildlife use area/zone.
- By show of hands all the Inkoisuk participants indicated they aware, familiar and in acceptance on the 5 LSD Zones of their group ranch.

Min 04/03/06: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- Jeremiah Lemiti stated that upon agreement by members and the group ranch management, it was agreed as follows: -
  a) Each member would be allocated 10 acres for settlements, and the location was based on easy access to social amenities mainly schools, roads, water, electricity/ power and health facilities
  b) Cultivation/farming was on 2 acres per member, 26 acres for wildlife conservation though members could graze their livestock if a need arose, and 31 acres in the rangelands for use by wildlife and livestock. Benefits accrued from the conservation area (26 acres per member) would be shared equally among the members through the MGR cooperative society
  c) In the industrial and mining zone, each member would get 3 acres. When such areas were leased by investors by the MGR cooperative society, members will share the proceeds equally
- Samuel Saruni added that livestock grazing in the conservation and pastoralism zones will be overseen and managed by a grazing committee.
- By a show of hands, all the members indicated they knew and were aware of the permitted activities in each of the group ranch subdivision zones. They also said members had accepted and agreed with the same.

Min 05/03/06: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division Zones Especially the Conservation and Tourism Zone

- Jacob Ntasikoi elaborated members will be issued with title deeds for the 31 acres located in the conservation zone, but they won't be allowed to farm, fence, subdivide, construct permanent settlements, and drill water for their use. The zone will exclusively be used by livestock and wildlife. On the 26 acres allocated to each member in the conservation zone, members will use it to graze livestock under extreme weather conditions and in agreement with the management of the MGR cooperative society and any investor(s) who may have leased the land. No cutting of trees/vegetation or burning vegetation (e.g., charcoal burning) will be allowed in this zone.

- Samuel Saruni added that 2 acres allocated to each member were for farming and no cutting of trees and charcoal burning will be allowed except pruning of trees. Members were expected to manage the land well to avoid destroying the soil structure and reducing its fertility.
- It was noted that most members (6 out of 7) were not well informed on the restricted activities on the 2 and 10 acres allocated to them.

Min 06/03/06: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- Jeremiah Lemiti proposed a duration of 5 years for the restrictions for each zone and which should be reviewed. This will allow member to evaluate the impacts (negative and positive impacts) of the restrictions.
- Samuel Saruni and Alex Panian supported this proposal and argued that the restrictions were a new thing to the members, and they should therefore be reviewed early enough to determine their benefits and challenges. Based on the outcome, the restrictions can be extended or modified based on a well-informed decision.
- Leah Komolo suggested the restrictions should be in place and reviewed after 4 years to ensure they were not a burden to the members, and if they are found to be a challenge, they should be done away with.
- Kipelian argued that the restrictions should be evaluated early and if they were found to be suitable, they could be extended.
- Jacob Ntasikoi proposed a review of the restrictions after 3 years. He argued it was better to do a review of the restrictions within a short duration other than a long one. Based on the outcomes, new and better restrictions framework can then be put in place. This will also enable members address early enough any challenges and disappointments that might arise from the restrictions.
- Naomi Saitoti argued the restrictions should be in place for 6 years and reviewed after every 3 years to have the shortest time of assessing the prone and cons of the restrictions before a final decision was made.
- Samuel Saruni proposed a 10-year duration, and a review after 5 years was the best. He argued that the subdivision process in all the neighbouring group ranches was different from that of MGR. Instead MGR had pioneered demarcation of the land based on zones, and as such, putting in place restrictions for 5 years was too short a time to learn and understand their implications. He suggested that in case the cons of the restriction were too much and burdened the members, they could be adjusted appropriately after 5 years after a critical evaluation.

Min 07/03/06: Closing Remarks

- Prof. John Kiringe thanked the members for their cooperation and for sharing their views freely. Jacob Ntasikoi proposed there was a need to do further awareness to members on the restricted activities in the 2 and 10 acres since many members were not well informed. He thanked the consultants for the engagement and consultations. The meeting ended at 11.52am with a word of prayer by Jeremiah Lemiti.

Annex 6: Minutes of SEA the consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at K.A.G Church, Inkoroshoni on Monday 30th May 2022

Participants

1. Mr. Matayo Naini
2. Mr. Johnathan Kayian
3. Mr. David Kayia
4. Mrs. Susan Kirereyian
5. Mrs. Mary Joel
6. Mr Joshua Kasaine
7. Mr. Solomon Ntete
8. Mr. William Ntukai
9. Mr. David Manoa (Rapporteur)
10. Prof. Kiringe (Rapporteur)
11. Mr. Saibulu Kismir(Taking minutes)
12. Mr. David Kiseyia (Translator)

Min 01/30/5: Preliminaries

- The meeting began at 9.25am with a word of prayer from Mrs Susan Kerereyian and thereafter, Prof. Kiringe explained the purpose of the meeting. He requested David Kayian to introduce the community members attending the meeting after which he introduced the SEA team.

Min 02/30/5: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Matayo Naini said that the community was aware of the MGR sub-division plan and how the process was done. Several meetings were held by the group ranch leaders and the community during which all members agreed unanimously to subdivide the group ranch. They agreed on phases of subdivision of the group ranch process with Namelok, Inkoroshoni, Isinet, Kaleisirua and Enkaji-Naibor being subdivided during phase 1. Land in Olng'osua, Noosilale to Emukutan was to be subdivided during phase 2, and Ilchalai, Oltiasika, Lemasusu and Siamali area were to be subdivided in phase 3. After subdivision of the entire group ranch, each member was allocated 10 acres for settlement. He added that a meeting was recently held at Inkoroshoni Primary School to inform the members on the commencement of allocating and showing them 31 acres in the rangelands for livestock grazing. In his view, not every member was entitled to allocation of 2 acres for cultivation or farming.
- Susan Kirereyian also said she is aware and very familiar with group ranch LSP since the they are involved in every step of the sub-division process by the group ranch leaders and management committee through several meetings. She mentioned that she had been allocated 10 acres for settlement and 2 acres and was happy and positive on how the leaders had/were conducting the sub-division process. Moreover, community members in her area recently held a meeting with group ranch leaders regarding allocation of another 31 acres in the rangelands. Overall, she expressed her appreciation on how the leaders

had involved them in the subdivision process, which a done in a very open and transparent manner.

- All the 8 community members who participated in the meeting mentioned that they were familiar with the MGR land use and sub-division plan and were involved in the entire process by their leaders.

Min 03/30/05: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Susan Kirereyian said she was familiar with group ranch subdivision zones, and could tell the locations and boundaries of each zone since several meetings had been held (by community members, leaders, and group ranch management) informing them about the zones and where they were located.
- Matayo Naini also said he was familiar with the zones created after subdivision of the group ranch. He mentioned that in the past only a few group ranch politicians and well up members got titles for 2 acres (for farming) through the group ranch leaders but after the current sub-division every group member has been allocated 2 acres for cultivation and this was done in a fair and open manner.
- Johnathan Kayian also mentioned that he was aware and familiar about the zones set aside after subdivision of the group ranch. So far only 300 members out of 4,227 members were yet to be allocated their 2 acres for cultivation, though plans are underway to do this. All members will have a title deed for the 2 acres. Matayo Naini mentioned that all members had been allocated 2 acres for farming/cultivation.

Min 04/30/05: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- Johnathan Kayian stated through the MGR subdivision taskforce and group ranch leadership, members were educated and informed on the permitted activities in each zone, and members had accepted the same.
- Matayo Naini said that members were familiar with the restrictions for each zone and had accepted them. Prior to sub-division commencement several meetings were held between the community, local leaders and group ranch management committee informing them about the sub-division process including the permitted activities in each zone. He said that everything was deliberated on and clarity of issues of the subdivision was no longer an issue of concern. Each zone had its permittable activities and no one should object to them since the rules and laws imposed were discussed and clarified to all members.

Min 05/30/05: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division Zones Especially the Conservation and Tourism Zone

- Susan Kirereyian said that the members were familiar with the restricted activities in the subdivision zones including that set aside for wildlife conservation and tourism development. This was done through holding several meetings between the community, leaders, and group ranch management committees during which they were informed and educated on the restricted activities in each zone. She mentioned that all the members supported and agreed to the restricted activities in the conservation and tourism development zone.

- Matayo Naina added that though wildlife was not allowed on the member's 2 acres (for cultivation) and 10 acres (for settlement), the community continued to coexist with wildlife, and members loved them more than the love they had for their livestock.

Min 06/30/05: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- Johnathan Kayian, said that for the 31 acres allocated to members in the rangelands, all the prohibited activities (i.e., no permanent settlements, no water drilling, no fencing, no sub-division), should not be violated whatsoever despite members having titles for this land. All the members were informed and educated about the restrictions and it's the members who proposed or came up with them. Members also agreed that restrictions for prohibited activities were to be place for 20 years and would be reviewed after every 10 years to assess whether they were suitable and if members had benefited from the same. He also mentioned that even if a member sold the 10 acres allocated to them for settlements members who are not allowed to interfere with the 31 acres set aside for pastoralism development after subdivision.
- Susan Kerereyian mentioned that after MGR land subdivision process was done, members are the ones who will own the 31 acres in the rangelands, hence, there was a need to secure and abide by the laid rules and laws on prohibitable activities in this zone.
- David Kayian said that the leaders will continue sensitizing and creating awareness to all the members in different clusters of the group ranch to make them well informed on review and duration of the restricted activities. But this process was still ongoing in some other clusters. He suggested that due to increase in human population in the group ranch and need for land to settlement, there was a need to make the duration and review of the restrictions clearer and more open to all members.

Min 07/30/05: Closing Remarks

- Prof. Kiringe thanked the participants for agreeing to attend the consultation meeting and sharing their views freely. Matayo Naini said that they were grateful for the meeting and requested NEMA to partner with the community to secure their land and wildlife for posterity.

  Mary Joel closed the meeting with a word of prayer at 10.40am.

Annex 7: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at K.A.G Church, Isinet on Monday 30th May 2022

Participants

1. Mr. Joseph Luyiana
2. Mr. James Pararian
3. Mr. Jeremiah Tipape
4. Mr. Joshua Moreu
5. Mrs. Susana Moreu
6. Mrs. Susana Meteyian
7. Mr. John Mwato
8. Mr. David Manoa (Rapporteur)
9. Prof. Kiringe (Rapporteur)
10. Mr. Saibulu Kismir(Taking minutes)
11. Mr. David Kiseyia (Translator)

Min 01/30/5: Preliminaries

- The meeting started at 11.26am with prayers from Mr Joseph Luyiana, who thereafter introduced the participants for the consultations, and explained to them the purpose of the session. Prof. Kiringe who was the rapporteur for the meeting introduced the SEA team and briefly explained the purpose of the consultations. He requested the members to freely air their views on the various issues they will be asked about.

Min 02/30/5: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Joshua Moreu said that members were informed about the plan to subdivide the MGR through several general meetings held by the group ranch leaders and the community. It was in those meetings that members agreed the group ranch should be subdivided.
- Jeremiah Tipape stated each member had been allocated 10 acres for settlement and were waiting for another 31 acres in the rangelands for use by livestock especially during times of droughts. Another 2 acres was allocated to each member for farming purposes.
- All the 7 participants collectively agreed they were familiar with MGR LSP and all the members had accepted it.

Min 03/30/05: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Susana Moreu said she was familiar with the group ranch subdivision plan and the zones set aside. She mentioned that members were allocated 2 acres for cultivation, 31 acres for pastoralism where subdivision was not permitted, and another 10 acres for settlement.
- Susana Meteyian mentioned that she was aware and familiar with 3 zones established after the group ranch subdivision, and she wanted to know which were the other zones.
- James Pararian answered her of the industrial/ mining and conservation and tourism zones were also set aside as well, which means there was a total of 5 zones in the group ranch after subdivision.
- Joshua Moreu asked how 29 acres of land were established and divided among the members.

- James Pararian responded and said that 26 acres are purely secured for conservancies and wildlife dispersal areas, and 3 acres per member adding to 29 acres per member were set aside for extraction of limestone and other natural resources. The 'Empakaai' area (a huge hollow point where rainwater collected and used by both wildlife and livestock) was also part of this land through it was not subdivided and allocated to members.

Min 04/30/05: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- Susana Meteyian stated that members were informed by the group ranch management about the permitted activities in the 31 acres of land meant for livestock and wildlife. She mentioned the area/land was purely meant for grazing of livestock by the members.
- Joseph Luyiana added he was aware of the permitted activities in all the 5 zones of the group ranch. The 2 acres (with a title deed) was meant for cultivation, 10 acres for settlement and residential development, 31 acres (with a title deed with restrictions) was specifically meant for livestock grazing and pastoral development. Use of the 31 acres zone by livestock was to be used during times of drought, and not fencing and subdivision was allowed. However, he said that he can sell this land, but the buyer was expected to strictly adhere to the agreed and permitted activities and associated restrictions.
- James Pararian mentioned that the intention of setting aside the 31 acres by each member was for pastoral development, and secure and rampant land sale to other tribes by majority. This would allow the current young children to grown up and get more knowledge and understanding on how to utilize and manage the land for great socio-economic returns to the community.
- David Manoa asked what would happen in case a member sold the 31 acres after getting a title deed.
- Joseph Luyiana explained while ownership changes of the 31 acres can occur, resources use rights won't change.
- Overall, the 7 community members said they were aware and familiar with the permitted activities in each subdivision zone and group ranch members had accepted the same.

Min 05/30/05: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division Zones Especially the Conservation and Tourism Zone

- Joseph Luyiana said that the conservation and tourism development zone belonged to all the members under Mbirikani GR Cooperative Society, and he was aware of the restricted activities in this area. But the restriction should not be strictly adhered to, since at times drought conditions might become severe, persistent and unbearable, which will then force the community to graze in this zone. He also mentioned that it was agreed that members who will graze livestock in this area will be charged.
- James Pararian stated that it was agreed in future, they will demand compensation when sub-division was completed for both 31 acres in the livestock and wildlife use area and from Mbirikani Group Ranch Cooperative Society (MGRCS). In case of livestock predation and human death by wildlife in these two zones, members will demand compensation from the Kenya Wildlife Service (KWS) as a state agency mandated agency to protect and manage wildlife. They will also charge KWS for use of the two zones by wildlife.
- Joseph Luyiana added that due to the harsh rules imposed on these conservation areas, members should be paid Carbon credits either to individuals or through the MGR

cooperative society. David Manoa asked whether KWS was informed on proposed compensation issues. James Pararian responded that during deliberations on the plan and process of sub-dividing MGR, KWS, other conservation stakeholders in the Amboseli region were invited and involved on demarcation of the wildlife movement corridors. Further, KWS will be informed about the compensation issues when the subdivision process was completed.

- All the 7 participants said that they were familiar (including other community members in the group ranch) with the restricted activities in the conservation and tourism development zone and had accepted and agreed to the same.

Min 06/30/05: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- John Mwato, said that his understanding was that the duration for the restrictions for the subdivision zones was 30 years, but they would be reviewed after 10 years, and this is what was agreed by the members and the group ranch management committee. Personally, he had no problem with this arrangement. These views were supported by
- James Pararian, concurred that after 10years of the restrictions many things will have changed and at that time, it will be necessary to them.
- According to Susana Meteyian, the group ranch committee and leadership proposed the restriction should be 20 years and after negotiating with the community, it was agreed they should be reviewed after 10 years.
- Susana Moreu proposed that women should be involved in this process of agreeing on the duration of the restrictions since it appeared, they had been neglected and their husbands were selling the 10 acres allocated for settlement without their consent. This is in turn ruining their children's' future as they will lack land to settle on when they grow up.

Min 07/30/05: Closing Remarks

The meeting adjourned at 12.51pm with Prof. Kiringe making some remarks, and thereafter, the session was closed with prayers by Joseph Luyiana.

Annex 8: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at Kalesirua Market Centre on Monday 30th May 2022

Participants

1. Mr. James Selengia
2. Mr. Daniel Kirasi
3. Mrs. Agnes Mwato
4. Mrs. Peninnah Joseph
5. Mr. Musa Melita
6. Mr Saitoti Metui
7. Mr. Samuel Kitisia
8. Mr. David Manoa (Rapporteur)
9. Prof. Kiringe (Rapporteur)
10. Mr. Saibulu Kismir(Taking minutes)
11. Mr. David Kiseyia (Translator)

Min 01/30/5: Preliminaries

- The meeting started at 2.40pm with prayers by Mrs. Peninnah Joseph after which James Selengia introduced members of the community participating in the consultations. David Manoa was the rapporteur for the session introduced the team members gathering views of MGR members. He also briefly explained the purpose of the consultation and asked participants to share their opinions and suggestions in a free and open manner.

Min 02/30/5: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Daniel Kirasi said the group ranch members, him included were aware and familiar with the land use and sub-division plan. They were informed about the plan through various meetings that were held by leaders of group ranch and the community and he is satisfied with the process of the subdivision.
- These sentiments were supported by Saitoti Metui who mentioned that several meetings were held by the ranch management and members during which they agreed to subdivide it. These education barazas (meetings) were aimed at sensitization community members about the planned subdivision of the group ranch and what it would entail including the process to be used. The awareness meetings and programmes were done in different villages across the entire group ranch. This was followed by a general meeting to the finalize the sub-division agreement, and the subdivision process was launched at Mbirikani town area and was attended by almost all members from all the settlement clusters in the group ranch.

Min 03/30/05: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Agnes Mwato said she aware and familiar with the MGR subdivision zones, and each member will be allocated 31 acres for livestock grazing (during times of drought) and use by wildlife, 10 acres for settlements, 2 acres for cultivation, and 29 acres for conservancies under the management of the Mbirikani Group Ranch Cooperative Society. But for the latter parcels of later, members would be issued with a title deed and the land will be owned communally by all the members under the cooperative society. She also mentioned

that there were restrictions (for period of 30 years) on how a member can use the 31 acres located in the pastoralism and wildlife use zone.

- James Selengia also mentioned that he was aware of the group ranch subdivision zones. Each member has been allocated the land as follows; 2 acres (with title deed) for cultivation,10 acres (with title) for settlements (one can drilling water and put-up residential houses), 31 acres (with title deed) for purely pastoralism development and grazing mainly during times of drought, and 29 acres for conservancies and tourism development. Benefits accrued from the latter (29 acres) will be shared equally among members and will be managed under a cooperative society.

Min 04/30/05: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- James Selengia said the members are aware and familiar with the permitted activities in the group ranch subdivision zones, and these were as follows; cultivation in 2 acres allocated to each member, settlements in 10 acres, livestock grazing mainly during times of drought in the 31 acres allocated to each member while limestone extraction will only be done in the industrial/mining zone(s) through leasing of the land.

Min 05/30/05: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division zones especially the conservation and tourism zone

- Musa Melita asked James Selengia whether members will be permitted to have a temporary settlement on the 31 acres allocated to them to which James responded that members will be allowed to construct temporary bomas specifically during drought to protect their livestock. He added that in for these parcels of land, members were entitled to a title deed but can't settle permanently, erect fences or drill water whatsoever.
- Daniel Kirasi wondered whether members will be allowed to harvest sand and gravel if they were found on the 31 acres allocated to them since they had a title deed for the same to which James answered that this won't be permitted including other natural resources extraction opportunities. No member will be permitted to hinder or deny others use of resources on their 31 acres especially grazing by livestock. Further, members will be charged for grazing their cows in the 31 acres during times of drought, and the money will be paid to the cooperative society, and thereafter shared equally among the members. For the 29 acres for conservancies and tourism, agreement with the investor or managing organization to all livestock to graze in if drought persist and seasonal changes.

Min 06/30/05: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- James Selengia stated that members had agreed that restrictions for the 31 acres zones will be in place for a duration of 30 years and will be reviewed after every 10 years to establish whether there were any benefits, and if these were not there, the restrictions will be done away with.
- According to Saitoti Metui, the review process of the restrictions might not be relevant in the near future since some members had already sold their 10 acres for settlement, 2 acres for cultivation and even the 31 acres before title deeds were issued. Though the intention of the restrictions was to secure land for the current young generations, there was a need to emphasis on the importance of avoiding change of land ownership by members.

- James Selengia asked why the consultants were gathering their views on the group ranch subdivision.
- Manoa said this was meant to strengthen MGR LSP through gazettement by the national government and assess whether it was aligned to relevant legal and policy frameworks.

Min 07/30/05: Closing Remarks

David Manoa thanked the participants for agreeing to attend the consultations meeting and appreciated their views. The meeting ended at 3.42pm with a word of prayer by Samuel Kitisia.

Annex 9: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at Imbirikani Town on Friday 3rd June 2022.

Participants

1. Mr. Moses Ole Kilowua
2. Mr. Leparakuo Ole Marti
3. Mr. Joseph Ngida Oloomoni
4. Mrs. Ann Metito
5. Mr. James Kasaine
6. Mr. John Saiko
7. Prof. John Kiringe (Rapporteur)
8. Mr. David Manoa (Rapporteur)
9. Mr. Kisimir Saibulu (Taking Minutes)
10. Mr. David Kiseyia (Translator)

Min 01/03/06: Preliminaries

- The meeting started at 12.25 pm with a prayer from Ann Metito. Joseph Ngida Oloomoni welcomed consultants' team and introduced the Imbirikani zone participants. David Manoa introduced the consultants and outlined the format for the consultations and emphasized the importance of the public participation in decision making.

Min 02/03/06: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Leparakuo Ole Marti informed the consultants that they were involved and informed by the group ranch leaders and committee leaders prior to the process. Every member had been issued with the 10 acres settlement and the 31 acres allocation is ongoing.
- Moses Ole Kilowua said he is aware of the LSP and the MGR land subdivision can be traced back many years ago. The subdivision has been handled by different MGR leadership. The then MGR chairman, Solomon Kotoke sub-divided Namelok and Isinet Wetlands into 2 acres for members. Former chairman, Joshua Kilitia processed some title deed for member until the current leadership of Daniel Metui took over. Ole Kilowa believes that Daniel Metui will complete the process by issuing title not only for the farming zones by all other zones as stated in the MGR LSP.
- Joseph Ngida Oloomoni affirmed that he was aware of the MGR LSP, as several meetings had been held to inform and sensitize the community members prior to the process. He added that opinion leader's views were gathered, and an AGM was called to all members.
- Ann Metito said that members were informed about the subdivision through the AGM.
- Leluan Kipees, explained that LSP has been a long process since-Daniel Metui's 2017 decision to sub-divide the group ranch and offer each member 5 acres for settlement failed. He added that, the MGR committees and formed taskforces had a hard time to sensitize and make members understand the importance of land sub-division.
- By a show of hands all the participant said they were familiar with the group ranch land use and sub-division plan and process used

Min 03/03/06: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Moses Ole Kilowua was aware of the 5 land subdivision zones. He explained that, there are 10 acres for settlement, 2 acres for irrigation/wetland areas, 26 acres for communal conservation, 2 acres for cement and mining and 31 acres for rangelands. All the particpants seconded Ole Kilowua's explanation. By show of hands, all the 5 Mbirikani zone participants acknowledged that they were familiar and in acceptance on the 5 lsd zones.

Min 04/03/06: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- Leparakuo Ole Marti said MGR members are familiar with the permitted activities. He outlined that; 10 acres given to every member with the consideration of availability and nearness to social amenities-schools, roads, water, power and hospitals was agreed prior. The zone is meant for settlement and cultivation if there is availability of water. The 2 acres are for cultivation, 31 for grazing livestock at extreme conditions, 26 acres for conservation and tourism, and 2 acres for cement and mining (Commercial Investments-leasing through donor and any potential investor for MGRCS shares).

Min 05/03/06: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division Zones Especially the Conservation and Tourism Zone

- Moses Ole Kilowua pointed out that, on the 26 acres (no title to be issued to any member) grazing is not allowed unless an agreement is reached between the investor and the community members through the MGR Cooperative Society. On 31 acres, there restrictions agreed on are, no fencing, no water drilling, no sub-division, land was not transferrable, and no permanent settlement are accepted. On the 10 acres settlement zone, no factory/ industries and no row buildings are accepted. On the 2 acres cultivation zone, it was agreed that there shall be no tree cutting (only pruning), no charcoal burning and any practices that destroys the soil structure and fertility.
- Although all the members confirmed that they were informed about the restriction on the 31 acres and 26 acres zones, they were not aware of the restricted activities on the 2 acres and 10 acres as detailed in the MGR LSP.

Min 06/03/06: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- Leparakuo Ole Marti proposed duration of 10 years and a review after 5 years in order to check the restrictions implications before deciding on addition or doing away with restrictions.
- Moses Ole Kilowua suggested that a duration of 30 years with review after 10 years was ideal. He attributed his suggestion to the fact that after 10 years the young generation will have earned more knowledge and expertise to manage their land and diversify investment. He said that the restriction will help to stop the ongoing selling of the allocated land to members for the sake of the future generation.
- Ann Metito proposed that the review should be done after 3 years so that they can able to see impacts of the restrictions and whether it beneficial to members or harmful for amendment.
- Joseph Ngida Oloomoni, proposed 30 years duration and 10 years of review-in order to preserve Maasai culture, prevent land grabbing and unplanned sell of land by members. He added that the plan to have at least each homestead to have one person with a diploma and above can help with the management of the land.

Min 07/03/06: Closing Remarks

- David Manoa thanked the Mbirikani members for their views and cooperation. The meeting was adjourned at 1.35 pm with a word of prayer from Moses Ole Kilowua.

Annex 10: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at Olbili on Tuesday 7th June 2022

Participants

1. Mr. Kitisia Munenke
2. Mr. Mepukori Makarot
3. Mr. Kudaos Munenke
4. Mr. Melita Sarbabi
5. Mr. Mepukori Malei
6. Mrs. Meikan Kitisia
7. Mrs. Lucy Leyiare
8. Prof. Kiringe (Rapporteur)
9. Mr. David Manoa (Rapporteur)
10. Mr. Kisimir Saibulu (Taking Minutes)
11. Mr. David Kiseyia (Translator)

Min 01/07/06: Preliminaries

- The meeting started at 8.29am by Mr. Kitisia Munenke welcoming the consultant team, and introduction of the rest of community participants. David Manoa who was the rapporteur for the session introduced the consultant team and briefed the participants on the purpose of the SEA consultation meeting and requested members to fully point out their views as much as possible.

Min 02/07/06: Familiarity and Acceptance of Community Members on MGR Land Use and Subdivision Plan

- Mepukori Malei said that the Mbirikani Community members are the ones who requested the group ranch leaders subdivide their land and issue each member a share. In addition to fear of losing their land if they did not adhere to the national government directive that all communal lands to be converted to private land parcels. He confirmed that every member got the 10 acres for settlement and 31 acres were being processed for allocation to the members.

Min 03/07/06: Familiarity and Acceptance of Community Members on MGR The Land Sub-Division Zones

- Kitisia Munenke confirmed that the members are aware of the 5 LSP zones. He pointed out that there are 31 acres for rangelands, 2 acres for crop farming, 10 acres for settlement, 29 acres for conservation and 1 acre for cement/lime stone mining.
- Mepukori Malei suggested that the group ranch leaders should have allocated 10 acres for conservation and 31 acres for settlement to take care of the anticipated human population growth in the years to come.
- Kitisia Munenke argued the 10 acres will be enough for all members to settle in as majority of the members within the ranch are pastoralist hence a need to secure more land for livestock grazing.

Min 04/07/06: Familiarity and Acceptance of Community Members on Permitted Activities in Each MGR Subdivision Zone

- Mepukori Makarot said that they were aware of the permitted activities in each zone. He explained that the 10 acres given to every member was for settlement, 2 acres for cultivation, 29 acres for conservation and tourism development, 31 acres for grazing during the extreme drought and the 1 acre for cement would benefit the members through shares accrued from leasing to a potential investor.
- Mrs. Meikan Kitisia on asked what would happen if a husband sold the 10 acres for settlement without family members consent.
- Prof. Kiringe answered as per the Kenya law, all family members especially the spouse must be involved and approve the sale of the land, otherwise such transactions will be null and void.

Min 05/07/06: Familiarity and Acceptance of Community Members on Restricted Activities in The MGR Subdivision Zones-Especially the Conservation and Tourism Zone

- Mrs. Meikan Kitisia said she is aware that on the 31 acres she was aware that members cannot sell or cultivate. She also said that the 10 acres for settlement, 1 acre for limestone mining and 2 acres for faming cannot be sold. She is not aware of the restricted activities on the 29 acres reserved for conservation and tourism.
- Mepukori Malei pointed out that,on the 31 acres which every member will be given a tittle deed, permanent settlements and farming are not allowed.
- Mepukori Makarot on the other hand, said that no vegetation burning, no charcoal burning and no tree cutting will be permitted on the 29 acres. He further stated that, members were not aware of the restrictions on the 2 for farming and 10 acres settlements.
- Mr. Malei who said that many people had sold their 10 acres of land and hence the restrictions seem not be adhered to.

Min 06/07/06: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones:

- Mepukori Malei stated all the Orbili cluster in general after MGR taskforce sensitization and education meetings held in their area to enlighten them on the imposed restrictions, all agreed duration of 30 years and a review period of 10 years. This was because, the period will give the members enough time to see the impacts of the restrictions.
- Mr. Makarot argued such a duration was sufficient as it will ensure that the young generation will have got educated to make meaningful decisions and members prevented from selling their land for short term gains at the expense of the future generation. All the Olbili members unanimously agreed with the above proposal.

Min 07/07/06: Closing Remarks:

- David Manoa thanked the members and emphasized on the need of them to secure their land for current and future generations, as they purely rely on land for livelihoods. He added that SEA report will help govern and protect their land against malpractices that can jeopardize human lives, wildlife and livestock. Mr. Kitisia Munenke on the other hand, thanked the consultants' team for coming to take their views on SLP. The meeting was adjourned at 9.30 am after a word of prayer from Mr. Meikan Kitisia.

Annex 11: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at Olng'osua/Olshilishilis on Wednesday 1st June 2022

Participants

1. Mr. Ole Sayiore
2. Mr. Baba Tapuka
3. Mr. Julius Leshinka
4. Mr. Nickson Metui
5. Mrs. Joyce Malei
6. Mrs. Margaret Lesinko
7. Mr. David Lekatoo
8. Mr. Ntiki Ole Moipai-
9. Mr. Joseph Lekatoo Manto
10. Mr. Munyee Toret
11. Prof. Kiringe (Rapporteur)
12. Mr. David Manoa (Rapporteur)
13. Mr. Kisimir Saibulu (Taking Minutes)
14. Mr. David Kiseyia (Translator)

Min 01/01/06: Preliminaries

- The meeting started at 14.10 pm with a word of prayer from Mrs. Margaret Lesinko. Mr. Ole Sayiore then introduced the rest of the Olngosua participants. David Manoa who was a rapporteur for the session introduced consultant team and briefly explained the purpose of the meeting and encouraged the participants to freely contribute to the discussions.

Min 02/01/06: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Munyee Toret said that they were informed and involved by the group ranch committee and leaders on the LSP. Another participant,
- Joseph Manto explained prior to commencement of sub-division process, members were involved in all steps and the process was fairly done with each members receiving their share of the land as agreed during the AGM.
- Julius Leshinka added prior to land demarcation process, members were invited and attended 4 AGMs to discuss and share their concerns.
- Mrs. Joyce Malei added that the gender issue was considered during the meetings.
- Baba Tapuka affirmed that they were involved and that they were issued with the 2 acres for cultivation and 10 acres for settlement as agreed during the meeting. He however concerned that the method proposed for allocating 31 acres (random picking of a number from a bucket) might disadvantage members as they can end up being allocated land that is too far from their settlement area.
- Nickson Metui, said that the LSP has gone on very well. He attributed this to the member verification that was done to ensure only the genuine membership got the land. Verification and cleaning of the MGR register reduced the membership from 4500 to 4227.

Min 03/01/06 Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Joseph Manto said he was aware of the MGR subdivision zones. He explained that 2 acres was farming, 10 acres for cultivation, 31 acres for livestock grazing and 29 acres for conservation and tourism (with 3 acres for leasing to limestone investor).
- Nickson Metui, confirmed that he was aware of the 5 zones, such as 29 acres for conservation and was categorized into forested and open savannah areas (to avoid biasness and favoritism on the process during subdivision) with every member allocated 13 acres on forested area and 13 on open savannah section.

Min 04/01/06: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- Mr. Ole Sayiore said he was aware of the permitted activities in each and elaborated by stating that the 31 acres was purely for pastoral development and grazing of livestock. The 10 acres is for settlement, 26 acres for conservation and tourism investment, and 2 acres for farming for people to feed their families.
- Nickson Metui also affirmed he knew the permitted activities in each zone and supported Ole Sayiore explanation. In general, all the 10 Olgosua participants were aware, agreed and accepted the permitted activities in each zone.

Min 05//01/06: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division Zones Especially the Conservation and Tourism Zone

- Nickson Metui said that members were aware of the restricted activities in each zone, and he further pointed out in the 31 acres there is no subdivision, no fencing, no water drilling, and no permanent settlement accepted for more than 4 months. The 29 acres for conservation that, despite the fact that grazing isn't permitted, if drought persist, an agreement will be discussed and arrived between the investor and the community members.
- Mr. Ole Sayiore confirmed that, no title deed is issued to members for the industrial and mining zones and the 29 acres for conservation.
- Nickson Metui pointed out that, restrictions governing the use of 31 acres will be dictated and agreed by the community depending on the change in rain seasons or prolonged droughts.

Min 06/01/06: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- Munyee Toret proposed a review after 10 years in order to test the impacts of restrictions in different zones.
- Mr. Ole Sayiore said that the MGR members were waiting for the AGM to discuss the restrictions. Majority of the people had suggested a review to be done after 10 years.
- Margaret Lesinko supported a review after 10 years saying it was a sufficient for the young generation to get education and be in a position to manage and diversify land use options other than selling it cheaply. She further added if the 31 acres is not managed and restrictions maintained, some members will still sell the land thus jeopardizing young generation future and livelihoods.

Min 07/01/06: Closing Remarks

- David Manoa thanked the members for their overwhelming cooperation, reasonable ideas and views that suited the ongoing and already demarcated areas within MGR and subdivision and its future in general. The meeting was adjourned at 15.30 pm with a word of prayer by Margaret Lesinko.

Annex 12: Minutes of the SEA consultation meeting for Mbirikani Group Ranch Land Use and Sub-division Plan held at Oltiasika on Thursday 2nd June 2022

Participants

1. Mr. John Saiperere
2. Mr. Joseph Shaangua
3. Mr. Alfred Lenkishon
4. Mr. Solomon Olamayiani
5. Mrs. Leah Jacob
6. Mrs. Faith Musa
7. Mrs. Lucy David
8. Mr. David Manoa (Rapporteur)
9. Prof. Kiringe (Rapporteur)
10. Mr. Saibulu Kismir(Taking minutes)
11. Mr. David Kiseyia (Translator)

Min 01/02/06: Preliminaries

- Mr. John Saiperere opened the meeting with prayers and the meeting started at exactly 9.57 am. He then introduced the community members participating in the consultations. Prof. Kiringe introduced the consultants and briefly explained the purpose and aim of the consultations. He also elaborated the reasons for undertaking the MGR LSP SEA.

Min 02/02/06: Familiarity and Acceptance of Community Members on MGR Land Use and Sub-Division Plan

- Solomon Olomayiani stated the community members are aware of the MGR SLP, since members were involved and informed by the group ranch leaders and MGR management committee about the subdivision and the process that was to be followed. Members were not charged for the subdivision unlike other group ranches in the region and he was happy about this. Members were still waiting to be allocated 31 acres in the rangelands, and he was aware there were restrictions put for this land mainly to avoid sale by members.
- Leah Jacob also mentioned she was aware of the MGR SLP, and members were not charged any money for the subdivision. She said this was a good gesture and thanked the group ranch management committee. Since members had been allocated 2 and 10 acres, this had made her aware and familiar with the LSP. She was positive about the subdivision process and thankful to the group ranch leaders and management committee for allocating member 2 and 10 acres without making any payment on the same.
- Alfred Lenkishon pointed out members were informed and agreed on the LSP process.
- Joseph Shaangua stated, before the process, the opinion leaders were involved, and all villages in the group ranch were notified on the same through several meetings. Eventually an annual general meeting was held in which all the members agreed on the subdivision process and the zones to be created. Members were also briefed on the zones after subdivision.

Min 03/02/06: Familiarity and Acceptance of Community Members on MGR Land Sub-Division Zones

- Alfred Lenkishon said that there were 5 zones created after MGR subdivision. He further clarified that each member would get three title deeds for the following zones: 10 acres

in the settlements area, 2 acres in the cultivation area, and 31 acres in the livestock grazing area(rangelands). In addition, each member was entitled to 29 acres in the conservation zone and 2 acres in the industrial/mining zone, but these land parcels won't have title deeds.

- Faith Musa and Lucy David stated they were only aware of 3 zones where members would be allocated land: 10 acres in the settlements zone, 31 acres in the livestock grazing zone (rangelands) and 2 acres in the farming zone for cultivation purposes.
- Leah Jacob mentioned she knew the 5 zones that had been agreed and set aside after the group ranch subdivision.

Min 04/02/06: Familiarity and Acceptance of Community Members on Permitted Activities in Each Group Ranch Subdivision Zone

- Lucy David said she was aware and familiar with the permitted activities in the subdivision zones, and these are agreed upon by members and the group ranch committee. The activities were as follows: -
    a) Settlement zone (for the 10 acres allocated to each member): for residential development, water drilling and further sub-divisions
    b) Cultivation to be done on the 2 acres issued to members in the farming zone
    c) Conservation in the 29 acres allocated to each member in the conservation and tourism zone
    d) Livestock grazing in the 31 acres allocated to each member in the communal pastoralism use zone. She mentioned that sale of this land was allowed but the buyer must agree and abide by the imposed restrictions
    e) Industries and mining area where each member owned 2 acres for minerals extraction
- All the 7 members indicated they were in agreement with the permitted activities in each zone.

Min 05/02/06: Familiarity and Agreement of Community Members on Restricted Activities in The MGR Land Sub-Division Zones Especially the Conservation and Tourism Zone

- Alfred Lenkishon said he knew the restrictions for the 31 and 2 acres allocated to each member under their respective zones. On the 31 acres, i.e., no fencing, no drilling for water, no sub-division, and permanent settlements were not allowed. Grazing by livestock was dependent on the season and availability of grass, and this was for 3 months only. For the 29 acres allocated in the conservation zone, its use by livestock was not allowed unless an agreement between investors and the community members was put in place. In the industrial and mining zone, no interference by unnecessary development was permitted, and the area was to be used for limestone extraction, and the proceeds obtained will be shared equally among all the members.
- John Saiperere mentioned that he also knew some of the restricted activities in the zones created after the group ranch subdivision. For instance, in the 31 acres zone, no selling, no drilling for water, no farming, and no permanent settlements were allowed. He further added that, on the 26 acres zone (with no title and was communally owned), livestock grazing was supposed to be done based on an agreement between the management of the Mbirikani Group Ranch Cooperative Society (acting on behalf the community) and the investor operating in the zone.

Min 06/02/06: Community Views on Duration and Review of Restrictions Imposed on MGR Subdivision Zones

- Leah Jacob proposed that the restriction should be in place for 10 years to give members time to assess whether they were beneficial or not. If there were no benefits after review, they should be done away with, and if there're benefits, they should continue being in place and if necessary, make some changes.
- Solomon Olomayiani suggested the restrictions should be in place for 5 years, after which they should be reviewed. To him, this was a reasonable short time to assess whether they were beneficial to the members, and he based this duration on the current system of electing political leaders in the country which is mainly for 5 years.
- Alfred Lenkishon proposed the restrictions should be place for 10 years before they were reviewed. He argued this will give community members ample time to become more aware and understand the land and how to manage it effectively. Additionally, the current young generations will have grown into adults with a better understanding and knowledge on how the land should be managed. They will also be in a better position to appreciate the importance of the land instead of viewing it from a monetary dimension especially through rampant sale. He added that, after 10 years the human population will have increased, and the 10 acres allocated to members for settlements won't meet and sustain their needs. This will necessitate review of the restrictions so that they could be adjusted accordingly.
- John Saiperere suggested the duration of the restriction should be 30 years, and a review time of every 10 years. This will give members ample time to assess the benefits and challenges associated with the restrictions (i.e., evaluate the restrictions advantages and disadvantages in detail). He further added that in case the challenges arising from the restrictions were too much of a burden they could be adjusted appropriately. In his view, having the restrictions for 5 years was too short for any meaningful adjustments and changes.
- Joseph Shaankua proposed that, the duration for the restrictions should be 30 years, and a review process after 5 years to evaluate their outcomes.

Min 07/02/06: Closing Remarks

Prof. Kiringe thanked the members for their cooperation and accepting to spare time for the meeting. Joseph Shaankua thanked the consultants for their questions which focus on the future and security of their land. He asked whether NEMA will share the community opinions that the consultants were gathering to which Prof. Kiringe said that their views will be part of a report submitted to NEMA. There will be a validation workshop (which will include them as community members and other stakeholders) prior to gazettement of the SEA report. The meeting end at 11.32am with a prayer by Joseph Shaankua.

Annex 13: Minutes of the SEA consultation meeting for Mbirikani and Eselenkei Group Ranches Land Use and Sub-division Plans with Amboseli region conservation NGOs held at Hippo Camp, Kimana Sanctuary Thursday 16th June 2022

Participants

1. Mr. Jackson Mwato (CEO, Amboseli Ecosystem Trust (AET)
2. Mr. Daniel Kaaka (AET)
3. Mr. Luke Maai Mae (Lion Guardian)
4. Mr. David Leyian (CEO Big Life Foundation)
5. Dr. Vicky Fishlock (Amboseli Trust for Elephants (ATE)
6. Dr. John Kioko (WWF)
7. Mr. Daniel Koskei (Senior warden, Amboseli N. Park)
8. Mr. Evan Mkala (IFAW Kilimanjaro Landscape Project Officer)
9. Mr. Richard Bonham (Director and CEO, Big Life Foundation)
10. Mr. James Ndung'u (ENRM Associates Consultant)
11. Prof. Francis Mwaura (ENRM Associates Consultant)
12. Prof. John Kiringe (ENRM Associates Consultant)
13. Mr. Kisimir Saibulu (Taking minutes)

Min 01/16/06: Preliminaries

- Mr. Jackson Mwato introduced the conservation NGOs attending the meeting and explained the purpose of the consultations with the SEA consultants. He also outlined the land tenure changes taking place in Eselenkei and Mbirikani Group Ranches due to subdivision.
- Prof. Francis Mwaura introduced the SEA consultants and outlined why the consultants were gathering views on subdivision of Eselenkei and MGR.
- Mr. James Ndung'u elaborated on the role of SEA after subdivision of the 2 ranches. The meeting then stated at 14.48 pm.

MIN 02/16/06: Mr. Jackson Mwato said that prior to subdivision of MGR, leaders and the management engaged and agreed with members on the need to do subdivision. They also agreed the ranch would be divide into 5 key zones.

Min 02/16/06: How About The 31 Acres MGR Title Deeds Ownership and Enforced Restrictions

Prof. Kiringe whether the title deed for the 31 acres allocated to each member in MGR in the pastoralism and wildlife conservation zone will have the stipulated restrictions. Mr. Jackson Mwato responded that AET will benchmark with Taita Taveta Wildlife and Conservancies Association (TTWCA) on how to acquire a title deed with restrictions that are acceptable and legally binding. Mr. Benson Leyian supported this proposal and added that enforcement of the agreed restrictions is very important.

Min 02/16/06: Views by partners regarding the land subdivision in MGR

Prof. Mwaura requested the representatives of the AET partners to submit their views in witiing regarding the following questions:-

Q1-The landuse subdivision plans for Eselenkei and Mbirikani group ranches have restricted certain activities in the grazing rangelands, conservation areas and wildlife corridors (e.g. further subdivisions, settlements, land sale and fencing). Which enforcement strategies does your organization envisage for effective governance including actions for restriction non-compliances?

Q2-The role of group ranch committees will come to an end with the land subdivisions after which governance functions in the grazing rangelands, conservation areas and wildlife corridors will be transferred to the cooperative society committees. What would be your recommendations (and role) in the formation and subsequent operations of the committees for effective governance and enforcement of restrictions?

Q3-Which alternative avenue(s) will KWS and non-state conservation entities be channeling their financial and technical assistance (e.g. school bursaries) to private land owners under the new land tenure dispensation after the dissolution of the group ranch committees?

The participants agreed to share their views as soon as possible.

Annex 14: Minutes of the SEA consultation meeting for Mbirikani and Eselenkei Group Ranches Land Use and Sub-division Plans held at Amboseli N. Park Head Quarters on Friday 17th June 2022

Participants

1. Mr. Daniel Koskei (Senior Warden, Amboseli N. Park)
2. Ms. Christine Mwinzi (Research Scientist, Wildlife Research and Training Institute)
3. Mr. James Ndung'u (ENRM Associates Consultant)
4. Prof. Kiringe (ENRM Associates Consultant)
5. Mr. Kisimir Saibulu (Taking Minutes)

Min 01/17/06: Preliminaries - The Senior warden then welcomed the consultants and the meeting started at 9.38 am. Mr. James Ndung'u introduced the consultants, and outlined the purpose of the meeting, and the need for subjecting the Eselenkei and Mbirikani Group Ranches LSPs to the SEA process. He also mentioned some of the expected changes in land uses after subdivision including farming, settlements and the anticipated the long-term impacts. The idea of doing the SEA was to also check the social and economic implications resulting from group ranches subdivision. Further, the SEA provided a legal framework for the subdivisions using EMCA CAP 387 subsection 57a, to secure land and livelihoods for the landowners. In this regard, the views of the Kenya Wildlife Service (KWS) were very important during the SEA process.

Min 02/17/06: Mr. James Ndung'u asked what will happen to wildlife conservation in the Amboseli Ecosystem due to subdivision of Mbirikani and Eselenkei Group Ranches including other ranches in the region.

- Mr. Koskei, the Senior Warden stated that the subdivision is a big threat to the future conservation of wildlife. Further land subdivision poses a challenge to conservation due to increasing land sales. This will increase encroachment into wildlife designed areas and might eventually lead to dissolution of existing conservancies like those under ALOCA in the former Kimana Group Ranch and Kitenden wildlife corridor. It will also complicate making of wildlife conservation decisions by KWS unlike under the group ranches arrangement.
- Subdivision of the group ranches in the Amboseli Ecosystem was attributed to the following: a) change in the Land Act in 2016 which advocated for subdivision of communal land, b) increase in human population, c) economic changes among the Maasai and their desire to be mainstreamed in socio-economic activities like other ethnic groups, d) changes in Maasai lifestyle, modern education and socio-economic changes and pressure, and e) fear of losing land. T
- Ms. Christine Mwinzi stated the community feared their land will be taken away by the government in the name of enhancing wildlife conservation without their consent.
- Mr. Koskei noted that under the group ranches land tenure, it was easy to make wildlife conservation decisions through their leaders. But after dissolution of the group ranches, it will be hard to make such decisions due to change to individual land tenure regime. Disbursement of benefits like money for bursaries (for pupils and students) was done through the group ranches leadership but this will be faced by challenges after dissolution of the ranches. Additionally, the individual landowners might ask for higher payments

above what is currently disbursed by KWS. He also stated that prior to subdivision of the ranches, locals harmoniously coexisted with wildlife but after dissolution of the ranches, human-wildlife conflicts will increase.

Min 03/17/06: Mr. James Ndung'u asked how ALOCA members and other conservancies shared wildlife conservation benefits.

- Ms. Christine Mwinzi elaborated that these landowners had agreed to lease their land to Big Life Foundation and were paid on a yearly basis. She also suggested the government could purchase such land through conservation NGOs instead of it being bought by none Maasai's who were putting it under other land uses instead of wildlife conservation.

Min 04/17/06: Mr. James Ndung'u asked how subdivision of the group ranches had affected Maasai pastoralism and their livelihoods.

- Mr. Koskei explainedthat since subdivision of the group ranches, there's was a reduction in livestock numbers due to diversification of land uses and increase in agriculture and human settlements which limited space and grazing areas for livestock.
- Ms. Mwinzi mentioned pastoralism among the Maasai will negatively affected by subdivision due to reduction on space for use by livestock. The community will also be forced to reduce their herd sizes and change livestock breeds.

Min 05/17/06: John Kiringe asked if KWS had plans on how to engage the community after subdivision of the Amboseli region group ranches.

- Mr. Koskei stated that KWS had planned to double the annual amount of money disbursed to the group ranches for school bursaries. Through the Amboseli Ecosystem Trust (AET), KWS was advocating formation of land trusts in Olgugului-Ololorashi group ranch and cooperatives societies in Eselenkei and Mbirikani group ranches to create awareness in the community on the need to secure wildlife movement corridors and creation of conservancies. These entities will then be responsible for management of these areas. He mentioned that they will engage local leaders to reach out to the community to actualize these ideas. Moreover, KWS will have to educate and create awareness among the communities on the impacts of subdivision of the group ranches and how they could benefit from the process. Further, he predicted there will be a reduction in wildlife ranging area and pattern, reduction more than key resources by wildlife, change in wildlife movement pattern, and an overall reduction in landscape ecological connectivity. To avoid these changes, he emphasized on the need to ensure the agreed restrictions in the group ranches subdivision zones should be enforced and adhered to by the landowners.

Min 06/17/06: Mr. James Ndung'u asked whether there is leasing land for wildlife conservation in the Amboseli Ecosystem.

- Ms. Mwinzi pointed out that it can only be sustainable if there are mechanisms to strengthen the agreements between the landowners and conservation NGOs. Moreover, the NGO's terms and conditions for leasing the land were usually short-term and operated within agreed timelines.

Min 07/17/06: Mr. James Ndung'u asked what were the ecological impacts of subdivision of the group ranches in the Amboseli region.

- Mr Koskei answered there was a narrowing of key wildlife movement corridors.
- Ms Mwinzi said Amboseli N. park will be affected and can't survive on its own without community land, and there was therefore a need to continue to engage locals after

subdivision of the group ranches to save the park and wildlife resources found in the ecosystem. She also expressed a lot of concern that the subdivision was cutting off landscape and ecological connectivity of key linkages of the Amboseli ecosystem to its neighboring ecosystems. In addition, wildlife foraging and dispersal pattern and range size will be reduced substantially. Loss of landscape connectivity will affect gene flow in wildlife populations leading to inbreeding and ultimately lower their populations or numbers. She also noted that proliferation of irrigated agriculture partly enhanced by subdivision of the group ranches had led to over abstraction of water which negatively affected the local water table.

Min 08/17/06: Mr. James Ndung'u asked about the status of Kajiado County spatial plan.

- Mr. Koskei mentioned that KWS and other stakeholders were still waiting its completion, and this was to be done after subdivision of all the group ranches in the Amboseli region.

Min 09/17/06: John Kiringe asked whether the restrictions imposed on the 31 and 26 acres allocated to each member in MGR pastoralism and conservation zones respectively will work.

- Ms. Mwinzi said they might work if the community members agreed and enforced them through management committees. She added that through NEMA, AET and land trusts the restrictions were more likely to be observed and enforced after gazettment of the LSP.

Min 10/17/06: John Kiringe asked whether there was a future for Amboseli N. Park and wildlife conservation in the Amboseli Ecosystem after subdivision of the Maasai group ranches.

- Ms. Mwinzi stated that the park size can't support viable wildlife populations on its own since it was dependent on adjust communal lands. More than 75% of the wildlife in the country roamed outside protected areas, therefore the future of Amboseli N. Park was it risk due to subdivision of the ranches.

Min 11/17/06: Closing Remarks

Mr. James Ndung'u thanked the Mr. Koskei and Ms. Mwinzi for sharing their views on different aspects of the SEA work. The warden also thanked the consultants and assured them that KWS will ensure that lands for wildlife conservation within Amboseli ecosystem will be secured for a better co-existence of nature and humans. The meeting was adjourned at 11.18 am.

Annex 15: Minutes of the SEA Consultation Meeting for Eselenkei and Mbirikani Group Ranches Land Use and Sub-Division Plan at the Deputy County Commissioners Office, Loitokitok on Thursday 16th June 2022

Participants

1. Mr. Wisley Koech (DCC, Oloitokitok Sub County)
2. Prof. Francis Mwaura (ENRM Associates Consultant)
3. Mr. James Ndung'u (ENRM Associates Consultant)
4. Prof. John Kiringe (ENRM Associates Consultant)
5. Kisimir Saibulu (Taking minutes)

Min 01/16/06: Preliminaries- Mr. Wisley Koech then welcomed the consultants and the meeting stated at 9.25 am.

- Mr. James Ndung'u started the meeting by introducing the consultants. He then briefly explained the purpose of the SEA and why the consultants wanted to gather the DCC's views.
- Prof. Francis Mwaura also outlined the purpose of subjecting the Eselenkei and Mbirikani Group Ranches (MGR) land subdivision plans (LSPs) to the SEA process. He emphasized the SEA reports will facilitate gazettement of the 2 LDPs by the government especially regarding enforcement of the agreed restrictions in and would make the plans stronger. Additionally, EMCA CAP 387 subsection 57a will give security and diversify land uses and activities by members of the two group ranches.

Min 02/16/06: Mr. James Ndung'u asked whether as a government officer he was aware about the subdivision of the 2 group ranches as well as other ranches in the Amboseli region and if his officers were involved in the process.

- Mr. Koech said he wasn't around during subdivision of Eselenkei and MGR but is aware and well informed about the ongoing subdivision processes of group ranches in the Amboseli region. During subdivision of the group ranches, wildlife movement corridors connecting Amboseli, Chyulu and Tsavo West National Parks were demarcated and some of them were in local conservancies. He further added that increase in human population of non-Maasai was worrying and was a big threat to the future of conservancies and wildlife movement corridors.
- Sale of land to non-Masai after issuance of land title deeds in wildlife areas (conservancies and wildlife corridors) will potentially lead to legal battles between such landowners and the government. Human-wildlife conflicts were likely to escalate as the new landowners encroach into wildlife use areas including movement corridors. Current wildlife movement will also be affected as well. A concern that is there is after issuance of title deeds in Eselenkei and MGR, the landowners will no longer be limited on how they could use their land, and this was a threat to wildlife conservation. In his view, if subdivision of the group ranches in the Amboseli region is not managed well, it will put Amboseli N. Park at risk. Tsavo West and Amboseli and Chyulu Hills N. Parks will also be at risk due to increase in livestock incursions since the Maasai won't have ample grazing land. Further land subdivisions is possible and might escalate significantly in the near future. Sale of land after subdivision of the former Kimana Group Ranch was a good example of what was likely to happen to the landscape and wildlife conservation after subdivision of other

ranches in the region. Therefore, there was an urgent need to put in place legal frameworks, strict rules, and measures to control and manage subdivision of the group ranches.

- The landowners should be encouraged through education and sensitization to form conservancies to secure a future for wildlife conservation in the region. Although Big Life Foundation was leasing land from some landowners in the region, most of them said the amount of money they received was too little. He wondered how long such an arrangement by conservation NGOs can be done, and instead the government should buy land being sold by the local instead of outsiders from other parts of the country.
- Additionally, there was a need to ensure communities in the Maasai group ranches of the Amboseli region obtained reasonable or substantial benefits from wildlife conservation. This view was informed by the observation that land sale and other land uses like agriculture gave landowners significant income which made them not appreciate the importance of leasing their land for wildlife conservation.

Min 03/16/06: Prof. Kiringe asked whether the government could purchase the land being sold by the Maasai for wildlife conservation.

- Mr. Koech said this idea should be included in the SEA report, which should be shared with the relevant ministry to make them understand the need to explore the possibility of buying such land.

Min 04/16/06: Mr. James Ndung'u asked what social safeguards had been put in place by the government to ensure the landowners in Eselenkei and MGR were protected especially their livelihoods after subdivision.

- Mr. Koech said that he feared for the first time there will be Maasai squatters in the Amboseli region due rampant land sale. The social fabric and livelihoods of the community will disintegrate due to subdivision of the group ranches. In the near future, say 5 to 10 years, the Maasai history, culture and traditions, in the region will change significantly. In his view Maasai livelihoods strategies would be affected since some were selling their land to purchase livestock but were later forced to sell it, leading to escalation of poverty in the community. He suggested a lot of awareness creation and sensitization were needed to manage land sales after subdivision of the group ranches.

Min 05/16/06: Mr. James Ndung'u asked what could be done to manage land sales among the Maasai after group ranches subdivision.

- Mr. Koech answered that chiefs should be involved in all land sales and are supposed to write an official letter to the land's office confirming land ownership and indicated whether family members had consented to the sale. Land sale was mostly done by men and rarely involved their spouses or children. Generally, the process of selling land among the Maasai was not following the stipulated guidelines and procedure which led to sale of land to multiple buyers. To address this problem, his office was working closely with chief's, group ranch officials and land agents.

Min 06/16/06: Mr. James Ndung'u asked what should be done to restore limestone mining areas in MGR and sand harvesting zones in Eselenkei group ranch.

- Mr. Koech said there should be clear plans on how such areas should be rehabilitated after the agreed use time had elapsed.

Min 07/16/06: John Kiringe asked whether the agreed restrictions of the 31 acres allocated to each member of MGR will be included in the title deeds.

- Mr. Koech said this was not possible and instead, it was upon the community members to agree on how to observe the said restrictions.

Min 08/16/06: Closing Remarks

Mr. James Ndung'u thanked Mr Koech for the agree to meet the consultants and for sharing his views. He emphasized the importance of the SEA in facilitating MGR gazettment of the Eselenkei and MGR LSPs as it will protect and communities' land in the near future The meeting was adjourned at 10.35 am.

Annex 16: Minutes of the SEA consultation meeting for Mbirikani and Eselenkei Group Ranches Land Use and Sub-division Plans with ALOCA officials held at Amboseli Junction Hotel on Thursday 16th June 2022

Participants

1. Mr. Samuel Kaanki (ALOCA Chairman)
2. Mr. John Gisa ALOCA coordinator)
3. Mr. Joseph Parmuat (ALOCA Secretary)
4. Mr. Sadalla Korinko (ALOCA Treasurer)
5. Mr. Kimarei Mapewa (Chairman, Osupuko conservancy)
6. Mr. James Ndung'u (ENRM Associates Consultant)
7. Prof. Francis Mwaura (ENRM Associates Consultant)
8. Prof. John Kiringe (ENRM Associates Consultant)
9. Mr. Kisimir Saibulu (Taking minutes)

Min 01/16/06: Preliminaries - The meeting started at 16.14 pm with Mr. Samuel Kaanki introducing the ALOCA officials while Mr. James Ndung'u introduced the ENRM Associates team. Prof. Francis Mwaura explained what the SEA was and why it was necessary to gather views of the ALOCA officials regarding LSPs for Eselenkei and Mbirikani Group Ranches. Mr. Kaanki said ALOCA officials were in a good position to share lessons learnt from subdivision of the former Kimana Group Ranch.

- Prof. Mwaura further outlined the purpose of subjecting the LSPs for the 2 ranches so that it would ensure security of wildlife, local people and their livelihoods.

Min 02/16/06: Prof. Francis Mwaura asked the officials about the subdivision process of the former Kimana Group Ranch.

- Mr. Kaanki said the group ranch was the first to be subdivided in the Amboseli region though it was done without a plan and no zones were established like what had happened in Mbirikani and Eselenkei group ranches. ALOCA conservancies had approved management plans. Due to land of a subdivision plan, wildlife movement corridors and routes were blocked through fencing, human settlements, and unplanned large farms like the Ngong Veg and KiliAvo which covered more than 1,000 acres of wildlife use areas and corridors within the former Kimana group ranch.
- Mr. Joseph Parmuat felt that during subdivision of Kimana group ranch the government let down the community down by failing to seize the opportunity to ensure wildlife conservation areas and movement corridors were set aside. He added that after subdivision, the Africa Wildlife Foundation (AWF) assisted some of the landowners to establish conservancies which were managed under the umbrella of Amboseli Landowners Conservancies Association (ALOCA). After AWF closed its operations in the region, the conservancies were leased to Big Life Foundation. Parmuat pointed out that Big Life Foundation and ALOCA members had created a predator consolation fund to compensate for livestock attacked or killed by predators in their conservancies. Each landowner made an annual contribution of Ksh. 1,000 to cater for the consolation funds.

Min 03/16/06: John Kiringe asked whether subdivision of the former Kimana group ranch had led to landlessness among the Maasai.

- Mr. Kaanki responded by said that most of the land sale was done by members who were not living in the group ranch or were members in other group ranches. But overall, there were so many squatters in Kimana town due to sale of land by some men and youthful Maasai men.

MIN 04/16/06: John Kiringe whether members of MGR would adhere to the restrictions imposed on the 31 acres allocated in the pastoralism and wildlife conservation zone.

- Mr. Kaanki responded that, even though a land title deed permitted the owner to sell the land, buyers were still expected to abide and with the restrictions.

MIN 05/16/06: John Kiringe asked whether there was a future for pastoralism after subdivision of Mbirikani and Eselenkei group ranches based on the lessons learnt after subdivision of Kimana group ranch.

- Mr. Kaanki mentioned that livestock numbers and pastoralism in general will decline substantially in the 2 ranches as evident in the former Kimana group ranch.
- Mr. Sadalla said that decline pastoralism in the Kimana area was a caused by loss of livestock grazing land due to rampant farming and sale of land to individual landowners. Disintegration of communal livestock grazing management and guidelines also contributed to the decline.
- Mr. John Gisa pointed that many members of the former Kimana group ranch sold their land and purchased livestock but were forced to sell it later though this made them poor. He suggested that pastoralism in the former Kimana group ranch may have declined by 60%.
- According to Mr. Kaanki, poverty levels among the Maasai of the former Kimana group ranch had increased significantly and he attributed this to subdivision of the ranch. He strongly suggested that members of Eselenkei and MGR should discouraged from selling their land, and should continue to use their subdivided land communally to sustain pastoralism. He also noted there is rampant sale of land among the Maasai and this needs to be addressed urgently.

Min 06/16/06: John Kiringe sought the opinion of the ALOCA officials on the proposal by some of the Maasai to be allowed to graze their livestock in Tsavo West and Chyulu Hills N. Parks where there was plenty of grass biomass.

- Mr. Joseph Parmuat said this should not be allowed so that the community would learn how to better manage grazing resources on their land and also come up with strategies for sustainable pastoralism.

Min 07/16/06: John Kiringe and James Ndung'u sought to know how subdivision of the group ranches impacted members.

- Mr. Kaanki responded by saying that over 98% of members of the former Kimana group ranch were poor and attributed this to rampant land sale and the ensuing mismanagement of the funds obtained from such sales.

MIN 08/16/06: James Ndung'u asked what advise should be given to members of MGR and Eselenkei group ranches after subdivision.

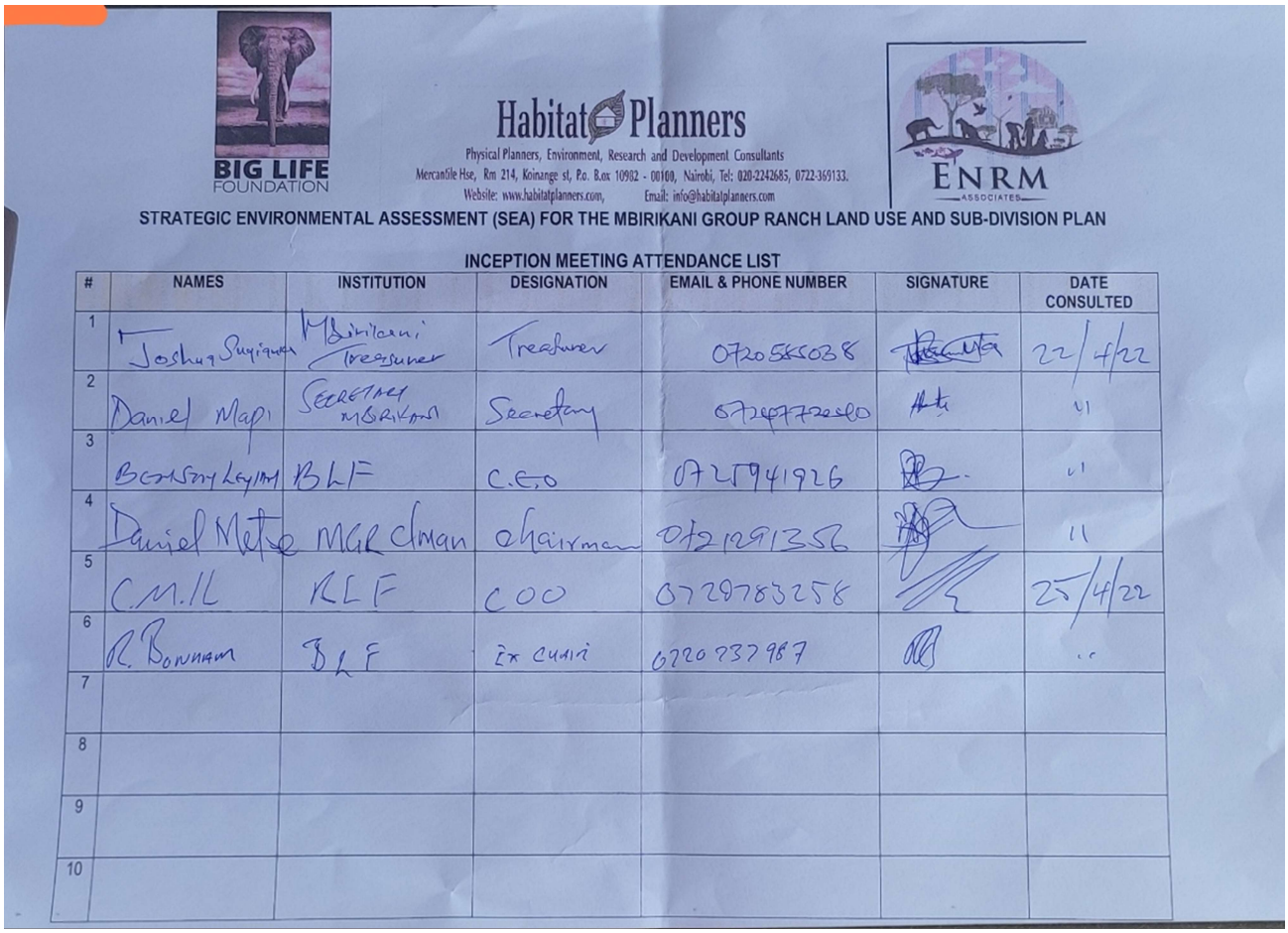
- Mr. Kaanki responded that they should not sell their land whatsoever. Additionally, they should enforce and adhere to the restrictions imposed on the pastoralism and wildlife conservation zones. This this will curtail sale of the land without a better understanding on its impacts to their livelihoods.

- Mr. Sadalla added that if members were to sell their land for whatever reason, they should not sell entire parcels and instead they should sell portions of the same.

Min 09/16/06: Closing Remarks

- James Ndung'u thanked the ALOCA officials for participating in the SEA consultations.
- Prof. Francis Mwaura added that the SEA report will enhance land management of Eselenkei and MGR after their subdivision.
- Mr. Kaanki also thanked the consultants for organizing the meeting and suggested the SEA report should advise the government to intervene during the subdivision process of Amboseli region group ranches. The meeting was adjourned at 17.37 pm

ANNEX B – ATTENDANCE LISTS



BIG LIFE FOUNDATION

Habitat Planners
Physical Planners, Environment, Research and Development Consultants
Mercantile Hse, Rm 214, Koinange st, P.o. B.ox 10902 - 00100, Nairobi, Tel: 020-2242685, 0722-369133.
Website: www.habitatplanners.com, Email: info@habitatplanners.com

ENRM ASSOCIATES

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR THE MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

INCEPTION MEETING ATTENDANCE LIST

#	NAMES	INSTITUTION	DESIGNATION	EMAIL & PHONE NUMBER	SIGNATURE	DATE CONSULTED
1	Joshua Sugiyan	Mbirikani Treasurer	Treasurer	0720585038		22/4/22
2	Daniel Mapi	SECRETARY MBIRIKANI	Secretary	0724977205		"
3	Bonny Layian	BLF	C.E.O	0725941926		"
4	Daniel Metito	MGR chman	chairman	0721291356		"
5	C.M.L	KLF	COO	0729783258		25/4/22
6	R. Bonham	BLF	Ex Cumi	0720737987		"
7						
8						
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Habitat Planners
Physical Planners, Environment, Research and Development Consultants
Mercantile Hse, Rm 214, Kaimenje st. P.O. Box 72502 - 00100, Nairobi, Tel: 0720240305, 0723-369333,
Website: www.habitatplanners.com Email: info@habitatplanners.com



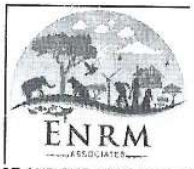
STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: ILCHALAI DATE: 1/6/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	MERIN SANIGO	0707 17 3773	
2	Payiai ole Sanigo	0722123119	
3	Tina Lengete	0712847234	
4	[illegible]	07 2897 529	
5	SANGO MAEN	31897323	
6	LEAH TATIO		
7	SANIGO KISHAPUI	29 69[illegible]32	
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Physical Planners, Environment, Research and Development Consultants

Mercantile Hse, Rm 214, Kaningo rd, P.o. Box 10982 - 00100, Nairobi, Tel: 020-2243685, 0733-869133.

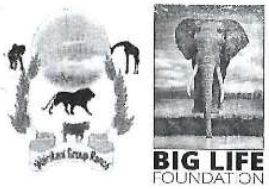
Website: www.habitatplanners.com, Email: info@habitatplanners.com

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: IMBIRIKANI ZONE DATE: 08/06/022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	ANN METITO	07269182 99	
2	MOSES OLE KILOWUA	0720307824	
3	JOSEPH NGIDA OLOMONI	0716 218 300	
4	LEPARAKUO OLE MARTI.	07 00841278	
5	Leluan Kupaas.	0790652466.	
6	JAMES KASAINE	0790 173 175	
7	John Saiko	0722 729829	
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Website: www.habitatplanners.com Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: ENKAJI NAIBOR DATE: 1/06/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	JACOB LOTUBILUA	0718161732	
2	JONAH LEPIRO	0135194414	
3	MELOMPUKI PARTERI	0748734175	
4	JOHN PARTIMO	0728660402	
5	LUKA LEPIRO	0727791823	
6	MARIAMU JONAH	0745790386	
7	PENINA LUKA	0758515856	
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Mercantile Hse, Rm 214, Kaburugo st. P.o. Box 10903 - 00100, Nairobi. Tel: 020-2242685, 0722-868133.

Website: www.habitatplanners.com Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: EMUKUTAN ZONE DATE: 07/06/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	MELUBO MANINA	0100 16 85 40	
2	NTEGENA SARUNI	0728 137845	
3	KETOKO BACKSON	0758957498	
4	ISACK MEIJO	0790148208	
5	PARANTAI MBARNOTI	0724594837	
6	OLAMAJIANI BACKSON	0717099053	
7	David Backson	0702072432	
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STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

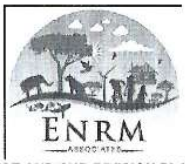
SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: OLTIASIKA DATE: 02/6/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	John Sairpetere	0726879687	
2	Joseph Sitangua	0798106466	
3	Leah Jacob	N/A	
4	Faith Musa	N/A	
5	Lucy David	N/A	
6	Solomon Ntompayiani COLLINS SAMIAR	~~0700000~~ 0700101620	
7	ALFRED LENKUTTAN	0718590291	
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SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: OLGOSUA / SHILISHILI DATE: 01/6/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	MUNYEE TORET	0720665 23	
2	JOSEPH MANTO	0746549192	
3	DAVID LEKATOO	0713148354	
4	JULIUS LESHINKA	0743211661	
5	SOMOIRE TORET	0729853446	
6	KIPAREU MOIPAAI	0724011010	
7	YIANA MALEI	0787181176	
8	MUSUNGUI LESINKO	N/A	
9	KUPERE METUI	0704416614	
10	NTITI MOIPAAI	0723474147	
11	DAVID LEKATOO	0713148354	



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Website: www.habitatplanners.com Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: JNKOISUK DATE: 03/6/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	JEREMIAH LEMITI	0710255092	
2	JOEL KIPELIAN	0719877418	
3	SAMUEL SARUNI	0703766094	
4	NAOMI SAITOTI	0795188842	
5	LEAH KOMOLO		
6	Jacob NTASIKOI	0725096347	
7	Alex Pamiau	0721869981	
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Mercantile Hse, Rm 214, Kenyatta st, P.O. Box 10932 - 00100, Nairobi, Tel: 020-2245645, 0722-369133.
Website: www.habitatplanners.com Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

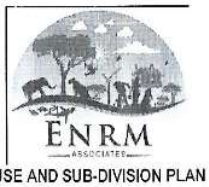
SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: INKOROSHONI DATE: 30/05/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	SUSAN MUSEKA	0716 18 51 78	
2	MARY JOEL	0795316309	
3	JOSHUA KAJAINE	0716 17 4881	
4	SOLOMON NDEKE	0726769100	
5	WILLIAM KOKAI	0742334837	
6	MATAYO NAINI	0710209491	
7	JONATHAN KATIAN (CHIEF)	0728413573	
8	DAVID KATIAN	0724 222025	
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Website: www.habitatplanners.com Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: ISINET K.A.G DATE: 30/5/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	MATHEW JOSEPH LUMIANA	0711 570 617	
2	JEREMIAH TIPAPE	0725 929 069	
3	JOSHUA MOREU	0724 895 449	
4	SUSAN MOREU	0758 684 269	
5	SUSAN RAETEMIAN	0725 899 11	
6	JAMES, PARARIAN	0728 570 712	
7	JOHN MWATO	0707 930 345	
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Website: www.habitatplanners.com Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR THE MBIRIKANI ESELENKI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS KEY INFORMANTS

ZONE/AREA: LOITOKITOK (KWA DCC OFFICE) DATE: 16-06-22

#	NAMES	INSTITUTION	DESIGNATION	EMAIL & PHONE NUMBER	SIGNATURE
1	James Ndungi				
2	John Karinge	Habitat Planners	Consultant	0722846625 JWKinige@gmail.com	
3	Kasimir Zaibuke	SFS	Minutes Taker	kasimirzaibuke@gmail.com 0759127012	
4	Audley Koech	DCC LOK sub-county	0721178417	Interviewer/Chairman	
5	Francis Mwaura	Habitat Planners	Consultant	0722906460 francis.mwaura2018@gmail.com	
6	Samuel Kaenzi	ALOCA	Chairman	olekaanni@gmail.com 0723918658	
7	JOSEPH PARMUAT	ALOCA	SECRETARY	0721897417	
8	Kimaire Mapenga	ALOCA	Chairman OSILWELO	0727275991	
9	John Ciiga	ALOCA Coordinator	Coordinator	0721378087	
10	Sadallah Korinko	ALOCA	TREASURER	0722309434	



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Mercantile Hse, Rm 214, Kaisange st, P.O. Box 72982 - 00100, Nairobi, Tel: 020-2240685, 0722-364733,
Website: www.habitatplanners.com Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

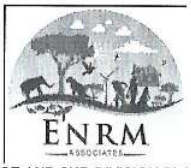
SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: OLBILI ZONE DATE: 7/06/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	MELITA SARBABI	0790 78 45 37	
2	MEPUKORI MAKAROT	NONE	
3	KUDAOS MUNENKE	07 02 29 65 44	
4	KITISIA, MUNENKE	07 11 52 16 30	
5	MEPUKORI MALEI	07 10 630821	
6	MEIKAN KITISIA	746 544 630	
7	LUCY LOPIARE	NONE	
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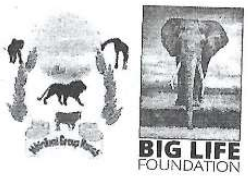


STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR MBIRIKANI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS WITH KEY COMMUNITY REPRESENTATIVES

ZONE/AREA: KALESRUA DATE: 30/5/2022

#	NAMES OF PARTICIPANTS	PHONE OR ID NUMBER	SIGNATURE
1	SAITOTI METUI	0789 [illegible] 71	
2	Daniel Kirasi	0710291702	
3	James Sekenqoy	0708130699	
4	Reuinah Joseph	072581 4578	
5	AGNES Mwato	~~0113~~92 0114392953	
6	MUSA MELITA	0706158574	
7	Samuel Lemasika	0721868012	
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Habitat Planners

Physical Planners, Environment, Research and Development Consultants
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Website: www.habitatplanners.com, Email: info@habitatplanners.com



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR THE MBIRIKANI ESELENKI GROUP RANCH LAND USE AND SUB-DIVISION PLAN

SCOPING CONSULTATIONS KEY INFORMANTS

ZONE/AREA: Sits Nkoli Ear Consultations DATE: 16.06.22

#	NAMES	INSTITUTION	DESIGNATION	EMAIL & PHONE NUMBER	SIGNATURE
1	Daniel Kiplicogei	KWS	Snr Warden	dkorgey@kws.go.ke	
2	Benson Leyian	BLF	C.E.O	benson@biglife.org	
3	Richard Bonham	BLF	CHAIR	richard@biglife.org	
4	Vicki Fishlock	ATE	RESIDENT SCIENTIST	vfishlock@elephantstrust.org	
5	Jackson Mwaka	AET	Executive Director	jmwaka@amboseliecosystem.org	
6	DANIEL KAAKA	AET	Conservancies Coordinator	dkaaka@amboseliecosystem.org	
7	EVAN MWAVUA MKALA	IFAW	ATK Program Manager	emkala@ifaw.org	
8	Luke Maamai	Lion Guardians	Program Manager	Luke@lionguardians.org	
9	JOHN KOLICO	WWF			
10					

ANNEX C – ENRM ASSOCIATES PRACTICING LICENSES

Annex 1: Certificate of Registration



No. **PVT-7LU58YZL**

CERTIFICATE OF INCORPORATION

I hereby **CERTIFY** that,

ENRM ASSOCIATES LIMITED

is on this date 20 Jan 2022 Incorporated under the Companies Act, 2015 and that the Company is a **PRIVATE LIMITED COMPANY.**

.....

Registrar Of Companies

This is a system generated certificate. To validate this document send the word **BRS** to **21546**

Annex 2: KRA Tax Compliance 2022-2023

KENYA REVENUE AUTHORITY

www.kra.go.ke

Tax Compliance Certificate

For General Tax Questions
Contact KRA Call Centre
Tel: +254 (020) 4999 999
Cell: +254(0711)099 999
Email: callcentre@kra.go.ke

Taxpayer PIN : P052085571H

Certificate Date: 12/03/2022

Name and Address :

Enrm Associates Limited
NA, Marine Plaza, NA, Kajiado East District,
PO Box:79972,
Postal Code:00200

Certificate Number:
KRAKJD1264583322

This is to confirm that Enrm Associates Limited,
Personal Identification Number P052085571H
has filed relevant tax returns and
paid taxes due as provided by Law.

This Certificate will be valid for
twelve (12) months up to 11/03/2023.

Caveat: This certificate is issued on the basis of information available with the authority as at the certificate date mentioned above. The Authority reserves the right to withdraw the certificate if new evidence materially alters the tax compliance status of the recipient.

Disclaimer : This certificate is system Generated and therefore does not require signature.You may confirm validity of this certificate on the iTax Portal by using the TCC Checker.This certificate confirms your compliance status for a period of five years preceding the date of issue. The certificate may however be with withdrawn on grounds of outstanding debt affecting periods prior to this.

Annex 3: NEMA Certificate of Registration

FORM 5 (r.14(4))

nema
mazingira yetu | uhai wetu | wajibu wetu

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)
THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

CERTIFICATE OF REGISTRATION AS AN ENVIRONMENTAL IMPACT ASSESSMENT/ AUDIT EXPERT

Certificate No: NEMA/EIA/RC/6671

Application Reference No: NEMA/EIA/ER/13976

This is to certify M/s **ENRM Associates** of

P.O. Box 79972-00200 Nairobi (Address) has been registered as an Environmental Impact Assessment Expert in accordance with the provisions of the Environmental Management and Coordination Act Cap 387 and is authorized to practice in the capacity of a Lead Expert/Associate

Expert/Firm of Experts (Type) **Firm of Experts**

Expert Registration No: **12767**

Issued Date : **7/28/2022**

Signature

(Seal)

Director-General
The National Environmental Management Authority

P.T.O.

Annex 4: ENRM NEMA Practicing License 2022

FORM 7 (r.15(2))

nema
mazingira yetu | uhai wetu | wajibu wetu

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY(NEMA)

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

ENVIRONMENTAL IMPACT ASSESSMENT/AUDIT (EIA/EA) PRACTICING LICENSE

License No : NEMA/EIA/ERPL/18102

Application Reference No: NEMA/EIA/EL/23553

M/S **ENRM Associates**
(individual or firm) of address

P.O. Box 79972-00200 Nairobi

is licensed to practice in the

capacity of a (Lead Expert/Associate Expert/Firm of Experts) **Firm of Experts**
registration number **12767**

in accordance with the provision of the Environmental Management and Coordination Act Cap 387.

Issued Date: **9/20/2022** Expiry Date: **12/31/2022**

Signature…..

(Seal)
Director General
The National Environment Management Authority

Annex 5: ENRM Associates EIK Certificate 2022



EIK Environment
INSTITUTE OF KENYA

Certificate of Membership

This is to certify that
ENRM Associates
Member No: EIK/3/5724

Is a Non Practising Firm registered with Environment Institute of Kenya
An Institute Founded in the year 2014 to extend and disseminate Environmental knowledge and promote the practical application for public good.

Linda Munyao
Chairperson

09/09/2022
Date

This Certificate remains the property of Environment Institute of Kenya. Membership is subject to annual renewal

Annex 6: Francis Mwaura NEMA practicing license 2022



FORM 7 (r.15(2))

nema

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY(NEMA)

THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

ENVIRONMENTAL IMPACT ASSESSMENT/AUDIT (EIA/EA) PRACTICING LICENSE

License No : NEMA/EIA/ERPL/16984

Application Reference No: NEMA/EIA/EL/21931

M/S **Francis Mwaura Mwangi**
(individual or firm) of address

P.O. Box 79972-00200 Nairobi

is licensed to practice in the

capacity of a (Lead Expert/Associate Expert/Firm of Experts) **Lead Expert**
registration number **0077**

in accordance with the provision of the Environmental Management and Coordination Act Cap 387.

Issued Date: **3/30/2022**

Expiry Date: **12/31/2022**

Signature.....

(Seal)
Director General
The National Environment Management Authority

P.T.O.

Annex 7: Francis Mwaura EIK Certificate 2022



EIK Environment
INSTITUTE OF KENYA

Certificate of Membership

This is to certify that

Francis Mwaura

Member No: EIK/1/2257

Is a Practising Lead Member of Environment Institute of Kenya
An Institute Founded in the year 2014 to extend and disseminate
Environmental knowledge and promote the
practical application for public good.

ENVIRONMENT INSTITUTE OF KENYA

Linda Munyao
Chairperson

12/01/2022
Date

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