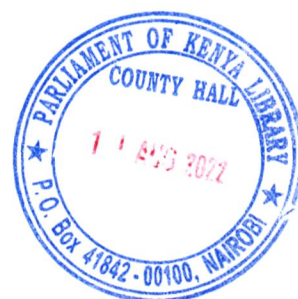


PARLIAMENT OF KENYA



ELEVENTH PARLIAMENT – FOURTH SESSION- 2016

THE NATIONAL ASSEMBLY

DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

REPORT ON THE INQUIRY INTO THE IMPACT OF THE STANDARD GAUGE
RAILWAY ON THE ENVIRONMENT OF THE TSAVO CONSERVATION AREA

CLERK'S CHAMBERS
PARLIAMENT BUILDINGS,
NAIROBI

NOVEMBER, 2016

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LIST OF ACRONYMS

EIA	Environment Impact Assessment
ESIA	Environmental and Social Impact Assessment
KWS	Kenya Wildlife Service
KRC	Kenya Railways Corporation
NEMA	National Environment Management Authority
NMK	National Museums of Kenya
NNP	Nairobi National Park
PAs	Protected Areas
WHO	World Health Organization
WRMA	Water Resources Management Authority

CHAIR'S FOREWORD

The Committee wishes to thank the Office of the Speaker of the National Assembly and the Office of the Clerk of the National Assembly for the support extended to it in the execution of its mandate. The Committee further extends its appreciation to the members of the public and the various government institutions for the time and considerable effort that they have invested in this investigation, through submissions, hearings and provision of additional information.

I take this opportunity to thank all members of the Committee for their patience, endurance and dedication to Committee business despite their other commitments and tight schedules which enabled the Committee to consider the matter and come up with this report.

On behalf of the Departmental Committee on Environment and Natural Resources and pursuant to Standing Order 199 of the National Assembly I now have the honor to present the Committee Report of its inquiry into the Impact of the Standard Gauge Railway on the Tsavo Conservation Area

Hon. Amina Abdalla, CBS, M.P

EXECUTIVE SUMMARY

This inquiry was initiated by the Hon. (Dr.) Wilbur Ottichilo, MP, Member of Parliament for Emuhaya Constituency when he sought a Statement from the Chairperson of the Departmental Committee on Transport, Public Works and Housing. The Honourable Member sought to establish the expected environmental impact of the construction of Standard Gauge Railway (SGR) line through the Tsavo East and West National Parks. He also sought to know whether an Environmental Impact Assessment (EIA) study had been carried out and the mitigation measures of the EIA Report. Following unsatisfactory response to the request for a statement, the matter was later taken up by the Departmental Committee on Environment and Natural Resources.

In carrying out the inquiry, the committee held several meetings and undertook a field visit to the Tsavo Conservation Area. The committee also held a meeting with the members of the public at the Tsavo Conservation Area where it received oral submissions. Thereafter, the Committee proceeded for a working retreat at the Boma Hotel which provided the opportunity to consider the submissions from the inquiry participants to further draft and consider its report.

The Report of the Committee contains a number of recommendations based on its observation from the inquiry into the impact of SGR on the Tsavo Conservation Area. These include: The Kenya Railways Corporation should redesign the wildlife crossing points to align them with the appropriate wildlife crossing points, further, the Committee also recommends that the National Environment Management Authority (NEMA) should monitor the progress made by the different agencies to comply with the terms of the EIA licence and failure to comply should attract the necessary sanction.

MANDATE

The functions and mandate of the Committee include:

- a) Investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the assigned Ministries and departments;
- b) Study the programme and policy objectives of the Ministries and departments and the effectiveness of the implementation;
- c) Study and review all legislation referred to it;
- d) Study, access and analyze the relative success of the Ministries and Departments as measured by the results obtained as compared with its stated objectives;
- e) Investigate and inquire into all matters relating to the assigned Ministries and departments as they may deem necessary, and as may be referred to them by the House;
- f) Vet and report on all appointments where the constitution or any law requires the National Assembly to approve, except those under Standing Order 204; and
- g) Make reports and recommendations to the House as often as possible, including recommendation of proposed legislation.

The subject matter of the Departmental Committee on Environment and Natural Resources are stated in the Second Schedule of the National Assembly Standing Order as: climate change; environment management and conservation, forestry, water resource management, wildlife; mining and natural resources, pollution and waste management.

OVERSIGHT

In executing its mandate, the Committee oversees the following Government Departments namely:-

- i. The State department for Water Services;
- ii. The State Department of Environment;
- iii. The State Department for Natural Resources; and
- iv. The State Department of Mining

MEMBERSHIP

The Committee comprises the following members:-

Chairperson	The Hon. Amina Abdalla, CBS, M.P
Vice- Chairperson	The Hon. Alexander Kosgey, M.P.
	The Hon. Alice Ng'ang'a, M.P.
	The Hon. Samuel Ndiritu, M.P.
	The Hon. Opiyo Wandayi, M.P.
	The Hon. (Dr.) Ejidius Njogu Barua, M.P.
	The Hon. Jude Njomo, M.P.
	The Hon. Moitalel Ole Kenta, M.P.
	The Hon. Kathuri Murungi, M.P.
	The Hon. Sunjeev Birdi, M.P.
	The Hon. Jackson K. Rop, M.P.
	The Hon. Abdi Noor Ali, M.P.
	The Hon. Joyce Emanikor, M.P.
	The Hon. Abdulaziz Farah, M.P.
	The Hon. Ronald Tonui, M.P.
	The Hon. (Dr.) Reginalda Wanyonyi, M.P.
	The Hon. Gideon Mwiti, M.P.
	The Hon. Hassan Dukicha, M.P.
	The Hon. Chachu Ganya, M.P.
	The Hon. Charles G. Mongare, M.P.
	The Hon. (Dr.) Wilber K. Ottichilo, M.P.
	The Hon. Richard Makenga, M.P.
	The Hon. George Ogalo, M.P.
	The Hon. (Major) Muluvi Mutua, M.P.
	The Hon. Mohamed, Diriye M.P.
	The Hon. Peter Kinyua, MP.
	The Hon. Shukran Hussein Gure, M.P
	The Hon. Joyce Lay, M.P

Mr. Speaker Sir,

In order to prosecute the matter before it, the committee formed a sub-committee to inquire into the issue and report back to the committee. The members of the sub-committee were as follows:-

1. The Hon. (Dr.) Wilber Ottichilo, M.P – Chairman
2. The Hon. (Dr.)Reginalda Wanyonyi, M.P
3. The Hon. Chachu, Ganya Francis, M.P
4. The Hon. (Dr.) Barua Njogu, M.P
5. The Hon. Kathuri Murungi, M.P
6. The Hon. Sunjeev Birdi, M.P
7. The Hon. Dukicha Hassan, M.P
8. The Hon. Abdiaziz Farah, M.P
9. The Hon. Jude Njomo, M.P
10. The Hon. Moitalel ole Kenta, M.P

COMMITTEE SECRETARIAT

The Committee is serviced by the following Members of Staff:

Ms. Tracy Chebet Koskei	Clerk Assistant II
Mr. Hassan A. Arale	Clerk Assistant III
Mr. Ronald Walala	Legal Counsel II
Mr. Hassan Ahmed Odhowa	Senior Research Officer
Ms. Amran Mursal	Fiscal Analyst III

CHAPTER ONE

1.0 BACKGROUND

1.1 The establishment of the inquiry

1. On 6 August 2014, pursuant to the National Assembly Standing Orders No. 44 (2) (c), the Hon. (Dr.) Wilbur Ottichilo, MP, Member of Parliament for Emuhaya Constituency, sought a Statement from the Chairperson of the Departmental Committees on Transport, Public Works and Housing regarding the expected environmental impact of the construction of Standard Gauge Railway (SGR) line through the Tsavo East and West National Parks. The Honourable Member stated that the planned construction of the SGR is expected to impact negatively on the short and long term status of the environment, movement and survival of wildlife in the Tsavo National Parks. He further stated that the eventual use of the line by the high speed train is expected to cause great stress among wildlife and pose serious risks and danger of the frequent collision between trains and the wildlife particularly at night. In his request the Member asked the Chairperson to inquire and report on the following-

- 1) Whether an environmental impact assessment (EIA) was undertaken and approved by NEMA;
 - 2) A detailed EIA report and summary of its mitigation measures;
 - 3) A confirmation to the House that the commencement and construction of the SGR will not take place until the EIA has been undertaken and approved by NEMA
2. The Chairperson of the Departmental Committee on Transport, Public Works and Housing then provided a Statement to the House and suggested that the substantive Ministry in charge of the issue be directed to respond to the Statement.
 3. The Hon Ottichilo was dissatisfied with the response and resolved to put a question to the Cabinet Secretary for Environment and Natural Resources on the matter. The question stated as follows-

Could the Cabinet Secretary inform the Committee whether an Environmental Impact Assessment (EIA) was undertaken and approved the National Environmental Management Authority for the construction of the Standard Gauge Railway (SGR) from Mombasa to Nairobi, the mitigation measures to be undertaken in ensuring that the

construction of the Standard Gauge Railway through Tsavo East and Tsavo West National Park will not impact negatively on the environment, movement and survival of wildlife, and which mechanism both short and long-term, have been put in place to evaluate the success or the failure of the proposed mitigation measures?

1.2 Method of work

4. Once the question was officially before the Cabinet Secretary, the Committee took over the matter to prosecute it as part of its mandate. In execution of this mandate the committee conducted a number of activities which are set out below.

1.2.1 Proceedings of the Committee

5. The Committee proceeded to consider the matter in the following manner-
 - (i) On 8th May 2015 the Cabinet Secretary for Environment and Natural Resources appeared before the Committee to officially respond to the question, the Member had asked. Based on the Cabinet Secretary's inconclusive answer the Departmental Committee on Environment and Natural Resources resolved to establish a sub-committee in order to deal with the matter conclusively.
 - (ii) On 7th April 2016 the sub-committee travelled to the Tsavo Conservation Area together with the Kenya Wildlife Service (KWS) to have a first-hand opportunity to receive submissions from KWS and members of the public.
 - (iii) The sub-committee further held several other meetings with government agencies such as the Kenya Wildlife Service (KWS) and the Kenya Railway Corporation (KRC) to receive submissions.
 - (iv) The Committee finally proceeded for a retreat to draft and consider the Report at Boma Hotel in Nairobi on 24th October, 2016. The final Report of the Committee was approved in a meeting held on 8th November, 2016. The Report of the Committee contains a number of recommendations based on the observations made from its inquiry into the impact of the SGR on the Tsavo Conservation

Area. The Minutes of the meetings of the Committee are herein annexed as *Annex 1*.

CHAPTER TWO

INTRODUCTION

2.1 Kenya's Wildlife diversity

6. Kenya has a total of 8,654 known wildlife species. Out of these, a total of 107 species are threatened. In the recent years, a surge in wildlife crimes such as poaching and competition for space due to changing land use patterns have determined the numbers and distribution of major species of wildlife in the country.
7. The Tsavo ecosystem and its environs remain one of the most important habitats for wildlife in the country.

2.2 The wildlife and the economy

8. Wildlife resources managed by KWS is the backbone of Kenya's tourism industry and accounted for 21% of foreign exchange earnings and 12% of the country's GDP in 2012. 70% of tourism earning is wildlife based and it is the second largest contributor to the country's economy. It is also a key pillar in achieving the goals of vision 2030. The contribution of the tourism industry also has a multiplier effect in other sectors of the economy such as agriculture, horticulture, transport and communication.

2.3 The Tsavo Ecosystem

9. Tsavo National Park is one of the key areas where the Standard Gauge Railway passes through. The Park covers approximately 20,747 Km² and was established as a national park in 1948 due to its significant wildlife species diversity and numbers. Most of the Tsavo ecosystem is considered unsuitable for farming due to insufficient rainfall while livestock rearing was greatly challenged by the prevalence of high tsetse fly infestation in most parts of the ecosystem.
10. In 1949, the Tsavo National Park was gazetted and divided into two for administrative purposes with the area on the western side of the Mombasa – Nairobi highway forming Tsavo West (7,065 Km²) and Tsavo East being the area on the eastern side (13,747 Km²). Since then, the two Tsavo's have established themselves important biodiversity baskets in the country, attracting fame and recognition from far and wide. The Tsavo's remain one

of the most visited and well known parks in the country for their biodiversity and the attractive mixture of ecosystem.

11. The Tsavo ecosystem is an important biodiversity gene pool owing to the large contiguous area estimated to be over 40,000Km². The Tsavo national parks constitute about 52 % of total protected areas in Kenya and therefore remain one of the most important areas for conservation and protection of the country's national heritage. The Tsavo ecosystem hosts the largest single elephant population and close to a third of the country's elephants.

2.4 The SGR project

12. The Standard Gauge Railway (SGR) is a Vision 2030 flagship project meant to transform Kenya's infrastructure in line with Kenya's economic blue print of 2030. The project's aim is to play an important role in strengthening cooperation among the East African Community member states and to promote regional and economic development. The SGR project is the largest infrastructure project under Vision 2030. The modern, high capacity railway line between Mombasa and Malaba is expected to be commissioned in 2018, and is being carried out in two phases. Phase 1 goes from Mombasa to Nairobi and is expected to be commissioned in 2017. The SGR project Phase 1 passes through the Tsavo East and Tsavo West National Parks and the Kiboko Sanctuary. The construction of the SGR has resulted in easements of land in the three wildlife protected areas totaling to 10.2Km².
13. The existing railway network was built in 1891. It is in poor operations due to serious aging of equipment, usage of the old meter gauge, unreliability and long turnaround trips, poor infrastructure and outdated technology i.e. basic manual engineering characteristics and geometrics limiting axle loads, speed and train capacity. Therefore, large amounts of container freights that arrive in the Port of Mombasa by sea have to be transferred by road to Uganda, Rwanda, Burundi, South Sudan and other destinations within the country. This situation not only causes huge pressure to Kenyan road system, but also increasing the freight cost, as well as slowing the development of regional trade. The current railway being operated by Rift Valley Railways (RVR) can only handle about 6%

of the cargo from the Mombasa Port (*approximately 13 metric tons per year*). The rest (94%) has to be hauled by road which is unsustainable in the long run as the cargo volumes increase.

2.5 The Environmental and Social Impact Assessment (ESIA) of the SGR project Phase 1

14. The Kenya Railway Corporation (KRC) as the project proponent was required to undertake an Environmental and Social Impact Assessment of the SGR project. Under the Environmental Management and Coordination Act (EMCA) No.8 of 1999 and the Environmental (Impact Assessment and Audit) Regulations, 2003, an ESIA must be carried out with regard to all new development projects, programs or activities. This is to be done at the planning stage of the proposed undertaking to ensure that significant impacts on the environment are taken into consideration during the construction, operation and decommissioning of the project.
15. In compliance with the requirement, KRC appointed Africa Waste and Environment Management Centre (AWEMAC) as a consultant to conduct the Environmental and Social Impact Assessment (ESIA) of the proposed SGR project phase 1 for purposes of generating a comprehensive report that could then be used by the project proponent to apply for an EIA licence from NEMA. The firm subsequently submitted the ESIA Report to the National Environment Management Authority (NEMA) as required by law. The scope of the assessment covered the project site, its surroundings and the utilities proposed by the project proponent.
16. The ESIA report discusses several positive environmental impacts of the proposed SGR project phase 1 as follows-
 - (i) Creation of employment opportunities for construction and operation crew;
 - (ii) Creation of faster means of transport for bulk cargo from the ports;
 - (iii) Decongestion at the Port of Mombasa;
 - (iv) Increased business opportunities for small and medium -scale traders such as hotel and shop owners, food vendors, etc.;
 - (v) Increased regional trade;
 - (vi) Reduced pressure on the road system;
 - (vii) Reduced risk of accidents on the roads;

- (viii) Contribution of revenue to the county, national and regional governments;
- (ix) Emergence of new towns such as Konza Technology City;
- (x) Reduction of HIV/AIDS along the Mombasa –Nairobi Highway particularly among long distance truck drivers and their partners;
- (xi) Revitalization of large-scale agricultural production in rural areas along the new route;
- (xii) Improved tourism;
- (xiii) Development of other sectors of the economy especially mining and construction due to reduced goods transportation costs.

17. The ESIA report also summarizes the negative environmental and social impacts and the expected mitigation measures under each of the identified negative impact as follows-

a) *Soil erosion*

- (i) Control earthworks
- (ii) Install drainage structures properly
- (iii) Ensure management of excavation activities
- (iv) Landscaping of disturbed areas

b) *Dust Generation*

- (i) Spray stock piles of earth with water
- (ii) Avoid pouring dust materials from elevated areas to ground
- (iii) Cover all trucks hauling soil, sand and other loose materials
- (iv) Provide dust screen where necessary

c) *Increase in HIV/AIDS and STDs infection incidence during construction community*

- (i) Provide VCT services among construction workers and surrounding
- (ii) Strengthen advocacy through awareness training in HIV/AIDS and other STDs

d) *Land Acquisition and Involuntary Resettlement/Displacement of persons*

- (i) A Resettlement Action Plan (RAP) to be commissioned
- (ii) Property valuation and compensation
- (iii) Implement a public awareness programme

e) *Vegetation Disturbance, Habitat Alteration and Fragmentation*

- (i) Landscape the sites by planting grass and trees at all disturbed areas

- (ii) Avoid fragmentation or destruction of critical terrestrial and aquatic habitats
- (iii) Construction of bridges to span at-risk areas (e.g. wetlands)
- (iv) Minimize the clearing of riparian vegetation during construction
- (v) Avoid construction activities during the animal breeding season and other sensitive seasons or times of day
- (vi) Avoid the introduction of invasive species during reinstatement activities
- (vii) Care for the existing and planted trees

f) *Occupational Health and Safety hazards*

- (i) Regular maintenance of vegetation within railroad rights-of-way
- (ii) Training workers in personal track safety procedures
- (iii) Implement Noise Control Regulations
- (iv) Avoid exposure to Diesel Exhausts
- (v) Rest periods at regular intervals and during night hours in accordance with international standards and good practices for work time
- (vi) Implementation of rail operational safety procedures on: General rail operational safety, Transport of dangerous goods, Level crossings safety

g) *Pedestrian safety Emissions to Air and Exhaust Emissions*

- (i) Fuel-efficient and less pollution equipment shall be used where feasible
- (ii) Consider the reduction and control of combustion source emissions
- (iii) Consider the reduction and control of fugitive emissions
- (iv) Engine idling time shall be minimized
- (v) Equipment shall be properly tuned and maintained

h) *Soil and water resource contamination due to leaks and spills of fuel and oil*

- (i) Storage tanks and components should meet international standards
- (ii) Storage tanks should have appropriate secondary containment
- (iii) The spill retention area should be equipped with an oil / water separators
- (iv) Fueling facilities should develop a spill prevention and control plan

i) *Accidents involving wildlife & livestock*

- (i) Earth embankments
- (ii) Fence railway corridor
- (iii) Construct underpasses at strategic points

- (iv) Establish water points across underpasses for animals
- (v) Avoid all level crossings

j) *Disturbances to public utilities/ infrastructure*

- (i) Involvement and continuous consultation of key stakeholders at all stages of the project cycle
- (ii) Compensation and re-locations
- (iii) Use of an integrated approach in planning public utilities by sharing most transport corridors for roads, pipelines, water, sewerage, electricity lines, etc.

k) *Disruption of livelihoods, loss of jobs and businesses for people depending on the long-distance road trucks*

- (i) Employment of locals and considerations in job allocations especially for activities requiring unskilled labour
- (ii) Training in emerging job opportunities and requirements in the new railway system
- (iii) Commissioning of other potential income generating activities along the rail line, e.g. revitalization of large-scale agricultural activities, mining, livestock farming, tourism, etc.
- (iv) Truck owners to sell their long-distance trucks to other countries and also to be supported to shift to investment to private trains
- (v) Truck owners to shift to other areas that still require their services in the region

l) *Wastewater Discharge*

- (i) Use of ultra-filtration to extend the life of washing solutions for aqueous parts or use of alternatives to water cleaning
- (ii) Plumbing connection of floor drains, if any, in maintenance areas to the waste water collection and treatment system
- (iii) Prevention of discharge of industrial wastes to septic systems, drain fields, dry wells, cesspools, pits, or separate storm drains or sewers
- (iv) Pre-treatment of effluents to reduce contaminant concentrations

m) *Waste generation and disposal*

- (i) Passenger train operators and cleaning contractors to segregate waste in the trains

- (ii) Instituting an integrated solid waste management program for Waste from Passenger Trains and Terminals
- (iii) Waste storage, collection, transportation and disposal as per Waste Management Regulations, 2006

n) *Noise pollution and Vibrations*

- (i) Implementation of noise reduction or prevention measures at the source
- (ii) Sensitize workforce including drivers of construction vehicles
- (iii) Install sound barriers for pile driving activity
- (iv) Install portable barriers to shield compressors and other small stationary equipment where necessary
- (v) Maintain all equipment
- (vi) Workers in the vicinity of high level noise to wear safety and protective gear

o) *Hazardous Materials*

- (i) Use of aqueous detergent cleaning solutions or steam cleaning, or use and recycling of aliphatic cleaning solvents
- (ii) Use of water-based paints
- (iii) Use of track mats to retain wayside grease and other contaminants
- (iv) Avoiding use of new or replacement parts with asbestos containing materials

p) *Environmental Management and the environmental monitoring plans*

Tables 15 and; 19, 20 and 21 of the ESIA report detailed elaborate environment monitoring plan and environmental management plans respectively with the recommended mitigation plans and parties responsibly for its implementation and the strict adherence to these plans throughout the project cycle.

2.6 The Conditional EIA Licence No. 0014338 issued to the Kenya Railway Corporation

18. After submission of the Environmental and Social Impact Assessment study Report to NEMA, the project proponent was issued with a conditional EIA licence **No. 0014338** on 5th February 2013. Some of the EIA licence conditions relevant to the matter under consideration in part were as follows-

- (i) **Condition 1.3** which requires the proponent to, without prejudice to the other conditions of the license, implement and maintain an environmental management

system, organizational structure and allocate sufficient resources to achieve compliance with the conditions of the License;

- (ii) **Condition 1.8** which requires the proponent to comply with NEMA'S improvement orders throughout the project cycle;
- (iii) **Condition 2.1** which requires the proponent to ensure that land acquisition, compensation, or resettlement is done in consultation with the Ministry of Lands;
- (iv) **Condition 2.2** which requires the proponent to work in consultation with the Kenya Wildlife Service especially on the section running across Tsavo National Park;
- (v) **Condition 2.4** which requires the proponent to work in consultation with the Kenya Forest Service (KFS) to ensure protection of Kibwezi forest;
- (vi) **Condition 2.9** which requires the proponent to ensure that, depending on the magnitude, material sites undertake a separate EIA before the commencement of works; and
- (vii) **Condition 2.18** which requires the proponent to ensure strict adherence to the Environmental Management plan developed throughout the project cycle.

2.7 Grant of Easement to the Kenya Railway Corporation for the Construction of the Standard Gauge Railway

19. According to the ESIA Report, the SGR was to be constructed within or parallel to the Mombasa-Nairobi transport corridor existing within wildlife protected areas. The Report further noted that prior to the commencement of the project, there would be need for the project proponent to conclude land transfer agreements for the land required for the project.
20. Article 62 of the Constitution defines wildlife protected areas as public land and vests the same in the National Land Commission (NLC) for the benefit of the people of Kenya. Any dealings in land within wildlife protected areas must be with the approval of the NLC.
21. The applicable Acts of Parliament contemplated under Article 62 of the Constitution with particular regard to the management of land reserved for wildlife protected areas are the Wildlife Management and Conservation Act 2013, the Land Act, 2012 and the Land Registration Act, 2012.

22. With regard to the project land within wildlife protected areas required for the project, the NLC vide Gazette Notice No. 724 dated 2nd February 2014, and letter Ref: 1451/16 dated 12th March 2014, notified the Kenya Wildlife Service of its intention to acquire land for the Kenya Railways Corporation (KRC).

23. The Kenya Wildlife Service subsequently claims to have notified the Commission of the provisions of section 34 of the Wildlife Management and Conservation Act, 2013 on the procedure for the variation of the boundaries or revocation of a National Park or a Marine Protected Area. Section 34 of the Wildlife Management and Conservation Act, provides—

“A notice under this section which proposes to—

(a) vary the boundaries of a national park; or

(b) change the status from national park to wildlife conservancy or sanctuary;

shall only be published by the Cabinet Secretary where a proposal is recommended by the Service after consultation with the National Land Commission in accordance with subsection (2) of this section and is subsequently approved by a resolution of Parliament:

Provided that there shall be no recommendation unless—

(a) they are satisfied that such variation of boundary or cessation of national park proposed by the notice—

(i) shall not endanger any rare, threatened or endangered species;

(ii) shall not interfere with the migration and critical habitat of the wildlife;

(iii) does not adversely affect its value in provision of environmental goods and services, and,

(iv) does not prejudice biodiversity conservation, cultural site protection, or its use for educational, ecotourism, recreational, health and research purposes;

(b) the proposal has been subjected to an environmental impact assessment in accordance with the provisions of the Environmental Management and Coordination Act, 1999; and

(c) public consultation in accordance with the Fourth Schedule has been undertaken in relation to the proposal.”

24. KWS, KRC and the NLC thereafter established a Multi-Institutional Technical Team which prepared a Joint Technical Report on *Convergence Points in National Development and Environmental Conservation*. The Technical Report recommended, among other recommendations, that KWS and KRC, with the approval of NLC, enter into a Grant of Easement Agreement for project land falling within wildlife protected areas.

25. The Land Act, 2012 and the Land Registration Act, 2012 allow the registered owner of land to grant easements over the land. Both Acts define an easement as—

“a non-possessory interest in another’s land that allows the holder to use the land to a particular extent, to require the proprietor to undertake an act relating to the land, or to restrict the proprietor’s use to a particular extent, and shall not include a profit”

26. Section 138 of the Land Act, 2012 outlines the nature of an easement as follows—

“(1) Subject to any other written law applicable to the use of land, the rights capable of being created by an easement are—

(a) any rights to do something over, under or upon the servient land; or

(b) any right that something should not be so done;

(c) any right to require the owner of servient land to do something over, under or upon that land;

(d) any right to graze stock on the servient land.

(2) The rights capable of being created by an easement do not include—

(a) any right to take and carry away anything from the servient land;

(b) any right to the exclusive possession of any land.”

(3) Unless an easement has been created for specific period of time which will terminate at a fixed date in the future or on the happening of a specific event in the future or on the death of the grantor, the grantee or some other person named in the grant, an easement burdens the servient land and runs with the land for the same period of time as the land or lease held by the grantor who created that easement.

(4) Subject to the provisions of this part an easement shall be capable of existing only during the subsistence of the land or lease out of which it was created.”

27. Pursuant to the recommendation of the Technical Team, KWS and KRC, with the approval of the NLC entered into a Grant of Easement Agreement on 22nd August, 2014 and a Supplemental Agreement dated 28th August 2015 for the grant of a further easement due to a realignment of the project within the Nairobi National Park.

28. **Clause 2 and Clause 5** of the Grant of Easement Agreement outlines the consideration from KRC for the grant of the easement as—

(a) deposit of an Environmental Restoration Grant of **Kshs. 1.197 Billion** in the following manner—

(i) Kshs. 250 Million to be paid on or before the execution of the Agreement;

(ii) Kshs. 846,900,000/- to be paid on or before 31st December 2014; and

(iii) Kshs. 94,100,000/- to be paid on or before 31st March 2015;

(b) payment to the Service of any and all costs of relocation of facilities affected by the construction of the Standard Gauge Railway, excluding the fences within the sections of the property affected by the SGR and the incidental costs of wildlife security estimated at Kshs. 278 Million in the following manner—

(i) Kshs. 100 Million on or before the execution of the Agreement; and

(ii) Kshs. 178 Million on or before 31st December 2014.

29. In addition to the above sums totaling 1.475 Billion in consideration for the easement, KRC executed a Deed of Undertaking on 22nd August 2014 agreeing to acquire within one (1) year of the date of the agreement alternative land for the conservation of wildlife.

30. Clause 5.8 of the Supplemental Agreement provided that KRC would pay a sum of money, to be agreed, into the Wildlife Endowment Fund. The Technical Team negotiated this sum at Kshs. 4 Billion and a Cabinet Memorandum has been presented to the Cabinet Secretary for Environment and Natural Resources.
31. The Technical Team recommended that the funds received by KWS for the Environmental Grant be applied towards-
- (a) Habitat rehabilitations and restorations along 133 km of SGR;
 - (b) Eradication of invasive species;
 - (c) Wildlife rescues, security surveillance and operations along SGR;
 - (d) Monitoring wildlife movements including use of satellite collars and camera traps;
 - (e) Construction of security outposts to defray incremental cost of security;
 - (f) Relocation of KWS amenities and facilities; and
 - (g) Monitoring implementation of the Environmental Monitoring Plans (EMPs).

CHAPTER THREE

SUBMISSIONS RECEIVED BY THE COMMITTEE

32. A number of submissions were received by the Committee from various stakeholders throughout the inquiry period as follows-

3.1 Submission by the Cabinet Secretary for the Ministry of Environment and Natural Resources

33. The Cabinet Secretary (CS), Prof. Judi Wakhungu appeared before the Committee on 8th May, 2015. The Cabinet Secretary submitted that the Kenya Railways Corporation carried out an Environmental and Social Impact Assessment (ESIA) Study for the construction of the Standard Gauge Railway (SGR) from Mombasa to Nairobi as required by the Environmental Management and Coordination Act (EMCA), 1999. The CS further submitted that the ESIA

Report referenced NEMA/EIA/5/2/900 was submitted to National Environmental Management Authority (NEMA) on the 1st November, 2012.

34. In her oral submission, she added that due to the magnitude of the project and the various sensitive ecosystems the project was to go through such as the Tsavo East and Tsavo west National Parks, NEMA undertook institutional recognition by sending the report to the appropriate Lead Agencies including the Kenya Wildlife Service for sectoral comments. These comments were incorporated in the licensing process of the Standard Gauge Railway project.

35. She further informed the Committee that the Ministry of Environment and Natural Resources had put in place various mitigation measures to protect the environment and wildlife in the Tsavo East and West National Parks. She enumerated the measures taken by the Ministry as follows-

- 1) The Ministry profiled the wildlife in the protected areas of the Tsavo National Park;
- 2) KWS was tasked to propose samples of a modified electric fence for easy control of wildlife through the underpasses;
- 3) KRC was required to involve the KWS scientists, Engineers and other key stakeholders at all stages of the project including design to ensure that the impacts to the protected areas were minimized;
- 4) KRC was tasked to consider wildlife corridors and the community around Tsavo National Park to ensure minimal interference of the wildlife migration corridors;
- 5) KWS would provide services such as water through drilling of boreholes and construction of other water reservoirs such as earth dams to improve the lives of the people living around the National Park;
- 6) KWS was tasked with reviewing and approving the proposed railway route-map for the section of the park before implementation of the project;
- 7) An Inter-Agency team of NEMA, KWS, National Museums of Kenya (NMK), and Water Resources Management Authority (WRMA) were charged with the continuous inspection and monitoring of the project to ensure that the EIA licence conditions were

adhered to. The Agencies would issue appropriate remedial orders in case of non-compliance by KRC or in the event of any other emerging issue.

3.2 Field visit by the Committee to the Tsavo Conservancy area

36. The Committee accompanied by KWS carried out an inspection visit at the Tsavo National Park between 7th April and 10th April, 2016.

Submission by Kenya Wildlife Service Officials in Tsavo Conservancy Area

37. KWS Officials submitted that Tsavo Conservancy Area is one of the largest contiguous protected areas in Africa and is the largest protected area in Kenya. The Tsavo East, Tsavo West and Chyulu occupy about 52% of total protected areas in the country and about 4% of Kenya's surface area. The Tsavo protected area together with the dispersal areas cover a land size of over 60,000 km² and the Tsavo Conservancy Area holds the largest elephant population in the country. The entry to the parks is through the Sala, Bachuma, Voi, Manyani, Ithumba, Mtito, Kanjaro, Maktau, Ziwani, Jipe, Chyullu gates.

38. With regard to the impact of the SGR on the Tsavo Conservancy, KWS officials submitted that-

- (a) The structural design of the SGR has caused habitat fragmentation. The Park in certain areas has been divided into two. This has affected the natural habitats of some of the species including their breeding behaviors.
- (b) The embankments and landfills have completely blocked some wildlife migratory and dispersal areas. This affects the seasonal movement of wildlife, their breeding habits, social behavior, their genetic pool; and access to water and pasture during adverse weather conditions;
- (c) Cumulatively, there had been increased road-kills. The accumulation and restriction of wildlife to designated wildlife crossing corridors and fencing-off of the rest of the SGR has led to increased road-kills where animals attempted to cross in unfamiliar crossing points;
- (d) There is danger of increased poaching and bush meat incidences as wildlife are herded to designated crossing corridor and points;

- (e) There are potential other negative environmental effects such as air pollution, water and soil pollution and loss of crucial vegetation; and
 - (f) The SGR has caused the displacement of other park infrastructure such as park gates and park fences especially at Bachuma.
39. With regard to proposed measures to mitigate the adverse impact of the SGR on the conservancy, the officials submitted that-
- (a) At least six crossing points should be built in Tsavo in addition to box culverts and bridges.
 - (b) There should be increased security checks, impromptu security checks and monitoring, surveillance and installation of CCTV cameras at all wildlife crossing points;
 - (c) Environmental Management Plans (EMPs) should be established and implemented;
 - (d) Road and rail users should be educated and made aware of the project through use of clear warning signs, indicator lights and road bumps; and
 - (e) The Bachuma gate should be relocated and all fences merged with the SGR fence.

Submission by a member of the public at Maungu

40. Mr. Ben Mwangi, a farmer and businessman, informed the Committee that SGR benefitted the area in a number of ways. He listed the compensation paid to landowners for land taken up for the project, job creation and training for locals employed under the project and reduction of insecurity in the area. He further noted that the project allows locals to provide housing and food for the SGR construction workers and that there is an industrial park coming up nearby at Sanghala which could be utilised as a special economic zone. He hoped that SGR will reduce the clearing and forwarding period as well as transportation time for cargo.
41. Mr. Mwangi submitted that, as a way to reduce human-wildlife conflict, the farmers have resorted to fencing their parcels of land in addition to the SGR and KWS fences. To prevent

elephant incursion to their farms, , farmers in the areas have resorted to keeping beehives, growing pepper plants which ward off the animals.

Submission by Mr. John Mulamba the Chairperson, Taita Taveta County Wildlife Conservation and Compensation Committee

42. Mr. Mulamba, informed the Committee that, as a member of the wildlife conservation and compensation committee they face challenges which include-

- (a) Human Wildlife Conflict which is being escalated by illegal grazing in the park especially Tsavo West and the wildlife in turn invades the communities encroaching on the parks. The cases of HWC were on the increase since the commencement of the SGR project;
- (b) Changes in the environment near the parks. The construction of the SGR has necessitated underpasses and overpasses which animals are not used to.
- (c) Human settlements along the traditional migratory corridors. It had been recommended that a land use planning officer be attached to the County Wildlife Conservation and Compensation Committee to advise on this and assist in the maintenance of the animal corridors.

(c) Submission by the Director General, Kenya Wildlife Service

43. The Director General KWS, Mr. Kitili Mbathi informed the Committee that the monetary value of the affected conservation areas in terms of loss of biodiversity and ecosystem services was estimated at Kshs. 3.7 Billion.

44. The Director General submitted documents to the Committee which showed that the SGR project under the current alignment from Mombasa to Nairobi has affected land in wildlife protected areas as follows:

- (a) Tsavo East National Park, Tsavo West National Park and Tsavo Road and Railway Reserve – 1,019 ha (2,516.9 acres)
- (b) Kiboko Wildlife sanctuary – 10.2 ha (25.2 acres)

45. The documents further noted that overpass bridges, tunnels and culverts had been constructed to allow wildlife to move between Tsavo East and West after rigorous scientific analysis. Seven (7) wildlife corridors were identified and marked by KWS along the proposed SGR alignment within the Tsavo ecosystem. These included two corridors at Bachuma and Ngutuni and five at Manyani, Tsavo River, Kyulu, Kenani and Kanga areas.
46. As consideration for KWS providing it with land for construction of the SGR through Tsavo East and West National Parks and Kiboko Wildlife sanctuary KRC committed, principally, to make certain payments to KWS and bear the costs of specified developments and activities consequent upon construction of the SGR within the wildlife protected areas.
47. KWS had so far received a total of Kshs. 1,469,000,000/- from which they have used Kshs. 30 Million for the construction of the Bachuma Gate. The balance of Kshs. 1,439,000,000/- was used to bridge a shortfall in the KWS budget in financial year 2015/2016.
48. The Director further submitted that the following issues were outstanding with regard to the grant of easement for the SGR project in wildlife protected areas-
- (a) KRC has not started construction of the game-proof electric fence along the SGR corridor within the Tsavo National Parks and Kiboko Wildlife Sanctuary. This failure is contributing to the increased level of wildlife rail-kills and road –kills due to the on-going SGR construction.
 - (b) There is an outstanding payment of Kshs. 94, 100,000 being the balance of environment restoration grant as per the agreement; and
 - (c) KRC undertook to acquire land suitable for conservation of wildlife within one year from the date of the Grant of Easement Agreement in order to compensate loss of habitat.
49. With regard to the status of monitoring and surveillance by KWS, the Director submitted that KWS-
- (a) has established and laid a sampling transect and permanent sampling station along SGR corridor for biodiversity assessments to track change in wildlife utilization of various habitats affected by SGR construction;

- (b) is actively monitoring wildlife crossings/bridges that were identified especially in Tsavo in order to ensure that wildlife movement within Tsavo ecosystem is maintained and that the key wildlife crossings are not blocked by SGR;
 - (c) is tracking compliance with the Environmental Management Plans (EMP) arising from numerous Environmental Impact Assessment (EIA) studies undertaken under SGR activities within the protected areas;
 - (d) has been undertaking security surveillance and operations, including gathering intelligence information to pre-empt any potential threat to wildlife as a result of the SGR activities in protected areas;
 - (e) has continued to respond to sporadic human-wildlife conflict incidences that have increased recently due to the on-going SGR construction in the Tsavos;
 - (f) has attached over sixty (60) rangers to undertake various security duties for the SGR project within Tsavo National Park, under the joint Inter-Agency Security team under the Command of Railway police.
50. During a subsequent meeting held with the Committee on 13th September 2016, the Director General, KWS informed the Committee that-
- (a) KWS had put electronic collars on animals in the Tsavo National park to monitor their migratory routes and had established that animals had started adapting to the new migratory routes;
 - (b) The knowledge gained from the experience in Tsavo National park would be used to ensure the most minimal disruption was caused to animals at Nairobi National Park;
 - (c) KWS had only granted an easement to KRC for the construction of a bridge for the SGR Phase 2 project however the land still belonged to KWS;
 - (d) KWS was still analyzing the various options submitted by KRC and was yet to approve any of the options for construction for phase 2 of the SGR project;
 - (e) Phase 1 of the project had hived off 9 km of the Nairobi National Park;
 - (f) The Environmental Impact Assessment study for phase 2 is route specific and would be done once one option was agreed on; and

- (g) As part of the EIA, KWS would expect KRC to demonstrate and give examples of countries that had used similar designs in parks without causing negative impact to the animals and eco-system.

CHAPTER FOUR

COMMITTEE OBSERVATIONS AND RECOMMENDATIONS

4.1 COMMITTEE OBSERVATIONS

The Committee made observations under the following sub-headings-

The Environmental and Social Impact Assessment Report (ESIA)

- 1) An Environmental and Social study report for phase one of the SGR project was submitted to National Environment Management Authority (NEMA) and subsequently a conditional EIA licence No. 0014338 was issued to the Kenya Railway Corporation on 5th February 2013 as the project proponent;
- 2) The report also recommended an environmental monitoring plan as detailed on table 15 of the ESIA report which also included recommended mitigation measures and the responsible parties being the Kenya Railway Corporation and the contractor;
- 3) The ESIA report and the conditional licence both required mitigation measures to be instituted by the Kenya Railway Corporation and a comprehensive environmental management and monitoring plans to be implemented by the KRC throughout the project life cycle to mitigate the identified and the potential adverse environmental impacts of the project;
- 4) The National Environment Management Authority made little, if any, or no effort at all to monitor the compliance and fulfillment of the conditions of its licence by the various agencies. This was observed to amount to dereliction of statutory duty bestowed upon NEMA as the premier environmental protection agency. NEMA's continued issuance of

- conditions laden licences with no effort to monitor its compliance by project proponents can be construed to be a scheme to avoid liability for breach of their statutory responsibility to protect the nation's environment and natural resources;
- 5) Phase 1 of the SGR project line has fragmented some parts of and altered the actual boundary of the Tsavo National Park. The project has not complied with the requirements of section 34 of the Wildlife Management and Conservation Act, 2013 which provides that "*Variation or alteration of the boundary of a wildlife protected area requires Parliamentary approval: r;*
 - 6) The fragmentation of the Tsavo National Park by the SGR project has exposed parts of the Park to squatters and other adverse possessors to the detriment of wildlife conservation and protection;
 - 7) The fragmentation of the Tsavo National Park has affected the movement of wildlife between the Tsavo East and Tsavo West and thus interfering with the normal natural adaptation of wildlife species to their habitat. This in turn has affected their breeding, gene pool and the predator-prey proportions in the Park;
 - 8) The fragmentation of the Tsavo National Park further exposes the endangered species to poachers. The Park is likely to be a fertile ground for the unforgiving poachers exposing the already threatened endangered species especially elephants to further risk of poaching;
 - 9) The fragmentation of the Tsavo National Park may also lead to increased human-wildlife conflict consequently leading to higher demand for compensation from the government;
 - 10) The fragmentation of the Tsavo National Park has cut-off important and regularly used watering points for wildlife and there is no alternative provision of watering points for the wildlife;
 - 11) There was inadequate provision of wildlife crossing points and culverts and bridges were constructed at locations that are not known wildlife corridors;

- 12) The detailed designs of the culverts and bridges in the protected area had not been shared with the Kenya Wildlife Service contrary to the clear conditional provisions in the ESIA report and the conditional EIA licence issued to the project proponent;
- 13) Some of the underpasses were poorly designed and too narrow for large animals such as elephants and giraffes to use it as crossing points;
- 14) The use of embankments which have fragmented habitats have also affected smaller animals such as dikdiks, warthogs, among others, and made it impossible for such animals to access some of their best known natural breeding and feeding grounds;
- 15) The design of the under-passes within the Tsavo National Park lacked the input of the expertise of KWS engineers and scientists. The design does not conform to international best practices and are inappropriate in a wildlife protected area.
- 16) During the course of the construction of Phase 1 of the project, KRC flouted condition 1.3, 2.2 and 2.18 of the EIA licence. The KRC further failed to institute the required mitigation measures as recommended in the ESIA report in relation to the Tsavo National Parks;
- 17) The KRC was negligent in either altering or disregarding critical licence conditions which have had adverse ramifications on the protected and endangered wildlife species in Tsavo National Park. NEMA were either complicit by not demanding compliance from the KRC and/ or breached their statutory duty to protect the environment from a non-compliant proponent.
- 18) The implementation of ESIA report was shrouded in mystery, secrecy, opaqueness and irresponsibility on the part of NEMA, KRC and KWS which are government agencies bestowed with the statutory powers to diligently execute their respective duties. This state of affairs has given the SGR project a bad image and caused adverse environmental impact that could have otherwise been mitigated if the agencies had carried out their duties as required by law;
- 19) There is need to amend the EMCA, 1999 to provide for clearer processes of undertaking a full environmental impact assessment for large infrastructure projects, compliance and

responsibility for negligence to monitor licence conditions by NEMA and the need to make an environmental rehabilitation bond a mandatory requirement for the approval of such projects;

- 20) There is an urgent and immediate need by parliament to re-look at the legal and institutional framework for the protection of the environment for the present and future generations. This is informed by the fact that NEMA has failed to diligently execute part of its statutory obligations;

The grant of Easements to the Kenya Railways Corporation for the construction of the Standard Gauge Railway

- 21) Section 34 of the Wildlife Management and Conservation Act, 2013 outlines the procedure for the variation of the boundaries of or the revocation of a national park. The outright acquisition of land within an area under the administration of the KWS would fall squarely within the provisions of section 34 of the Wildlife Management and Conservation Act and would therefore require Parliamentary approval, an Environmental Impact Assessment Report and consultation of the public before taking effect;
- 22) The provisions of the Land Act, 2012 and the Land Registration Act, 2012 allow KWS to grant an easement within a protected wildlife area with the approval of the National Land Commission. In this regard, the implementation of Phase I of the SGR project from Mombasa to Nairobi resulted in the grant of an easement amounting to 10.292Km² by the KWS to KRC in wildlife protected areas.
- 23) Despite the legality of the grant of easement by KWS to KRC, the design and effect of the SGR fragmenting the wildlife protected areas may be argued as an actual alteration or variation of the boundaries of the Tsavo National Parks;
- 24) The provisions of the Wildlife Management and Conservation Act, 2013 should prevail with regard to the grant of any rights or title to land within wildlife protected areas.

Compensation for the easement granted and utilization of the funds

- 25) The Kenya Wildlife Service as the registered proprietor of lands within which national parks are situated may in appropriate circumstances and with the involvement and

approval of the National Land Commission, grant easement for the use of such land. In this regard, the implementation of Phase I of the SGR project from Mombasa to Nairobi resulted in the grant of an easement amounting to 10.292Km² by the Service to the Corporation in wildlife protected areas as shown below.

PROTECTED AREA	EASEMENT
Tsavo East National Park, Tsavo West National Park & Tsavo Road and Railway Reserve	10.19Km ²
Kiboko Wildlife Sanctuary	0.102Km ²
TOTAL	10.292Km ²

- 26) With regard to the easement granted to the Corporation, the compensation negotiated and accepted by the Service was lower in value as compared to its own Kshs. 3.7 Billion estimate. This puts into question the nature of negotiations that led to their acceptance of a lower amount in compensation.
- 27) Despite the monies agreed and the undertaking made by the Corporation for the grant of the easement, to date the Service is in receipt of a total of Kshs. 1.469 Billion, a shortfall of Kshs. 600 Million;
- 28) Of the Kshs. 1.469 Billion already received, KWS has only utilized Kshs. 30 Million for construction of the Bachuma Gate and applied Kshs. 1.439 Billions towards its 2015/2016 Budgetary shortfall contrary to the recommendation of the Technical team that the funds be used for-
- (a) Habitat rehabilitations and restorations along 133 km of SGR;
 - (b) Eradication of invasive species;
 - (c) Wildlife rescues, security surveillance and operations along SGR;

- (d) Monitoring wildlife movements including use of satellite collars and camera traps;
- (e) Construction of security outposts to deflate incremental cost of security;
- (f) Relocation of KWS amenities and facilities; and
- (g) Monitoring implementation of the Environmental Monitoring Plans (EMPs).

4.2 COMMITTEE RECOMMENDATIONS

The Committee makes the following recommendations from the observations and other evidence collected during the course of the inquiry-

The Environmental and Social Impact Assessment Report (ESIA)

- 1) The National Environment Management Authority (NEMA) should monitor the progress made by the different agencies to comply with the terms of the EIA licence and failure to comply should attract the necessary sanction. All the mitigation measures recommended in the ESIA report and the Conditions in the EIA licence should be implemented fully within and outside the protected areas including establishment and implementation of the environmental monitoring and environmental management plans;
- 2) The Kenya Railways Corporation should redesign the wildlife crossing points to align them with the appropriate wildlife crossing points and where KRC knowingly or negligently disregarded the EIA licence conditions especially where they did not seek the expertise of KWS in designing the wildlife crossing points or placing an inappropriate wildlife crossing locations, KRC should rectify the mistake and redesign the wildlife crossing points;
- 3) The National Environment Management Authority should be more transparent and accountable in its EIA licencing regime. The issuance of EIA licences must be supported by clear evidence and full disclosure that the project proponent has the capacity to fulfil the licence conditions and that the adverse environmental impacts of especially large infrastructure projects can be mitigated;
- 4) NEMA officers who approve issuance of EIA licences despite the existence of a strong presumption of irreversible adverse environmental impact should be held liable for their action/inaction;

- 5) The government-to-government large infrastructure projects contracts that are likely to have adverse environmental impacts such as the SGR must be subjected to full public disclosure requirements and must also meet the statutory environmental protection requirements. Submission of a mandatory Environmental rehabilitation bond should form part of the approval requirement for all large infrastructure projects;
- 6) the Ministry of Environment and Natural Resources should urgently engage key stakeholders with a view to amending the Environmental Management and Coordination Act, 1999 to reformulate the legal and institutional architecture in order to achieve the constitutional obligation to guarantee inter-generational equity in respect to the environment;
- 7) The Kenya Wildlife Service should immediately repossess any part of the protected area that was fragmented by the SGR and which is currently inhabited by unauthorized persons;
- 8) The Kenya Railways Corporation should factor in their budget an annual allocation to support the equipping, security surveillance and maintenance of all wildlife crossing points provided for within the protected areas;
- 9) The Kenya Wildlife Service should take practical steps to mitigate the effect of the fragmentation of the Tsavo National Parks on wildlife breeding, gene pool and the predator-prey proportions within the Tsavo conservancy area. Any cost associated with these mitigation measures should be met by the KRC;
- 10) The Kenya Railway Corporation should support the Wildlife Compensation fund to alleviate the high demand for compensation that will likely arise due to the increased human-wildlife conflict occasioned by park fragmentation occasioned by the implementation of the SGR project;
- 11) The KRC in consultation with KWS should increase the number of wildlife crossing points and redesign those that do not meet the recommended international standards and best practices;

12) The KRC in consultation with KWS should construct wildlife watering points to take care of the water needs of the wildlife cut-off from their habitual and seasonal watering points.

The grant of Easements to the Kenya Railways Corporation for the construction of the Standard Gauge Railway

13. The Committee recommends that the Wildlife Conservation and Management Act, 2013 be amended to provide for the need for Parliamentary approval for the grant of any right to the use of land within wildlife protected areas, in particular, with regard to infrastructure projects;

4.2.3 Compensation for the easement granted and utilization of the funds

14. The KWS service should be compensated by KRC for the actual value of the easement granted which was estimated to be Kshs. 3.7 Billion;

15. The Kenya Wildlife Service should use the proceeds of the compensation for the easement to implement projects and activities that will support the mitigation of the adverse impacts of the SGR and advance the objectives of conservation, in particular-

- (a) Habitat rehabilitations and restorations along 133 km of SGR;
- (b) Eradication of invasive species;
- (c) Wildlife rescues, security surveillance and operations along SGR;
- (d) Monitoring wildlife movements including use of satellite collars and camera traps;
- (e) Construction of security outposts to defray incremental cost of security;
- (f) Relocation of KWS amenities and facilities; and
- (g) Monitoring implementation of the Environmental Monitoring Plans (EMPs).

Setting up of an endowment fund

16. The Wildlife Conservation and Management Act, 2013 provides that the Kenya Wildlife Service shall establish an endowment fund for purposes of developing wildlife initiatives, managing and restoring protected areas and conservancies, protecting endangered species, habitats and ecosystems, etc. The fund should be established and the KRC should remit money to the fund annually.

Signed..........Date.....17/11/2012.....

Hon. Amina Abdalla, CBS, MP
Chairperson, Departmental Committee on Environment and Natural Resources

The recommendation section should not have acronyms – all names to be stated in full.

MINUTES OF THE 21ST SITTING OF DEPARTMENTAL COMMITTEE ON
ENVIRONMENT AND NATURAL RESOURCES SITE VISIT HELD ON 8TH APRIL 2016
STARTING AT 9:00AM

PRESENT:

1. Hon. Wilber Ottichilo, MP - Session Chair
2. Hon. Francis Chachu, MP
3. Hon. Richard Ole Kenta, MP
4. Hon. Kathuri Murungi, MP
5. Hon. Sunjeev Birdi, MP
6. Hon. Dr. Reginalda Wanyonyi, MP
7. Hon. Abdulaziz Farah, MP
8. Hon. Jude Njomo, MP
9. Hon. Hassan Dukicha, MP
10. Hon. Njogu Barua, MP

*Ole Kenta
Sunjeev*

IN ATTENDANCE

1. Ms. Rose Wanjohi - Second Clerk Assistant
2. Mr. Ron Walala - Legal Counsel II
3. Mr. Ahmed Odhowa - Researcher

WITNESSES

1. Dr. Margaret Mwakima - Principal Secretary, Natural Resources
2. Mr. Kitili Mbathi - Director General, Kenya Wildlife Service
3. Dr. Stephen Manegene - Director, Wildlife Conservation, Ministry
4. Dr. Francis Gakuya - Chief Veterinary Officer, KWS
5. Mr. Francis Mwaita - Deputy Director, Finance and Administration, KWS
6. Ms. Lynette W. Muganda - Deputy Director, Human Capital, KWS
7. Mr. Robert Obrein - Assistant Director, KWS
8. Mr. Luka Nansha - Regional Intelligence Officer., KWS
9. Mr Dominic Wambua - Senior Warden, Tsavo East National Park, KWS
10. Capt. Kenneth Ochieng - Senior Warden/Pilot Tsavo West National Park,
KWS

11. Ms. Margaret Maina - Communication Officer, Ministry of Environment and Natural Resources
12. Mr. Godfrey Odhiambo - Communication Officer, Ministry of Environment and Natural Resources
13. Mr. Micah Yabei - KWS

MIN.NO. /DC/ENR/072/2016:

SITE VISITS

The Committee was informed that:

- i. Aruba Dam that KWS was planning to desilt it because it was not able to hold water and therefore was not providing water as required. The water points within the park need to be increased to reduce animal migration to ranches and farmers in search of water. Currently, there is only one water truck to supply both Tsavo parks.
- ii. One of the invasive species which includes the prickly pear cactus not only colonises the area its growing in but also causes injury to the animals as they have not adapted to avoiding or eating it.
- iii. At Bachuma gate, the gate had to be moved from its previous position because access to it had been blocked by the SGR and the wayleave required. To provide for water runoff, there will be water canals next to SGR, directing it to water troughs to provide water at the animal crossings and watering points. The new gate would have an information area, restrooms, ticket offices, security offices and control room. Further, there is a proposed Bachuma railway station near the park entrance which would be convenient in passenger disembarking to get into the park. Near the park entrance there is an animal migration crossing which would be a tourist attraction. After the Bachuma gate, most of the land on the other side of the road mainly consists of ranches, where elephants migrate to. Unfortunately, to cross to the road there occur road kills on the busy Nairobi Mombasa Highway as well as poaching because the ranches do not have as good security as in the parks. The animals migrate in search of food and water.
- iv. As it viewed the Maneaters Gate and the Tsavo River bridge, that the Tsavo catchment area was catered for in the original SGR design. The provision of water at the animal crossings will allow KWS to direct animals to the crossing as well as provide security for them as they will be vulnerable at these crossings.

- v. As it viewed the park invasion at Maungu that KWS had obtained a court order to evict any squatters on their land, but the order is yet to be executed because the courts have not issued it to KWS in writing.

Mr. Ben Mwangi, a farmer and business person at Maungu informed the Committee that SGR was providing benefits to the area as it opened it up. There is compensation to landowners for land taken up to provide for way leave for SGR; job creation and training for the workers for the SGR; reduction of insecurity as the area opens up. It is allowing them to provide housing and food for the SRG construction workers. It is hoped that SGR will reduce the clearing and forwarding period as well as transportation time for cargo. He further informed the Committee that there was an industrial park coming up nearby at Sanghala which could be utilised as a special economic zone.

As a way to reduce Human Wildlife Conflict, the farmers have resorted to fencing their parcels of land, which is also enhanced by both the fences by SGR and KWS. To prevent elephant incursion to their farms especially those planted with watermelons, there are using beehive fencing and pepper plants.

As a farmer and business person, he requests KWS to help in the promotion of bee hive and pepper fencing.

Committee Observations

The Committee observed that

- The compensation paid for the wayleave does not appear to be adequate for the 10.92km²
- At Bachuma gate, as per the original approved SGR design, there was to be a flyover or overpass but it has not been constructed. This calls into question on whether the original SGR design is being implemented or there are variations to it and what informed the changes.
- The barriers to the original animal migrations creates distress to the animal as well as increase the incidences of road kills as the animals cross the road to reach the ranches.
- Human settlements along the way leave as well as at the overpasses and underpasses provided for animal migration would increase incidences of HWC. That there were also more human settlements between the SGR and the electrical pinions along the rail.

In response to the Committee observations, the Management of KWS and The Ministry of Environment and Natural Resources informed the Committee that

- Perhaps the Committee could recommend the construction of underpasses during the expansion of Nairobi Mombasa Highway to a dual carriage to mitigate against road kills and the animals remaining in the ranches. Kenya Wildlife Services was satisfied with the number of underpasses and overpasses provided for by the SGR project.
- Artificial water provisions within the park will also contain the animals within the Parks and reduce migration to the ranches and human settlements. Further in time as the constructions reduce on the SGR, Pipeline and Nairobi Mombasa dual carriage, the animals will adapt.
- Responsibility of ensuring that the way leaves were free of human settlement lies with Kenya Railway Corporation since the land is now legally theirs.
- The electrical pinions were being constructed in anticipation of electrical trains on SGR.

Committee Recommendation

The Committee recommends

1. Inviting the management of Kenya Railways Corporations on the human settlements on the way leave

MIN.NO. DC/ENR/073/2016: SUBMISSION BY MR. JOHN MULAMBA, CHAIRPERSON, TAITA TAVETA COUNTY WILDLIFE CONSERVATION AND COMPENSATION COMMITTEE:

The Chairperson, County Wildlife Conversation and Compensation Committee of Taita Taveta Constituency informed the Committee that he and other chairpersons of the 47 counties compensation claims committees were appointed and gazetted on 6th March, 2016. All County Wildlife Conservation and Compensation Committees have had two meetings since they were constituted facilitated by the Parent Ministry.

The County Wildlife Conservation and Compensation Committee of Taita Taveta has met several times to ty and clear the backlog of the compensation claims since the compensation sections in the Act came into force in 2014. The compensation claims include

- 15 death

- 235 injuries
- 452 crops and livestock

The Committee has however managed to approve all 15 death claim and 168 of the 252 injuries claims for processing and payout by the parent ministry. Most of the reviewed injury claims are from snake bites. Because there is no standard way of review of injuries they have had to rely on a government medical officer to assist them in assessing injuries based on where they have occurred in the body and the %age of damage which has occurred. Records of snake bites injuries are imprecise and unclear, and therefore as a committee they have recommended sensitizing health practitioners on how to report the incidences. The Committee has defined that for an injury to warrant a claim, the snake bite must have been poisonous and that it necessitated administration of anti-venom. This however may exclude herbal anti-venom. The Committee requests the Ministry to provide guided regulations on compensation for snake bites. The Committee further requests that the public is sensitised on the type of injury that would merit compensation. As a Committee, they also requests that the public to be educated to view wildlife as a benefit.

The Chairperson informed the Committee that, as a compensation claim committee they face challenges which include

1. Facilitation of their duties. Initially it had been proposed that as chairperson, they receive a Honoraria to facilitate them including transportation. This proposal was disallowed by Salaries & Remuneration Commission.
2. They do not have a standard operating procedure
3. Human Wildlife Conflict which is being escalated by illegal grazing in the park especially Tsavo West and the wildlife in turn invades the communities encroaching on the parks.
4. Changes in environment near the parks. The construction of the SGR has necessitated underpasses and overpasses which animals are not used to.
5. Human settlements along the traditional migratory corridors. It had been recommended that a land use planning officer is attached to the County Wildlife Conservation and Compensation Committee to advise on this and assist in the maintenance of the animal corridors.
6. The demarcation of Community land. Taita Taveta Constituency is struggling with encroachment because quite a large area was taken for conservation.

7. Pending crops and livestock claims. The Compensation Claims Committees are requesting for additional funds too clear the backlog of cases and to ascertain the authenticity of the claims filed.

Committee Observations

The Committee observed that

1. It was not clear whether the claims for death and injuries have been settled;
2. Animals are seen as been taken care of better than the human beings. Compensation was introduced in the Act as a form of benefit to the public;
3. It appears that that human beings are determined to encroach on wildlife areas through their land use;
4. Compensation may not be sustainable especially in view of the backlog of claims pending and the low budgetary allocation on the same. The mandate ad jurisdiction of KWS on compensation claims need to be defined;
5. There is need of community sensitization on the importance of wildlife to human sustainability;
6. There was need for public participation in the Environmental Impact Assessment of the SGR project come up with mitigating measures against HWC;
7. KWS as a key stakeholder should have been given an opportunity to interrogate he report and present their issues for discussion;
8. It was not clear NEMA's role and mandate in enforcement of the findings in the EIA and enforcement of the mitigating measures agreed concerning the SGR project;
9. It appeared that cases of HWC were on the rise with the implementation of the SGR project.

In response to the Committee observations, the Chairperson of the County Wildlife Conservation and Compensation Committee informed that Committee that

1. The Committee was waiting communication from the Ministry on the whether the death and injuries claims already submitted had been settled. The Ministry has however settled the death claims filed between Jan 2014 to November 2014. It should be noted that in Taita Taveta constituency alone Kshs. 625 million is required to settle death and injury claims alone;

2. Some of the ways to sensitise the public on the benefits of animals includes direct benefits for instance a percentage of the park fees to be given to the community; organising school bus tours to the parks to change negative perceptions of wildlife and Corporate Social Responsibility activities by KWS.
3. The County Wildlife Conservation and Compensation Committees are a linkage between the public and the Ministry;
4. He had not been invited to participate in the EIA as provided for in the EMCA Act;
5. The cases of HWC were on the increase since the commencement of the SGR project, but it is worth noting that the new law which introduced compensation claims was operationalized around the same period.

The PS, Natural Resources in response informed the Committee that

- The delay in operationalization and facilitation for the chairpersons of the committees had been occasioned by the differences on the type of allowances and honoraria with SRC which has since been resolved. At the moment the budgetary allocations for settlement of compensation claims is not enough;
- Compensation claims for snake bites was a challenge because even World Health Organization did not have enough anti venom. But perhaps as a revenue stream and after obtaining the necessary clearance from WHO, the County can initiate an anti-venom enterprise. The public need to be sensitise on snake behaviour, for instance the snake come to homes to look for water, therefore some homes are providing water within the compound which as reduce HWC.
- Although the EMCA Act provides for public participation in the EIA, it does not define who the lead agency is nor the project proponent;

Committee Recommendation

The Committee recommends that Kenya Wildlife Services provides the Committee with a copy of the Environmental Impact Assessment Report forwarded to them and their responses/comments on it.

MIN.NO. DC/ENR/074/2016:

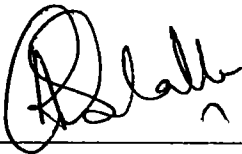
ANY OTHER BUSINESS

There was no other business before the Committee

MIN.NO. DC/ENR/075/2016

ADJOURNMENT

There being no other business, meeting was adjourned at Fifteen Minutes to Two O'clock.

SIGNED:  _____

(CHAIRPERSON)

DATE: 24 / 6 / 2014

MINUTES OF THE 22ND SITTING OF DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES SITE VISIT HELD ON 8TH APRIL 2016 IN MANYANI KWS TRAINING SCHOOL STARTING AT 3:00PM.

PRESENT:

1. Hon. Wilber Ottichilo, MP - Session Chair
2. Hon. Francis Chachu, MP
3. Hon. Richard Ole Kenta, MP
4. Hon. Kathuri Murungi, MP
5. Hon. Sunjeev Birdi, MP
6. Hon. Dr. Reginalda Wanyonyi, MP
7. Hon. Abdulaziz Farah, MP
8. Hon. Jude Njomo, MP
9. Hon. Hassan Dukicha, MP
10. Hon. Njogu Barua, MP

*Sunjeev
Birdi*

IN ATTENDANCE

1. Ms. Rose Wanjohi - Second Clerk Assistant
2. Mr. Ron Walala - Legal Counsel II
3. Mr. Ahmed Odhwa - Researcher

WITNESSES

1. Dr. Margaret Mwakima - Principal Secretary, Natural Resources
2. Mr. Kitili Mbathi - Director General, Kenya Wildlife Service
3. Dr. Stephen Manegene - Director, Wildlife Conservation, Ministry
4. Dr. Francis Gakuya - Chief Veterinary Officer, KWS
5. Mr. Francis Mwaita - Deputy Director, Finance and Administration, KWS
6. Ms. Lynette W. Muganda - Deputy Director, Human Capital, KWS
7. Mr. Robert Obrein - Assistant Director, KWS
8. Mr Dominic Wambua - Senior Warden, Tsavo East National Park, KWS
9. Capt. Kenneth Ochieng - Senior Warden/Pilot Tsavo West National Park, KWS
10. Ms. Margaret Maina - Communication Officer, Ministry of Environment and Natural Resources
11. Mr. Godfrey Odhiambo - Communication Officer, Ministry of Environment and Natural Resources
12. Mr. Micah Yabei - KWS

MIN.NO. /DCENR/076/ 2016: SITE VISIT: KWS MANYANI TRAINING SCHOOL

The Committee toured KWS Manyani Training School, where it was informed that the school trains both KWS officers and other security agencies officers.

As the Committee inspected the low cost housing being provided for KWS officers, they were informed that the houses are being constructed with interlocking bricks. The bricks are made using soil, water and a bit of cement. The cost of the 16 two-bedroomed, self-contained houses is Kshs. 10, 000,000(Kshs 750,000 each) compared with the traditional stone house which cost Kshs 50 million for 8 two bedroomed self-contained units. Labour is provided by the nearby Manyani GK prisons.

The Committee was informed that KWS is negotiating an MOU with Kenya Prisons Services for provision of prison labour to build KWS houses, where the two services have camps near each other.

MIN.NO. DC-ENR/077/2016:

ANY OTHER BUSINESS:

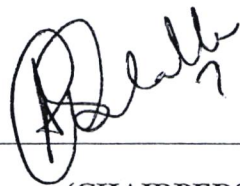
There was no other business before the Committee.

MIN.NO. DC-ENR/078/2016:

ADJOURNMENT:

There being no other business, meeting was adjourned at Half past Three O'clock. The next meeting will be held on Saturday 9th April, 2016 starting at 9:00am

SIGNED: _____



(CHAIRPERSON)

DATE: _____

27/6/2016

MINUTES OF THE 23RD SITTING FOR THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NAATURAL RESOURCES IN THE MEETING ROOM IN THE KILAGUNI SERENA HOTEL IN TSAVO STARTING FROM 9.00 AM

PRESENT

1. The Hon. Wilber Ottichilo, MP - Session Chair
2. The Hon. Njogu Barua, MP
3. The Hon. Dr. Reginalda Wanyonyi, MP
4. The Hon. Richard Ole Kenta, MP
5. The Hon. Jude Njomo, MP
6. The Hon. Francis Chachu, MP
7. The Hon. Abdulaziz Farah, MP
8. The Hon. Hassan Dukicha, MP
9. The Hon. Kathuri Murungi, MP

IN ATTENDANCE

1. Ms. Rose Wanjohi - Second Clerk Assistant
2. Mr. Ronald Walala - Legal Counsel II
3. Mr. Ahmed Odhwa - Researcher

WITNESSES

1. Mr. Kitili Mbathi - Director General, Kenya Wildlife Service
2. Dr. Stephen Manegene - Director, Wildlife Conservation, Ministry
3. Dr. Francis Gakuya - Chief Veterinary Officer, KWS
4. Mr. Francis Mwaita - Deputy Director, Finance and Administration, KWS
5. Ms. Lynette W. Muganda - Deputy Director, Human Capital, KWS
6. Mr. Robert Obrein - Assistant Director, KWS
7. Mr Dominic Wambua - Senior Warden, Tsavo East National Park, KWS
8. Capt. Kenneth Ochieng - Senior Warden/Pilot Tsavo West National Park, KWS

MIN.NO. DC-ENV/079/2016:

PRELIMINARIES

The Chairperson called the meeting to order at Ten Minutes past Nine o'clock. The prayer was said by Ms. Rose Wanjohi, Second Clerk Assistant.

MIN.NO. DC-ENV/080/2016: SUBMISSION BY THE DIRECTOR GENERAL KENYA WILDLIFE SERVICE (KWS)

Mr. Kitili Mbathi, the Director General, Kenya Wildlife Services informed the Committee that tourism is the 2nd largest contributor to the country's Economy and accounts for 10.5% of the Country's GDP. The Wildlife resource is the backbone of the Tourism Industry in Kenya. 90% of Safari tourism and about 75% of Tourism earnings depend on Wildlife. Tourism has a multiplier effect on other sectors of the economy. Parks and wildlife conservancies account for 8% of Kenya's land mass.

KWS conserves biodiversity through protected area systems in form of National Parks, National Reserves and National Sanctuaries which cover 8% of the Kenyan landmass: There are 24 National Parks;

- 29 National Reserves;
- 4 Marine Parks;
- 6 Marine Reserves; and
- 5 National Sanctuaries.

KWS Controls 125 Wildlife Stations outside protected areas.

KWS is facing challenges in the area of Human Wildlife conflicts which are on the rise due to:

1. Increasing pressure for land space due to
Population increase
Urbanization and settlement;
2. Increase in incompatible land use in previously wildlife ranges/dispersal areas;
3. Seasonal migration of elephants e.g. in the Tsavos;
4. Infrastructural developments which interfere with free wildlife movement - tampering with the traditional migration corridors e.g. S.G.R, Pipeline (during construction phase);
5. Negative attitude towards wildlife/Kenya Wildlife Service by the public;
6. Unsettled compensations claims;
7. Inadequate Corporate Social Responsibility /enterprise projects;
8. Livestock incursion in parks leading to increased competition for water and pasture with herbivores;
9. Climate Change effects which leads to lack of water and food in Parks;

10. Loss of dispersal areas and migratory routes for animals to human settlements; and
11. Invasive species reducing food supplies for herbivorous animals.

To address human wildlife conflicts, KWS has established barriers (electric fences) to segregate Park Areas from human habitats; strategically deployment of staff and equipment to deal with problematic animals in PAC stations and PAMU; operationalizing of the County Wildlife Conservation and Compensation Committee to address wildlife management issues as per the WCMA, 2013 and mapping out areas with high conflict rates (conflict hot spots) which allows for strategic decision making on Human Wildlife conflict management; Long term solutions for HWC include Community projects; Translocation of problematic animals in certain cases, mainly predators; Enhanced awareness creations/ education programs and stakeholder engagement.

Other Challenges facing KWS include Construction of Ranger houses- Approximately 2,500 rangers do not have decent housing, and are mainly housed in uni-huts and tents. Further there is need for renovation and refurbishment of existing staff houses and offices. To meet this need KWS has embarked on construction of low cost houses but are hampered by inadequate funding compared to the needs. They require maintenance of Park roads and airstrips. KWS maintains an unclassified road network within parks of approx. 4,500 km for ease of movement within parks

To combat poaching and other threats to Wildlife and enhance conservancy efforts, KWS has embarked on security operations which include

1. Enhanced Security Operations through establishment and strengthening of specialized units e.g. Canine Unit that help to sniff wildlife products / tracking wildlife offenders at entry and exit points; Wildlife Police Department; Prosecution Unit for wildlife offences; Rapid response unit; Intelligence unit; Investigation unit; and Aerial operations. Whilst poaching is still a threat, KWS and other security agencies have made a significant number of enforcement efforts to combat poaching. 41% reduction in elephant poaching compared to 2014 (lowest since 2007) and 69% reduction in Rhino poaching compared to 2014 (lowest since 2008).
2. KWS has emphasized on procurement of security equipment in the (force modernization program); Assorted firepower equipment; Surveillance equipment; Night vision devices; Training in advanced tactical operation and modern Communications equipment;
3. Linkages and collaboration with other law enforcement agencies.
4. Recruitment and training of additional rangers;
5. Enactment and operationalization of Wildlife Act 2013 which provides for deterrent penalties;

6. Elevation of wildlife crime to the national agenda including inclusion of KWS in National Security Advisory Committee (NSAC); inclusion of KWS in County Security Intelligence Committees (CSIC); creation of wildlife crime unit by the ODPP; and
7. Enhanced Monitoring & Surveillance of Key Species – scientific interventions

Committee Observations

The Committee observed that

1. KWS being on-board on the compensation mandate, it can assist by operationalizing strategic ways to raise funds for the kitty or perhaps the settling of compensation claims can be domiciled at the National Treasury.
2. There should be a clear difference between community livestock farming and business livestock farming and how each impacts on the wildlife and environment;
3. KWS needs clear strategies on how to maintain their infrastructure during the low tourism season and what strategies do they have in place to attract both domestic and international tourists
4. It needs to be demonstrated clearly how the communities living around the Parks benefit from it;
5. There is need for strategies and measures to deal with the encroachment of dispersal area and animal migratory corridors;
6. The land use practises around the protected areas were contributing to Human Wildlife Conflict;
7. KWS as an institution needs to generate enough revenue and improve operations to breakeven and be able to reduce reliance on donations and budgetary allocation;
8. There was need to both review the current laws or enact new laws regarding wildlife conservancy and tourism which affect KWS and its operations;
9. KWS should have a list of areas which can be prioritised in terms of funding;
10. Communities living near the parks and conservancy areas can be encouraged to continue doing the same by channelling direct benefits to them or CSR;
11. There should be clear strategies to deal with trading in bushmeat;
12. There appears to be a concentration on conservation of certain species of wildlife while there appears to be a decline of other species;
13. KWS and the Parent Ministry should expedite reviewing of the compensation claims as forwarded to them by the county wildlife conservation and compensation committees;

In response to the Committee Observations the Director General, KWS informed the Committee that

1. KWS was finalising regulations for gazettelement that would allow them to give 5 percent of revenue as direct benefit to the communities around the Park. The same regulations would be tabled at the Stakeholders Conference scheduled for May 2016, then forwarded to the Parent Ministry for adoption and gazettelement.
2. The mandate to market tourism is vested in the Kenya Tourism Board who is allocated funds on the same. Marketing is an expensive affair for which KWS does not have the mandate nor the funds to engage in it effectively;
3. The Ministry need to have clear guidelines on how to review the compensation claims to avoid ambiguity and that is budgetary provisions to settle the claims, for instance the obligation for compensation claims stands at Kshs 10 billion yet the KWS budgetary allocation is Kshs 2 billion. There is need to establish a wildlife compensation scheme which is seeded to avoid holding back settlement of claims due to lack of funds;
4. The inclusion of snake bites as a compensable claims which has raised the amount of claims due;

MIN.NO.DC-ENV/081/2016: PRESENTATION BY DR. FRANCIS GAKUYA CHIEF VETERINARY OFFICER, KENYA WILDLIFE SERVICE

The Chief Veterinary Officer, KWS informed the Committee There are a total of 107 threatened species in Kenya as summarized in the table below

Order	Critically Endangered	Endangered	Vulnerable	Total
Mammals	4	11	18	33
Birds	4	12	14	30
Reptiles	2	4	2	8
Fish	7	4	15	26
Plants		4	6	10
Total	16	34	55	107

There are challenges facing wildlife conservation and management which include Habitat loss; Habitat fragmentation; Poaching; Diseases for instance wild dogs and Grevy's zebra; Human-wildlife conflict and livestock incursion in parks; Reduced wild prey base for carnivores; Isolation for localised single

national populations – roan antelope, sable antelope, Tana crested mangabey, Tana red colobus; Negative endangered species interactions e.g. lions and Grevys Zebra and Low genetic diversity; inbreeding for instance among roan antelope, sable antelope, bongo antelope; Invasive species; drying up of water sources; Increased risk of drought, fire and floods and Coral bleaching due to increased sea temperatures.

In an effort to deal with these challenges, KWS has come up with several strategies which include

- ✓ Development of species conservation and management strategies. The Service in collaboration with stakeholders has developed various endangered species-specific strategies to guide their recovery;
- ✓ Timely implementation of scheduled & emergency translocations for improved species management and human-wildlife conflicts mitigation respectively;
- ✓ Enhanced monitoring and surveillance operations through use of monitoring devices such as collars, horn-transmitters, ear-notches, transponders including key species etc;
- ✓ Establishment of breeding sanctuaries for endangered species- rhinos, roan antelopes, sable antelopes, mountain bongos and hirolas;
- ✓ Enhancement of captive wildlife management mainly for orphaned and injured animals – animal welfare & genetic preservation;
- ✓ Enhancement of operations of wildlife forensic & genetics laboratory to assist in prosecution of wildlife crime as well as for genetic studies and disease diagnostics;
- ✓ Prompt response to clinical and disease outbreak events;
- ✓ Habitat restoration programmes – degraded habitats;
- ✓ Provision of water in parks – water-pans, boreholes, dams;
- ✓ Removal of invasive species in critical conservation areas e.g. Lake Nakuru & Nairobi NP;
- ✓ Conservation of water catchment areas;
- ✓ Carrying out wildlife census useful in establishing species numbers in various ecosystems mainly for large herbivores.

In an effort to be able to implement these strategies, KWS requires funding to

- ✓ Carry out census and biodiversity inventories to inform the National Wildlife Conservation Status Report;
- ✓ Develop, review and implement Park Management plans;
- ✓ Develop, review and implement endangered species specific strategies and review the strategies;

- ✓ Equip and replace aging veterinary and capture equipment to facilitate rapid response and management of HWC cases as well as scheduled translocations;
- ✓ Set up predator free-breeding sanctuaries for roan antelopes, sable antelopes and other endangered species;
- ✓ Update and upgrade biodiversity databases;
- ✓ Disease surveillance and monitoring activities;
- ✓ Forensic laboratory to support prosecution of wildlife crimes;
- ✓ Upgrading captive wildlife facilities for improved animal welfare.

Committee Observations

The Committee observed that

1. The integrity of the current wildlife census was in question since it was not clear whether there is inclusion of data from other conservation stakeholders and KWS reluctance to share the findings;
2. KWS was requesting funding for translocation of wildlife;
3. Culling was a wildlife management tool which can be utilised by KWS to reduce overpopulation as well as a way to provide game meat for income generation;
4. It was not clear on the status of the data centre and GIS office system. Further if the service reviews the various thesis recommendations by universities as a way to enrich their conservancy and management efforts;

In response to Committee observations, the KWS Chief Veterinary officer informed the Committee that

1. The mandated cycle of every three years was inadequate to do a comprehensive data collection in-order to have a comprehensive census. But the data collected by other wildlife conservation agencies was included in the current census;
2. The service was intending to undertake a massive translocation of wildlife especially buffaloes from the Nakuru protected area as the numbers were unsustainable ; elephants from the Laikipia ranches and also as a way to reduce inbreeding ;
3. The GIS system is in place and operational, while data centre is being managed by the Bio safety information office. They could incorporate the thesis recommendations in the research division.

Committee Recommendation

The Committee recommends that KWS provides a list of their top three priority areas for funding with justifications for consideration by the Committee.

MIN.NO. DC-ENV/082/2016: PRESENTATION BY MS. LYNETTE W. MUGANDA, DEPUTY DIRECTOR, HUMAN CAPITAL, KENYA WILDLIFE SERVICE

The Deputy Director, Human Capital, Kenya Wildlife Services informed the Committee that the Current approved Establishment: is 7,457 staff members which breaks down to Uniformed -4,072; Non Uniformed -1,177 and Temporary staff -1,307, All totaling to 6,557 persons. The Staff are deployed as follows in the areas of Headquarters; 8 conservation areas spread across the country; 2 Service centers and 2 Training centers.

Some of the challenges being faced in the Human Capital management include

- ✓ **Re-categorization** – KWS was re-categorized upward from PC 3B to PC 3A by State Corporations Advisory Committee in July 2014 but has not managed to implement the new salary structure due to budgetary constraints;
- ✓ **Poor Medical scheme**– The Service operates an internally managed medical scheme characterized by low in/out patient limits; for instance the outpatient amount for staff and dependents is Kshs. 20,000. KWS is exempted from contributing to NHIF medical scheme.
- ✓ **Staff mortgage** – this commenced in 2014/2015 FY but was suspended in 2015/2016 FY due to constrained financial resources
- ✓ **Staff Car loan scheme** –it has been approved but is yet to be implemented.
- ✓ **1,307 temporary staff** – Due to inadequate funding, the Service has a huge temporary staff base which it is unable to absorb them. This is contrary to the employment Act
- ✓ **Annual salary increment** – this has not implemented in 2015/2016 FY except for rangers cadre. With the current trend and budgetary constraints, they are not sure they shall implement in the current financial year.
- ✓ **Shortage experienced in housing uniformed staff.** Only a third of the houses are constructed and the service has resorted to leasing expensive private residential blocks

All the pending staff matters contribute to low morale, and generally the Service lags behind other state corporations in implementing approved structures. KWS management appeals for financial support from the government like other uniformed services.

Committee Observations

The Committee observed that

1. There should be analysis to remunerations to KWS officers and other uniformed services for harmonization;
2. The recruitment criteria for hiring rangers should not interfere or hinder their core job;
3. The Service was not include in the NHIF medical scheme, yet the medical cover in place is not adequate;

In response to the Committee observations, the Deputy Director, Human Capital informed the Committee that

1. In terms of salaries and allowances, KWS is comparable to the other uniformed services like Kenya Forest Service and the Police. KWS also provides group life and personal insurance for its staff. KWS is however requesting for improvement in the provision of medical scheme and housing. It should be noted that KWS pays the salaries of its rangers while the other uniformed services are paid by the government;
2. KWS pays the enhanced rates for their medical scheme which precludes them from benefiting from NHIF medical scheme;
3. As part of their recruitment policy KWS has been allocating more slots to those communities that border the wildlife conservancy areas;
4. The Service would be carrying out a performance audit of staff, to curb overstaffing in some departments and way forward to deal with the temporary staff for whom they require Kshs. 76 million to retrench them.

MIN.NO.DC-ENV/083/2016: PRESENTATION BY MR. FRANCIS MWAITA DEPUTY DIRECTOR, FINANCE AND ADMINISTRATION, KWS

The Deputy Director, Finance and Administration, KWS informed the Committee that KWS three main sources of income are KWS A- in -A; Government of Kenya grants and Donor grants. KWS A-in-A_ traditionally has constituted two thirds of the total income, 80% revenue from non-resident visitors and 70 % of revenue generated by 5 parks out of 34 parks. Below is the financial performance of KWS for the last 6 years

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
INCOME	Ksh.millions	Ksh.millions	Ksh.millions	Ksh.millions	Ksh.millions	Ksh.millions
KWS A-in-A	3,068	4,130	4,775	4,362	4,063	2,929

GoK Subvention- Recurrent	937	937	900	900	1,110	2,810
GoK Subvention- Development	564	564	1,208	1,208	1,684	1,519
Grants	437	424	360	497	550	693
Total Income	5,006	6,055	7,243	6,967	7,407	7,951
EXPENDITURE						
Personnel Emoluments	2,216	2,469	2,751	3,310	3,645	3,811
Other operating costs	2,593	3,589	3,885	3,714	3,294	3,663
Capital Expenditure	153	796	726	515	477	69
Total Expenditure	4,962	6,854	7,361	7,538	7,416	8,171
SURPLUS / (DEFICIT)	44	(799)	(118)	(572)	(9)	(220)

From the table above, it is noteworthy that KWS realized the highest A-in-A in 2011/2012 FY of Kshs. 4.8 Billion. From 2012/2013 FY KWS A-in-A began a steady decline. GoK funding has been on a gradual increase for the last 6 years while there is gradual increase in expenditure. Worth noting is that deficits are recorded in almost all financial years, while the Exchequer releases have not been fully released as per the printed estimates.

The table below shows the budgetary trends

DESCRIPTION	BUDGET	BUDGET	BUDGET
	2014-2015	2015-2016	2016-2017
	KShs.millions	KShs.millions	KShs.millions
A. INCOME			
KWS A-in-A	3,034	2,729	2,729
GoK Recurrent Income	2,810	810	2,310
GoK Development Income	1,519	778	1,428
Grants	821	1,721	556
Total Income	8,184	6,038	7,023

B. EXPENDITURE			
Personnel emoluments	4,001	4,116	4,489
Operating & Maintenance	3,844	3,184	3,080
Capital Expenditure	1,745	1,481	1,306
Total Expenditure	9,590	8,781	8,875
DEFICIT	(1,406)	(2,743)	(1,852)

From the table above, there is a decline in income yet total recurrent income from KWS A-in-A and GoK cannot meet the payroll costs alone. There is a significant reduction in operating expenditure and a huge funding gap. This has also been occasioned by the National Treasury instructions to balance the budget.

The Deputy Director, Finance and Administration, KWS informed the informed the Committee that

- ✓ KWS has a broad mandate which is not matched with the current available resources
- ✓ KWS budget should be funded fully to eliminate deficits
- ✓ GoK to provide seed funds for KWS Enterprise to reduce reliance on exchequer

Committee Observations

The Committee observed that

1. To generate more revenue, perhaps KWS can introduce low cost infrastructure and tourism experience to domestic tourists;
2. It was not clear on the expenditure of each park if 70% of the income is generated by 5 out of the 32 parks;
3. KWS should come up with income generating ventures to reduce reliance on government funding and focus on sustainability;

In response to the Committee observations, the Deputy Director, Finance and Administration, KWS informed the Committee that

1. In an effort to attract domestic tourists, KWS has reviewed their park fees downward, but this has not been significant due to the increase in expenditure thus reducing profitability. They are therefore currently expecting government funding to reduce their deficit;

2. Most of the operating costs have been going to maintenance of infrastructure and vehicles. KWS proposes an introduction of a sub programme to provide for maintenance costs. It is worth noting that KWS does not have its own fleet of cars to carry visitors within the Park;
3. Kenya Tourism Board receives Kshs. 5 billion to fund marketing of Kenya as a Tourist destination. KWS proposes as a major stakeholder to be allocated a portion to enable it market the Parks and Conservancies as a tourist destination;
4. The Service proposes to base their expenditure on project to enable to source for funds as each come along.

MIN.NO. DC-ENV/084/2016:

ANY OTHER BUSINESS

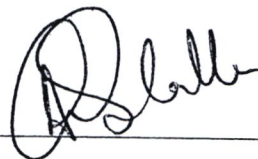
There was no other business before the Committee

MIN.NO. DC-ENV/085/2016:

ADJOURNMENT

There being no other business, the meeting adjourned at Fifteen Minutes past One o'clock.

SIGNED: _____



(CHAIRPERSON)

DATE: _____

24/6/2016

MINUTES OF THE 24TH SITING FOR THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NAATURAL RESOURCES IN THE MEETING ROOM IN THE KILAGUNI SERENA HOTEL IN TSAVO STARTING FROM 2:30 PM

PRESENT

1. The Hon. Wilber Ottichilo, MP - Session Chair
2. The Hon. Njogu Barua, MP
3. The Hon. Dr. Reginalda Wanyonyi, MP
4. The Hon. Richard Ole Kenta, MP
5. The Hon. Jude Njomo, MP
6. The Hon. Francis Chachu, MP
7. The Hon. Abdulaziz Farah, MP
8. The Hon. Hassan Dukicha, MP
9. The Hon. Kathuri Murungi, MP

Ole Kenta
Francis Chachu

IN ATTENDANCE

1. Ms. Rose Wanjohi - Second Clerk Assistant
2. Mr. Ronald Walala - Legal Counsel II
3. Mr. Ahmed Odhwa - Researcher

WITNESSES

1. Mr. Kitili Mbathi - Director General, Kenya Wildlife Service
2. Dr. Stephen Manegene - Director, Wildlife Conservation, Ministry
3. Dr. Francis Gakuya - Chief Veterinary Officer, KWS
4. Mr. Francis Mwaita - Deputy Director, Finance and Administration, KWS
5. Ms. Lynette W. Muganda - Deputy Director, Human Capital, KWS
6. Mr. Robert Obrein - Assistant Director, KWS
7. Mr Dominic Wambua - Senior Warden, Tsavo East National Park, KWS
8. Capt. Kenneth Ochieng - Senior Warden/Pilot Tsavo West National Park, KWS

MIN.NO. DC-ENV/086/2016:

PRELIMINARIES

The Chairperson called the meeting to order at Half past Two O' clock. The prayer was said by Ms. Rose Wanjohi, Second Clerk Assistant.

MIN.NO. DC-ENV/087/2016: SUBMISSION BY THE DIRECTOR GENERAL KENYA WILDLIFE SERVICE (KWS) ON WILDLIFE CONSERVATION AND MANAGEMENT ACT

Mr. Kitili Mbathi, The Director General, Kenya Wildlife Service informed the Committee that;

- i. The Wildlife Conservation and Management Act, 2013 seeks to amongst other things, provide for the protection, conservation, sustainable use and management of wildlife resources in Kenya. It establishes the KWS with the mandate of conserving and managing the said wildlife resources for the people of Kenya.
- ii. In collaboration with several key stakeholders, the participation of strategic communities and the financial assistance of the Nature Conservancy, KWS has completed the drafting of 22 sets of Regulations, which shall shortly be subjected to a national stakeholders' conference for approval in May 2016. Thereafter the regulations shall be ready for presentation to the Cabinet Secretary for discussion by the relevant committee of parliament before they are gazetted.
- iii. The Act has certain limitations and inadequacies which make it difficult to implement it. In various forums, it has been suggested that the Act be considered for immediate amendments.
- iv. Kenya Wildlife Services however recommends that before the procedures and processes of amendments are embarked on the current draft regulations are approved for gazettment and application. Once the commencement of the full implementation of the Act begins then the difficulties inherent in the Act can be appreciated and sections that require amendments are considered. There are, however, certain sections of the Act that may invite immediate amendments so as to correct obvious errors, eliminate mis-descriptions and correct cross-references. Such non-substantive inaccuracies do not need to await a comprehensive inquiry and revisions.
- v. Kenya Wildlife Services therefore recommends that the current draft regulations proceed to the stakeholders' conference to obtain approval of the regulations, which after the parliamentary process shall be gazetted for implementation. Thereafter,

commence the identification of the sections of the Act which need short term and long term deliberation for amendment.

MIN.NO.DC-ENV/088/2016: SUBMISSION BY THE PARLIAMENTARY LEGAL COUNSEL ON AMENDMENTS TO THE WILDLIFE CONSERVATION AND MANAGEMENT ACT

The Parliamentary legal counsel informed the Committee that the proposed amendments were developed jointly between the African Network for Animal Welfare (ANAW), the Judiciary Training Institute (JTI), the Kenya Wildlife Service (KWS) and the Office of the Director of Prosecutions. They seek to—

- (a) amend the definitions of “biodiversity”, “dealer”, “dispersal areas”, “endangered species”, “game ranching”, “sport hunting”, “threatened species” and “wetlands” to correct typographical and contextual errors;
- (b) introduce new definitions for “extractive activity”, “subsistence hunting” and “vulnerable species”;
- (c) add the Principal Secretary in the State Department responsible for matters relating to internal security and national government coordination and the Director of Veterinary Services as members of the KWS Board of Trustees;
- (d) criminalize the act of bio-prospecting in addition to bio-piracy;
- (e) add intent as an ingredient in the commission of the offence of introducing an invasive species into a wildlife conservation area under the Act. Previously, the offence did not rely on the intention of the person charged;
- (f) extend the application of the Act to National Reserves;
- (g) allow a person who kills a wild animal to report the killing and circumstances leading to the killing of the animal and deliver the trophies of the animal to the nearest wildlife office or police station within forty eight hours of taking the action. The current provision as drafted may be abused as it has no timelines or requirement that a report of the incident be made and the trophies be delivered to KWS;
- (h) strike a balance between the application on mandatory minimum and maximum sentences for the various offences provided for under the Act. The current mandatory

minimums may lead to a miscarriage of justice where a subsistence hunter or a person arrested with as little as a bangle of ivory faces the same sanctions as the leader of a poaching enterprise that trafficks in tonnes of ivory;

(i) introduce a general penalty for offences under the Act for which no penalty is currently provided. Some offences under the Act cannot be prosecuted due to that oversight;

(j) transit civil and criminal proceedings commenced under the Wildlife (Conservation and Management) Act, 1976 that was repealed by the current Act; and

(k) correct typographical, cross-referencing and factual errors in the items listed in the Third, Fifth, Sixth, Eighth, Ninth, Tenth and Eleventh Schedules. These include amending the Third Schedule to only allow compensation for cases of death or injury caused by poisonous snakes, deletion of the reference to “Game hunting” in the preparation of a Wildlife Management Plan under the Fifth Schedule, deletion species under the Sixth schedule erroneously listed as endangered and restating the proper names and sizes of National Parks, National Reserves and Sanctuaries under the Eleventh Schedule.

The Committee has expressed reservations on the amendments touching on National Reserves and is yet to adopt them as the KWS Board of trustees has not given its comments on the contents.

**MIN.NO.DC-ENV/089/2016: SUBMISSION BY THE DR. MARGARET MWAKIMA
PRINCIPAL SECRETARY, NATURAL RESOURCES, MINISTRY OF
ENVIRONMENT, NATURAL RESOURCES AND REGIONAL DEVELOPMENT
AUTHORITIES:**

The Principal Secretary, Natural Resources informed the Committee that KWS as an organization has found itself facing a myriad of challenges to effectively manage wildlife conservation which is a very expensive undertaking. As human population increases, competition for scarce resources such as land for cultivation and settlement also increases. Large areas that were regarded as migratory corridors and dispersal areas are no more while infrastructural developments have introduced permanent human footprints in shrinking wildlife habitats, threatening the existence of wildlife. Wildlife conservation and management cost continues to rise as threats escalate and wildlife crimes become more sophisticated.

MINUTES OF THE 74TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, HELD ON MONDAY 24TH OCTOBER, 2016 AT 2.30 PM IN THE BOMA HOTEL, NAIROBI.

PRESENT

1. Hon. Abdalla Amina, CBS, M.P. – **Chairperson**
2. Hon. Ole Kenta Richard Moitalel, M.P.
3. Hon. Mohamed Diriye Abdullahi, M.P.
4. Hon. Kathuri Murungi, M.P.
5. Hon. Sunjeev Kaur Birdi, M.P.
6. Hon. Ndiritu Samuel Mathenge, M.P.
7. Hon. Ottichillo K. Wilber, M.P.
8. Hon. Richard Makenga, M.P.
9. Hon. Wandayi James Opiyo, M.P.
10. Hon. Dr. Barua Ejidius Njogu, M.P.
11. Hon. Isaac Mwaura, M.P.
12. Hon. Dr. Wanyonyi Reginalda N. M.P.
13. Hon. Jude Njomo, M.P.
14. Hon. Ogalo George Oner, M.P.
15. Hon. Ng'ang'a Alice Wambui, M.P.

APOLOGIES

1. Hon. Alexander Kosgey, M.P. – **Vice Chairperson**
2. Hon. Emanikor Joyce, M.P.
3. Hon. Ganya Francis Chachu, M.P.
4. Hon. Rop Jackson Kipkorir, M.P.
5. Hon. Dukicha Hassan Abdi, M.P.
6. Hon. Irea Gideon Mwiti, M.P.
7. Hon. Geni Charles Mong'are, M.P.
8. Hon. Joyce Lay, M.P.
9. Hon. Gure Shukran Hussein, M.P.
10. Hon. Abdinoor Mohammed Ali, M.P.
11. Hon. Peter Kinyua, M.P.
12. Hon. Tonui Ronald Kiprotich, M.P.
13. Hon. Farah, Abdulaziz Ali, M.P.
14. Hon. Muluvi Marcus Mutua, M.P.

IN-ATTENDANCE - SECRETARIAT

1. Ms. Tracy Chebet Koskei – Clerk Assistant II
2. Mr. Hassan A. Arale – Clerk Assistant III
3. Ms. Fatuma Abdi – Audio Officer
4. Mr. Ahmed Hassan Odhowa – Senior Research Officer
5. Mr. Wilson Angatangoria – Serjeant-At -Arms
6. Ms. Lydia Mwangi –Secretary

MIN.NO. DC/ENR/256/2016: PRELIMINARIES

The meeting was called to order at 2.45 pm after which prayers were said. The Chair then welcomed the members to the meeting.

MIN.NO.DC/ENR/257/2016: REPORT WRITING RETREAT ON THE IMPACT OF SGR ON THE STANDARD GAUGE RAILWAY:

After lengthy deliberation the committee made the following observations and recommendations.

OBSERVATIONS:

The committee made the following observations, that,

- I. The implementation of environmental impact assessment report on phase I of the project was not observed,
- II. Flaws on the design- under this, the committee was for the opinion that, there was need for suspended embankments, protection of the ecosystem, improve the quality and increase the quantity of the crossings and other general design flaws like trenches.
- III. There is need to establish whether KWS followed due process in granting easement to Kenya Railways Corporation;
- IV. On compensation, has KWS received adequate compensation from Kenya Railways Corporation and was it used for rehabilitation? The funds should have been put in a trust fund and used for conservation efforts. Further, was the right value for the land given?

RECOMMENDATIONS;

The Committee makes the following recommendations from the observations and other evidence collected during the course of the inquiry-

The Environmental and Social Impact Assessment Report (ESIA)

1. The Committee recommends as follows-
 - 1) The National Environment Management authority (NEMA) should monitor the progress made by the different agencies to comply with the terms of the EIA licence and failure to comply should attract the necessary sanction. All the mitigation measures recommendation in the ESIA report and the Conditions in the EIA licence should be implemented fully within and outside the protected areas including establishment and implementation of the environmental monitoring and environmental management plans;
 - 2) Where KRC knowingly or negligently disregarded the EIA licence conditions especially where they did not seek the expertise of KWS in designing the wildlife crossing points or

placing a wildlife crossing point at an inappropriate location, KRC should rectify the mistake and redesign the wildlife crossing points;

- 3) The National Environment Management Authority should be more transparent and accountable in its EIA licencing regime. The issuance of EIA licences must be supported by clear evidence and full disclosure that the project proponent has the capacity to fulfil the licence conditions and that the adverse environmental impacts of especially large infrastructure projects can be mitigated. NEMA officers who approve issuance of EIA licences despite the existence of a strong presumption of irreversible adverse environmental impact should be held liable for their action/inaction;
- 4) The government-to-government contracts of large infrastructure projects that are likely to have adverse environmental impacts such as the SGR must be subjected to full public disclosure requirements and must also meet the statutory environmental protection requirements. Submission of a mandatory Environmental rehabilitation bond should form part of the approval requirement for all large infrastructure projects;
- 5) Parliament should amend the Environmental Management and Coordination Act, 1999 to reformulate the legal and institutional architecture in order to achieve the constitutional obligation to guarantee inter-generational equity in respect to the environment.
- 6) The Kenya Wildlife Service should immediately repossess any part of the protected area that was fragmented by the SGR and which is currently inhabited by unauthorized persons;
- 7) The Kenya Railways Corporation should factor in their budget an annual allocation to support the equipping, security surveillance and maintenance of all wildlife crossing points provided for within the protected areas;
- 8) The Kenya Wildlife Service should take practical steps to mitigate the effect of the fragmentation of the Tsavo National Parks on wildlife breeding, gene pool and the predator-prey proportions within the Tsavo conservancy area. Any cost associated with these mitigation measures should be met by the KRC;

- 9) The Kenya Railway Corporation should support the Wildlife Compensation fund to alleviate the high demand for compensation that will likely arise due to the increased human-wildlife conflict occasioned by the SGR park fragmentation.
- 10) The KRC in consultation with KWS should increase the number of wildlife crossing points and redesign those that do not meet the recommended international standards and best practices;
- 11) The KRC in consultation with KWS should construct wildlife watering points to take care of the water needs of the wildlife cut-off from their habitual and seasonal watering points.

The grant of Easements to the Kenya Railways Corporation for the construction of the Standard Gauge Railway

The Committee recommends that Parliament amends the Wildlife Management and Conservation Act, 2013 to provide for the need for Parliamentary approval for the grant of any right to the use of land within wildlife protected areas, in particular, with regard to infrastructure projects.

Compensation for the easement granted and utilization of the funds

2. The Committee recommends as follows-
 1. The KWS service should be compensated by KRC for the actual value of the easement granted which was estimated to be Kshs. 3.7 Billion.
 2. The proceeds of the compensation should be used to implement projects and activities that will support the mitigation of the adverse impacts of the SGR and advance the objectives of conservation, in particular-
 - (a) Habitat rehabilitations and restorations along 133 km of SGR;
 - (b) Eradication of invasive species;
 - (c) Wildlife rescues, security surveillance and operations along SGR;

- (d) Monitoring wildlife movements including use of satellite collars and camera traps;
- (e) Construction of security outposts o deflate incremental cost of security;
- (f) Relocation of KWS amenities and facilities; and
- (g) Monitoring implementation of the Environmental Monitoring Plans (EMPs)

Setting up of an endowment fund

The Committee recommends as follows:

The Wildlife Conservation and Management Act, 2013 Act, 2013 provides that the Kenya Wildlife Service shall establish an endowment fund for purposes of developing wildlife initiatives, managing and restoring protected areas and conservancies, protecting endangered species, habitats and ecosystems, etc. The fund should be established and the KRC should remit money to the fund annually.

MIN.NO.DC/ENR/258/2016:

ADJOURNMENT

There being no other business the meeting was adjourned at 3.30pm.

SIGNED.....

(Chairperson)

DATE.....17/11/2016

MINUTES OF THE 73RD SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, HELD ON MONDAY 24TH OCTOBER, 2016 AT 10.00 AM IN THE BOMA HOTEL, NAIROBI.

PRESENT

1. Hon. Abdalla Amina, CBS, M.P. – **Chairperson**
2. Hon. Ole Kenta Richard Moitalel, M.P.
3. Hon. Mohamed Diriye Abdullahi, M.P.
4. Hon. Kathuri Murungi, M.P.
5. Hon. Sunjeev Kaur Birdi, M.P.
6. Hon. Ndiritu Samuel Mathenge, M.P.
7. Hon. Ottichillo K. Wilber, M.P.
8. Hon. Richard Makenga, M.P.
9. Hon. Wandayi James Opiyo, M.P.
10. Hon. Dr. Barua Ejidius Njogu, M.P.
11. Hon. Isaac Mwaura, M.P.
12. Hon. Dr. Wanyonyi Reginalda N. M.P.
13. Hon. Jude Njomo, M.P.
14. Hon. Ogalo George Oner, M.P.
15. Hon. Ng'ang'a Alice Wambui, M.P.

APOLOGIES

1. Hon. Alexander Kosgey, M.P. – **Vice Chairperson**
2. Hon. Emanikor Joyce, M.P.
3. Hon. Ganya Francis Chachu, M.P.
4. Hon. Rop Jackson Kipkorir, M.P.
5. Hon. Dukicha Hassan Abdi, M.P.
6. Hon. Irea Gideon Mwitii, M.P.
7. Hon. Geni Charles Mong'are, M.P.
8. Hon. Joyce Lay, M.P.
9. Hon. Gure Shukran Hussein, M.P.
10. Hon. Abdinoor Mohammed Ali, M.P.
11. Hon. Peter Kinyua, M.P.
12. Hon. Tonui Ronald Kiprotich, M.P.
13. Hon. Farah, Abdulaziz Ali, M.P.
14. Hon. Muluvi Marcus Mutua, M.P.

IN-ATTENDANCE - SECRETARIAT

1. Ms. Tracy Chebet Koskei – Clerk Assistant II
2. Mr. Hassan A. Arale – Clerk Assistant III
3. Ms. Fatuma Abdi – Audio Officer
4. Mr. Ahmed Hassan Othowa – Senior Research Officer
5. Mr. Wilson Angatangoria – Serjeant-At- Arms
6. Ms. Lydia Mwangi – Secretary

MIN.NO. DC/ENR/253/2016: PRELIMINARIES

The meeting was called to order at 11.00 am after which prayers were said. The Chair then welcomed the members to the meeting.

MIN.NO. DC/ENR/254/2016: REPORT WRITING RETREAT ON THE IMPACT OF SGR ON THE STANDARD GAUGE RAILWAY:

The committee having considered the report made the following observation under the following topics.

Consideration of the matter:

The committee felt there was the need to bring out in the report the chronology of events regarding the matter. The meeting was informed that this matter was considered after the Hon. Ottichilo requested for a statement in 2014 in the floor of the House from the Cabinet Secretary for the Ministry of Transport and Infrastructure on whether an Environmental Impact Assessment Study before the construction of the Standard Gauge Railway through the Tsavo National Park and what mitigation measures were envisaged. The matter was later referred to the Cabinet Secretary for the Ministry of Environment and Natural Resources as a question. The Cabinet Secretary response to the question was unsatisfactory and thereafter

(The committee to form a sub-committee to investigate the matter.)

On the Background:

The committee felt the need to enrich the background with the following,

- I. Current railway status;
- II. What necessated the construction of the Standard Gauge Railway?
- III. The state of the Tsavo National Park before and after passage of SGR?
- IV. The significance of Tsavo National Park to the country;
- V. How is Railway impacting on Tsavo National Park and why the need for Standard Gauge Railway.
- VI. The need to have detailed environmental impact assessment report?
- VII. The need to know the procedure for material sourcing being used in the construction.

Observations;

The Committee observed that, Kenya wildlife Service was not involved in the designing of wildlife migration Corridors. Instead of an overfly a wall was Created. The tunnel gates corridors were made small narrow and were moved from the original position.

MIN.NO.DC/ENR/255/2016: ADJOURNMENT:

There being no other business the meeting was adjourned at 12.30pm.

SIGNED.....
(Chairperson)

DATE..... 17/11/2016

KWS has made great strides in wildlife conservation, including reduction in poaching against a backdrop of challenges such as declining tourism revenues, wildlife habitat loss due to encroachment, climate change effects, increased threats to wildlife and human wildlife conflict. The challenges come in the midst of dwindling resources, having relied heavily from income from parks fees that are currently experiencing a slump due to various factors like travel advisories and security fears occasioned by recent past terrorist attacks.

All stakeholders should participate in SGR project operationalization and mitigation factor to minimize stress to the environment and wildlife.

There is need to continue implementing the compensation sections of the Wildlife Conservation and Management Act. More money needs to be allocated for compensation claims because in the current FY 2015/2016 the budgetary allocation is not enough to settle all the claims before the ministry.

To sustain the gains made in past and look for new ways of tackling current and emerging challenges, KWS support to put it on sound financial footing to enable it continue managing and conserving the country's precious natural heritage.

The Committee thanked KWS for being open about their current challenges and the state of the organization. The Committee pledged to work together with KWS to assist them overcome the challenges facing them in order for KWS to fulfil its mandate of protecting and conserving Kenya's wildlife heritage

MIN.NO. DC-ENV/090/2016:

ANY OTHER BUSINESS

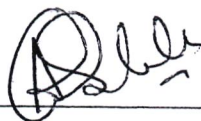
There was no other business

MIN.NO. DC- ENV/091/2016:

ADJOURNMENT

There being no other business the meeting was adjourned at ten minutes past four o'clock. The next meeting will be per notice.

SIGNED: _____





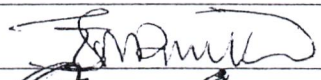
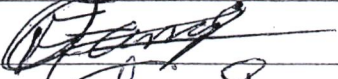

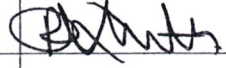
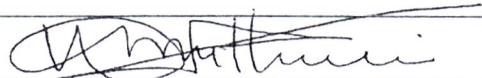
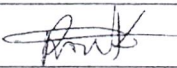
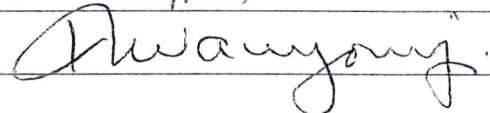
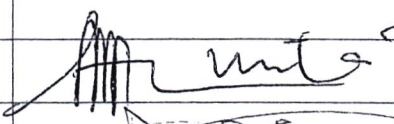

(CHAIRPERSON)

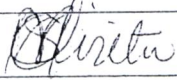

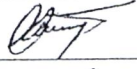

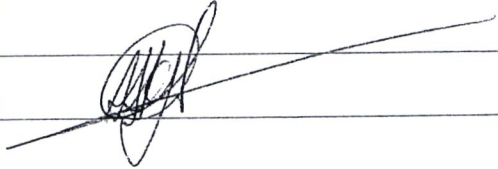
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24 / 6 / 2016

**COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES
NATIONAL ASSEMBLY**

**ADOPTION LIST OF THE REPORT ON THE INQUIRY IN TO THE
STANDARD GAUGE RAILWAY ON THE ENVIRONMENT OF THE TSAVO
CONSERVATION AREA ON TUESDAY 17TH NOVEMBER, 2016 IN CPA
ROOM.**

	NAME	SIGNATURE
1	Hon. Abdalla, Amina, MP, CBS-CHAIRPERSON	
2	Hon. Alexander Kosgey, MP Vice Chairperson	
3	Hon. Dukicha, Hassan Abdi, MP	
4	Hon. Emanikor, Joyce Akai, MP	
5	Hon. Ganya, Francis Chachu, MP	
6	Hon. Geni, Charles Mongare, MP	
7	Hon. Gure, Shukra Hussein, MP	
8	Hon. Ole Kenta, Richard Moitalel, MP	
9	Hon. Mohamed, Diriye Abdullahi, MP	
10	Hon. Murungi, Kathuri, MP	
11	Hon. Ogalo, George Oner, MP	
12	Hon. Sunjeev Kour Birdi, MP	
13	Hon. Tonui, Ronald Kiprotich, MP	
14	Hon. Dr. Wanyonyi, Reginalda N, MP	
15	Hon. Farah, Abdulaziz Ali, MP	
16	Hon. Dr. Barua, Ejidius Njogu, MP	
17	Hon. Irea, Gideon Mwiti, MP	
18	Hon. Muluvi, Marcus Mutua, MP	
19	Hon. Wandayi James Opiyo, MP	

20	Hon. Ndiritu, Samuel Mathenge, MP	
21	Hon. Ottichilo, Wilber Khasilwa, MP	
22	Hon. Rop, Jackson Kipkorir, MP	
23	Hon. Abdinoor, Mohammed Ali, MP	
24	Hon. Ng'ang'a, Alice Wambui, MP	
25	Hon. Peter Kinyua, MP	
26	Hon. Richard Makenga, MP	
27	Hon. Jude Njomo, MP	
28	Hon. Joyce Lay, M.P	

ANNEXTURE 1- COMMITTEE MINUTES

AMINUTES OF THE 72ND SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON TUESDAY 18TH OCTOBER, 2016 AT 10:00 AM IN CPA ROOM PARLIAMENT BUILDINGS.

PRESENT

1. Hon. Abdalla Amina, CBS, M.P. – Chairperson
2. Hon. Alexander Kosgey, M.P. – Vice Chairperson
3. Hon. Ole Kenta Richard Moitalel, M.P.
4. Hon. Kathuri Murungi, M.P.
5. Hon. Sunjeev Kaur Birdi, M.P.
6. Hon. Tonui Ronald Kiprotich, M.P
7. Hon. Dr. Wanyonyi Reginalda N. M.P
8. Hon. Muluvi Marcus Mutua, M.P.
9. Hon. Richard Makenga, M.P
10. Hon. Wandayi James Opiyo, M.P

APOLOGIES

1. Hon. Emanikor Joyce, M.P.
2. Hon. Mohamed Diriye Abdullahi, M.P
3. Hon. Ndiritu Samuel Mathenge, M.P
4. Hon. Ottichillo K. Wilber, M.P.
5. Hon. Dr. Barua Ejidius Njogu, M.P.
6. Hon. Isaac Mwaura, M.P.
7. Hon. Jude Njomo, M.P.
8. Hon. Ogalo George Oner, M.P.
9. Hon. Ng'ang'a Alice Wambui, M.P.
10. Hon. Ganya Francis Chachu, M.P.
11. Hon. Rop Jackson Kipkorir, M.P.
12. Hon. Dukicha Hassan Abdi, M.P.
13. Hon. Irea Gideon Mwiti, M.P.
14. Hon. Geni Charles Mong'are, M.P.
15. Hon. Joyce Lay, M.P
16. Hon. Gure Shukran Hussein, M.P.
17. Hon. Abdinoor Mohammed Ali, M.P.
18. Hon. Peter Kinyua, M.P.
19. Hon. Farah, Abdulaziz Ali, M.P.

IN-ATTENDANCE - SECRETARIAT

1. Ms. Tracy Chebet Koskei - Clerk Assistant II
2. Mr. Hassan A. Arale - Clerk Assistant III
3. Mr. Ahmed Hassan Odhowa - Senior Research Officer
4. Mr. Wilson Angatangoria - serjeant -At -Arms

MIN.NO. DC-ENR/250/2016: PRELIMINARIES

The meeting was called to order at 11.00 am after which prayers were said. The Chair then welcomed the members to the meeting.

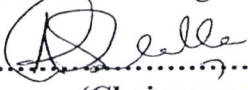
MIN.NO. DC-ENR/251/2016: CONSIDERATION OF DRAFT REPORT ON THE IMPACT OF STANDARD GAUGE RAILWAY ON THE TSAVO NATIONAL PARK BIODIVERSITY:

The committee went through the draft report and after deliberations made the following observation and asked the secretariat to incorporate the following changes;

1. To establish if the procedure as outline in the EMCA, 1999 was followed and if not then propose Mitigation measures. The secretariat was also asked to work closely with Hon. Wilber Ottichilo, M.P on the analysis of the Environmental Impact Assessment Report and Hon. Kathuri Murungi, M.P on Mitigation measures proposed in the EIA Report.;
2. To develop clear historical background of the Standard Gauge Railway focusing on the environmental impact and not on economic impact;
3. Clearly outline the issue on human/wildlife conflict resulting from the construction of the Standard Gauge Railway.

MIN.NO.DC-ENR/252/2016: ADJOURNMENT:

There being no other business the meeting was adjourned at 12.30pm.

SIGNED.....
(Chairperson)

DATE.....17/11/2016.....

MINUTES OF THE 20TH SITTING OF DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON 7TH APRIL 2016 IN CONFERENCE ROOM ARUBA ASHNIL HOTEL AT 7:00 PM.

PRESENT:

1. Hon. Wilber Ottichilo, MP - Session Chair
2. Hon. Francis Chachu, MP
3. Hon. Richard Ole Kenta, MP
4. Hon. Kathuri Murungi, MP
5. Hon. Sunjeev Birdi, MP
6. Hon. Dr. Reginalda Wanyonyi, MP
7. Hon. Abdulaziz Farah, MP
8. Hon. Jude Njomo, MP
9. Hon. Hassan Dukicha, MP

IN ATTENDANCE

1. Ms. Rose Wanjohi - Second Clerk Assistant
2. Mr. Ron Walala - Legal Counsel II
3. Mr. Ahmed Odhowa - Researcher

WITNESSES

1. Dr. Margaret Mwakima - Principal Secretary, Natural Resources
2. Mr. Kitili Mbathi - Director General, Kenya Wildlife Service
3. Dr. Stephen Manegene - Director, Wildlife Conservation, Ministry
4. Dr. Francis Gakuya - Chief Veterinary Officer, KWS
5. Mr. Francis Mwaita - Deputy Director, Finance and Administration, KWS
6. Ms. Lynette W. Muganda - Deputy Director, Human Capital, KWS
7. Mr. Robert Obrein - Assistant Director, KWS
8. Mr. Luka Nansha - Regional Intelligence Officer., KWS
9. Mr Dominic Wambua - Senior Warden, Tsavo East National Park, KWS
10. Capt. Kenneth Ochieng - Senior Warden/Pilot Tsavo West National Park, KWS
11. Ms. Margaret Maina - Communication Officer, Ministry of Environment and Natural Resources
12. Mr. Godfrey Odhiambo - Communication Officer, Ministry of Environment and Natural Resources
13. Mr. Micah Yabei - KWS

MIN.NO./DC.ENR/069/2016: PRESENTATION ON THE TSAVO CONSERVANCY AREA BY MR. ROBERT OBREIN, ASSISTANT DIRECTOR, KENYA WILDLIFE SERVICE

The Committee heard that the Tsavo Conservancy Area is one of the largest contiguous protected areas in Africa and comprises the largest protected area in Kenya. Tsavo East, Tsavo West and

Chyulu occupy about 52% of total protected areas in the country and about 3.9% of Kenya's surface area. The protected area and the dispersal areas cover over 60,000 sq. kms. The Tsavo Conservancy Area holds the largest elephant population in the country. Tourists enter the parks through the following gates (Sala, Bachuma, Voi, Manyani, Ithumba, Mtito, Kanjaro, Maktau, Ziwani, Jipe, Chyullu). Vehicles allowed into the Park for game drives are vans, Buses and cars. Payments vary depending on vehicle used and tourist status (foreign or domestic). The tourist attractions available in Tsavo West include Wildlife species; Mzima springs; Chaimu crater; Shetani lava; Chyullu ranges; Six sisters hills and Rhino sanctuary

The Committee heard that revenue collection has been on a downward trend from 2011(Kshs. 1,224,419,965), 2013(Kshs. 935,523,664) to 2015(Kshs. 446,698,350). This has been occasioned by a drop in visitors to the national parks also on a downward trend 2011(357,079 persons); 2013(217,764 persons) to 2015(154,491 persons).

The Wildlife security threats include livestock incursions into the park and dispersal areas; poaching and trade in trophies; wildfires; Human Wildlife conflicts and bushmeat. One of the target animals for poaching are elephants which at the height of the menace the country lost 27 animals between May to June 2014 alone. Some of the causes of Human wildlife conflict include increasing pressure for land space; Population increase; Urbanization and settlement along Mombasa highway blocking the animal migratory corridors.; increase in incompatible land use in previously wildlife ranges/dispersal areas through Crop farming (maize, water melon, etc); Seasonal migration between the Tsavo East – Ranches – Tsavo West & vice versa; infrastructure Development for instance SGR, Pipeline and Congestion/heavy traffic on Mombasa highway.

To mitigate Human wildlife Conflict certain measures can be put in place including Quick actions like scaring away the animals ; deploying personnel on temporary operation bases in hot spot areas for quick response ; creation of permanent outposts in in hot spot areas; translocation to other parks (Predators Mainly) and construction of barriers or fences . Other medium or long term measures include construction of the proposed Alia –Kamtonga –Kasigau fence (100km); enhancing fence management by establishing and funding a fully-fledged fence office both in Tsavo East and Tsavo West; National land use plan and zonation; creation of enabling conditions for investing opportunities for wildlife as an alternative key land-use (subsidized loans, marketing, etc); Provision of underpasses/overpasses along the Mombasa Highway for ease of crossing and preferably at direct points to those of the SGRs; to move the proposed inland container terminal bothe at Voi for Taveta/TZ bound and at Mtito Andei for those headed towards Nairobi; secure animal corridors by buying land to connect Tsavo East and Tsavo West through the Ranches, drilling of 2 Boreholes earmarked for the Tsavo West-,Southern Part; desilting of Aruba Dam ; Damming of Tsavo River and Creation of wetlands which will reduce wildlife migration to human settlements in search of water.

Kenya Wildlife Services is facing challenges to mitigate HWC which include

1. Inadequate or lack of resources to implement mitigation activities
2. Budget cuts (e.g. Vehicle Maintenance 2014/2015- 86,600 currently 41,300 for 3 vehicles and a motorbike

3. Timely availability of chopper and the accompanying running costs
4. Risk to communities lives during elephant drives
5. The Non-operationalization of CWCCC (to facilitate compensation)
6. Lack of national land use plan

It is worth noting that HWC has never been given much attention as a challenge in that Partners and donors have not undertaken activities geared towards supporting HWC. There is inadequate resource allocation including funding and equipment.

More challenges to the protected areas and parks are encroachment of the Park; charcoal burning; wood carving; incompatible land use; invasive species; disease; tourism activities; pollution; declaration of Taita ranches as a Disease free zone which has resulted in a heavy presence and build-up of non-local livestock investors and subsequently proliferation of arms into the ranches and trading centres along Msa-Nrb highway; Overstocking in the ranches leading to spill over to protected areas of Tsavo East and Tsavo West; High demand for ivory locally and internationally (currently black market prices 1kg of ivory = Kshs. 13,000 – Kshs. 30,000 hence attracting more and more poachers and high number of illegal fire arms in the nearby counties due to insecurity e.g. Tana River, now being directed at elephant and rhino.

Other Challenges include:-

- High returns arising from elephant poaching is enticing local communities to either participate directly in the illegal activity or indirectly support poachers by refusing to divulge information to security agencies. Inadequate equipment e.g. night visions and low use of technology and the prevailing inadequacy of firearms has adversely affected the success of security operations;
- Sophisticated poaching methods;- use of communication gadgets e.g. mobile phones, night vision goggles and quick means of transportation e.g. motor bikes has enhanced chances of criminals to evade law enforcers;
- 'Silent' poaching methods e.g. poisoned arrows, poisoned watermelons, poisoned spikes, use of dart guns and silenced guns;
- Inadequate funding. Security operations are expensive to finance. Coupled with the prevailing low tourist numbers, budgetary constraints have been a major draw-back which has negatively affected our security operations. There is need to enhance allocations especially for intelligence and enforcement;
- Climate Change – Effects this global phenomenon including severe drought and flash floods which negatively impact on the environment;
- Barriers on the Mombasa-Nairobi Highway Traffic; Pipeline and SGR has formed a barrier restricting free movement of wildlife especially the elephants. This has caused elephants deviating into areas they were not previously been going into, leading to increased HWC;
- Incompatible land use: Farming activities coming up along Mombasa Nairobi Highway opposite the corridors which increases the conflict;
- Water scarcity in the parks; there is little investments for water points within the parks;

- There is lack of political good will to tolerate wildlife conflicts mostly aggravated by delays in payment of compensations.

The Standard Gauge Railway (SGR) is a government project that will aid in achieving vision 2030. SGR will be constructed to run from Mombasa, Kenya to Kigali, Rwanda through Nairobi, Malaba in Kenya. The first phase will be between Mombasa to Nairobi where it will go through national parks (Tsavo East, West and Nairobi) and Kiboko sanctuary. A total of 133 km will be in the protected areas. Since the run of way will be 130 meters, then the SGR will consume about 10.38 km². The SGR in the Tsavo parks alone will take about 10.2 km² of land.

Some negative effects of the Standard Gauge Railway include:

1. Habitat fragmentation – additional infrastructure, dividing the parks into two;
2. Blockage of wildlife migration/dispersal – genetic movement, social and behavioural change, access to water and pasture during adverse conditions;
3. Increased road and rail kills – SGR will be fenced and accumulate wildlife in wildlife crossing;
4. Possibility of increased Poaching and bushmeat incidences;
5. Potential negative environmental effects – air, water and soil pollution, vegetation loss;
6. Displacement of park infrastructure – Gates, fence

The solutions

1. Building of wildlife crossing – 6 crossing points in Tsavo, Box culverts and also bridges will act as crossing points;
2. Security checks and surveillances – CCTV in wildlife crossing points, impromptu security checks
3. Environmental management plans (EMP) established;
4. Education and awareness of the road and rail users – putting of warning lights/signs and maybe put bumps on the road;
5. Relocation of gate – Bachuma gate;
6. Fences merged with the SGR fence.

There are proposed revenue streams

- Mzima water bottling Plant
- Elephant Museum
- Rhino Night census
- Aruba dam
- Kiboko Sanctuary
- Chyulu Hills- Cycling, Walking Safaris

Committee Observations:

The Committee observed that

1. KWS appears not have been consulted or requested for input during the Environmental Impact Assessment process;
2. SGR is using water from the Tsavo river without paying compensation for its use
3. It was not clear the amount of compensation to KWS for the 10.92km²; the rate used to calculate it and to whom is administering it and for what purpose;
4. It was not clear whether a bond based on the Environmental Impact Assessment of the SGR which by law would be domiciled with NEMA for rehabilitation of the environment after the project is finished is available;
5. The Galana Kulalu project land had been cleared of trees which was impacting on the environment and the park itself;
6. It was not clear on the status of the corridors which previously were provided to allow livestock to reach water points within the park and dispersal areas;
7. The new legal framework has assisted KWS to reduce poaching; HWC and provide for compensation payments to persons affected by the HWC.

In response to the Committee observations, the management of KWS and PS, Natural Resources informed the Committee that

1. KWS had received approximately Kshs. 1.3 billion in compensation for the 10.92km² land which had been hived off as wayleave;
2. The Galana Kulalu ranch had been cleared of trees and the area had become arid. The Ministry has met with the Israel government on how to manage an arid area. Further, the ranch will be reforested to create buffer between the ranch and the park;
3. In the designs, there were mitigation measures against disruption of animal migrations between the parks by providing for overpasses and underpasses. But in some instance along the SGR, this has not been aligned with the traditional migratory routes.
4. The compensation amount for the 10.92km² is approximately Kshs. 1.47 Billion of which the remainder to be paid is approximately Kshs 94 million. It is in a fixed deposit account in Kenya Commercial Bank administered by Kenya Wildlife Services. The rates used to calculate the compensation amounts are different for the rates being used to compensate the individual landowners;
5. The SGR project originated from the Ministries of Transport and Infrastructure Development; Environment and Natural Resources, National Treasury and Development Planning and Lands, Housing and Urban Development;
6. The Ministry faces a challenge in the compensations of HWC. Although the amended legislation provides the animals involved in HWC can elicit compensation and the amounts for the different levels of injuries and death itself. However, currently they are not able to compensate all victims as the verification process is ongoing and the inherited backlog from when the compensation claims came into effect. Further the budgetary allocation is not adequate to clear all the current claims.

Committee Recommendations

The Committee after deliberation recommends that

1. It is provided with a copy of the Environmental Impact Assessment Report(EIA) including the Environment Management plan by Kenya Wildlife Service(KWS), the PS, Natural Resources, Ministry of Environment and Natural Resources and National Environment Management Authority(NEMA);
2. NEMA provides a copy of the bond on the EIA for rehabilitation after SGR project completion as well as its status and confirms where it is domiciled and who administers it. KWS to also provide their copy of the same bond as the consumers;
3. KWS to provide the rates and evaluation parameters used to arrive at the Kshs. 1.47 Billion compensation for the 10.92 km2 and the current status of payment; Further KWS to provide a list of projects and justifications to benefit from the amount. The Ministry of Environment to provide the rates and evaluation parameters being used to compensate other landowners.
4. PS, Natural Resources to provide a copy of the SGR design approvals as the rail passes through the Parks

MIN.NO. DC-ENR/070/2016:

ANY OTHER BUSINESS

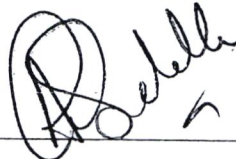
There was no other business before the Committee.

MIN.NO. DC-ENR/071/2016:

ADJOURNMENT

There being no other business, meeting was adjourned at Eight O'clock. The next meeting will be held on Friday 8th April, 2016 at 9:00am

SIGNED: _____

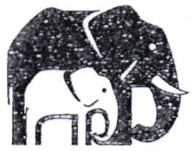


(CHAIRPERSON)

DATE: _____

24/5/2016

ANEXTURES 2-KENYA WILDLIFE SERVICE SUBMISSIONS



Your Ref: KNA/DC-ENR/2016 (54)

Our Ref: KWS/DIR/223

6th October 2016

The Clerk of the National Assembly
Clerk's Chambers
National Assembly
Parliament Buildings
NAIROBI

D/Committee
Tracy chebet
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7/10/16

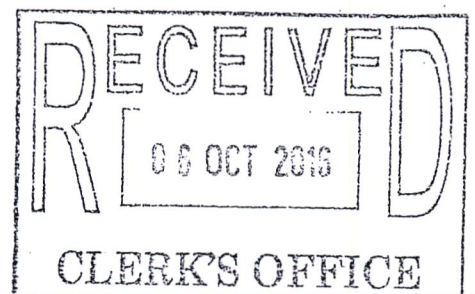
Attention: Michael R. Sialai

Dear Sir

**RE: SUBMISSION OF INFORMATION TO THE DEPARTMENTAL
COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES**

We refer to your letter dated September 19th 2016 requesting us to provide some clarification relating to the meeting with the Committee on September 13th 2016. We apologise for the delayed response, it was due to the recently concluded CITES Meeting in Johannesburg. We will address each point in the order it is raised in your letter:

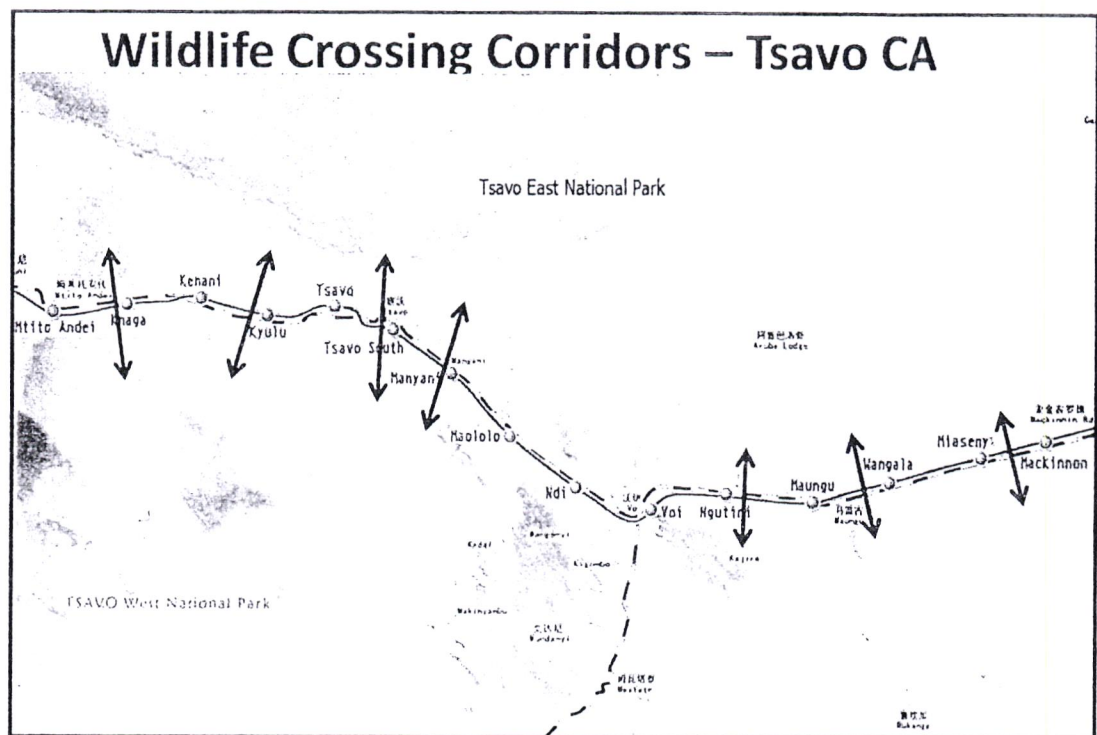
- i. Provide a complete Environmental and Social Impact Study Report and the licence showing clearly identified mitigation measures for any adverse impacts on the Tsavo East National Park, Tsavo West National Park, Nairobi National Park and the Kiboko Wildlife Sanctuary for the phase 1 of The SGR project.
 - Attached is the ESIA Study Report on a CD;
 - Attached is EIA License No. 0014338 issued on 5th February 2013
 - Attached is EIA License No. NEMA/EIA/PSL/2148 issued on 5th August 2015.
- ii. State clearly with supportive evidence whether the identified mitigation measures have been undertaken.



.....

- Condition 2.2 of the EIA states that: "The proponent shall work in consultation with Kenya Wildlife Service especially on the section running across Protected Areas".
- Overpass bridges, tunnels and culverts have been constructed to allow wildlife to move between Tsavo East and West. They were all sited after rigorous scientific analysis.
- Seven (7) wildlife corridors were identified and marked by KWS along the proposed SGR alignment within the Tsavo ecosystem. These include 2 corridors at Bachuma and Ngutuni and 5 at Manyani, Tsavo River, Kyulu, Kenani and Kanga areas. The corridors will allow for connectivity and movement of wildlife between Tsavo East, Tsavo West and the Taita Ranches (Plate 1).

Plate 1. The sever (7) wildlife crossing corridors within the Tsavos



iii. The total size of land within the wildlife protected areas that was lost to phase 1 of the SGR project.

- The SGR project under Phase-I alignment from Mombasa to Nairobi has resulted in easements of land in wildlife protected areas as follows:
 - (a) Tsavo East National Park, Tsavo West National Park and Tsavo Road and Railway Reserve – 1,019ha (2,516.9 acres).
 - (b) Kiboko Wildlife Sanctuary – 10.2ha (25.2 acres).

(c) Nairobi National Park – 87.3 ha (215.6 acres), comprising of 46.7 ha corridor and 40.6 ha severed areas).

iv. The total size of land within the wildlife protected areas that will potentially be lost to phase- 2 of the SGR project:

- **The proposal under consideration for the SGR alignment within NNP for Phase-2 is a bridge measuring 6 km across the park with an average height of 18metres.**

v. The species of wildlife within these protected areas were or would be affected by the loss of these pieces of land to the SGR project - Clearly state their estimated numbers and whether they are endangered species or not:

- **All wildlife species in the Park will be especially elephants which travel long distances in search of water during the day. The mitigation however is that corridors, bridges and culverts that have been established will form the main crossing points for the animals.**
- **Kenya has about 34,000 elephants**

vi. The compensatory amount agreed to be paid for phase-1 of the SGR project to the Kenya Wildlife Service, whether there was any consideration for the restoration and rehabilitation of the environment outside the wildlife protected areas.

- **There was no compensation money paid to KWS for Phase-1 of SGR.**
- **The monetary value of the affected PA lands especially in Tsavo in terms of loss of biodiversity and ecosystem services was estimated at KSh. 3.7 Billion.**
- **As consideration of KWS providing it with land for construction of the SGR through Tsavo East and West National Parks, Kiboko Wildlife Sanctuary and Nairobi National Park, Kenya Railways Corporation made a commitment to pay to KWS funds to bear the costs of specified developments and activities consequent upon construction of the SGR within PAs as follows:**

- (a) **An environmental restoration grant of KShs. 1.197 Billion (One Billion One Hundred and Ninety Seven Million). ((This comprised of Eight Hundred and Sixty Four million (KSh. 864 Million) based on estimated values of restoring an area of 1 km² estimated at KSh. 6.5 million; and Kenya Shillings Three Hundred and Thirty Three million (KSh. 333 Million) based on estimated values of KSh 2.5 million per kilometer square for wildlife rescues, eradication of invasive species resulting from SGR activities and burrow filling for 133km of SGR within the PAs).**

- (b) Any and all costs required for, or incidental to, relocation of KWS's amenities or facilities affected by construction of the SGR and the incremental cost of wildlife security, which was estimated at KShs. 278 Million ((computed at 15% disturbance on value of land affected (KSh. 138,529,579); relocation of Bachuma Gate (KSh. 15,000,000), Cheetah Gate (KSh. 15,000,000 and Kiboko staff quarters (KSh. 100,000,000); incremental cost of wildlife security for establishing nine security outposts at the wildlife corridors/crossing points (KSh. 9,000,000)).
 - (c) The computed incremental cost of wildlife security; environmental restoration; and relocation of amenities for re-aligning SGR Phase-1 through NNP was estimated at KShs. 408,256,080 (Four Hundred and Eight million Two hundred and Fifty Six thousand and eighty shillings),
 - (d) The amount of money computed for the KWS Endowment Fund, based on the economic value of the SGR reserve within NNP due to re-alignment was estimated at KSh. 4 Billion. This amount was agreed upon by the Boards of KRC and KWS and sanctioned by the Ministry of Transport and The Treasury.
- Kenya Wildlife Service deals with land designated as National Park, Reserves and/or Sanctuaries. Therefore, we did not make any consideration with the SGR contractor for the restoration and rehabilitation of the environment outside the wildlife protected areas, because this is the responsibility of the National environment Management Authority.
- vii. How much of the agreed amount have actually been paid to KWS. Also provide a breakdown of how the actual money already paid as compensation have been utilised.

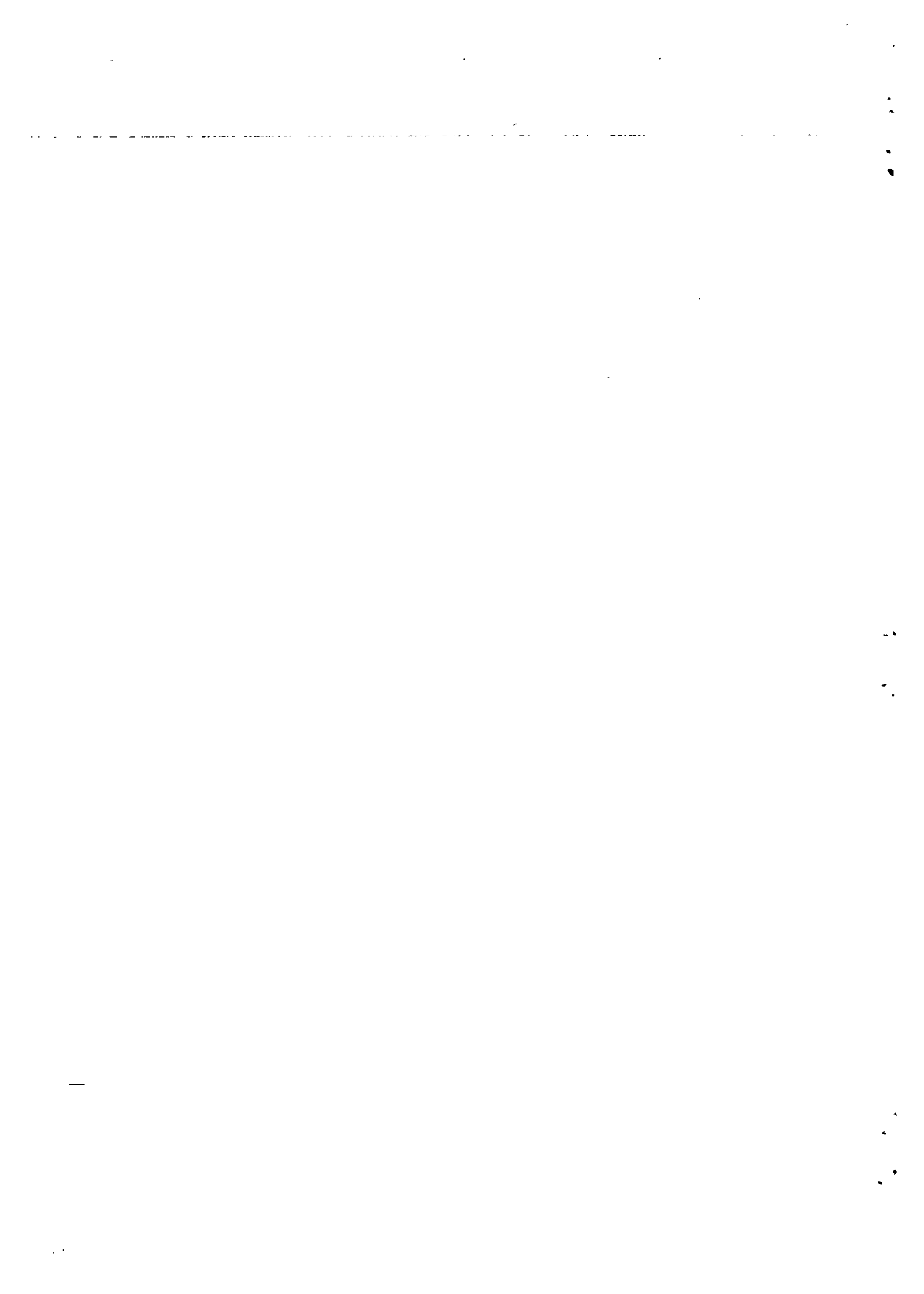
- The following is a breakdown of the money received from KRC for Phase-1 of SGR.

DATE RECEIVED	AMOUNT (Kshs)
07/10/2014	350,000,000
12/01/2015	1,024,900,000
25/08/2016	94,100,000
Total	1,469,000,000

- Utilization of funds received from SGR Phase-2: The KWS Board approved the allocation Kshs 30 million for Bachuma Gate. The balance of the funds were used to bridge the shortfall in the KWS

budget in FY2015/16. This was approved by the Board of Trustees in a supplementary Budget in June which was then submitted to the Treasury through the Ministry of Environment and Natural Resources.

- viii. The estimated compensatory amount to KWS for SGR phase 2 project.
- **The Board of Trustees has authorised KRC to conduct an Environmental Impact Assessment of the proposed 6km bridge across NNP. Any discussions on compensation for Phase 2 will only be conducted after the EIA has been completed and the project approved.**
- ix. Provide and elaborate the legal process that was followed to acquire the land in the wildlife protected areas and whether this process conformed to the provision of section 34 of the Wildlife Conservation and Management Act 2013 on the procedure for variation of boundaries or revocation of a national park or a marine protected area for phase 1 and 2 of the SGR project:
- There was negotiation by both parties (KWS and KRC) and the supervision of National Land Commission (NLC).
 - The Parties agreed that the appropriate registerable legal instrument to provide access for construction of the SGR through PAs was a Grant of Easement.
 - An easement is a non-possessory interest created over land that allows the holder to use the land to a particular extent, to require the proprietor to undertake an act relating to the land, or to restrict the proprietor's use to a particular extent.
 - KWS and KRC signed a Grant of Easement Agreement on 22nd August 2014 to confer a right of way to KRC to construct SGR within PAs and further stipulated the obligations of each Party.
 - KRC concurrently signed a Deed of Undertaking to acquire land for KWS in compensation for the land/wildlife habitats affected by construction of the SGR.
 - KWS and KRC signed a Supplemental Easement Agreement on 28th August 2015, for SGR re-alignment in NNP.
 - There was no variation of park boundary / revocation of national parks and as such the provisions of Section 34 of the Wildlife Conservation and Management Act 2013, were not applicable.
- x. Provide designs and maps for actual or potential construction that have or will take place within the wildlife protected areas for phase 1 and 2 of the SGR project.
- **Copies attached**



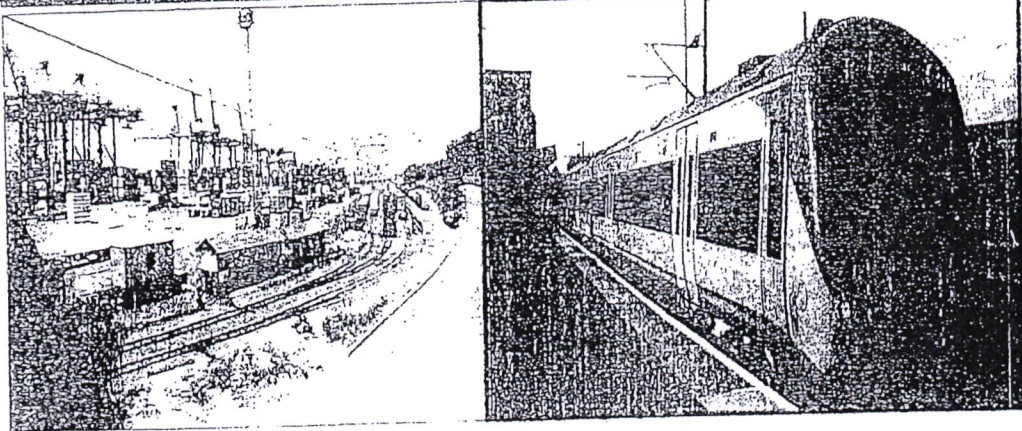
We will be pleased to provide any additional information you may require,

Yours Sincerely,

A handwritten signature in black ink, reading "Kitili Mbathi". The signature is written in a cursive, flowing style with a period at the end.

KITILI MBATHI
DIRECTOR GENERAL

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT STUDY REPORT FOR THE
PROPOSED MOMBASA-NAIROBI STANDARD GAUGE RAILWAY PROJECT**



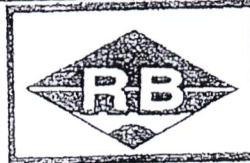
ENVIRONMENTAL CONSULTANTS



**Africa Waste and Environment
Management Centre
(AWEMAC)**

Limuru Road, Muthaiga Mini Market
Complex, Left wing 3rd Floor
P.O. Box 63891-00619
Muthaiga- NAIROBI.
Tel: - 020-2012408/0704333166
Email: awemac_ken@yahoo.com
Website: www.awemac.co.ke
FIRM NEMA Reg. No. 0527

CONTRACTOR



**China Road and Bridge Corporation
CRBC**

P.O. Box 39037, NAIROBI
Plot 330/265, Hatheru Road-Lavington
Tel: 020-3877955/3870956
Fax: 020-3870334
Email: crbc_ke@126.com
Website <http://www.crbc.com>

*AWEMAC
L.I.C.*

PROPONENT

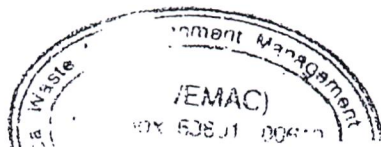


KENYA RAILWAYS CORPORATION
P. O. Box 30121 - 00100,
Off Haile Selassie Avenue,
Nairobi, Kenya | Tel: 254-20-2210111 /
2215211 / 2210200 |
Fax: 254-20-340049 / 221456 |
Email: contact@krc.co.ke

Vision 2030 Government Flangship Project



OCTOBER 2012



5 NOV 2012





nema
mazingira yetu | uhazi wetu | wajibu wetu

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

**THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT
ENVIRONMENTAL IMPACT ASSESSMENT LICENSE**

EIA/900
Application Reference No.
Registration No: 0014338

For official use

This is to certify that the Project Report/Environmental Impact Assessment Study Report received from
Kenya Railways Corporation(Name of
of individual/firm) of **P. O. Box 30121-00100 Nairobi** (Address

submitted to the National Management Environment Authority (NEMA) in accordance with the
Proposed Mombasa—Nairobi
Environmental Impact Assessment and Audit Regulations regarding
Standard Gauge Railway Project

.....(title of project) whose objective is to carry on
Construction of 485.303KM of standard gauge railway line consisting of 33 yards/ terminals

..... (briefly describe purpose) located at
The line passes through Mombasa, Kilifi, Kwale, Taita -Taveta, Makueni. Kajiado, Machakos
and Nairobi Counties

.....(locality and district) has been
reviewed and a licence is hereby issued for implementation of the project, subject to attached conditions.

Dated this **05th** Day of **Feb 2013**

Signature..... 

(SEAL)


Director General
The National Environment Management Authority

CONDITIONS OF LICENSE

1. This licence is valid for a period of.....(time within which the project should commence) from the date hereof.
2. The Director-General shall be notified of any transfer/variation/surrender of this license.

P.T.O.



1.0 General Conditions

- 1.1 This project is for the construction of proposed Nairobi – Mombasa Standard Gauge Railway Line by Kenya Railways Corporation costing US\$4 Billion.
- 1.2 The license shall be valid for 24 months from the date of issue.
- 1.3 Without prejudice to the other conditions of this license, the proponent shall implement and maintain an environmental management system, organizational structure and allocate resources that are sufficient to achieve compliance with the requirements and conditions of this license.
- 1.4 The Authority shall take appropriate action against the proponent in the event of breach of any of the conditions stated herein or any contravention to the Environmental Management and Coordination Act, 1999 and regulations therein.
- 1.5 This license shall not be taken as statutory defence against charges of environmental degradation or pollution in respect of any manner of degradation/pollution not specified herein.
- 1.6 The proponent shall ensure that records on conditions of licenses/approval and project monitoring and evaluation shall be kept on the project site for inspection by NEMA's Environmental Inspectors.
- 1.7 The proponent shall submit an Environmental Audit report in the first year of occupation/operations/commissioning to confirm the efficacy and adequacy of the Environmental Management Plan.
- 1.8 The proponent shall comply with NEMA's improvement orders throughout the project cycle.
- 1.9 The proponent shall provide the final project accounts (final project costs) on completion of construction phase. This should be done prior to project commissioning/operation/occupation.

2.0 Construction Conditions

- 2.1 The proponent shall ensure that land acquisition/compensation/resettlement is done in consultation with the Ministry of Lands.
- 2.2 The proponent shall work in consultation with Kenya Wildlife especially on the Section running across Tsavo National Park.
- 2.3 The proponent shall ensure the protection of any archaeological sites in consultation with the National Museums of Kenya.
- 2.4 The proponent shall work in close consultation with the Kenya Forest Service to ensure protection of Kibwezi Forest.
- 2.5 In the event the project site borders a river or stream, the proponent pursuant to regulation 6 (c) of Water Quality Regulation 2006, shall protect the riparian reserve by ensuring that no

GAZETTE NOTICE No. 721

THE COUNTY GOVERNMENTS ACT

(No. 17 of 2012)

THE NYANDARUA COUNTY TASKFORCE ON LAND
PLANNING AND DEVELOPMENT

APPOINTMENT

PURSUANT to the provision of section 30 (1) and 102 of the County Governments, Act. 2012, Governor of Nyandarua County appoints—

John Maina Kariuki (Fr.),
Julius Muthanwa,
John Nginye Macharia (Rev.),
Gitau Thambanja,
Miriam Wanjiku Waweru,
Stephen Kari Githiaka,
Harrison Kiragu Wachira,
Joseph Njoroge Njugi
Mary Wanjiru Njogo.

as members of the Nyandarua County Task Force on Land Planning and Development for a period of 90 days.

Dated the 24th January, 2014.

D. W. MWANGI,
Governor, Nyandarua County.

GAZETTE NOTICE No. 722

THE COUNTY GOVERNMENTS ACT

(No. 17 of 2012)

THE COUNTY ASSEMBLY OF MANDERA

REGULAR SITTINGS OF THE COUNTY ASSEMBLY

PURSUANT to Standing Orders of the Standing Orders of the Mandera County Assembly, it is notified for the information of Members of the County Assembly and the general public that the Assembly shall resume its regular sittings of the Second Session in the County Assembly Chambers at the County Assembly Buildings, on Tuesday, 11th February, 2014 at 2.30 p.m.

Dated the 3rd January, 2014.

A. S. HASSAN,
Speaker.

GAZETTE NOTICE No. 723

THE COUNTY GOVERNMENTS ACT

(No. 17 of 2012)

THE COUNTY ASSEMBLY OF MACHAKOS

RELOCATION OF THE COUNTY ASSEMBLY

PURSUANT to notice of motion dated Thursday 21st November, 2013, it is notified for the information of the Members of the County Assembly of Machakos and the general public that the County Assembly of Machakos shall relocate from County Hall, from Saturday 1st February, 2014, to Mavoko Sub-County Town Hall Chambers for a period of three months to pave way for renovation of the Machakos County Assembly Chambers after which the County Assembly shall resume its sittings at the Machakos County Hall from Friday 2nd May, 2014.

During the said period the Assembly business shall be transacted at Mavoko Town Hall Chambers.

B. M. MUNG'ATA,
Speaker, Machakos County Assembly.

GAZETTE NOTICE No. 724

THE LAND ACT

(No. 6 of 2012)

MOMBASA–NAIROBI STANDARD GAUGE RAILWAY
PROJECT

INTENTION TO ACQUIRE LAND

IN PURSUANCE of the transitional provisions contained in section 162 (2) of the Land Act and section 6 (2) of the Land Acquisition Act (repealed), the National Land Commission gives notice that the government intends to acquire the following parcels of land for the Kenya Railways Corporation for the construction of the Mombasa–Nairobi standard gauge railway in Taita Taveta, Kwale and Makueni Counties.

Parcel No.	Registered Owner	Area to be Acquired (Ha.)
Kathekani 395	Jonah Mutisya Ikusya	3.101
Kathekani 396	Joseph Nduta Kyengo	0.7700
Kathekani 636	Rose Kavee Muindi	1.503
Kathekani 637	Pauline Kasusu Malyunga	0.203
Kathekani 677	John Mbithi Peter	0.1931
Kathekani 676	Margaret Ikinga Wachira	1.334
Kathekani 679	Fredrick Mathembe Juma	0.0131
Kathekani 715	Milka Ndunge Kilavi	0.6345
Kathekani 714	Paulinah Munini Kiilu	0.0897
Kathekani 737	Jonah Mutisya Ikusya	1.347
Kathekani 726	Rodah Mutinda	0.0699
Kathekani 378	Samuel Mutua Ngewa	0.4618
Kathekani 375	Luka Muli	0.8565
Kathekani 376	Peter Muoka Munyao	0.0350
Kathekani 334	Paul Musyimi Mwove	0.5031
Kathekani 385	Amos Muli Mutua	0.1581
Kathekani 386	Rael Wausi Musyoka	0.1369
Kathekani 389	Samuel Mutua Ngewa	0.6016
Kathekani 387	Agnes Mukina Mauta	0.2744
Kathekani 203	Moses Kimani Gacheba	0.6922
Kathekani 390	Alphonse Katunga Keli	0.0205
Kathekani 202	Francis Kiruka Njoroge	0.4988
Kathekani 201	Margaret Ikinga Wachira	0.4557
Kwale/Mwavumbo/1	Mwavumbo Group Ranch	14.05
Kwale/South Samburu/58	South Samburu Group Ranch	28.34
LR 24360	Kenya Wildlife Service	65.81
LR 24361	Kenya Wildlife Service	35.90

Plans for the affected land may be inspected during office hours at the office of the National Land Commission, Ardh House, 1st Ngong Avenue, 3rd Floor, Room No. 305 and at respective Lands offices in Makueni, Wundanyi and Kwale.

Notice for the inquiries will be published in the Kenya gazette after 30 days as per section 112 (1) of the Land Act of 2012.

Dated the 2nd February, 2014.

MUHAMMAD A. SWAZURI,
Chairman, National Land Commission.

GAZETTE NOTICE No. 725

THE LAND REGISTRATION ACT

(No. 3 of 2012)

ISSUE OF A PROVISIONAL CERTIFICATE

WHEREAS Samuel Kevin Kimanui, of P.O. Box 54279–00200, Nairobi in the Republic of Kenya, is the registered proprietor lessee of that piece of land known as L.R. No. 209/4966, situate in the city of Nairobi, by virtue of a grant registered as I.R. 11802/1, and whereas sufficient evidence has been adduced to show that the said grant issued thereof has been lost, notice is given that after the expiration of sixty (60) days from the date hereof, I shall issue a provisional certificate of title provided that no objection has been received within that period.

Dated the 7th February, 2014.

G. M. MUYANGA,
Registrar of Titles, Nairobi.

MR/4122229



**NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)
THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT
ENVIRONMENTAL IMPACT ASSESMENT LICENSE**

License No: **NEMA/EIA/PSL/2148**

Application Reference No: **NEMA/EIA/SR/532**

This is to certify that the Environmental Impact Assessment Study Report received from

Kenya Railways Corporation.

P.O. Box 30121 - 00100, Nairobi.

submitted to the National Environmental Management Authority in accordance with the Environmental Impact Assessment & Audit Regulations regarding

Proposed Re-alignment of the Standard Gauge Railway (SGR).

whose objective is to carry on

Re-alignment of the standard gauge railway within the Nairobi National Park at a mileage range of DK 455+ 650 - DK 464+ 500 with a total length of 8.85 km including the construction of sub-grade, culvert and bridge engineering.

located at

Within Nairobi National Park at Athi River area, Machakos County.

has been reviewed and a license is hereby issued for the implementation of the project, subject to attached conditions.

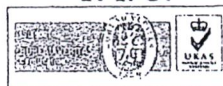
Issue Date : **05 August, 2015**

Signature

(Seal)

**Director-General
The National Environment
Management Authority.**

P. T. O.



ISO 9001 : 2008 Certified

1.0 General Conditions

- 1.1 This project is for the realignment of the Standard Gauge Railway within the Nairobi National Park at Athi River area, Machakos County at mileage range DK455+650 – DK464+500 with a total length of 8.85km including the construction of sub-grade, culverts and bridge engineering at an estimated cost of Ksh. 750,000,000.
- 1.2 The license shall be valid for 24 months (time within which the project shall commence) from the date hereof.
- 1.3 The Director General shall be notified of any transfer, variation or surrender of this license.
- 1.4 The proponent shall provide the final project accounts (final project costs) on completion of construction phase. This should be done prior to project commissioning/operation/occupation.
- 1.5 Without prejudice to the other conditions of this license, the proponent shall implement and maintain an environmental management system, organizational structure and allocate resources that are sufficient to achieve compliance with the requirements and conditions of this license.
- 1.6 The Authority shall take appropriate action against the proponent in the event of breach of any of the conditions stated herein or any contravention to the Environmental Management and Co-ordination Act, 1999 and regulations there-under.
- 1.7 This license shall not be taken as statutory defense against charges of pollution in respect of any manner of pollution not specified herein.
- 1.8 The proponent shall ensure that records on conditions of licenses/approval and project monitoring and evaluation shall be kept on the project site for inspection by NEMA's Environmental Inspectors.
- 1.9 The proponent shall submit an Environmental Audit Report in the first year of occupation/operation/commissioning to confirm the efficacy and adequacy of the Environmental Management Plan.
- 1.10 The boundary of the Nairobi National Park shall **NOT** be altered as a result of the realignment and the land on both sides of the standard gauge railway corridor shall remain under the Kenya Wildlife Service title and control.
- 1.11 The proponent shall comply with NEMA's improvement orders throughout the project cycle.

2.0 Construction Conditions

- 2.1 The proponent shall obtain all the requisite approvals from the Kenya Wildlife Service, the National Lands Commission, the County Government of Machakos and other relevant Authorities prior to commencement of construction works.
- 2.2 The proponent shall construct an elevated rail track with an embankment that will have three bridges to enable wildlife and tourists to pass below the track at DK455+680, DK460+498, DK461+196.6 and DK462+096.
- 2.3 The proponent shall ensure the protection and conservation of any archaeological sites in consultation with the National Museums of Kenya.

- 2.4 In the event the project site borders a river or stream, the proponent pursuant to regulation 6 (c) of Water Quality Regulation 2006, shall protect the riparian reserve by ensuring that no development activity is undertaken within the full width of the river or stream to a minimum of six (6) meters and a maximum of 30 meters on either side based on the highest recorded flood level.
- 2.5 The proponent shall ensure that depending on the magnitude of the material borrow sites, separate EIA shall be undertaken before commencement of works, and ensure that the borrow pits are continually rehabilitated and finally decommissioned at the end of the Project.
- 2.6 The proponent shall put up a project signboard as per the Ministry of Public Works standards showing the NEMA EIA license number among other details.
- 2.7 The proponent shall ensure that appropriate signage's such as diversions and rail markings are in place to prevent occurrence of accidents.
- 2.8 The proponent shall ensure that all excavated material and debris is collected, re-used and where need be, disposed off as per the Environmental Management and Coordination (Waste Management) Regulations of 2006.
- 2.9 The proponent shall ensure air pollution control measures are put in place to mitigate against dust during the construction phase.
- 2.10 The proponent shall in collaboration with the EIA Expert and the Contractor ensure that the proposed mitigation measures are adhered to during construction phase and where necessary, appropriate mending-up activities undertaken and report submitted to NEMA.
- 2.11 The proponent shall ensure the project will not encroach on any way-leave and road reserves.
- 2.12 The proponent shall ensure strict adherence to the provisions of Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.
- 2.13 The proponent shall ensure strict adherence to the Occupational Safety and Health Act (OSHA), 2007.
- 2.14 The proponent shall ensure that construction workers are provided with adequate personal protection equipment (PPE), sanitary facilities as well as adequate training.
- 2.15 The proponent shall ensure that construction activities are undertaken during the day (and not at night) – between 08.00 hours and 17.00 hours and that transportation of construction materials to and from site are undertaken during off peak hours.
- 2.16 The proponent shall closely work with the Kenya Wildlife Service to ensure the integrity of the environment is maintained and suitable fences are constructed to mitigate wildlife-train conflicts and ensure wildlife safety and to close off any possibility of illegal access into the park by pedestrians.
- 2.17 The proponent shall ensure that the development adheres to zoning specifications issued for development of such a project within the jurisdiction of the Kenya Wildlife Service, National Lands Commission, County Government of Machakos, Ministry of Transport and Infrastructure, Ministry of Health, Ministry of Lands, National Museums of Kenya, Housing and Urban Development, National Construction Authority, Directorate of Occupational Health and Safety Services, Water Resources Management Authority, with emphasis on approved land use for the area.
- 2.18 The proponent shall ensure strict adherence to the Environmental Management Plan developed throughout the project cycle.

3.0 Operational Conditions

- 3.1 The proponent shall ensure that all waste water is disposed as per the standards set out in the Environmental Management and Coordination (Water Quality) Regulations of 2006.
- 3.2 The proponent shall ensure that all equipment used are well maintained in accordance with the Environmental Management and Coordination (Noise and Excessive Vibration Pollution Control) Regulations of 2009.
- 3.3 The proponent shall ensure that all solid waste is handled in accordance with the Environmental Management and Coordination (Waste Management) Regulations of 2006.
- 3.4 The proponent shall ensure that all workers are well protected and trained as per the Occupational Safety and Health Act (OSHA) of 2007.
- 3.5 The proponent shall undertake continuous and regular biodiversity monitoring of the significant impacts during construction, operation and decommissioning phases of the project.
- 3.6 The proponent shall work in close collaboration with the other stakeholders such as the Kenya Wildlife Service, Kenya Forest Service, the National Museums of Kenya, and other conservation groups to ensure sound environmental conservation and management practices are followed.
- 3.7 The proponent shall comply with the relevant principal laws, by-laws and guidelines issued for development of such a project within the jurisdiction of the Kenya Wildlife Service, National Lands Commission, County Government of Machakos, Ministry of Transport and Infrastructure, Ministry of Health, Ministry of Lands, National Museums of Kenya, Housing and Urban Development, National Construction Authority, Directorate of Occupational Health and Safety Services, Water Resources Management Authority and other relevant Authorities.
- 3.8 The proponent shall ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as wildlife-train conflict mitigation, provision of wildlife passage/bridges, elevation of the rail tracks, water conservation, waste water management, storm water drains, soil erosion control mechanisms, traffic management plan, dust control are designed, constructed and employed simultaneously with the proposed project.

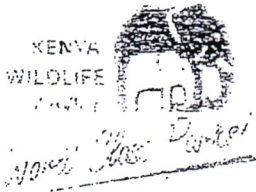
4.0 Notification Conditions

- 4.1 The proponent shall seek written approval from the Authority for any operational changes under this license.
- 4.2 The proponent shall ensure that the Authority is notified of any malfunction of any system within 12 hours on the NEMA hotline No. 020 6006041 and mitigation measures put in place.
- 4.3 The proponent shall keep records of all pollution incidences and notify the Authority within 24 hours.
- 4.4 The proponent shall notify the Authority in writing of its intent to decommission the facility **three (3) months** in advance.

5.0 Decommissioning Conditions

- 5.1 The proponent shall ensure that a decommissioning plan is submitted to the Authority for approval at least three (3) months prior to decommissioning.
- 5.2 The proponent shall ensure that all pollutants and polluted material is contained and adequate mitigation measures provided during the phase.

The above conditions will ensure environmentally sustainable development and must be complied with.



GRANT OF EASEMENT AGREEMENT

DATED 22 August 2014

KENYA WILDLIFE SERVICE
TO
KENYA RAILWAYS CORPORATION