

## Policy Paths Toward Enhancing Sustainable Management of the Masai Mara National Reserve

*Integrated ecosystem management approach the way to go*

### Preface

The Maasai Mara National Reserve (MMNR) is the main tourist attraction within Narok County, Kenya and is globally regarded as a premier wildlife-viewing destination. It was declared a World Heritage Site in 1989 and recently named as [one of the new Seven Wonders of the World](#) by an American Broadcasting Company (ABC) panel due to the annual migration of close to two million wildebeest and thousands of zebras from Serengeti National park across Mara River to mate and graze before returning to Serengeti. Over many decades, wildlife-based tourism has provided a vital source of revenue for Narok County generating on average KSh 3 billion annually (Poole *et al.*, 2016).

The human population around the reserve is growing at an average of 7% per annum, almost three times the national rate (Coughenour *et al.* 2000). Exploding settlement and sub-division of land across much of the Mara landscape has resulted in increased fencing of private lands, reduced wildlife migratory corridors, and increased human-wildlife conflict. Livestock numbers have also increased due to rising wealth from land leases and access to pasture for livestock (Thompson *et al.* 2009). Infrastructural development within and around the reserve is putting additional pressure on this critical and fragile ecosystem. As a result of these various stressors conflict with wildlife is on the rise and natural resources within the Reserve are in rapid decline.

In the past five years, there has been a dramatic increase in the number of tourist facilities within and around



Maasai Mara national reserve landscape

MMNR, including lodges, camps, balloon off-take and landing sites and open camps among others. As such the Maasai Mara's wildlife is at risk because of its own attractiveness. Too many tourist disturbances can lead to the decline of wildlife populations and in the long run, the area could lose the wildlife and subsequently the tourists. When carrying capacity is exceeded, the pressure presents adverse effects to any protected area and MMNR is no different.

In a bid to address the aforementioned challenges, the MMNR 10-year (2012-2021) draft Management Plan was finalized in 2012. Unfortunately, it was never officially adopted. Since 2012, tourist facilities development has increased significantly and as a result, important components of the 2012-2021 Draft Management Plan have been rendered obsolete. Furthermore, the Wildlife Conservation and Management Act, 2013 requires that every national park, reserve or conservancy be managed in accordance with a Management Plan gazetted by the Cabinet Secretary from the relevant ministry. The Act also stipulates that no development in a national park, reserve or conservancy will be approved in the absence of a Management Plan. In consideration of these factors, the Narok County Government resolved that the MMNR Management Plan must be revised and updated before adoption and gazettelement.

On this premise, the East African Wild Life Society (EAWLS) was commissioned by the Narok County Government, and supported by USAID through the Planning for Resilience in East Africa through Policy, Adaptation, Research, and Economic Development (PREPARED) project, to conduct a comprehensive and independent audit of all tourist facilities within the MMNR in 2016. The aim of this audit was to provide up-to-date, accurate and reliable data to inform the revision of the MMNR Management Plan and contribute to the PREPARED overall project objective of enhancing the sustainable management of the Mara-Serengeti Ecosystem.

This policy brief assesses the findings presented in the audit report entitled "**Planning for Resilience in**



**EAWLS Presenting the Audit Findings:** From Left: Lena Munge (CECM Department of Tourism and Wildlife), Chelsea Keyser (Deputy Chief of Party, BCTA), Brian Heath (CEO, Mara Conservancy), David Kuria (Audit Team Leader, EAWLS), Julius Kamau (Executive Director, EAWLS) and HE Samuel Tunai (Governor, Narok County Government).

**East Africa through Policy, Adaptation, Research, and Economic Development (PREPARED) Project: Maasai Mara National Reserve Tourist Facilities Audit Report (2016)** prepared by EAWLS, with the aim of providing policy directions on sustainable management of the Masai Mara Ecosystem.

**What are the issues?**

The audit revealed several policy issues that require attention by several stakeholders especially the Narok County Government. Kenya has a robust legal framework that guides and regulates how tourist facilities in and around national parks, reserves and conservancies are established and managed. The audit revealed some cases of non-compliance with laws, policies and regulations, especially those that relate to tourist facilities statutory requirements with regards to business registration, ownership and environmental management.

The audit established that the Reserve has a total of 31 permanent tourist facilities including 29 lodges and two camps, with a total bed capacity of 1,382. In addition, 20 open camp sites, three view/picnic sites and nine other facilities were also observed. It was noted with great concern that in some facilities the bed capacity is exceeded during the peak seasons, however, the extent could not be established during the audit.

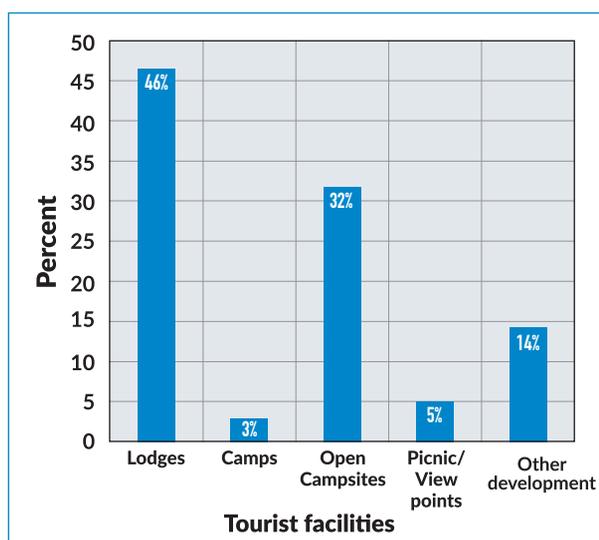
The Wildlife Conservation and Management Act 2013 stipulates that no development will be approved in the absence of a Management Plan which has been approved and gazetted by the Cabinet Secretary. The increasing number of tourist facilities within MMNR in the absence of an approved and gazetted Management Plan is alarming and is in contravention of this Act.

As revealed by the audit, 10% of all the tourist facilities audited lack leases while 11% of those with registered

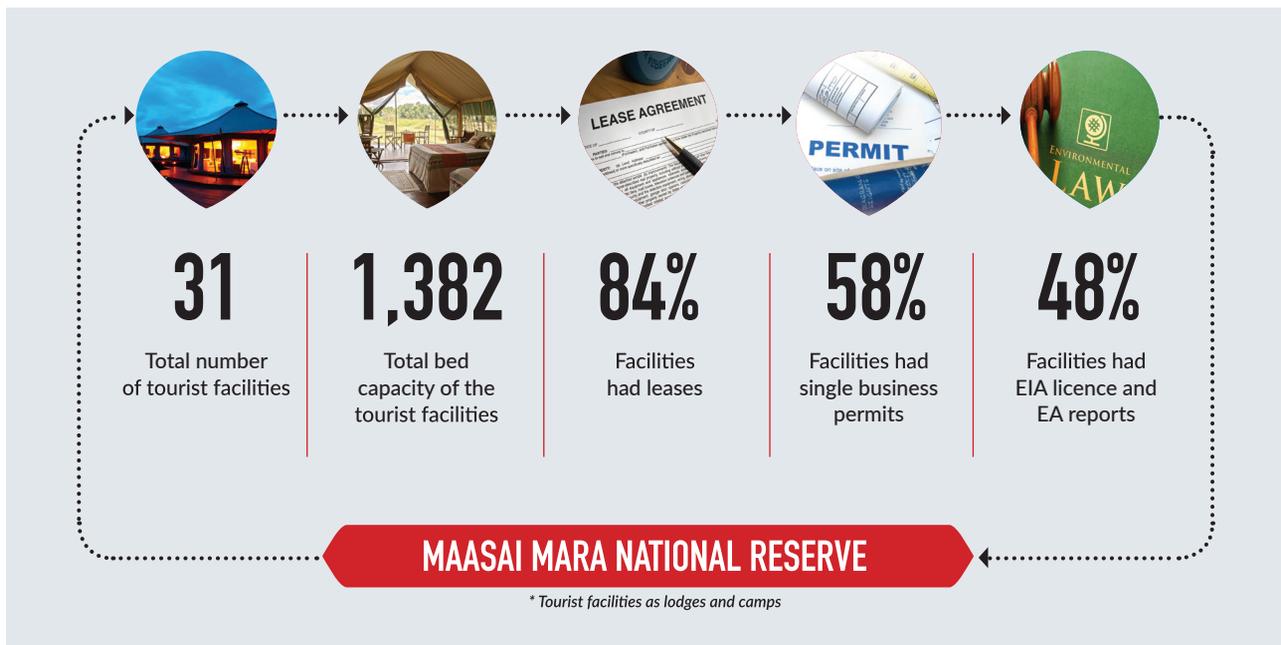
leases were found to be sharing lease reference numbers. In addition, 42% of all the audited facilities did not present or display single business permit issued by the County Government. The law requires that all the facilities have leases as a proof ownership and registered by the Ministry of Lands, Planning and Urban Development, and that they must possess and display at all times the single business permits issued by the County Government.

According to the audit findings, 55% of the tourist facilities lacked Environmental Impact Assessment (EIA) licenses and Environmental Audit (EA) reports as required by Environment Management and Coordination (Amendment) Act 2015. The Act requires that all projects conduct an EIA prior to commencing the project and that the EIA report is submitted to the National Environmental Management Authority (NEMA) for approval and issuance EIA license thereof. The regulations also require an annual environmental assessment to ensure compliance with respective environmental management plans.

Findings of the present audit also established that the spatial distribution of the tourist facilities was concentrated along Mara River and its tributaries. Indeed, over 50% of the facilities are built within 30m riparian reserve (i.e. 30m from either sides of the river bank from the highest water mark) of Mara River and its tributaries which is in contravention of environmental laws. This skewed spatial distribution was largely influenced by the desire to have tourist facilities in close vicinity to the migratory routes, water sources, favourable micro-climate, and rich biodiversity associated with the riverine ecosystem. The audit further revealed that 58% of the tourist facilities had improper waste management and disposal practices which pose great threat to terrestrial and aquatic life. For instance, solid waste attracts



**Figure 1: Tourist facilities and other development within MMNR**



carrion-eaters such as hyenas, baboons, velvet monkeys and marabou storks, which may result in human-wildlife conflict, wildlife poisoning and wildlife behaviour change especially their natural feeding habits. The audit noted the prevalence of invasive species in the reserve and especially in the tourist facilities.

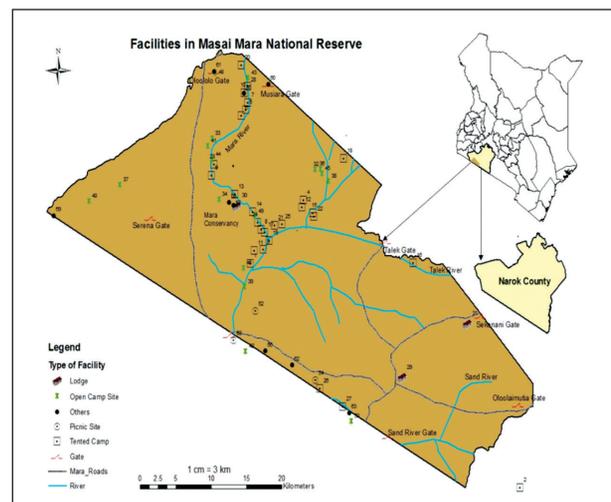
Environmental degradation as a result of frequent off-road driving by the tour drivers was evident in MMNR, especially on the Eastern side. Off-road driving causes damage to natural vegetation and disturbance to wildlife, and this can be disastrous to the whole reserve if not controlled. Off-road driving is recognized as an offence as per the MMNR Rules, but enforcement by the Narok County Government and awareness of negative impacts of off-road driving among tour operators are inadequate.

MMNR does not exist in a vacuum but rather forms an integral part of the Mara-Serengeti Ecosystem. The existence of the reserve is supported by several community and private conservancies surrounding it. In fact, these conservancies increase the amount of land under protection in the Maasai Mara Ecosystem by nearly an area almost the same size as that of MMNR. The beautiful wildlife of the Masai Mara ecosystem would be highly compromised without these privately owned conservancies. In addition, the perennial Mara River flows across the Masai Mara to the Serengeti and provides its life-giving waters for the whole of Mara-Serengeti ecosystem. Hence, the health and continued existence of MMNR require an integrated ecosystem-based management. However, the coordination mechanism between the Narok County Government, Tanzanian Authority and other stakeholders responsible for the management of Mara-Serengeti ecosystem is

inadequate to support this ecosystem-based system.

### Policy Recommendations

- 1) The Narok County Government to urgently commission a comprehensive and independent audit of all the tourist facilities and other developments outside the MMNR and in the conservancies. Further, the County Government to strengthen the coordination mechanism with the Tanzanian Authorities responsible for the management of the Serengeti National Park and conservancies for information sharing and joint initiatives in the management of the Mara-Serengeti Ecosystem. Data from the audit of the facilities outside MMNR and a similar initiative in Serengeti will be useful not only to inform the review but also implementation of the Management Plan.
- 2) The Narok County Government to fast track the



**Spatial distribution of the tourist facilities and other developments within MMNR**

revision, approval and the gazettelement of the MMNR Management Plan as per the provisions of the Wildlife Conservation and Management Act, 2013. Meanwhile, the County Government in collaboration with NEMA to suspend approval of any proposed tourist facilities development within the Reserve until the MMNR Management Plan is adopted and gazetted by the Cabinet Secretary.

- 3) A comprehensive spatial mapping of critical ecological habitats in MMNR to be conducted by the Narok County Government in collaboration with relevant stakeholders to ensure that such critical wildlife habitats are not encroached for tourist related development. The County Government in collaboration with NEMA to ensure that such critical habitat spatial plans are used in decision making and approval process of all tourism development.
- 4) NEMA in collaboration with the Narok County Government to conduct annual control audits to ensure all tourist facilities are operating in compliance with the framework of environmental law, regulations, procedures and guidelines.
- 5) The Narok County Government to verify whether the existing leases are registered with the Ministry of Lands, Housing and Urban Development, as required by law, and regularize them. Shared leases should be revoked and the facilities without leases held accountable by the County Government and other relevant Agencies.
- 6) Invasive species pose a big threat to the ecological integrity of the Maasai Mara ecosystem, hence the Narok County Government, in close collaboration with Kenya Wildlife Service and other relevant stakeholders, to develop and execute an invasive alien species strategy for Mara Ecosystem.
- 7) The non-state actors in conservation discourse to effectively and meaningfully engage, collaborate and partner with Narok County Government in advancing the implementation of the aforementioned policy recommendations. In addition, the non-state actors to support, track, monitor and report the implementation progress to ensure that the Narok County Government and other State Agencies such as NEMA and KWS remain accountable and committed to actioning the recommendations.

## Reference

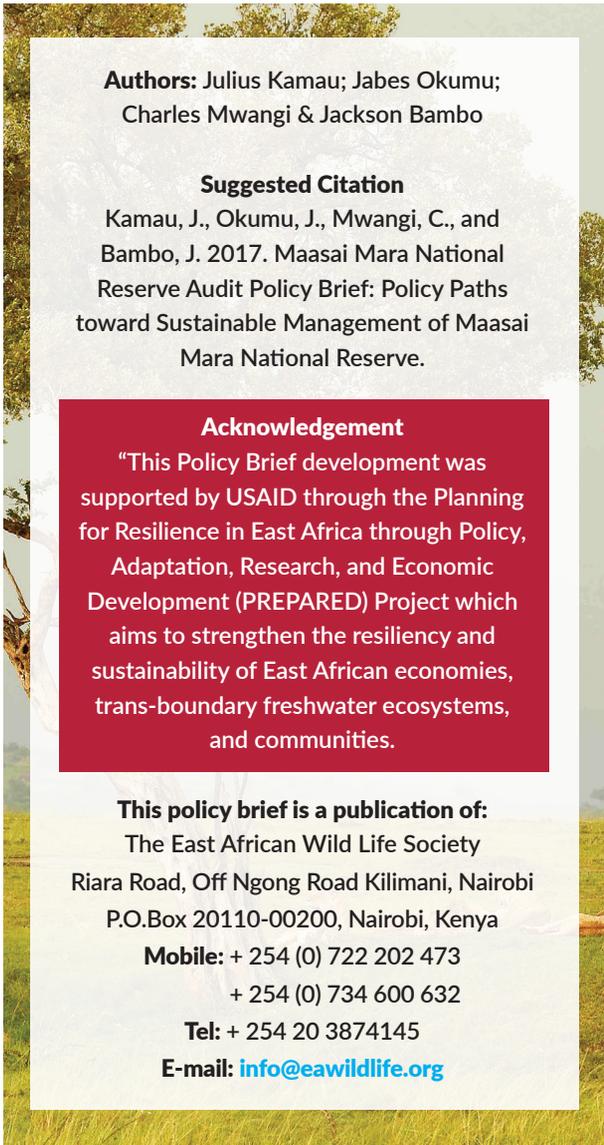
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