

Dynamics of Livelihoods and Environmental Crimes in Elgeyo Marakwet County, Kenya

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ABSTRACT

This study examined the dynamics of livelihood and environmental crimes in Elgeyo Marakwet County, Kenya. The study establishes that environmental degradation poses a great risk to human livelihood. The study sets the stage by examining the connection between forests and human livelihood, specifically exploring its value and relevance to human lives. Further, the study examines the dynamics of livelihood and forest crimes. Qualitative approaches, such as interviews, narratives, and document analyses, were employed. In the findings and results, the study establishes that there have been notable changes in the dynamics of the livelihoods of the residents of Elgeyo Marakwet, which disoriented their activities such as circumcision, grazing, and farming. On examining the impact of the drastic shift, it is established that the residents morphed into illegal loggers, amongst other forest crimes that have endangered their lives. The paper then proceeds to highlight competing challenges in addressing environmental crimes before recommending solutions on how to resolve challenges in environmental crimes in Kenya.

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1. INTRODUCTION

The degradation of the environment and natural resources impedes efforts to reduce poverty among vulnerable communities living in rural areas (UN Millennium Project, 2005, as cited in Tyler, 2006). Globally, environmental resources such as forests are crucial to millions of poor households, especially in developing countries. According to Sati (2014), forests are a source of firewood, fodder, timber, firewood, and herbs. The farming communities highly depend on the forest as their source of livelihood. In parts like the Indian Central Himalayas, the region's economy relies upon cultivating traditional cereal crops whose production is considerably low; hence, this population depends on forest resources as a source of livelihood. Sati (2014) further notes that forests have linkages with agricultural and crop production for manure composition. Wild fruits such as kafal, bhamore, hensole, and kilmode are also examples of forest resources that substantially enhance the livelihood of rural communities living in the Himalayas. Moreover, the Himalayas forest is a habitat for numerous wildlife species, such as elephants and tigers, which attract tourists and provide income to local communities living in the area. Consequently, the forest is a vital source of livelihood for rural communities and thus requires attention for comprehensive conservation measures.

Globally, about 90% of the world's poorest population depend on the forest as their source of livelihood. About 1 billion people live within the world's most biologically diverse forests (Mukul et al., 2008). Most rural communities depend on forest resources such as bush meat for their nutrition and livelihood. About 300 million of the poorest people are entirely dependent on the forest for their livelihoods (Kim et al., 2008, as cited in Lee et al., 2014). The forest is an intrinsic part of the culture and spiritual life, which rural communities depend on for survival. For instance, Schmidt and Theilade (2010) and Aiyadurai et al. (2010) note that forests provide locals and indigenous tribes with resin, building materials, food, medicine, and trade. The income from forest resources represents a significant revenue source. For example, results reported by Vedeld et al. (2007) indicate that forest products in Asia contribute significantly to the country's revenue, with an average contribution to the household income of around 20% in the populations sampled.



In Bolivia, forests cover half the country. Approximately 1.4 million people in the country live in rural areas and utilize forests as their livelihood to some degree. About 30,000 peasant farmers living in forest zones engage in extracting non-timber forest products from the 101 million ha of forest, while 500 small-scale timber producers and unregistered ones make use of about 800,000 ha of forest. Small farmers in intermontane valleys make up a further 700,000 people and occupy approximately 8 million ha (CIFOR, 2006). In Asia, poverty and the degradation of natural resource bases threaten thousands of rural communities in uplands and infertile coastal areas on which they depend for their immediate livelihoods. These individuals are mostly far from market centers and capital cities. The ecological systems are nutrient-deprived. In addition, these communities have had their biological diversity and control of valuable resources stripped off, forcing them to violently contest the few valuable resources available (Tyler, 2006). Therefore, this necessitates an innovative approach that focuses holistically on diverse ecological and social contexts to increase the commitments of rural communities toward addressing environmental degradation.

In Africa, and specifically in the Central African Republic, the Pygmy people have primarily relied on the forest as their source of livelihood. The forest allows them to hunt and gather food. About 100,000 Pygmy people barter and trade fruits, bush meat, and other forest products with neighboring farming communities (Luscuyer, 2003, as cited in CIFOR, 2006). However, colonial settlement patterns and administrative systems of forest-based communities have changed the way rural communities live and relate to forest resources. Previously, dispersed settlements of communities living near the forest were resettled into concentrated villages along roads and rivers and subjected to the authority of government-appointed chiefs (Luscuyer, 2003, as cited in CIFOR, 2006). This resettlement disrupted and undermined the customary tenure regime, which currently remains the prime mechanism regulating the exploitation of forest resources among rural communities.

Africa is a highly dynamic region, with different countries having different cultural positioning and development pathways. The colonial era split traditional socio-economic spatial units with new state borders and reconfigured sociocultural and economic systems. In addition, colonial policies further isolated rural communities from development. Some of these values often contribute to prevailing tensions regarding natural resources and management conservation of the environment (Catley *et al.*, 2013). These aspects not only define human interaction with the environment but also necessitate reforms on environmental concerns. Not forgetting, they invoke the desire to preserve environmental resources as a source of livelihood for rural communities (Gore, 2017). Moreover, environmental policies often discriminate against rural communities residing in forested areas by controlling their access rights and promoting corruption by granting the powerful logging companies preferential treatment (Muller *et al.*, 2018). The absence of a solid legal framework and policies makes it difficult to remove such bias against rural communities, so this study sought to identify suitable remedies that can help rural forest communities make use of forest resources and facilitate them to build their life while reducing the overexploitation of these resources.

In Kenya, the fragmented areas of forest are under pressure from encroachment and exploitation. Traditionally, Kenya's forest cover was more extensive. However, since colonial times, forest cover has decreased, especially natural forests, partly due to the white settlers taking land from forest reserves and converting it into commercial farms (Ongugo *et al.*, 2014). According to Mwangi (1998, as cited in Ongugo *et al.*, 2014), deforestation began in 1897 when European settlers exploited forests for commercial farming and fuel. The destruction of forests altered the livelihood of rural communities, who were displaced and forced to live as squatters. These processes continued even after independence, with some parts of the forest allocated for public utilities such as schools and institutions for civilian interest.

Environmentalists center on the complexity of ecological, economic, political, and cultural linkages between protected areas and their surrounding regions. These interactions, however, are complex in some aspects and cases, especially in protected areas that have been carved out from traditional rural livelihood systems by exogenous agencies. Policy frameworks managing environmental resources and rural livelihood seem muddled, with overlapping and inconsistent mandates (UNEP, 2010). Most rural households in Kenya depend on environmental resources for subsistence and as a source of income. However, the commercialization of these resources and changes in the dynamics of the livelihoods of rural communities have resulted in an increase in environmental destruction (Fisher, 2004). This study, therefore, examined the dynamics of livelihood and environmental crimes with specific emphasis on nature and changes in the dynamics of livelihoods, the impact of the dynamics of livelihood among residents on environmental crime, and the challenges in addressing environmental crimes associated with changing dynamics of livelihood.

Historically, forests have been significant among rural indigenous communities in terms of non-cash income and cultural reasons. Communities intensively used forests for cultural practices like circumcising, hunting, fuel wood, forest fallows, collecting herbal medicine, extracting honey, and

grazing. Communities living near the forest had general rights of ownership, use, and access to forest resources. However, over time, the colonial intervention in the settlement pattern and administrative systems has altered the traditional dynamics of livelihoods and created immense changes in the ways rural communities live and relate to the forests. Environmental reforms and commercialization of forest resources have disrupted and undermined the customary tenure regimes, which remain the central agency in regulating the use of forest and environmental resources by its community members. The boom and bust-nature of commercialized forest resources has increased a sense of instability among communities residing near forests and encouraged illegal logging and charcoal burning. Currently, these communities are at risk from illegal logging and the removal of timber and non-timber products from the forests. Further, strict environmental conservation policies violate protected area boundaries among communities that have traditionally relied on the forest as their source of livelihood. This extensively threatens the conservation of forest resources and biodiversity. It is against this backdrop that this study sought to examine the dynamics of livelihood and forest crimes among communities living near forests in Elgeyo Marakwet County in Kenya.

2. METHOD

This study employed a qualitative research methodology to examine the dynamics of livelihood and environmental crimes in Elgeyo Marakwet County, Kenya. The focus was on understanding the interplay between environmental degradation and human livelihood, particularly concerning forest resources and their significance to local communities. The study utilized qualitative methods such as interviews, narratives, and document analyses to gain an in-depth understanding of the local residents' perspectives and experiences. By gathering narratives from community members, local leaders, and environmental officials, the study aimed to capture a comprehensive picture of the socio-economic and cultural dynamics that influence both livelihood practices and environmental crimes in the region.

Interviews were conducted with key stakeholders, including community elders, local authorities, and representatives from environmental organizations, to gather diverse viewpoints on the issues at hand. These interviews focused on how changes in the environment have impacted traditional livelihood practices such as circumcision, grazing, and farming, leading to a rise in illegal activities like logging. Additionally, document analysis was utilized to review historical records, government reports, and environmental policies to contextualize the findings within the broader socio-political landscape. This approach allowed the study to identify patterns and trends in environmental degradation and its impact on livelihoods over time.

The findings were analyzed using thematic analysis to identify key themes and patterns that emerge from the data. By examining the narratives and documents, the study sought to uncover the underlying causes of environmental crimes and the challenges in addressing them. This included exploring the socio-economic pressures that drive individuals to engage in illegal logging and other forest crimes, as well as the effectiveness of existing environmental policies. The study concludes with recommendations for addressing environmental crimes in Kenya, emphasizing the need for community-based approaches that consider the unique cultural and economic contexts of rural communities. Through this methodology, the study aims to contribute to a better understanding of the complex relationship between livelihood dynamics and environmental degradation, providing insights for policymakers and stakeholders involved in sustainable development and conservation efforts.

3. RESULTS AND DISCUSSION

3.1. *Nature and Change in the Dynamics of Livelihood among Rural Communities Living Near the Forest in Elgeyo Marakwet County*

This study sought to examine the nature and the changes in the dynamics of livelihood among rural communities living near the forest. The study was necessitated by the increase in forest crimes and the lack of appreciation of environmental values by several stakeholders and rural communities. The respondents recounted that before the colonial invasion, the forest was a lifeline to communities living in the Elgeyo Marakwet forest. All the social, economic, and cultural aspects of the community were dependent on the forest resources. These activities included (a) circumcision and rites of passage, (b) grazing and herding of livestock, and (c) farming.

The three economic and cultural aspects were the primary source of livelihood drawn from the forest resources among rural communities in Elgeyo Marakwet. During ancient times, every community living adjacent to the forest depended on the forest to undertake such events. Each of these activities is discussed deeply, as well as how nature has changed and transformed contemporary society.

TABLE I: ROLE OF THE FOREST IN SUPPORTING CIRCUMCISION AND RITES OF PASSAGE AMONG RURAL COMMUNITIES IN ELGEYO MARAKWET COUNTY

Role of forest in supporting circumcision as a cultural livelihood	Frequency	Percentage
Seclusion	50	50%
Venue for training community values and taboos	30	30%
Venue for teaching community security matters	20	20%
Total	100	100%

TABLE II: CURRENT CHANGES IN CIRCUMCISION PRACTICES AS A FORM OF CULTURAL LIVELIHOOD AMONG RURAL COMMUNITIES IN ELGEYO MARAKWET COUNTY

Dynamics in the rite of passage as a form of cultural livelihood		Frequency	Percentage
Traditional	Modern		
1. Teaching community values and taboos	Teaching school-based education	70	70%
2. Seclusion to provide privacy	No seclusion since the practice is done in the hospital	20	20%
3. Teaching security matters	Teaching premarital sex and myriad of contemporary challenges	10	10%
Total		100	100%

3.1.1. Circumcision and Rite of Passage

Circumcision and rite of passage were cultural activities and part of the society's livelihood that largely depended on the forest. Traditionally, circumcision ceremonies (tumdo) were held every five years, whereby all initiates were expected to form an age set (Ipinda). In this study, all 100 respondents acknowledged circumcision and rite of passage and the importance of forest resources in supporting the cultural livelihood of past communities living near the forest. The respondents indicated that initiation took place in specific secluded areas of the forest. [Table I](#) indicates the role of the forest in supporting circumcision and rite of passage as a form of cultural livelihood among rural communities living adjacent to the Cheptongei and Embobut forests in Elgeyo Marakwet County.

The findings from [Table I](#) indicate that initiates were circumcised and trained about the community's values and adult topics, such as taking care of their family in a secluded place within the forest. The forest also served as a convenient place where initiates were taught about the community's security matters. The seclusion period of initiates in the forest lasted for about two years among the Marakwet community and one year for the Keiyo community and after a ceremony (Kipuno) or (Apen) held to mark the elevation of these initiates to a new age set.

From the above findings, it is evident that the forest environment provided a favorable environment upon which rural communities such as the "Keiyo" and the "Marakwet" communities could practice their cultural livelihood. However, the respondents argued that the practice of the rite of passage in the forest among communities has changed. For instance, only a few sections of the community still rely on the forest as a favorable place used to circumcise young men and educate them. Currently, a majority of the locals have embraced Western culture, whereas some of the cultural practices, such as circumcision and informal education, have changed to formal.

The study also sought to examine the dynamics of cultural livelihood among rural communities living adjacent to the forest in Elgeyo Marakwet County. The findings are encapsulated in [Table II](#).

[Table II](#) indicates the traditional nature of circumcision and the change in its dynamics in contemporary society. In the past, the forest offered rural communities places to teach community values and taboos. However, this has currently changed as initiates undergoing circumcision are taught basic education. The forest environment, which traditionally facilitated seclusion and privacy of initiates undergoing circumcision, no longer supports this cultural livelihood because a majority opt for medical initiations. Also, initiates are currently taught subjects relating to premarital sex and a myriad of contemporary challenges. These teachings, however, involve both male inmates and females who have reached the maturity stage. Therefore, the forest environment no longer serves as a venue for teaching young men about security matters in the community.

3.1.2. Grazing and Herding of Livestock

Livestock is a major social and economic form of livelihood among rural communities in Elgeyo Marakwet County. Most households, whether poor or rich, own some livestock, although their number and breed vary. Dairy cattle are kept in the highlands, while indigenous breeds, such as Sahiwal and Zebu, are reared in the lowlands through pastoralism. The goat and sheep breed is vital for milk production and meat across the county. Livestock is commonly used to graze in the forest for some reasons. For example, [Springate-Baginski and Blaikie \(2013, p. 182\)](#) note that some families keep large,

less productive herds of cattle. Such individuals bring their herds to the forest for grazing, especially during the dry seasons. As Springate-Baginski and Blaikie point out, access to forest resources to sustain social and economic livelihoods is critical for the well-being of most rural households since it enhances their ability to survive. This study, therefore, sought to examine how the forest resource supported the grazing and herding of livestock in the past and how the practice changed. [Table III](#) illustrates the dynamics associated with grazing and herding of livestock among communities in Elgeyo Marakwet during the past and in the present.

TABLE III: DYNAMICS ASSOCIATED WITH GRAZING AND HERDING OF LIVESTOCK AMONG COMMUNITIES IN ELGEYO MARAKWET DURING THE PAST, AND IN THE PRESENT

Dynamics associated with grazing and herding of livestock among communities		Frequency	Percentage
Past	Present		
1. Grazing sections of the forest was considered a community resource	Privatization of some sections of the forest including grazing areas	13	13%
2. Utilization of forest resources was subject to the supervision of mandated traditional elders	Subjected to supervision by government agencies like Kenya Forest Service	22	22%
3. No cash was paid for individuals using forest land to graze their livestock	Rural communities seeking to graze their livestock must pay a specific monthly fee to the Kenya Forest Service	65	65%
Total		100	100%

Before the colonial period, rural communities in Elgeyo Marakwet considered forest resources as community resources. From [Table III](#), it is evident that forests formed an important part of the rural livelihood system, particularly in supporting livestock. The natural environment also constituted an important renewable economic resource, which satisfied many with basic needs, such as opportunities to graze livestock without any form of sanction or restriction. Most locals used the forest resource in such a way that they did not only sustain themselves but were also mindful of future generations. It is observed that 13% of the respondents indicated that initially, the forest was communally owned, contrary to the present, where some sections have been privatized.

The results from 22% of the respondents indicate that grazing sections of the forest and forest resources were utilized under the supervision of mandated traditional elders, as opposed to the current time when forest grazing areas are protected and managed by government agencies like the Kenya Forest Service. The past communities also ensured efficient and sustainable utilization of forests without privatizing them. Also, 65% of the respondents indicated community ownership of forest grazing areas without attaching a monetary value to them. However, they indicated that this practice had changed, as locals are currently required by the Kenya Forest Service to pay a monthly fee of 50 Kenya Shilling (0.5 US dollars) every month for every cow grazing within the forest zone. These changes suggest that past rural communities in Elgeyo Marakwet County did not manage forest resources while herding their livestock but instead utilized them without abuse and without permitting a specific individual to lay claim over forest zones that have abundant pastures for livestock. This was possible because of the smaller population and the plenty of pasture. Nevertheless, there was concern and steps to ensure that forest resources would be available for future generations, hence helping manage and protect the environment.

3.1.3. Farming

Historically, most African communities depended on the forest as their form of economic livelihood. Individuals living adjacent to dense forests relied on them to a high degree of subsistence farming systems, which helped sustain agricultural productivity. However, the invasion of Africa by colonialists altered this practice. For example, according to the [FAO \(1996\)](#), the colonial administration formulated regulations that declared forest environment and resources free capital. The decree altered the traditional forestry management and discredited the traditional social institutions that once protected the use of these resources. [FAO \(1996, p. 137\)](#) further notes that factors such as cash economy and commercial agriculture on forestland were also introduced. The opening up of interior parts of Africa and the introduction of new values and new ways of conducting business altered the rural community's perception of how forest resources ought to be utilized and managed. This study, therefore, established how forest-supported farming among rural communities in the past and how this has changed, as illustrated in [Table IV](#).

TABLE IV: USE OF FOREST BY RURAL COMMUNITIES IN ELGEYO MARAKWET COUNTY TO SUPPORT FARMING

Use of forest in supporting farming in the past		Frequency	Percentage
1.	Cultivation of millet and sorghum	17	17%
2.	Planting of traditional crops	83	83%
Total		100	100%

From Table IV, most respondents indicated that some rural communities, such as the Sengwer, had lived in the Embobut forest for centuries, dating back to before the colonial invasion. These communities adopted farming, which was carried out in the forest. Concerning forest use for farming, 17% of respondents indicated that cultivation of millet and sorghum in the forest was common during the colonial times, while a majority of 83% indicated that the forest supported farming of traditional crops such as cassava and sweet potatoes, which helped sustain the livelihood of the community. Before their eviction, the Sengwer practiced shifting cultivation for two to three years. However, after Kenya's independence, the government began evicting these people, forcing them to become internally displaced and denying them a chance to conduct farming on the land that they had owned for centuries. The respondents indicated that currently, some rural communities, such as the Sengwer, are landless since the Kenyan government demarcated their land and prohibited them from practicing any form of farming or agricultural activities. Since then, the Sengwer population has been forced to turn to illegal charcoal burning and logging as a way of supporting their economic livelihood. Also, the respondents noted that violent eviction, destruction of crops planted on forestland, and the opening of the interior parts, such as Embulot, offered rural communities such as the Sengwer and the Endoo a chance to collaborate with powerful organized businessmen, who come to the forest to take precious timber such as Cedar and African redwood. These resources are packed into trucks and then transported to towns such as Eldoret for sale.

4. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

From the research findings, this study suggests the following recommendations. Increased illegal charcoal burning and logging are complex environmental crimes with far-reaching environmental, social, and economic impacts. Lack of operational laws and enforcement often contributes to the degradation of Elgeyo Marakwet forest and diversely affects rural populations, particularly the poorest forest-dependent communities. Hence, the national government, in conjunction with the County government of Elgeyo Marakwet County and the Kenya Forest Services, needs to formulate an awareness campaign regarding the magnitude and global implications of illegal activities in the forest sector and the initiatives to control them.

CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

REFERENCES

- Aiyadurai, A., Singh, N. J., & Milner-Gulland, E. J. (2010). Wildlife hunting by indigenous tribes: A case study from Arunachal Pradesh, northeast India. *Oryx*, 44(4), 564–572.
- Catley, A., Lind, J., & Scoones, I. E. (2013). *Pastoralism and Development in Africa: Dynamic Change at the Margins*. Routledge.
- CIFOR. (2006). Justice in the Forest: Rural Livelihoods and Forest Law Enforcement. Center for International Forestry Research. https://www.cifor-icraf.org/publications/pdf_files/Books/BColchester0601.pdf.
- FAO. (1996). Forestry Policies of Selected Countries in Africa (Report). Food and Agriculture Organization of the United Nations. <https://www.fao.org/4/w3489b/w3489b00.pdf>.
- Fisher, M. (2004). Household welfare and forest dependence in Southern Malawi. *Environment and Development Economics*, 9(2), 135–154.
- Gore, M. L. (2017). *Conservation Criminology*. Wiley Blackwell.
- Lee, T. M., Sigouin, A., Pinedo, M. V., & Nasi, R. (2014). The Harvest of Wildlife for Bushmeat and Traditional Medicine in East, South and Southeast Asia: Current Knowledge Base, Challenges, Opportunities and areas for Future Research (Report). Center for International Forestry Research (CIFOR). https://www.cifor-icraf.org/publications/pdf_files/OccPapers/OP-115.pdf.
- Mukul, S. A., Uddin, M. B., Uddin, M. S., Khan, M. A. S. A., & Marzan, B. (2008). Protected areas of Bangladesh: Current status and efficacy for biodiversity conservation. *Proceedings of the Pakistan Academy of Sciences*, 45(2), 59–68.
- Muller, E. U., Kushlin, A. V., Linhares-Juvenal, T., Muchoney, D., Wertz-Kanounnikoff, S., & Henderson-Howat, D. (2018). The State of the World's Forests: Forest Pathways to Sustainable Development (Report). Food and Agriculture Organization of the United Nations. <https://openknowledge.fao.org/server/api/core/bitstreams/f8b1c590-8521-43f9-85c8-ef0e66144dcb/content>.
- Ongugo, P. O., Langat, D., Oeba, V. O., Kimondo, J. M., Owuor, B., Njuguna, J., Okwaro, G., & Russell, A. J. (2014). A Review of Kenya's National Policies Relevant to Climate Change Adaptation and Mitigation: Insights from Mount Elgon (Working Paper). CIFOR.

- Sati, V. P. (2014). *Towards Sustainable Livelihoods and Ecosystems in Mountain Regions*. Springer.
- Schmidt, L., & Theilade, I. (2010). *Conservation of Prey Long Forest Complex, Cambodia: Conservation, Environmental Services and Sustainable Use*. Forest & Landscape, University of Copenhagen.
- Springate-Baginski, O., & Blaikie, P. E. (Eds.) (2013). *Forests People and Power: The Political Ecology of Reform in South Asia*. Routledge.
- Tyler, S. R. (2006). Community-based natural resource management: A research approach to rural poverty and environmental degradation. In S. R. Tyler (Ed.), *Communities, livelihoods, and natural resources: action research and policy change in Asia* (pp. 13–30). CABI.
- UNEP. (2010). *Africa Water Atlas*. United Nations Environment Program.
- Vedeld, P., Angelsen, A., Bojö, J., Sjaastad, E., & Berg, G. K. (2007). Forest environmental incomes and the rural poor. *Forest Policy and Economics*, 9(7), 869–879.