

Land-Use Change and Livestock Production Challenges in an Integrated System: The Masai-Mara Ecosystem, Kenya

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ABSTRACT Participatory rural appraisal techniques and a survey of 100 households were used to evaluate livestock production, and pastoral development of the Maasai in Mara. It was observed that patterns of land-use have principally changed from nomadic pastoralism to sedentary pastoralism, agropastoralism, and, in some cases, pure cultivation. These trends have adversely affected livestock production and the productive capacity of the Mara ecosystem. Diminishing grazing area occasioned by expanding cropping patterns has negatively impacted on vegetation resources and the biodiversity of the ecosystem. It has also increased the intensity of conflict over diminishing land resources. Because the production system is largely subsistence with a strong livestock base, it is further undermined by, among other factors, animal diseases, water scarcity, land individualisation, poor marketing infrastructure, and livestock/wildlife conflicts. Based on the findings of the present study, development approaches need to emphasise integrated livestock and wildlife utilisation, land tenure reforms that embody livestock mobility as a key strategy of optimising the use of transient forage resources, disease control, and development of livestock marketing.