

Conflict minimizing strategies on natural resource management and use – the case for managing conflicts between wildlife and agro-pastoral production resources in Transmara district, Kenya.

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Introduction

The largely agro-pastoralist Maasai population of Transmara district are faced with the difficult challenges that come with living by the periphery of the world famous Maasai Mara National Game Reserve (henceforth, Mara). Though wildlife are supposed to be confined in designated and protected areas (national parks and game reserves), the lack of natural or artificial boundaries inevitably leads to wildlife spillover into human settlement habitats. Many are the instances in which wildlife have destroyed crops, hunted livestock, destroyed infrastructure and even inflicted fatal injuries on humans. Retaliatory and protective measures by humans, not to mention the material incentive of poaching, have in turn resulted in numerous wildlife deaths as well. The consequence has been a significant tension between the affected human population and the national entities mandated to protect wildlife.

The Mara is an indispensable natural resource valued for its abundant variety of wild animals. It has significant instrumental value as well, attracting a majority of the tourists who visit Kenya. Because tourism is a key engine of Kenya's economy, and due to lobbying from national and international conservation organizations, wildlife and their habitats are protected by a legally empowered Kenyan government institution, the Kenya Wildlife Services (KWS). The Maasai population, on the other hand, is disenchanted by policies which they claim favour wildlife over people and do not compensate them sufficiently for the risks and losses that they bear.

The research summarized in this policy brief aims at enumerating the various human-wildlife conflicts that occur among a population of households living in close proximity to the Mara. The authors delineate the complexities involved in effectively managing a valuable natural resource that has large and positive global externalities but a non-trivial, negative externality at the local level. The research attempts to ascertain the extent of losses incurred by the sample population and the benefits received by local communities.

Wildlife-human interactions: The cost and extent of conflict

The study was carried out in the Kirindoni and Lolgoriani administrative divisions of Transmara district. The region lies within the southern rangelands of Kenya and borders the Mara from the northwest. Wildlife-human conflict management is thus an issue of particular concern among its residents. To elicit the main concerns of the sample population, the research team first informally conducting 17 focus group discussions among key informants in both divisions. A follow-up formal survey questionnaire was then administered to 158 households distributed across both divisions. Among the

respondents, 63% pursued a purely pastoral livelihood while 37% were agro-pastoralists. The survey solicited information on the nature, the extent, the policy response, as well as the personal perceptions of the conflicts between humans and wildlife in the area.

Virtually all the respondents (97%) indicated that human-wildlife conflicts were a major problem in the area. Elephants and baboons were considered to be the most destructive wildlife by a majority of respondents. Because both species travel in packs and feed on crops, they can wipe out several households' entire crop in a single visit. Leopards and hyenas were also among those considered as major threats as they preyed on livestock and small ruminants and were of particular danger to humans as well. As the tables below indicate, these problems are quite significant. Table 1 shows the total proportions of cattle, and sheep and goats (shoats), belonging to respondents that were killed or injured in the past one year of the survey. In Table 2, the fraction of respondent households who indicated having a family member killed or injured in the year preceding the survey is shown. As indicated by the majority of interviewees, school-going children were most adversely affected by the threat posed by wildlife. Fear of attack constrained their activities and posed a considerable obstacle to school attendance, especially since most children often have to walk quite a distance to schools.

Table 1: Livestock casualties due to wildlife in year prior to survey

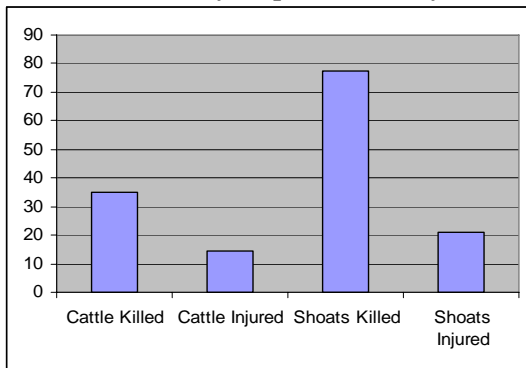
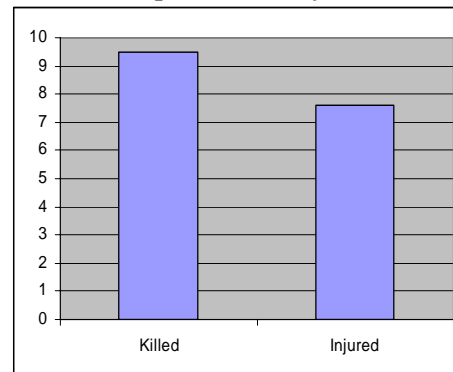


Table 2: Human casualties due to wildlife in year prior to survey



While the costs of proximity of wildlife with humans are certainly significant, respondents claimed to also receive some benefits and compensation. There is a formal program charged with providing compensation to populations affected by wildlife. Administered by the KWS, the compensation scheme initially included provisions to reimburse property damage caused by wildlife, but is currently reduced to providing a modest compensation allowance of KShs 30,000 (US\$375) and KShs 15,000 (US\$187.50) for the loss and injury of human life, respectively. The program eventually evolved to include the injection of funds to the local government for the building of infrastructure such as roads, schools and clinics. While the majority of respondents claim to be aware of these compensation schemes and 32% indicated having benefited in some way, the general feeling is that the compensation schemes merely serve to benefit local politicians.

Conclusion and Policy Implications

One of the statutes in the current version of the Wildlife act indicates that “*wildlife is managed and conserved so as to yield to the nation in general, and to individual areas in particular, optimum returns in terms of cultural, aesthetic and scientific gains as well as such economic gains as are incidental to proper management and conservation*”. Within the limits of the act, it is implied that the KWS’s role includes, but is not limited to, initiating government policy on wildlife conservation, managing national parks and reserves on behalf of the society as a whole, and helping farmers and ranchers protect crops and livestock from wildlife.

The study has shown that the human habitants of Kirindoni and Lolgoriani divisions in Transmara district, particularly afflicted with wildlife conflicts due to close proximity to the Mara, are not quite satisfied that the KWS is living up to its role; especially as it concerns protecting their welfare in the face of wildlife disruption. While the authors note a realization among the people that the wildlife are indeed an important natural resource and a key source of revenue, they do not agree that their concerns are adequately dealt with. Without a well established policy of conflict management that adequately responds to the community’s concerns, the community will continue to take their own measures to protect themselves; actions that will inevitably result in both human and wildlife fatalities. Respondents suggest a reinstallation of personal compensation for loss of property, as well as a less bureaucratic and more substantial compensation for human loss and injury. Furthermore, they demand the physical separation of wildlife, either by erecting artificial borders or by increasing policing of the perimeters.

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