

# **How farm animal management may support wildlife conservation and social development**

By

Prof. Dr. Michael Lierz

Prof. Dr. Axel Wehrend

Prof. Dr. Christine Wrenzycki

Prof. Dr. Carlos Hermosilla

PD Dr. Rainer Hospes

**Justus-Liebig-University Giessen, Germany**

## **Abstract**

The Maasai Mara National Game Reserve and its surrounding areas represent a fragile ecosystem, which is seriously threatened by many different factors concerning its function and existence.

One of the major problems seems to be the competition of grazing farm animals with wildlife on pastures and shared habitats. Economic and social motives lead to increasing herds of livestock and, as a consequence, to continuous displacement of free-ranging animals.

In a first assessment step on the needs and aims of landowners and the current parameters of animal production, as well as the situation of wildlife, information has to be gathered. This will be performed in coordination with local experts and social-economic researchers, so that interactions between livestock and wildlife can be described and evaluated. Special emphasis is placed on monitoring infectious and zoonotic diseases, health maintenance programs, productivity and reproductive performance (herd and individual) in both, wildlife and livestock.

In a second step immediate measures will be initiated with the aim to improve the current performance as well as lifetime production of livestock, introducing the tools of modern veterinary science, adapting them to local conditions and requirements. Breaking chains of infections and zoonoses in interactions of livestock and wildlife as well as in farm dogs and free-ranging predators/stray dogs and installing an improved management is considered as prerequisite for balancing the coexistence between farm animals and wildlife. The aim will be to minimize the pressure on free-ranging animals and simultaneously improve quality of livestock and its productivity without maximizing herd sizes.

In a third step a long term cooperation in research and education will be installed, which includes the establishment of a research camp on-site for student and research workshops as well as the establishment of an exchange program for students, teaching and scientific staff to increase the local knowledge to have the implemented methodologies self sustaining in future.

**Key words:** Maasai Mara National Game Reserve, Interactions between livestock and wildlife, Improvement of animal production, Balancing of coexistence, 3-step-program.