8. FUNCTIONAL RELATIONSHIPS BETWEEN PARKS AND AGRICULTURAL AREAS IN EAST AFRICA: THE CASE OF NAIROBI NATIONAL PARK

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SUMMARY

Parks in much of Africa and Asia were designed to protect large mammals and they captured the imagination of Europeans and North Americans, often as destinations for hunting or to be enjoyed for recreation. Functional relationships between parks and areas beyond or within the ecosystem, whether protected or otherwise, were therefore not taken into account. As a consequence, many parks in East Africa form concentration areas for migrating wildlife populations and constitute small parts of much larger ecosystems. Many of the animals therefore use areas under human occupation for a part of their seasonal cycles. Threats to dispersal areas beyond park boundaries therefore have implications for the survival and well being of many parks in East Africa.

The Athi-Kapiti ecosystem is one such system and is dominated by livestock. It also has a large number of wild herbivores of which wildebeest and zebra are the most numerous, and constitute over half the total wildlife population. Nairobi National Park, the only protected part of this ecosystem forms the northern limit of the wildlife migrations in the dry season and constitutes less than 10% of the ecosystem. Migratory zebra and wildebeest move out of the park in the wet season and return in the dry to join other resident wildlife. The ecology of the

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park and plains are inextricably linked by the movement patterns of the migratory species.

Despite being wildlife-rich, these plains have not escaped human development and they are being converted to uses that are incompatible with wildlife conservation. Like many other ecosystems that straddle park and privately owned wildlife areas, it faces the challenges of conserving wildlife on these human occupied areas with rapidly growing population and poverty. How can landowners maximise returns from their land, where does wildlife fit and to what extent can it become a profitable part of land use? These are some of the questions landowners must ask themselves continuously as they make decisions on how best to use their land and provide livelihoods for their families.

Current threats to the parks migratory populations and the ecosystem as a whole arise from a growing human population, changing settlements patterns, fencing and proximity to the city of Nairobi and nearby industrial towns. These activities are fragmenting the ecosystems and taking up important wildlife habitat. Conservation measures and ways of providing economic incentives have been proposed. These include:

- The establishment of wildlife corridors from the Mbagathi river crossings through the upper part of Kitengela where the most intense pressure is currently found;
- The creation of a buffer zone along the Mbagathi river across from Nairobi National Park within which tourism facilities and high-value home sites can continue to be developed.
- The compensation of Kitengela landowners in critical parts of the ecosystem. Fencing is one of the principal threats to wildlife migration in the larger Kitengela area. Ways can be found to persuade landowners not to fence.

Unless the profitability of wildlife can be demonstrated at the local level or other innovative ways of conserving it are found, wildlife in this ecosystem is unlikely to survive into the 21st century and beyond.

INTRODUCTION

The concept of strict hunting reserves dates back to the time of the Assyrians who set aside such reserves specifically for the African elephant along the Euphrates. In Eastern and Southern Africa the concept of hunting preserves and "royal" (chief) game existed, for example, in the Buganda Kingdom. However, modern day protected areas, lands set aside exclusively or primarily to conserve wildlife, date back little more than a century. Parks in much of Africa and Asia were designed to protect large mammals which captured the imagination of Europeans and North Americans, often as targets for hunting or as objects to be enjoyed for recreation. Internationally and nationally therefore, parks were object oriented rather than process oriented (Hales, 1989). Functional relationships between parks and areas beyond or within the ecosystem, whether protected or otherwise, were therefore not taken into account. As a consequence, few parks were designed biologically and