NSF-Human and Social Dynamics Program: Parks As Agents of Social Change

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This multi-institutional interdisciplinary project examines the social and environmental impacts of a sample of parks in four countries – Tanzania, Uganda, Botswana, and Namibia – and across an ecological gradient from mid-altitude forests to semiarid savannas. Demographic conditions around the parks range from very densely populated agricultural landscapes bordering two of the parks to sparsely populated landscapes with seasonal movements of people, livestock, and wild animals. Some of the parks have attracted many settlers from other areas, while in other cases, people have left for opportunities elsewhere.

Our research indicates that each of the parks—Tarangire in northern Tanzania; Kibale in western Uganda; Chobe and nearby protected areas in northern Botswana; and Bwabwata and Mudumu in northeastern Namibia – have been reasonably successful in protecting habitat and biodiversity within their boundaries. They have also had a complex mix of impacts on surrounding landscapes and ecosystems, including institutional development at various levels; demographic trends; changes in risks, welfare, and livelihood activities; changes in attitudes to parks and conservation; and environmental changes in the surrounding landscapes and communities.

Some of our findings include the following: all of the parks have stimulated social and institutional change in neighboring communities and households. Public and private ecotourism institutions as well as other economic enterprises and physical infrastructure have expanded in all of the areas. In several cases, increased tourism associated with parks (or its expectation) has stimulated the growth of women's craft production groups. Community-based management institutions that receive a substantial share of the revenues from tourism and hunting licenses have been established in Botswana and Namibia. Comparable institutions are rare or absent from the Tanzanian and Ugandan parks, although some revenue sharing occurs. Major negative impacts of protected area conservation include the crop losses and other hazards posed by animals in all of the areas, as well as the environmental impacts of rapidly increasing elephant populations in the southern African cases.

Population growth, external income sources, and marketing opportunities have led to agricultural expansion and intensification around the Ugandan and Tanzanian parks, but in southern Africa crop and livestock agriculture has not necessarily expanded and has often stagnated or contracted. Income and employment related to the parks have minor per-capita effects in the East African cases, but have had a large impact in some of the southern African communities.

Local peoples' assessments of the parks have been more positive in many, though not all, of the cases, contrary to the expectations of many critics of park impacts. Most respondents in the southern Africa and Ugandan cases view parks positively either for economic or environmental services reasons. Attitudes to the park in Tanzania are far more negative, partly because of frequent changes in park policy as well as occasionally heavy-handed enforcement of park regulations. Some Tanzanian communities have adopted "preemptive cultivation" in wildlife migration corridors to avoid further loss of land to parks and protected areas. This is one among several examples of how parks and conservation policy can stimulate responses that affect the efficacy of conservation efforts themselves.

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