Benefit Sharing in Protected Area Management:  
the Case of Tarangire National Park, Tanzania

Conservation is often viewed as a tradeoff between the development of short-term benefits and protection for long-term benefits. However, with the appropriate mechanisms, it is possible to achieve both aims. The justification to protect parks in developing countries can be based on an economic rationale rather than a primarily social or environmental one. Enhancing the revenue earning potential of protected areas from tourism, and directly returning those benefits to the appropriate set of stakeholders can result in a balanced approach to long-term environmental conservation and short-term economic development.

Currently, approximately 14% of Tanzanian territory is designated as protected areas. Though national parks, game preserves, and other protected areas have generated revenue for the government, not much of this revenue has been retained to enhance the conservation efforts in these areas or to compensate the local communities. Funding for the Tarangire National Park (TNP) as it is for the Tanzania National Parks Authority (TANAPA), the national park authority, is limited and gate revenues are supplemented by external donors, both through TANAPA and directly to TNP. Within TNP, actual revenues have consistently been greater than expenditures since the 1991 financial year. TNP operates at a profit which has increased variably by approximately 23% to 140% per year. Surplus revenues are contributed to TANAPA

Stakeholder Consultations: Tarangire National Park

In Tarangire, a detailed examination of the stakeholders identified several groups with vested interests in the conservation mission of the park: visitors, park management, TANAPA, village leaders and community members, and tour operators.
Visitor Survey

The empirical results of a Contingent Valuation (CV) analysis used to estimate the value of the Tarangire National Park under two different levels of conservation and natural resource protection revealed that current levels of revenue collection from park users’ fees are lower than the amount that visitors can afford to pay.

The current fee structure is $20 for non-national foreign visitors, $10 for resident expatriates, and $1 for resident nationals. Non-residents are willing to pay $36.63, and non-national residents, $16--nearly double the current amounts. Aggregated over 380,000 visitors to all national parks in Tanzania, this represents potential economic rent of $4,397,000 from non-residents and $1,954,000 from non-national residents. This is a relatively conservative estimate given the fact that few of the non-resident respondents were actually aware of the fees charged because of their inclusion in their travel package. Relative to TANAPA’s recurrent expenditure budget of $2,633,000 in 1992/93, this revenue loss was substantial. The figures indicate that Tanzanian parks are subsidizing the costs of relatively wealthy foreign and expatriate visitors.

In addition to direct increases in entrance fees, there are several other alternatives to increasing the economic rent provided by protected areas. Differentiated pricing at different parks, based on the quality of nature experiences, level of conservation required, and/or level of protection achieved, is one option practiced at Gombe and Mahale national parks where the entrance fees are substantially higher. Differentiated pricing and service packages which cater to different levels of eco-tourist could also increase revenue. Thus, a low-cost, minimum-service package could be offered to budget travelers and the higher end market could be offered a different package.

Community Outreach

Village surveys revealed that the advantages to living near the park were the potential access to transportation, firewood and water. The disadvantages were limitations on field size, loss of access to grazing and firewood. The villagers also wanted the park’s help in improving water resources, providing wild animal control, and support in health projects. Two approaches have been used for community outreach to share benefits with local communities one through the Community Conservation Service and the other through tour operators.

The Community Conservation Service (CCS) is a program within TANAPA that aims to benefit local people through development projects. This approach is used by TANAPA to address resources issues in areas beyond park boundaries over which it has no jurisdiction. Ultimately, the CCS warden in a park like Tarangire will serve as a liaison between park management and local communities. In coordinating general park management with the CCS office, community issues can begin to be addressed in park administration.

By contrast, the tour operator approach to benefit sharing, more closely associated with the village leaders, is less flexible. The major problem has been that the villagers (non-leaders) do not feel that they are benefiting directly from the benefit sharing program. Unlike CCS, the tour operators do not have the capacity to supervise local projects and limit their involvement to
allocating to the village councils a collected fee of $6 per visitor.

Table 1
Comparison of Two Benefit Sharing Schemes
at Tarangire National Park

<table>
<thead>
<tr>
<th>Program</th>
<th>CCS (TNP)</th>
<th>Private Tour Operators</th>
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<tbody>
<tr>
<td>Location</td>
<td>All villages adjacent to TNP</td>
<td>Some(not all adjoining villages)</td>
</tr>
<tr>
<td>Benefit Type</td>
<td>Small-scale infrastructure projects</td>
<td>$6 per client cash payment to village council</td>
</tr>
<tr>
<td>Conservation Link</td>
<td>Loose agreements: no farms in buffer zones, anti-poaching support</td>
<td>Strong contractual business agreement: no farming in safari areas</td>
</tr>
<tr>
<td>Community Input</td>
<td>Primarily Labor</td>
<td>General land use limitations in certain areas</td>
</tr>
<tr>
<td>Decision Making</td>
<td>Strong degree of control over projects, decisions, implementations</td>
<td>None</td>
</tr>
<tr>
<td>Dependence on Community Leadership</td>
<td>Low</td>
<td>High</td>
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Lessons Learned

Through a review of the findings of studies on other protected areas in Sub-Saharan Africa, and their own research at Tarangire, the study team distilled the following lessons.

<table>
<thead>
<tr>
<th>Project</th>
<th>Country</th>
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<tbody>
<tr>
<td>Amboseli Park/Wildlife Extension Project</td>
<td>Kenya</td>
</tr>
<tr>
<td>Aire-Tenere Park</td>
<td>Niger</td>
</tr>
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</table>
Technical Assistance: A combination of technical know-how and sociological sensitivity is vital to developing and implementing complex conservation oriented development projects. In villages around Tarangire, there was a distrust of the village council members who received the funds from the tour operators. This eventually led to an unwillingness on the part of beneficiaries to abide by the covenants of their agreements with the tour operators. In the CSS-sponsored projects, the villagers themselves were consulted directly and developed a greater sense of ownership of the conservation efforts because they felt they were directly benefiting from the park’s operations. In this sense, capacity development in local communities is essential for sustainable conservation efforts.

Projects vs. Cash: Project approaches rather than cash schemes reduce the potential for mismanagement of funds and may facilitate benefits reaching a broader segment of community needs. However, careful planning of projects is necessary to ensure their appropriateness and impact. Also project support should continue through completion to ensure that benefits are appropriately used.

Scale: If conducted on a small scale, even highly successful conservation development projects will fail to achieve larger park or eco-system encompassing needs. Thus, "projects which only address a portion of protected area cannot ensure the integrity of the area. Projects which address an entire protected area with limited resources are highly unlikely to have any significant effect" (Hannah, African Parks, African People).

Enforcement: Although participatory approaches are emphasized, most experts agree that some level of enforcement needs to be supported against poaching and other illegal uses of park resources. Currently, very few participatory programs have clearly documented a lower incidence of poaching, less fuelwood extraction, etc. as a result of the programs. If participatory projects fail, it may be because, despite the benefit-sharing strategies being used, beneficiaries continue to see greater personal advantage in continuing illegal extractive activities.

Linkages: Ultimately, conservation succeeds only when the development program’s success
depends on the success of conservation. Such is the case of the CAMPFIRE program in Zimbabwe where utilization of wildlife provides the development benefit, but depends in turn on proper management, and improvement, in the state of those wildlife resources.

*Establish Ties among Stakeholders:* Improving formal and informal ties among all stakeholders improves the ability of each group to address its respective concerns. Coordination concerning benefits, development needs, and community concerns can integrate objectives and lessen the opportunity for competing agendas.

**Recommendations**

In many cases, protected areas already justify their existence based solely on economic terms (the revenues from user fees exceed the government’s operating costs to maintain them). However, mechanisms for optimal revenue generation and allocation are still underutilized and a number of pitfalls can reduce the effectiveness of many management and benefit-sharing actions. The following is an integrated checklist of steps to be taken in assessing conservation development projects.

- Analyze the existing goals, practices and problems of protected areas and neighboring areas;
- Determine, through contingent valuation, if the full potential economic rent is being collected by current user fee structures;
- Review administrative and financial policies at the local and national levels;
- Outline guidelines for incorporating and financing stakeholder concerns into park management; and
- Understand how revenues can and do continue to support the financial and ecological sustainability of protected areas.


For more information on the subject, please contact Narendra Sharma, Rm. J6-089, World Bank, 1818 H Street NW, Washington D.C. 20433. Tel. no. : (202) 473-4124. E-mail address: nsharma@worldbank.org
For copies of the article, please contact P.C. Mohan, Rm. J5-171, World Bank, 1818 H Street NW, Washington, D.C. 20433. Tel. no.: (202) 474-4114. Internet address: pmohan@worldbank.org