

COMMUNITY CONSERVATION RESEARCH IN AFRICA

Principles and Comparative Practice

Working Papers

Paper No 9

THE IMPACT OF COMMUNITY CONSERVATION INITIATIVES AROUND TARANGIRE NATIONAL PARK (1992-1997)

by

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Research funded by the Global Environmental Change Programme, Phase IV (Grant No. L320 25 3211) of the Economic and Social Research Council, United Kingdom. This research is a collaborative project between IDPM, University of Manchester, African Wildlife Foundation, (Nairobi), Centre for Applied Social Sciences, University of Zimbabwe and the Department of Geography, University of Cambridge.

The views expressed in this paper are those of the author(s) and should not be attributed to any of the collaborating organisations. These are interim research results circulated to stimulate discussion and critical comments.

ISBN: ISBN 1 90251811X

Published by: Institute for Development Policy and Management, University of Manchester,
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ABSTRACT

- This study was undertaken with the permission of TANAPA, as part of the “Community Conservation: Principles and Comparative practice in Africa” project funded by the Economic and Social Research Council of the United Kingdom and as a collaborative project between the University of Manchester, the African Wildlife Foundation (AWF), and the Center of Applied Social Studies at the University of Zimbabwe.
- The Knowledge, Attitudes and Practices survey carried out by TANAPA in conjunction with AWF in 1992 provides the baseline data for this study. Primary data collection in 1997 comprised village meetings and key informant interviews. Data collection in 1997 focused on villages on the western side of the Park. To avoid duplication of effort data for the east side of the Park are drawn largely from the Tarangire Conservation Project reports, and verified using key informant interviews.
- Analysis of the baseline survey focused on the relationship between National Park staff and local people, benefits to the local people, and the problems being encountered in living with wildlife.
- Villages where TANAPA has focused effort between 1992 and 1997 all report an increase in contact with Park staff.
- The 1997 study indicates greater support for the Park and a marked change in relationship between the local people and TANAPA staff. Villagers were more positive about the Park in 1997 than in 1992 and referred to an old enmity between them.
- Benefits obtained through TANAPA’s Support for Community Initiated Projects (SCIP) fund are recognised as wildlife related benefits in receiving villages and have made a significant contribution to changing the Park-people relationship. A total of US\$ 93,800 has been distributed around TNP between 1992 and 1997 through SCIPs.
- The impact of TANAPA’s efforts in distributing SCIP funds and increasing communication with the people around Tarangire National Park through the ‘Ujirani Mwema’ programme goes beyond areas of direct input. Data indicate that knowledge of TANAPA’s efforts and anticipation of future benefits makes villages that have thus far not been recipients of SCIP funds, nor focus areas of TANAPA activity, more prepared to engage in dialogue with TANAPA staff.
- Villagers listed the same problems of living with wildlife in 1997 as in 1992. There is little evidence of change in the costs of living with wildlife, and little evidence of a concerted effort to minimise these costs.
- Noted as a constraint to the CCS programme at the strategic planning workshop in 1994, institutional buy-in and full understanding of CC activities amongst staff within TANAPA’s other departments are still lacking.

ACKNOWLEDGMENTS

First and foremost we would like to thank TANAPA for allowing us to carry out this study and providing useful data and insights on the progress of CC in Tanzania. We would also like to thank all the staff of Tarangire National Park for their assistance and patience in providing information. Special thanks are owed to all the villagers we met and interviewed for their time and perseverance with yet more researchers. We thank the staff of the African Wildlife Foundation and the Community Conservation Service Centre in Arusha for guidance in designing this study and for logistical and technical support throughout. We are also grateful to the ESRC of the UK by providing the grant which made this study possible. Thanks are also due to all individuals who gave time to be key informants and generously provided information for this study. We are grateful to our driver, Lukas, for ferrying us from village to village. This paper has benefited from comments from David Hulme and Patrick Bergin.

1 INTRODUCTION

The last two decades have seen the application of considerable national and international resources to increase local participation in conservation initiatives. The outcome of such initiatives remains uncertain. Do people change their behaviour or attitudes towards conservation? Do benefits to local people increase and does conservation become more equitable? What are the social and ecological impacts of these projects? While these community projects have been prolific in number and varied in design, there have been few opportunities to test the assumptions that drive community conservation (CC) initiatives, learn from experience and modify practices.

Tarangire offers a rare opportunity to address these questions. Here, a concerted effort to work with local people was started by the Community Conservation Service (CCS) of Tanzania National Parks (TANAPA) as part of the *Ujirani Mwema* (good neighbourliness) programme, recognising that the Park's continued existence is dependent on the support of the people living directly around it. TANAPA also recognised the threat of changing land use around the Park. Shortly after the first initiatives, and while the programme was still being designed, TANAPA conducted a survey of people's Knowledge, Attitudes and Practices (KAP) with respect to wildlife around Tarangire National Park (TNP) in 1992. Technical support for this survey was provided by the African Wildlife Foundation (AWF). Since then, activity has continued around the park as part of the *Ujirani Mwema* programme with varying levels of effort and input of resources over the years. Other programmes for community involvement in wildlife conservation have been initiated by the private sector and through NGO support, providing further opportunities to assess the impact of community involvement in wildlife conservation around TNP.

The well studied and monitored wildlife resource in TNP would theoretically enable one to correlate data on resource with CC initiatives. It should be noted however that the objectives of CC in Tarangire are focused on the resource in the most general sense, and are articulated in the CC strategic plan as the need to minimise negative impacts on the resource by reducing conflict and helping to solve problems.

This study aims to analyse the major impacts and achievement of the 6 years of implementing community conservation in Tarangire. Carried out as part of an independent research project, the study aims to inform implementors and policy makers and guide future decision making. To this end, implementors of the programme served as key informants to the study and were also consulted on the study design to maximise its value to these user groups.

Based on the stated aims and underlying principles of the CCS programme (see Section 2), this study examines the relationship between the National Park staff and the local people as the key variable in determining whether the CC programme of TANAPA has had any impact in its work between 1992 and 1997. The study also analyses the problems being faced by local people in living with wildlife, and the impact of TANAPA's benefit sharing programme.

2 BACKGROUND

2.1 Tarangire National Park

Tarangire National Park (TNP) spans an area of 2642 km² in the Arusha Region of Tanzania and was gazetted in 1957. The Park is surrounded by the Mukungero Game Control Area (GCA) to the South, the Simanjiro GCA to the east, the Lolkisale GCA to the North east and Mto wa Mbu GCA to the North (EC and TANAPA, 1997). The park covers only a small portion of what has been described as the Tarangire Ecosystem, and forms the dry season refuge for the migratory species in the ecosystem (Borner, 1985; EC and TANAPA, 1997).

The fauna of TNP is characterised by a large mammal community that includes 58 species typical of the East African savanna. The most abundant large mammal species are zebra, wildebeest, buffalo and elephant (EC and TANAPA, 1997). These comprise one of the most important populations of wild herbivores in eastern Africa and the largest populations of elephants in northern Tanzania. Studies (Lamprey, 1967; Borner, 1987) have confirmed that most of the large mammals in the Tarangire ecosystem depend on the resources available outside the Park for more than six months of the year. This is a wide area with a mixed regime of landuse including GCAs and areas where individuals have had large pieces of land allocated to themselves for agriculture.

TNP faces numerous management challenges. Of primary importance is the rapid demographic increase and consequent human impact on the areas around the National Park (EC and TANAPA, 1997). Without careful landuse planning the key migratory routes for the wildlife stand to be lost and the park is in danger of becoming an island park with only resident species surviving. This could cause the ecological impoverishment of the Park and also the loss of a natural resource of significant economic value to Tanzania through tourism, and one potentially important to the economic development of the local people.

TNP receives an ever increasing number of tourists each year. Visitor numbers compiled at the Park headquarters indicate a steady increase in tourists (see Table 1). Projections indicate a steady growth in coming years, and the Park is reported to be one of four parks in Tanzania in which revenues are higher than the budget (EC and TANAPA, 1997). Part of the northern circuit of parks in Tanzania, and accessible from Arusha, TNP is a popular tourist destination.

Table 1: Number of tourists visiting Tarangire National Park 1992/93 to 1996/97

Year	No. of Tourists
92/93	31,852
93/94	43,339
94/95	38,746
95/96	43,790
96/97	54,454

(Source: TNP headquarters)

2.2 TANAPA and Community Conservation

TANAPA's CC initiatives began in 1985 when a working group at the Serengeti Regional Conservation workshop consulted on 'Extension Education and Park/People interactions' and recommended that a 'Rural Extension Education' programme should be initiated as a matter of priority (Bergin & Dembe, 1996). The African Wildlife Foundation (AWF) was amongst the first to follow-up on this recommendation by sponsoring a pilot project to support TANAPA in developing its capacity for CC focusing on three villages bordering Serengeti National Park in 1988. This set the stage for TANAPA's future extension work. In December 1990 AWF appointed a project officer to assist with the establishment of a Community Conservation Unit (CCU) at TANAPA headquarters working with TANAPA's Community Conservation Coordinator.

TANAPA currently runs its CC activities around 12 National Parks through the Community Conservation Service (CCS) as a programme of park outreach from National Parks to surrounding communities and local governments. The Swahili term for the programme is *Ujirani Mwema* (good neighbourliness). The mission statement of the CCS is as follows.

“CCS is a field programme supported by a unit in TANAPA headquarters, which aims to identify and implement opportunities for sharing park benefits with adjacent communities. CCS activities and CCS staff follow normal TANAPA procedures for lines of responsibility and reporting. CCS seeks to protect the integrity of National Parks by reducing conflicts between wildlife and surrounding communities and by helping to solve problems of mutual concern.”

The objectives of the CCS are to:

- Improve relations between individual parks and local communities.
- Ensure that the interest of National Parks with regard to natural resource conservation and community welfare are presented at all levels;
- Facilitate the sharing of benefits to target communities; and
- Assist communities to gain access to information, resources and services which promote sustainable development.

The CCS is a department within the Directorate of Park Management and Conservation. Its activities are endorsed by the TANAPA Board of Trustees in the National Park policies approved in 1993. CCS activities around the different National parks are coordinated by the Community Conservation Coordinating Committee (C4) which meets quarterly. This forum, which brings together TANAPA staff, interested donors and NGOs, has ensured a coordinated approach to CC activities around all Tanzania's National Parks.

At the National Park level activities are guided by the strategic action plans developed through participatory workshops, and TANAPA appoints a CC Warden to implement and coordinate CC activities. The extension activities at Park level aim to provide channels of communication between communities and the Park; solve problems; and provide some conservation education. TANAPA begins extension work in target communities by getting approval at district and local level government.

TANAPA's benefit sharing programme evolved from a contribution made by the Board to the construction of a local secondary school in Ruaha National Park and the request made to the Board by the CCS at Arusha National Park Board meeting that some form of revenue sharing be initiated. A decision was made to provide a total of 10mTshs (US\$ 16,670) for community projects in three parks: Kilimanjaro, Arusha, Serengeti. The administration of the SCIP fund was guided by a series of principles. Since then the programme has grown to become approximately 2.5% of TANAPA's budget per year, and guidelines for application and administration drawn up by the CCS.

2.3 Tanzania's wildlife sector

Tanzania has a complex and evolving wildlife sector with a number of institutions charged with managing various aspects of the environment and wildlife conservation. While it is beyond the scope of this study to present a detailed overview or analysis of this sector, there are a number of factors that directly impact TNP and TANAPA's CC initiatives around TNP.

As a National Park, TNP falls under the jurisdiction of TANAPA, a parastatal organisation. TANAPA is overseen by a Board of Trustees appointed by the Ministry of Natural Resources & Tourism, and the chair is appointed by the President. National Park Policy is geared towards conservation and non-consumptive use of wildlife, and includes clear guidelines for CC.

The area surrounding TNP, on the other hand, falls under a mixed regime of management. The GCAs are managed by the Ministry of Natural Resources and Tourism at District level. In GCAs wildlife is protected under the Wildlife Conservation Act of 1974. Hunting is allowed only by license or written permit obtained by residents at District level and by non-residents from central government. Other human activities such as settlement, cultivation, etc. are not restricted in a GCA. GCAs are declared or altered by the Ministry of Natural Resources and Tourism with regional and district approval. TANAPA thus operates in an institutional landscape that does not give it a strong mandate to work outside national parks. It holds jurisdiction over the National Park, while jurisdiction for the land surrounding the National Park and target areas of TANAPA's CC programme lies with Government and private individuals. This was noted as a weakness of the CC programme at the TNP strategic planning meeting in 1994.

2.4 Community Conservation initiatives around Tarangire

2.4.1 TANAPA

TANAPA currently has the most comprehensive and widespread programme of CC activities around TNP, although as discussed below, its initiatives have been complemented by those of the private sector and NGOs working in the area, with coordination been provided through the C4 and the strategic planning process for the Park.

CC activities around TNP had modest and informal beginnings through the initiatives of Park rangers in the early 1980s providing transport and other assistance to local people whenever possible. As part of the CCS programme within TANAPA, TNP was the first park to receive a full time CC Warden in July 1990. CCS work in TNP began in 1991 and a survey of local people's Knowledge, Attitudes and Practices (KAP) with respect to wildlife and the Park was undertaken in 1992. A strategic action plan

was developed to guide the work of the CCS in Tarangire in 1994. It was noted at the time that Tarangire hosted the second largest CCS programme.

At the time of primary data collection for this study in September and October 1997 the CCW post had been vacant for one year. The CCS activities were thus being overseen by the Park Warden- in-Charge and implemented by one full time CC Assistant in the western zone and a part-time CC Assistant in the eastern zone of the Park. A new CCW was appointed in December 1997.

2.4.2 Private Sector

Models for engaging pastoral communities around TNP in conservation have been tried by the private sector. Two tourist operators, Dorobo Safaris and Oliver's Camp, have, since 1990, been engaged in dialogue and projects to get the benefits of conservation to the grassroots level in the community, while safeguarding their access to the resource their private enterprises are dependent on. The experience of these private companies indicates promising results and the issues they have had to deal with are central to the issues of community wildlife management. Key informant interviews were held with owners and partners of the companies involved in these private enterprises, and with village elders from target villages.

While the tourist operations of both companies differ on the ground, their shared principles and philosophies have meant that these companies were able to take a united approach in working with the communities. Both currently have legally binding contacts with the villages. The contracts with the villages provide these two companies with exclusive rights for tourist operations with the respective village, and allows them to market a unique tourist experience. Oliver's camp has an area set aside by Loibor Serrit village for a permanent camp and walking trips, while Dorobo conducts mobile wilderness safaris and sets up temporary camps in the area of Emboret village.

Central to the functioning of these agreements was the issue of ownership and land tenure. Initial steps in these projects included villages securing title and seeking approval from the Wildlife Department for their wildlife enterprises. The Wildlife Department holds the mandate for managing wildlife resources outside the National Park and manages hunting in game control areas.

Benefits distributed to the villages thus far have amounted to Tshs 10m (US\$ 16,670) between 1990 and 1993. Transparency and accountability have been encouraged through wide involvement of villagers in meetings after initial discussion with village councils. While the company directors are keen to see that funds filter down to the local level, they have also been sensitive not to dictate the use of funds and to encourage village wide decisions on how these are spent (Oliver, 1995).

There has been some conflict between these non-consumptive wildlife use initiatives with hunting which for the most part seems resolved. Encouraging transparent dialogue within villages remains a challenge, and support for the time consuming process of extension and negotiation with villagers is being sought from NGOs.

2.4.3 The Community Conservation Service Centre

The evolving wildlife policy in Tanzania creates an enabling environment for communities to benefit directly from the natural resources on their land. Programmes such as the TANAPA Park outreach programme and private sector initiatives can thus be complemented by Community based Natural Resource Management. The most likely mechanism for communities to manage natural resources on their own land will be Wildlife Management Areas (WMAs). While there is not as yet provision in Tanzania's legislation for the creation of WMAs, Government strongly supports community involvement in conservation on their communal land.

The African Wildlife Foundation's Community Conservation Service Centre (CCSC) in Arusha has taken steps to support the establishment of WMAs in high potential areas including the Simanjiro area east of TNP (the CCSC was set up to support a broad spectrum of players in their CC initiatives). Key informant interviews were held with CCSC staff and elders in a target village.

The first step in the process of establishing WMAs has been the raising of awareness amongst community leaders and key actors of the options for community wildlife management through a study tour. During this tour community leaders were exposed to four examples of Community Wildlife Management depicting different ways to manage and benefit from wildlife. Field reports indicate a great excitement about the possibilities of benefiting from wildlife, and a cross-fertilisation of ideas as a result of the study tour.

Fostering community support and seeking understanding within target villages formed the second step in the process. Thus far, two target villages have gathered to form their own Natural Resource Committees. The CCSC has also facilitated links between the villages and their respective district governments and helped to have the WMAs recognised in the district level environmental plans. Further steps in promoting the establishment of WMAs will be taken according to guidelines provided by a checklist developed by CCSC, and through a series of frequent field visits.

Villagers have a few options in choosing how to use the resources in their respective WMAs. They can run tourist operations, lease the area to concessionaires or use the resources themselves. However, until land and wildlife use rights are reconciled in policy, each village wishing to establish WMAs will need to apply to the Director of Wildlife for use rights. Once they are set up and functioning, WMAs have the potential to increase significantly the economic benefits to communities.

3 METHODS AND SOURCES OF DATA

This study draws upon data from a number of sources. A Knowledge, Attitudes and Practices (KAP) survey carried out by TANAPA in conjunction with AWF in 1992 provides a baseline for the study. Primary data collection for this study comprised a series of village meetings to the west of the park, and a series of key informant interviews and focus group interviews with TANAPA staff, local and district government officials, members of the private sector and NGOs. A meeting was also held with village leaders to the east of the Park. Primary data were gathered in September and October 1997. This study also draws extensively from the Tarangire Conservation Project (TCP), a study implemented by the University of Milan and TANAPA with funding from the European Union, which aimed to provide data for landuse planning and natural resource management. This project collected extensive data on the east side of the park, including community interviews and local participatory mapping. These are

used to inform this study. Data on the status of the natural resource were obtained from Tanzania Wildlife and Conservation Monitoring (TWCM) and the TCP.

The 1992 KAP survey: The 1992 survey collected information on Knowledge, Attitudes and Practices regarding wildlife and the National Park, and was carried out in the early stages of the implementation of CCS activities in TNP. The survey collected responses from 1256 people living around TNP. The survey instrument was a field coded questionnaire administered by local school teachers after a series of training workshops. The results of this survey were compiled and presented in a report prepared by AWF (Barrow *et al.* 1992). However, an analysis of the data and its implications for CCS and for wildlife management has been lacking (Bergin & Dembe, 1996). These data thus presented a rare opportunity to examine people's attitudes and notions about wildlife and the Park a year after the inception of the CCS programme, and revisit these six years after the beginning the CC activities in TNP.

1997 Village meetings: Notice was sent to village leaders in advance notifying them of our desire to meet with the villagers, thus following accepted local procedures for holding meetings in any locality around the Park. A participatory rural appraisal exercise was held at each meeting. The discussion was recorded on flip chart paper during the meeting, and reviewed with the villagers for accuracy. To reduce bias towards a wildlife or National Park focus amongst the villagers, village interviews were structured to begin with questions about natural resource use in general, focusing on wildlife only at the end. Similarly, general questions about institutions contacted by villagers were asked before focusing on the role of TANAPA staff.

The village meetings focused on questions that would provide data on the effectiveness of the CC programme since the 1992 survey given the working objectives and mission statement of the CCS.

While this study was carried out with the two researchers identifying themselves as independent of TANAPA, both TANAPA and AWF staff were consulted on the study design to maximise the study's usefulness to these key implementors of CC.

Given the extensive field work of the TCP to the east side of the Park (see below), this study focused on villages on the western boundary of the Park. Of the six villages visited, four had been areas of focus for the CC programme. The other two villages were in Kondoa District, bordering the park to the south west. Kondoa District had not been a focal area for CC activities, although one of the villages visited had received funds from TANAPA's SCIP programme to complete a school. At the time of data collection in September 1997 TANAPA staff were keen to begin CC activities in Kondoa in response to a call from the MP of Kondoa, and in recognition of the fact that the main catchment area for Tarangire River, which flows through the centre of TNP, is in Kondoa District.

Key informants were interviewed on their perceptions of the impact of CC and TANAPA activity around TNP. Interviews were held both in Arusha and in the field.

4 THE BASELINE SURVEY

4.1 Overview

Analysis of 1992 data focused on three areas: the problems incurred in living with wildlife, the wildlife related projects being carried out or desired and the contact and relationship between park staff and villages. Each of these provides a basis upon which to assess the impact of TANAPA's activities with the local people given the stated aims of the CCS, as well as the impact of the activities of the private sector and NGOs.

As the questionnaire was field coded and respondents were able to give multiple responses to each question, the data presented here are primarily the number of times each response category was mentioned.

General characteristics of the survey respondents were as follows. Of the 1256 respondents, 35.4% (n=444) were women and 63.4% were men. The sex of the respondent was not indicated on 1.3% of the questionnaires.

Nearly half of the respondents (46.4%) had not received a formal education, and only 27.8% (n=349) had completed primary school. The survey indicated a fairly stable and ethnically mixed population. A significant proportion of the respondents (43.8%, n=540) reported that they had lived in the village for more than 20 years and 38.97% (n=489) had lived in the village between six and 20 years. Only 13.3% of the respondents had lived in their village less than five years.

The major economic activities of the respondents were farming (60.9%, n=763), pastoralism (9.7% n=122), and a mixture of cultivation and livestock keeping (27.0%, n=339).

Respondents were asked whether someone from TNP had visited their village. Nearly two thirds (65.6%) said their village had not been visited, 27.9% said they had been visited, and no response was listed for 6.5% of the respondents. On inquiring about the purpose of the visits, the response categories and the number of times each response was given were as follows:

- 84 To educate villagers
- 85 To help with village projects
- 86 To patrol
- 87 To assess wildlife damage
- 88 To carry out research
- 23 To consult villagers

Issues of benefits and costs were tackled in the survey using two main questions. Respondents were asked about the costs and benefits of both having wildlife in the area and living next to TNP. The questions and responses given were as follows.

What are the benefits of having wildlife in your area?

- 533 Able to see and know different kinds of animals
- 294 Get game meat
- 295 Income from the sale of items to tourists
- 296 Income from tourists camping in the areas
- 297 Other
- 298 Money from photos tourists take
- 5 Get foreign exchange

What are the good things [benefits] of living next to TNP?

- 332 Help with transport
- 333 Get firewood
- 334 Business opportunities

What are the bad things [problems] of having wildlife in your area?

- 1083 Destroy crops
- 1084 Kill livestock
- 1085 Threat to safety and security of people
- 163 Spread diseases

What are the bad things [problems] of living next to TNP?

- 411 Ranger disturbance
- 350 No access to trees
- 285 No access to grazing
- 230 Cannot expand shambas

4.2 Village profiles in 1992

To guide primary data collection in 1997, village profiles were compiled using the KAP survey data of 1992. These profiles were used to assess key issues within a village and provide the researchers with a background to each of the villages visited. Profiles were compiled for villages where more than 70 respondents had participated in the 1992 KAP survey. This number was deemed adequate to provide a reasonably accurate overview of the village. It must be noted that the data collected in 1992 and the data collected in 1997 are not directly comparable, the latter being the result of village meetings while the former is the result of a questionnaire survey with individual respondents.

While the village profiles were used primarily to guide the 1997 study and select appropriate villages for revisiting, three profiles (Table 2) are presented here as illustrative examples of uniformity between villages in responses to key questions of the survey. These three villages were also visited in 1997: two in the west for village meetings and one to the east for interview with key elders. The profiles also provide an indication of what TANAPA foci might have been in the respective villages had the 1992 survey been used to guide CC activity.

Table 2: Village profiles for Minjingu, Sangaiwe, and Loibor Serrit using data from the 1992 KAP survey.

	Minjingu (n=151)	Sangaiwe (n=104)	Loibor Serrit (n=129)
Q13. Visited by TNP staff	31.1%	69.2%	63.6%
Q10. Three most mentioned sources of advice to the village	<ul style="list-style-type: none"> Community development workers Agricultural officer Village leaders 	<ul style="list-style-type: none"> Community development workers Agricultural officer Village leaders 	<ul style="list-style-type: none"> Community development workers Village leaders Agricultural officer
Q11. Most mentioned negative trends in the environment	<ul style="list-style-type: none"> Destruction of water catchment areas Wasteful tree destruction Poaching 	<ul style="list-style-type: none"> Wasteful tree destruction Destruction of water catchment areas Poaching 	<ul style="list-style-type: none"> Wasteful tree destruction Destruction of water catchment areas Poaching
Q15. Most mentioned purpose of visits from park staff	<ul style="list-style-type: none"> Assess wildlife destruction Educate villagers Help with village projects 	<ul style="list-style-type: none"> Consult villagers Educate villagers Patrol 	<ul style="list-style-type: none"> Patrol Help with village projects Educate villagers
Q 20. Most mentioned benefits of having wildlife	<ul style="list-style-type: none"> Able to see and know different animals Income from sale of items to tourists Get game meat Income from photos tourists take 	<ul style="list-style-type: none"> Able to see and know different animals Get game meat Income from photos tourists take Income from sale of items to tourists 	<ul style="list-style-type: none"> Income from tourists camping in area Able to see and know different animals Get game meat Income from sale of items to tourists
Q 21. Most mentioned costs of living with wildlife	<ul style="list-style-type: none"> Destroy crops Threat to safety of people Kill livestock 	<ul style="list-style-type: none"> Destroy crops Kill livestock Threat to safety of people 	<ul style="list-style-type: none"> Destroy crops Threat to safety of people Kill livestock
Q 47. Most mentioned wildlife related projects to be initiated	<ul style="list-style-type: none"> New efforts to prevent wildlife damage Villager visits to the park Establish land use policy Sell game meat in markets Build tourist lodges 	<ul style="list-style-type: none"> New efforts to prevent wildlife damage Villager visits to the park Sell game meat in markets Build tourist lodges 	<ul style="list-style-type: none"> New efforts to prevent wildlife damage Establish land use policy Sell game meat in markets Build tourist lodges
Q 48. Most mentioned assistance TNP could provide	<ul style="list-style-type: none"> Provision of clean water Assist in health projects Assist in problem animal control 	<ul style="list-style-type: none"> Provision of clean water Assist in education projects Assist in health projects 	<ul style="list-style-type: none"> Provision of clean water Assist in education projects Assist in problem animal control

5 SIX YEARS OF CC ACTIVITY LATER

5.1 Village profiles in 1997

Of the five villages to the west of TNP, TANAPA's CCS had worked extensively with three: Minjingu, Sangaiwe and Mwikansi, and had not worked in two villages: Chubi and Itaswi. However, Chubi had received SCIP funds to finish a school. Both Chubi and Itaswi are on the southern border of the Park in Kondo District.

Village meetings were well attended in all villages with between 40 to 210 participants. All participants at the meetings apart from the youth said that they had moved to the area from elsewhere, the majority having moved to the area in the 1960s. Participants are therefore not people who were moved out of the Park when it was created.

All participants noted negative trends in the state of their environment. Primary concerns were decreased water, dryness and the loss of trees. While listing natural resources and their uses, the three villages TANAPA has worked with mentioned wildlife as one of their natural resources and listed its uses. Wildlife was not mentioned as a resource in the two villages where TANAPA has not worked. The problems of living with wildlife are the same as was mentioned in 1992. To the west of the Park the main problems reported were the destruction of crops by wild animals, danger to humans and livestock and disease transmission from wildlife to livestock.

Villages visited that had received funds from TANAPA's SCIP programme mentioned these benefits in their list of benefits of having wildlife in their area with the exception of Chubi. In Chubi, TANAPA had given some funds for a classroom but this was not mentioned in the list of benefits from wildlife.

Data collected by the TCP between March and July 1996 provide an overview of the pastoralist context. Four villages were visited: Emboret, Kimotorok, Loibor Serrit, and Terrat. Five interviews were conducted in each of these villages, except Terrat where four interviews were conducted. Responses were markedly uniform within villages and between villages, and reflect the main challenges of keeping cattle alive at the wildlife interface. Interviewees reported the problems of competition with wildlife for water and grazing and the danger posed to themselves and their cattle by lions and buffaloes as the main problems incurred because of wildlife. Disease transmission from wildlife to domestic animals also pose constraints to livestock raising in the area. In particular, malignant catarrhal fever (MCF) and tickborne diseases were mentioned.

In four of the five villages the pastoralists have begun to grow food crops for subsistence, with surplus being sold at markets. None of the interviewees from Kimotorok said they grew any crops. In all five villages people and their cattle were relatively mobile, moving to areas of water and more suitable pasture as the need dictated. Cattle are also moved in the wet season to avoid wildebeest from which they contract MCF. Landuse maps were drawn for all five villages and form part of the TCP final report.

5.2 Park –People Relationships

This study indicates dramatic changes in the relationship between park staff and local people in the areas where TANAPA’s CCS has been working. Examining the visitor books of one of the villages visited to the west of the park provides empirical evidence for an increase in contact with TNP staff over time (see Table 3). Data on visits go back to 1984, and the number of visitors signing the book each year ranges from 20 to 100. No visits from park staff are recorded between 1984 and 1992. The village had been visited by a member of TNP staff once in 1993 and 1994, four times in 1996 and seven times by October 1997.

Table 3: Visitors to a village on the western side of the Park 1984-1997

	1984	1985	1986	1987	1988	1889	1990	1991	1992	1993	1994	1995	1996	1997
Total visitors	20	50	74	77	49	56	99	93	62	68	100	45	39	62
Total park staff visits	0	0	0	0	0	0	0	0	0	1	1	0	4	7
% parkstaff/ total visitors	0	0	0	0	0	0	0	0	0	1.5	1	0	10.3	11.3

All villages visited in 1997 mentioned Park staff as one of the categories of people who visited their village. In Minjingu, Sangaiwe and Mwikansi villagers reported that they were visited frequently by Park staff. Villagers in Chubi said they were visited by Park staff a long time ago and villagers in Itaswi said they had no close relationship with Park staff (Chubi and Itaswi were not focal areas for CCS activity).

One of the indicators of how relationships have changed was obtained by revisiting the questions first posed in 1992: Should TNP be abolished, left the same, reduced or increased in size? Responses are shown in Table 4.

Table 4: Responses to the question “Should TNP be abolished, left the same, reduced, or increased?”. 1992 KAP survey and 1997 village meetings.

	Minjingu 1992 (1997)	Sangaiwe 1992 (1997)	Loibor Serrit 1992 (1997)
Abolish Park	6% (0%)	2.9% (0%)	33.3% (0%)
Leave Park the same	51.7% (82.6%)	83.7% (100%)	38.0% (9.5%)
Reduce size of Park	15.2% (17.4%)	29.8% (0%)	14.7% (90.5%)
Increase size of Park	6% (0%)	11.5% (0%)	2.3% (0%)

The data from the two years are not comparable as they were collected from an interview survey of individual respondents in 1992 and collected by a show of hands at a village meeting in 1997. However comments from the different village meetings and the 1997 data collection as a whole point to an improved relationship between local people and the Park staff.

The data collected from Loibor Serrit reflect a reality within the context of securing a livelihood. While this village of pastoralists are unwilling to see the Park abolished for a variety of reasons, their pastoralist lifestyle and need for land to graze their cattle make them more likely to ask that the park be reduced in size. They thus recognise a legitimate need for the Park, but at the same time also express their need for grazing land.

There is evidence that this short history of a Park working with the people is raising expectations and making people more interested in working with the Park. In Kondoa District, where TANAPA is starting to focus but has as yet not worked with any intensity, people were willing to gather to talk about national resource issues and were most eager for the Park to address their problems as they had done in other villages.

It cannot be ignored that relationships fostered between the national park and the local people are vulnerable to the personalities of the staff the Park recruits. In the words of one village elder from Sangaiwe:

“Some Park staff become part of our village life, they understand our problems and want to help us. Some, however, just have the job but are not interested in the people”

It was also noted that achievement within any particular village are subject to the initiative and interest of village leaders.

The term *Ujirani Mwema* is strongly embraced in the villages, but also raises questions of reciprocity frequently voiced during this research and during the TCP: “Why can our animals not go there [to the Park] while the Park animals can come here?”

In all villages, long descriptions were provided about the historical enmity between the park and the people. Points of contention were the fines imposed on villagers and the beating of people by park staff. Evidence for some harassment by park staff is seen in the 1992 response “Ranger disturbance (n=411)” to the question “What are the problems of living next to TNP”. Villages also felt they were not consulted on Park boundaries and were then punished for transgressing boundaries they were not even aware of. To TNP’s credit, villages felt they had a clearer understanding of the role of the Park since TNP efforts to educate them were started.

5.3 Benefit sharing

Budgets for Tarangire National Park SCIP fund total US\$ 93,800 for projects in 16 villages in the five fiscal years 92/93 to 96/97. The perception amongst villagers of receiving benefits correlated with TANAPA’s input to SCIP projects. The input to village projects seems to have provided much of the impetus in moving away from a history of negative relationship between the Park and the local people to the current positive relationship. Furthermore, the impact of the SCIP projects seems to be broad in the sense that there is awareness of benefits in the villages where TANAPA had not been focused and villagers were eager for dialogue and to attract TANAPA to their village.

Given the projects or assistance requested from TNP in 1992 of “provision of clean water”, “health and education projects”, and “problem animal control”, the CCS has to some extent met the needs of the villagers in the SCIP projects provided to each of the target villages. Minjingu had received desks for a

school in 1994; Sangaiwe had a classroom constructed in 1992 and a teachers house constructed in 1995; Mwikansi has a classroom constructed in 1997; and Chubi had a classroom completed in 1996. The total value of these projects was approximately US\$ 16,520.

An issue typically ignored in the implementation of CC programmes is the balance of resources between the implementing organisation and inputs to the community. At the village meetings held in 1997 there was consistent mention that TANAPA was well resourced and benefits going to community were minimal. Thus far the only benefits received by communities have been those received through TANAPA's outreach programme or the private sector initiatives. Opportunities for communities themselves to use wildlife resources on their land, such as the establishment of wildlife management areas, are still in the early stages of development.

Efforts at benefit sharing cannot be seen as a replacement for initiatives to minimise the problems people incur in living with wildlife. People reported the same problems of living with wildlife in 1997 that they reported in 1992, and there was little evidence of a concerted effort to address these. The request of most villagers in 1992 to "Make new efforts to prevent wildlife damage" does not appear to have received much attention, although Park rangers continue to assist with scaring crop raiding animals from people's cultivated plots of land.

5.4 Impacts on the conservation resource base

Impacts of CC on the resource base remain unclear, and an assessment is difficult without appropriate impact indicators determined at the outset. Given the stated aims of the CCS of reducing negative impacts on the environment, one of the clearest indicators would be a reduction in the incidence of poaching. Changes in the incidence of poaching have been used as an indicator of conservation impact elsewhere with success (Leader Williams, 1996). Data collected from the TNP headquarters indicate a decrease in poaching since 1994. However, it is difficult to determine whether the observed trend in poaching reflects a true trend in incidents, particularly in the absence of data on the level of effort on the part of the park staff over time. It has been postulated that a reduction in poaching has occurred since the inception of the CCS in Tanzania (Bergin & Dembe, 1996), but the data to substantiate this claim were not available in Tarangire. Furthermore attributing any observable trend to CCS as opposed to an increased effort in law enforcement patrols or any other factor is problematic.

However, it was frequently reported that villagers are increasingly informing park staff of poaching incidents and providing tip offs on the presence of poachers on village land. It was also noted that since 1995 all poaching incidents have occurred outside the Park. Problems of poaching in Tarangire seem to be localised. Park records indicate that approximately 90% of the poaching incidents occur to the west of the park. As relationships with the Park's neighbours improve it might be expected that poaching would decline further.

5.5 Institutional Issues

The implementation of CC around Tarangire National Park is faced with a number of constraints. While results so far are promising, it must be noted that resources applied to CC around TNP are very limited. CC staff are spread thinly on the ground and the achievements of the CCS thus far go to their credit. The Park has operated with one warden (absent for one year 1996/1997) and one full time CC Assistant. In comparison the Law Enforcement section has 50 rangers operating in the Park.

The CCS also faces challenges in introducing CC as a legitimate approach to conservation where a more traditional 'law enforcement' approach to conservation prevailed. As a department CCS has yet to gain the support of all the other departments of TANAPA. Doubt was also expressed about the impact of CCS benefit sharing programme. The effectiveness of benefits provided socially in influencing peoples' behaviour and their land use choices was questioned.

At the Park level a lack of institutional support is manifested in doubt about the achievements of CC amongst high level park staff and amongst the rangers. Some Park staff expressed doubt about the need for a separate department to deal with community issues. Park rangers expressed a lack of understanding of CC activities, although they did note that Park-people relationships had become more positive in recent years. Park rangers also expressed an interest in training to increase their understanding of CC.

Within the broader institutional framework, relationships with district level government necessary for the smooth function of TANAPA's activities outside the National Park are mixed. Institutional jealousies based on differing levels of resourcing between TANAPA and the Natural Resources Departments of District government may comprise activities in the field.

6 CONCLUDING DISCUSSION – COMMUNITY CONSERVATION IN THE CONTEXT OF LIVELIHOODS

Park-people relationships around TNP have been improved by the concerted effort of the CCS extension work and the SCIP projects. In addition, the value of wildlife and the Park have been enhanced by TANAPA's benefit sharing programme and the efforts of the private sector working to the east of the Park. A modest investment of manpower and funds has thus led to a significant change in attitudes towards the National Park: hostility and enmity have given way to dialogue and cooperation.

The evolving policy environment in Tanzania and initiatives such as WMAs will increase opportunities for local people to benefit from the wildlife resources on their land. However, models of conservation based on the argument that wildlife must pay, may be simplistic for TNP. Contrary to much current CC theory which posits that wildlife will be conserved to the extent that it provides 'economic' benefits, conservation in TNP appears to be dependent on a complex and dynamic interaction between cultural values, livelihood issues, human relationships and economic benefits.

The data collected in TNP argue that the people living around the Park hold cultural values which drive their desire to see that wildlife continues to exist in their surroundings. Wildlife is seen as having a value beyond its simple economic costs and benefits. These values are reflected in the responses from both the 1992 survey and the 1997 village interviews. Concern was expressed for the children whom had not seen certain species of wild animal such as the rhinoceros. In both 1992 and 1997 interest in

visiting the Park to see wildlife was high amongst village members. The most commonly stated benefit of living with wildlife in 1992 was 'We can see and know different kinds of animals'. In 1997 several villagers asked "Where will we go to see wild animals if they are finished here?".

This study also highlights the need to develop a conservation model in the context of secure livelihoods. The two sides of the park face different challenges in combining human livelihoods with conservation. In the west the main problem in securing a livelihood at the human-wildlife interface is the destruction of crops by wildlife. The danger posed to humans and livestock by some species of wildlife is also a problem. To the east of the Park the main problems are those of keeping cattle alive: securing grazing and water. Pastoralists also voiced concern over the threat posed to their livestock by lions and the danger of buffaloes to humans. In all villages wildlife is appreciated and wanted to the extent that it does not compromise livelihood. In 1992 the most commonly suggested wildlife related project was "new efforts to prevent wildlife damage", stressing the need to reduce the costs of living with wildlife.

It should be noted that landuse patterns around TNP are not static. An increasing amount of land is being cultivated to the east of the Park, expanding the range of conflict between agriculture and wildlife. The single most important issue determining conservation possibilities in and around TNP is landuse. The Park outreach programme and private sector initiatives both aim to expand the conservation constituency by having supporters outside the Park. Ways of influencing the landuse regime must also be sought. The desire of the local people to change their landuse is stated by a Maasai elder, "You cannot expect us to remain in history. Many projects come and recommend we remain pastoralists, but we have discovered the new foods. Now we want to grow crops and keep our cows".

TNP with its experimental approach to changing relationships with local people answers some questions about CC as an approach to conservation. However, it raises further and more interesting challenges. Attempts at increasing dialogue, benefit sharing and problem solving are a step in the right direction, but the values, desired landscape and livelihood concerns of the local people need to be embraced as key variables in determining the design of conservation initiatives. Perhaps the biggest challenge for any implementor of CC around TNP will be to maintain the ability to evolve and change in the face of dynamic relationships between Park and people, the changing balance between the benefits and costs of living with wildlife, changing cultures and changing landuse patterns.

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