

**Rethinking wildlife for livelihoods
and diversification in rural Tanzania:
a case study from northern Selous**

by

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ABOUT LADDER

LADDER is a research project funded by the Policy Research Programme of the UK Department for International Development (DFID) that seeks to identify alternative routes by which the rural poor can climb out of poverty. LADDER is working with nearly 40 villages and 1,200 households in Uganda, Tanzania, Malawi and Kenya to discover the blocking and enabling agencies in the institutional environment facing rural people that hinder or help their quest for better standards of living for themselves and their families.

This working paper represents work-in-progress and the reader is advised that it has not been subjected to academic quality control, nor edited for errors of fact or interpretation. The paper forms part of a mosaic of research findings that will contribute towards an overall picture of rural livelihoods and micro-macro links to poverty policies in the case-study countries. The findings and views expressed here are solely the responsibility of the authors and are not attributable to DFID.

All available Working Papers and Village Reports can be downloaded from the project website: <http://www.uea.ac.uk/dev/odg/ladder/>, which also details other information about the project. If, however, you wish your name to be added to or taken off the postal mailing list for the Working Papers, or to obtain the papers by post for specific countries only, please email l.mathieu@uea.ac.uk or j.mims@uea.ac.uk.

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Acronyms

AA	Authorised Association
CBC	Community Based Conservation
CBNRM	Community Based Natural Resource Management
CBO	Community based organisation
CC	Community Conservation
DC	District Council
GCA	Game Controlled Area
GTZ	Deutsche Gesellschaft fur Technische Zusammenarbeit
LADDER	Livelihoods and Diversification Directions Explored through Research
MBOMIPA	Matumizi Bora ya Malihai Idodi na Pawaga ('Sustainable Use of Wildlife Resources in Idodi and Pawaga' Project (also now a registered society)
MDC	Morogoro District Council
MNRT	Ministry of Natural Resources and Tourism
MRBZ	Mgeta River Buffer Zone
NFRE	Non-farm rural economy
NGO	Non Governmental Organisation
NR	Natural Resources
PRA	Participatory Rural Appraisal
PRSP	Poverty Reduction Strategy Paper
RD	Rural Development
SCP	Selous Conservation Programme
SGR	Selous Game Reserve
TANAPA	Tanzania National Parks
TTB	Tanzania Tourist Board
TWPF	Tanzania Wildlife Protection Fund
UNCTAD	United Nation Conference on Trade and Development
VG	Village Government
WD	Wildlife Division
WMA	Wildlife Management Area
WTTC	World Travel and Tourism Council

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Summary

This paper assesses how wildlife does and can contribute to rural livelihoods and livelihood diversification within villages on the northern border of Selous Game Reserve. Finding a variety of positive and negative livelihood impacts related to wildlife, it recommends approaches within community based conservation that would enhance livelihood gains. It then considers the contribution of wildlife-based enterprise to rural growth. Although this is currently minimal in the area, it is emerging as a policy goal. The paper argues that achieving wildlife-based growth is a long-term process, requiring attention to a number of policy issues going well beyond wildlife and community based conservation.

The paper is set in the context of three fluid and somewhat disconnected policy processes. Poverty and rural development strategies in Tanzania aim to encourage growth of the non-farm economy. Tanzania's wildlife policy includes a strong community based conservation element which is devolving benefits and rights to the local level. Tourism policy includes efforts to diversify Tanzania's tourism product into southern areas and new products. The paper considers the mutual interaction of these three and the role that wildlife use can play.

In the case study area there is hunting, nascent tourism, and a flagship community based conservation initiative, the Selous Conservation Programme. Livelihood analysis in the study area reveals a complex array of positive and negative impacts of wildlife on local people, but so far relatively small impacts directly on poor households. The community based conservation programme is devolving rights over wildlife to local institutions. This is a welcome and necessary – but not sufficient – step towards harnessing wildlife for livelihood gain. One conclusion is that more can be done to enhance gains to livelihoods, particularly now that these initial building blocks are virtually in place. This involves moving beyond a focus on institutions to reach individuals, and beyond distribution of benefits to creation of opportunities. While developing wildlife as a commercial asset, it is also important to ensure wildlife use supports existing livelihood strategies, particularly agriculture (the mainstay), and gathering wild resources (a minor strategy but important to the most vulnerable).

The research finds that, to date, there is little enterprise development and economic diversification based on wildlife use. This is no great surprise at this stage, given that it is early days in the development of 'Southern Circuit' tourism, enterprise options within CBC, and Tanzania's overall market-led economic strategy. But given that policy objectives are to boost rural growth, the possibility of stimulating a vibrant wildlife-based economy deserves further analysis. A number of obstacles that

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inhibit development of wildlife-based diversification in the study site are highlighted. Addressing these is a long-term process involving policies from a range of sectors. Recommended policy priorities include:

- *Within Community Based Conservation (CBC), a shift in emphasis from ‘distribution of benefits’ to creation of opportunities, and from institutions to households;*
- *Policies to both expand and diversify tourism, including the Southern Circuit and small-scale tourism-related enterprises;*
- *Development of parks and reserves in ways that increase linkages with neighbouring entrepreneurs;*
- *Attitudinal change from household to policy level: towards the importance of entrepreneurialism vs public sector control, and towards wildlife as an economic asset;*
- *Enterprise development: going well beyond classic community/NGO approaches, to strategies that develop markets, mindsets, and up-stream/downstream linkages; and*
- *Rural development strategies that view wildlife not just as something in need of more sustainable management but an opportunity to exploit for growth and for supporting coping strategies of the vulnerable.*

1 Introduction

The research for this paper aimed to tackle the question of how wildlife is contributing to livelihoods, and particularly to livelihood diversification, in the villages bordering the northern edge of Selous Game Reserve. This underdeveloped rural area is on the margins of Tanzania’s developing ‘Southern Circuit’ for tourism, and is a focus area for Tanzania’s longstanding Selous Conservation Project (SCP), which is a flagship project piloting Tanzania’s new Wildlife Policy. By bringing a livelihoods perspective to understanding wildlife issues on the ground, the research aims to feed into policy debates concerning community based conservation, rural diversification, tourism development and poverty reduction. The aim of the research is not to evaluate what has been done through various initiatives to date, but to look ahead to priorities for making wildlife use contribute to poverty reduction in the decades ahead.

The fieldwork assessed how wildlife, the SGR, and SCP initiatives affect rural livelihoods at present. It comes as little surprise that the research finds a multitude of positive and negative livelihood impacts of wildlife on different stakeholders, and little sign as yet of substantial livelihood change or economic diversification through wildlife-based enterprise in the area. So why are these of relevance to policy? There are in fact two distinct, though overlapping elements to the research, relevant to two different policy debates.

Firstly, Tanzania’s approach to wildlife management and community based conservation has evolved considerably over the last decade. A ‘fences and fines’ approach has given way to CBC-type approaches. Regulations are shortly to be signed into law which allow for the devolution of rights to manage and profit from wildlife to community based organisations (CBOs). This will mark another turning point in CBC: as the new organisations are registered and their wildlife management areas gazetted, a host of new opportunities and challenges will emerge. CBC initiatives in Tanzania, as elsewhere, have emerged from a fairly traditional

conservation-oriented background, and projects have generally been designed with a view to securing conservation gains rather than maximising livelihood benefits. This focus is changing, however, to varying degrees in different places. The livelihoods analysis presented here provides an opportunity to consider which impacts are particularly important from a poverty perspective, and hence to highlight those that need greater emphasis in the new phase.

Secondly and more broadly, the research is set in the context of Tanzania's rural development priorities, particularly the stated rural development objective (United Republic of Tanzania, 2001) of stimulating growth in the non-farm economy as a means to reduce poverty. While wildlife use is not currently a major economic activity in the area, the long-term potential needs consideration. It can be argued that looking for current evidence of diversification through wildlife in this area is premature: the southern tourism circuit is still small and this area is on its margin; community conservation has so far had to focus on the building blocks of generating benefits and devolving rights, and can only now turn to enterprise development issues; wildlife is not normally regarded by residents (except poachers) or policy makers as a commercial asset; and, more generally, Tanzania's embrace of liberalisation and market-oriented development model is comparatively recent, stemming from around 1986. Nevertheless, it is important to check whether the basis is being laid for the potential of wildlife to be realised.

Economic diversification through wildlife enterprise seems to be an implicit goal of current policy directions in tourism, wildlife management, and rural development. It is, however, rarely an explicit one: wildlife and tourism receive virtually no mention in rural development and poverty reduction documents, the Wildlife Policy aims to increase wildlife's contribution to GDP but there is little detail of how, and tourism policy aims to diversify locations and products, but there is little sign of interaction with wildlife or rural development strategies. Thus the paper assesses the obstacles to wildlife-based commercial activity, and how these could be addressed over the long term across the sectors.

Currently wildlife use in the study area is mainly hunting. In the long term, development of wildlife as an economic asset in rural areas will depend in large part on the pattern of tourism development. Conflicting views on tourism development are therefore considered in the paper. On the one hand, there is a clear need to find 'growth poles' in rural areas (United Republic of Tanzania, 2001; NEPAD, 2002), Tanzania is said to be the developing country experiencing fastest growth of tourism (WTO, see Appendix 2), and tourism may be one of the few local industries with comparative advantage in some areas, including low potential areas (Ashley, *et al.*, 2001). On the other hand, there are strong arguments that most benefits of tourism flow overseas or accrue to elites (Homewood, *et al.*, 2001), and it can serve as a growth pole in only the most well-endowed destinations. Thus in several African countries, policy-makers appear genuinely uncertain about how to value or approach tourism, how to harness it for rural livelihood enhancement, and how to integrate it with growth and poverty strategies.

This paper is part of a larger project: Livelihoods and Diversification Directions Explored through Research (LADDER). LADDER starts from the premise that households cope with, or exit from, poverty by pursuing a diverse array of livelihood options. These need to be understood for policy interventions to be effective. Thus the aim of LADDER is to make links between micro level livelihood outcomes and macro level policy initiatives. Livelihoods

and diversification strategies of households at different study sites are analysed to identify policy implications, particularly obstacles and options in achieving poverty reduction.

A core issue emerging from the LADDER research is the inability of the rural poor to secure non-farm alternatives to diminishing farm opportunities. While agriculture is the mainstay of most livelihoods, diversification options are also critical, mainly to enable poor households to decrease their risk or increase their reward. It is argued (Ellis and Mdoe, 2002) that a centre-piece of poverty reduction strategies should be creation of a facilitating environment that encourages trade, investment, risk-taking and enterprise to flourish in rural areas. But instead, the poor face an institutional context that is neutral or blocking of diversification. This is one of the themes explored in this paper in relation to wildlife, community conservation, hunting and tourism. In identifying the lack of diversification from wildlife, it seeks to understand why this is so, and what more would be needed to develop it.

LADDER field research in Tanzania was conducted at 4 field sites (comprising 11 villages) during 2001. The fieldwork team spent a week in each of the three villages in the Selous area during June and July, conducting 90 household surveys and using a variety of qualitative data gathering techniques. Research explicitly focusing on wildlife was undertaken during one of those weeks, mostly through discussions in the villages and with District level staff, supplemented by brief discussions in Dar (though not, at that point, with key staff in the SCP and Wildlife Division). In April 2002 a presentation based on a draft of this paper was made to a LADDER workshop for policy-makers and findings were discussed. Meetings were also held at the SCP offices to discuss the draft paper. In addition, every effort has been made to draw on the substantial grey literature and government literature on CBC in Tanzania. Nevertheless, the paper draws more heavily on insights from the case study area, than from any overview of CBC and tourism in Tanzania.

The remainder of the paper is structured into 4 sections. Section 2 outlines the policy context, in relation to poverty reduction, rural development, community conservation, tourism and hunting. Section 3 describes the study area: livelihood strategies, recent changes, and the interventions of the Selous Conservation Programme (SCP). Section 4 summarises the findings from the field research concerning the multitude of livelihood impacts of wildlife and wildlife uses. For those wishing to skim the detail, the section concludes with an overview of livelihood impacts. Section 5 then considers the implication of these findings, by discussing options and obstacles for wildlife to make greater livelihood contributions. The paper concludes with a summary of the policy implications.

2 The Policy Context

2.1 Poverty and economic strategies

Estimates for 2000 suggest that over 50 per cent of the population of mainland Tanzania live in poverty, and most are in rural areas. Poverty reduction is the focus of policy-makers and donors, although effective strategies for overcoming poverty remain somewhat elusive. The Poverty Reduction Strategy Paper aims to combine macro-economic stability, sector strategies and decentralisation, and poverty reduction itself. It interprets the latter as reducing income poverty, improving human capabilities and containing extreme vulnerability. Support for diversification and local enterprise (though not specifically wildlife or tourism in the current version) appear in the Poverty Reduction Strategy Paper (PRSP): there is an aim to promote diversification to help the poor to enter into the global economy as well as encourage

initiatives aimed at strengthening private investment, small and medium size enterprises and informal sector activities.

Two other PRSP themes are relevant to the current discussion. One is the recurrent theme of devolving implementation of reforms to districts, municipalities and communities, and encouraging cost-sharing and deeper participation at local levels. A second is the recognition of the dependence of the poor on environmental resources, particularly woodland resources. It is recommended that this area is worthy of further focus in the future in order to capture the complexities of environmental quality, dependency and environmental protection.

Strategy for rural areas is outlined in the Rural Development Strategy of 2001 (United Republic of Tanzania, 2001). Its key objectives are widely-shared growth, good governance, increased opportunity and access to services, and reducing risk. There is a strong emphasis on agriculture, but the need to develop the non-farm economy (again, without specific mention of tourism or wildlife) is recognised. The section on growth emphasises the need for private investment, transport infra-structure, non-farm-options, stimulus of an enterprise mindset and rural-urban growth points.

2.2 Wildlife and community based conservation

Wildlife conservation, protected area management, and game hunting have long been well established in Tanzania, dating back to German hunting laws in 1891. The Protected Area network now covers 28 per cent of the country (19 per cent is high protection where farming and residence are not allowed) (Table 1). Responsibility for managing wildlife and protected areas is split between national and district government, and between the government ministry and parastatals, such as Tanzania National Parks (TANAPA). At national level, wildlife falls within the same ministry as tourism – the Ministry of Natural Resources and Tourism – but in a separate Division.

Table 1 Protected area and permitted land uses

Protected area	Land uses and restrictions	Extent
National Parks	Preservation in natural state. Non-consumptive tourism only	4%
Game Reserves (GR)	Conservation of wildlife in natural state Consumptive tourism and professional hunting: tightly regulated	15%
Ngorongoro Conservation Area	Multiple use: wildlife conservation and preservation of traditional lifestyles	1%
Game Controlled Areas	Village land with controls on wildlife use Tourist hunting or resident hunting (as in a GR)	8%
Wildlife Management Area (proposed new category)	Wildlife management. Tourist and resident hunting, tourism, other NR uses regulated by by-laws and quotas. No farming.	None yet
Forest Reserve	Tourist hunting.	15*%
Open Area	Not protected. Resident hunting needs only a licence (not special permit).	

* 3 per cent of this, overlaps with PA devoted to wildlife conservation.

Current wildlife management policy has some strong continuity with past decades – an emphasis on maintaining the current Protected Area network, on continuing to support the anti-poaching patrol, and encouraging the on-going development of the hunting industry both within and outside Protected Areas by both residents and foreigners. However, there has also been a major policy shift, with the emergence of community approaches in the late eighties,

generally referred to as Community Based Conservation¹ (CBC). Several forces led to the emergence of CBC: plummeting elephant and rhino populations showed that the old fences and fines approach to conservation wasn't working; national enforcement capacity was inadequate to the task; new conservation thinking on community based natural resource management (CBNRM) was spreading across Eastern and Southern Africa, based on the idea of re-instating the value of wildlife (and so conservation) to local communities; this new thinking was in line with developmental thinking on participation and was strongly supported by donors – in Tanzania's case by German, British, Norwegian and American bilateral aid - at policy level and through pilot projects.

There have been two big shifts in thinking on CBC. The first revolution was from 'fences and fines' to the idea that *communities must benefit* from conservation. Thus in the early nineties, initial benefits focused on building trust, investing in infrastructure as well as permitting some meat or hunting. The rationale was very clearly to build support for conservation. The second revolution was a shift from hand-out of benefits to the idea of *devolving rights* to local level, to empower residents to make their own decisions and profits. There is plenty of debate still about degrees of empowerment: some reportedly reluctant to relinquish control², other critics arguing that CBC is still focused on short-term material benefits not rights, and that benevolent hand-outs from the top are disempowering (Shivji, 2001).

Nevertheless, it is clear that the Wildlife Policy produced in 1998 (United Republic of Tanzania, 1998) embraces devolution of some use rights over wildlife. Among many socially-oriented objectives to widen participation in the wildlife industry, increase access to employment, income and food, and promote a 'fair share' of wildlife income, the core proposal is to create a new form of protected area – a Wildlife Management Area (WMA)³ – which is to be managed by a community institution – termed an Authorised Association (AA). Within limits set by the Wildlife Division, AAs will be able to run the WMAs, keep a large share of wildlife utilisation fees, and to develop wildlife-based enterprise (see Table 2). This process of policy change was protracted, debated, and is still not finalised. WMA Guidelines which detail AA's rights and responsibilities, were developed in draft in 2000 (contained in Majamba, 2000), then translated into draft regulations. For many months it has been expected that these regulations will be signed into law shortly. Until then, registration of AAs and gazettment of WMAs cannot happen, and issues such as the share of revenue to be kept at AA level remain unresolved. Nevertheless, several Wildlife Division projects are piloting community wildlife management in prospective WMAs. The two flagship projects for wildlife are the Selous Conservation Programme (SCP), which began in 1989 with continuing funding from GTZ; and MBOMIPA ("Matumizi Bora ya Malihai Idodi na Pagawa – Sustainable Use of Wild Resources in Idodi and Pagawa") in Iringa Region, around

¹ The Wildlife Policy, 1998, defines community based conservation as conservation of resources based on the participation of local communities. CBNRM definitions, prominent in Southern Africa, are sometimes contrasted with CBC for giving (a) more emphasis to non-wildlife common property resources than wildlife, and (b) more emphasis to development objectives or sustainable management rather than conservation. It can be argued that Tanzania is shifting from CBC to CBNRM, given the growing number of projects relating to woodland and other plant resources, and the shift in some quarters away from pure conservation goals. However, we use the term CBC reflecting usage in Government documents as well as convenience.

² IRG, 2000 (p68) argues that effective community conservation first involved a reversal of relationships, from hostility to trust, and then requires a tenurial revolution, which faces obstacles of political, legal and bureaucratic inertia.

³ The Wildlife Policy of 1998 defines a WMA as an area declared by the Minister to be so and set aside by village government for the purpose of biological natural resource conservation.

Ruaha National Park, supported by DFID⁴. Once the regulations are signed, implementation of these projects will enter a new phase focusing on operationalising WMAs.

A third substantial shift in thinking may now be occurring, evidenced in the growing focus on *enterprise opportunities* arising from rights to use wildlife. Several technical analyses of economic options and revenues have been done during the preparation of WMA Guidelines. These have focused on what AAs can earn, whether they can be self-supporting, and whether District Government and National Government will be able to recapture in the medium term the revenues that they lose to AAs in the short term. Thus the enterprise focus so far has been mainly on the level of an AA, rather than on workers, individuals, and small or micro enterprises.

Table 2: Plans for WMAs

Enterprises	Potential Sources of WMA Revenue	Types of Taxes and Charges
Tourist hunting	Tourist hunting fees (poss 60% of annual block fee of \$7,500)	Corporate Tax
Resident hunting	Conservation fee (\$100/tourist/day)	Payroll Levy
Non-consumptive tourism	Resident hunting fees	Stamp Duty
Game cropping for meat hides, etc.	Sale of licences, use permits, charging use fees	VAT (e.g. poss 20% NFM)
Live animal capture and sale	Game license fees (poss 60%)	Import Duty
Game ranching and farming	Other fees – permit, trophy handling, hunter – variable	Excise Duty
Beekeeping and value-added processing	Concession fees from tourism operations	Central government taxes (e.g. poss 30% game license fees, 20% bed levy)
Natural Forest Management (NFM)	Sale of live game, game meat, animal skins, forestry products, fisheries, etc.	Local taxes - variable
Fisheries management	Leasing area	District taxes (e.g. poss 10% game license fees, 10% bed levy, 10% NFM)
Sustainable production of: Thatching materials Hay/livestock fodder Medicinal plants	Taxes on sustainable production (poss 70% for NFM)	
Range management for livestock production	Providing concessions to investors	
Mining	Investing	
Agriculture	Bed levy from tourists (poss 70%)	

Compiled from Mabugo and Mugoya, 2001; Christophersen, *et al.*, 2000.

⁴ CBC projects focusing on forests and other wild resources are also up and running (such as Wami Mbiki in Bagaymoyo and Morogoro Districts, and the Community Based Natural Woodlands Management Project in Iringa).

2.3 Tourism and hunting industries

International data indicates that tourism, broadly defined, has developed rapidly since the early nineties⁵, and is now an economically significant sector. Tourist receipts have grown at an average of 6 per cent per year since 1990 (Melamari, 2001), in 1999 tourism overtook coffee as the country's first largest foreign currency earner (US Department of Commerce, 1999), and the Government reports the industry is currently growing at around 30 per cent per annum (Investment Centre website, 14.12.02). In African terms, Tanzania is a leading destination: now ranked as the 5th top tourism sector income earner in Africa, just ahead of Kenya (WTO, 2001).

International tourism data includes all foreign non-resident visitors, thus combines hunters, wildlife-viewing tourists, and business visitors. For our purposes, it is more useful to consider hunting and wildlife viewing tourism separately. Hunting is well established, while the tourist industry, new in comparison, is much less structured. They are managed quite differently, falling under different divisions of the Ministry of Natural Resources and Tourism (MNRT).

Box 1: Key facts on tourism and hunting	
Tourism*	Hunting
Tourism arrivals 2001: 525,122 international tourist arrivals to Tanzania. Of these, 340,000 leisure/holiday visitors (including 50,000 to Zanzibar).	Hunting blocks: 122 in GRs, GCAs and open areas (SCP data)
Source market: By far the majority of holiday tourists to Tanzania are from Europe followed by the North Americas. 40-50% enter via Kenya.	Hunting companies: 36 registered hunting companies in Tanzania in 1999
Receipts: US\$725 million in international tourism receipts in 2001.	Selous Game Reserve 45 blocks allocated to 17 hunting companies selling to international tourist hunters
Receipts on the travel account represented 40% of total exports and goods and services in 1998/99.	The hunting value of the Selous was put at approximately US\$5 million in total government revenue in 2002 (of which about US\$1.85 mn is passed on to the Reserve and others) (Dr Siege, SCP, pers. comm.).
GDP contribution: tourism earnings as a share of GDP grew from 1% (late eighties) to over 6% in the mid nineties, and then 7.5%. (Kweka, <i>et al.</i> , 2001; Wade, <i>et al.</i> , 2001). The Masterplan estimates tourism contribution was 16% of GDP by 2001.	

GCA: Game Controlled Area. GR: Game Reserve. GDP: Gross Domestic Product.

* Estimates based on Government of Tanzania data, particularly the Tourism Master Plan (United Republic of Tanzania 2001) and other recent estimates supplied by the EU-supported tourism development programme. The estimates for numbers of tourists are considered an over-estimate. Further data on economic contributions is being developed currently (van Doorn pers. comm).

Hunting

The hunting industry includes 'tourist hunting' (hunting by international hunters for trophies) and 'resident hunting' (by Tanzanian residents for sport or meat). It is closely regulated by

⁵ The steady growth has been related to major governmental reforms, including the re-opening of the Tanzanian-Kenyan border in 1985 (Wade, *et al.*, 2001), foreign tourism policy and the restoration of private enterprise. Tourism gradually recovered in the late eighties, though in 1991 was still below the levels of 1974. Accelerated growth started from 1992 (data from EU-supported tourism development programme, van Doorn pers. comm.).

the Wildlife Division. A range of fees⁶ are levied by Government, which are then funnelled to Government departments and parastatals. One of the most significant changes to hunting regulations was the establishment of the Tanzania Wildlife Protection Fund (TWPF), which receives 25 per cent of all hunting fees and channels them back into managing protected areas. This is in marked contrast to many other countries where all revenues generated from wildlife accrue to Treasury.

Tourist hunting lies in the luxury market. To hunt a lion, for example, requires paying US\$4,200 for a 21 day safari on top of the US\$2,500 game fee (Vidale Safaris, 2002). It is reported that in 1996 there were under 1,000 hunters in total generating an average revenue of US\$8,698 *each* (thus total revenue of US\$8 million: Conservation Service Centre Office, 1999).

Tourism

Many more tourists than hunters visit Tanzania, so although they spend less per visit⁷, in aggregate they are more significant. Recreational tourism to the country is predominantly 'nature-based' and skewed geographically to the 'Northern Circuit' which is a safari loop running north from Dar es Salaam encompassing the Ngorongoro Crater, Serengeti Plains, Lake Manyara and Mount Kilimanjaro. The popularity of the north of Tanzania to international tourists stems from the 1960s and '70s when Tanzania was an 'add-on' to Kenya's growing tourism market⁸ (Conservation Service Centre Office, 1999; Wade, *et al.*, 2001). The Northern Circuit, where over 30 per cent of all hotels and lodges are found, continues to receive most of the country's tourism sector investment despite reports that occupancy is fairly low, appearing to perhaps be in decline⁹.

Tourism policy is the responsibility of the Tourism Division within the Ministry of Natural Resources and Tourism. Until 1992, tourism facilities were owned and controlled by Government. Since then private investment has increased, and the current emphasis of government is on growth of the industry, diversification of products, and creating a supportive infrastructure and environment.

Public policy statements envisage continued tourism growth averaging around 10 per cent per year, and for the annual number of tourists to be "in the 1 million range by the year 2010" (Melamari, 2001) (approximately double current levels). Several new policy documents have been developed, with support from international donors/NGOs, including: Integrated Tourism Master Plan for Tanzania; Tourism Infrastructure Project; the first draft of the National Tourism Policy, and several documents for investors¹⁰. The aim of these documents is to provide a framework to diversify tourism both geographically and as a product: geographically, the aim is to diversify from the Northern Circuit to a Southern Circuit, opening up Mikumi and Ruaha National Parks and Selous Game Reserve, and ultimately to a Grand Circuit of the whole country. The Southern Circuit is being strongly promoted by TANAPA and park fees have been reduced in the south to this end. Product diversification aims to move into beach, cultural and mountain climbing tourism in addition to safari

⁶ The most important fees generated by hunting are block fees (US\$7,500 annual fee), game or trophy fees, paid per animal (variable by species, elephant being US\$5000, baboon being US\$110 each) and conservation (US\$100 per tourist hunter day) or observer fees which are all paid to the Government (Vidale Safaris, 2002).

⁷ Generating around US\$1,000 per visit: data for photographic safari visitors for 1995/6 (WELD, 1999)

⁸ a period when Tanzanian 'self-reliance' (ujamaa) policy did not favour tourism development.

⁹ 56 per cent occupancy for 1996, 48 per cent in 1997 and 42 per cent in 1998: US Department of Commerce, 1999; Hotel Keepers Association in WELD, 1999.

¹⁰ See <http://www.investintanzania.com/opportunities/>

tourism, for example beach tourism on Mafia island and raft/boat trips up Rufiji River to Selous.

There is some explicit focus on community-based tourism, but little else on pro-poor growth strategies¹¹. Other commentators suggest that tourism is being encouraged to generate foreign exchange at a national level rather than to distribute it at the local community level (Kamara, 1995). In contrast, those in government emphasise that the encouragement of sustainable tourism, in an orderly fashion, leads to foreign exchange, government revenue, investment and job creation, and thus to an impact on poverty reduction (van Doorn pers.comm).

Despite the widely recognised potential of Tanzania’s tourism assets, the obstacles to policy implementation and rapid growth seem considerable. In a review of tourism policy in Tanzania, Wade, *et al.* (2001) conclude that there is:

“a lack of legal and regulatory framework towards tourism... little co-ordination can be found amongst relevant ministries, private sector actor groups, and ...NGOs. Regional and international tourism linkages are weak, and community awareness and participation are virtually non-existent. Furthermore, both the Tourism Division within the MNRT and the TTB are under-funded and under-staffed.”

3 Background to the study area: location, livelihoods, and the buffer zone

The study location lies on the northern edge of Selous Game Reserve, 94 km south of Morogoro town, in the south-eastern foothills of the Uluguru Mountains (see map, Figure 1). The land is fertile, but the area is relatively cut-off and underdeveloped. Roads are particularly poor. There is no electricity and only 25 per cent of households have access to piped water.

The wildlife/livelihoods study was done in three villages, Bonye¹², Sesenga and Kongwa. Within each, research focused within one sub-village (Table 3)

Table 3: Study area: sub-village, village, ward, division

Sub-village	Village	Ward	Division	Distance from Selous GR	Distance from the road
Sogea Mbele	Bonye	Bwakira chini	Bwakira	Borders SGR	7 Km
Kibungo	Sesenga	Mngazi	Bwakira	About 10 km	4 Km
Kisanga	Kongwa	Mvuha	Matombo	Borders SGR	7 Km

Most livelihoods are reliant on farming and crops grown include simsim (sesame), maize, banana, cowpeas, green gram, paddy, sorghum, cassava and tomatoes. Ladder surveys in 3 villages (N = 105) indicate that the vast majority farm plots of between 0.5 and 3 ha, amounting to 69 per cent of the land owned (unfarmed portions reflect the relative availability of land in the area). Richer households own approximately three times the hectareage of poor

¹¹e.g. a cultural tourism programme of SNV (Dutch development organisation) and the Tanzanian Tourism Board. It includes the aim to alleviate poverty through tourism and small-scale enterprise projects. Reports suggest that several villages in the Usambara Mountains, Mkomazi and Monduli districts have benefitted from this to date but returns to communities are low (Conservation Service Centre Office, 1999).

¹² To the outsider, the place known as Duthumi-Bonye, appears to be one village, but in administrative terms is two neighbouring villages separated by a stream. The study focused in Sogea Mbele, a sub-village of Bonye village. However, SCP staff point out that they do regard Sogea Mbele as a defined sub-village with its own identity. This is largely because they see it as a farming outpost used by Bonye residents, with many households shifting back and forth between Bonye and Sogea Mbele for farming purposes.

households. Agriculture is the staple activity and source of income, accounting for 68 per cent of total income (higher shares for the poorest and richest quartiles). All survey respondents identified farming or housework/farming as the households' main occupation. There is not one for whom government, private sector, or self-employment is key. A minority are livestock keepers (mainly Masaai and Barbaig migrants, some of them with large herds of cattle). The rest own chickens but not cattle. Farmer's priorities are to improve agriculture rather than to leave it (Mdoe, *et al.*, 2001). Nevertheless, limited diversification is also common, as the vast majority (76 per cent) engage in 1 or 2 non-farm activities. These are mainly seasonal wage labour (58 per cent), business (38 per cent), other activities (30 per cent) and handicrafts (30 per cent). Fourteen percent report activities that depend on harvesting natural resources (firewood, wild plants, additional natural resources, and bushmeat), though given the illegality of bushmeat and the gender roles and small-scale of plant harvesting, these are likely to be underestimates. For example, Arnold (2001) reports estimates that 20 to 25 per cent of total meat consumption across Tanzania is from wildlife.

Key changes in livelihoods can be summarised as: the disappearance of cotton, cotton ginning and trading; migration into the area by Masaai pastoralists; rise of simsim as a cash crop. The Bonye Village Chairman reports the main change to be the rise in education. Several respondents noted that there has been no improvement in the roads.

Compared to the other study sites (also in Morogoro Region), the livelihood data is broadly similar, though it fares better in terms of agricultural production and worse in most other socio-economic indicators, as would be expected of a more remote but fertile area.¹³ Within this study site, livelihood patterns are similar across the three sub-villages studied, although Sogea Mbele has some distinctive characteristics. It lies right on the edge of the Selous Game Reserve and the Gonabis hunting area (see Figure 1 below), and so experiences more directly problems of wildlife, particularly elephant crop damage, land use changes and being off the main routes. It has fares worse in several socio-economic indicators particularly compared to Kibungo sub-village in Sesenga, which suffers less wildlife damage being 10km from the SGR.

Indicators of poverty in the area are that: the bulk of agricultural production is consumed by the household (85 per cent of maize, and even for the richest quartile, the figure is 72 per cent) suggesting that there is limited demand or supply for marketing a surplus. Estimated annual income is around TSh 400,000 per household or TSh 150,000 per person (US\$470 and US\$176 respectively), with the poorest quartile averaging just TSh 46,000 (US\$54) per person per year.¹⁴ The Village Executive Officer estimates that only one sixth of men can afford to pay the development levy of 3,000 Tsh. per year. Wealth is associated with having more land, while a household's decline in the wealth ranking can be due to a poor harvest or family illness.

The villages lie within the project area of the Selous Conservation Programme and within the buffer zone known as Mgeta River Buffer Zone (MRBZ), which incorporates land of 19¹⁵ villages on the northern border of Selous. Selous Game Reserve (SGR) is a massive 50,000

¹³ Compared to other case study sites, ownership of land and livestock are higher, and the value of agricultural output per hectare is markedly so. But the area has lower education levels, fewer brick houses, tin roofs, , and a higher share of own consumption in total income (Mims et al 2002). It is remote compared to study sites nearer to Morogoro, but SCP staff point out that compared to villages involved in the southern zone of SCP it is not remote.

¹⁴ The richest quartile averages TSh 427,000 (US\$502) per person per year. However, all the data and particularly the estimate for the richest tercile is skewed by a few very large cattle owners at Kongwa. For each tercile, N = 26.

¹⁵ some sources say 19, some say 20. The number increased over time and was changing again at the time of fieldwork.

km² Game Reserve (the largest protected area in Tanzania). The Selous Conservation Programme began in 1989, following many years of decline in the elephant population. It initially focused on investments within the Reserve, and cracking down on poachers¹⁶. But then, in the words of a retired Regional Natural Resources Officer, *'we realised that if we didn't work with the community outside, it would be like pounding water'*. Thus the community conservation arm of SCP developed, which works with communities to both the north and south¹⁷. It should be noted that SCP staff regard the MBRZ area as the most difficult zone of the SCP, and Bonye village as the most difficult village within the area. A major explanatory factor is the low social coherence in the area, due to rapid in-migration. Thus it represents one end of the spectrum for SCP rather than a typical SCP area.

¹⁶ Elephant numbers slumped from 110,000 in the early seventies, to 55,000 around 1984/5 and 29,000 by 1987). In 1989, Operation 'Uhai' (Operation Life) was implemented, which involved a massive crackdown on poaching by army and police, and reportedly considerable violence against suspected poachers (Liyamuya pers. comm.)

¹⁷ This paper focuses only on the MRBZ (northern) area of SCP.

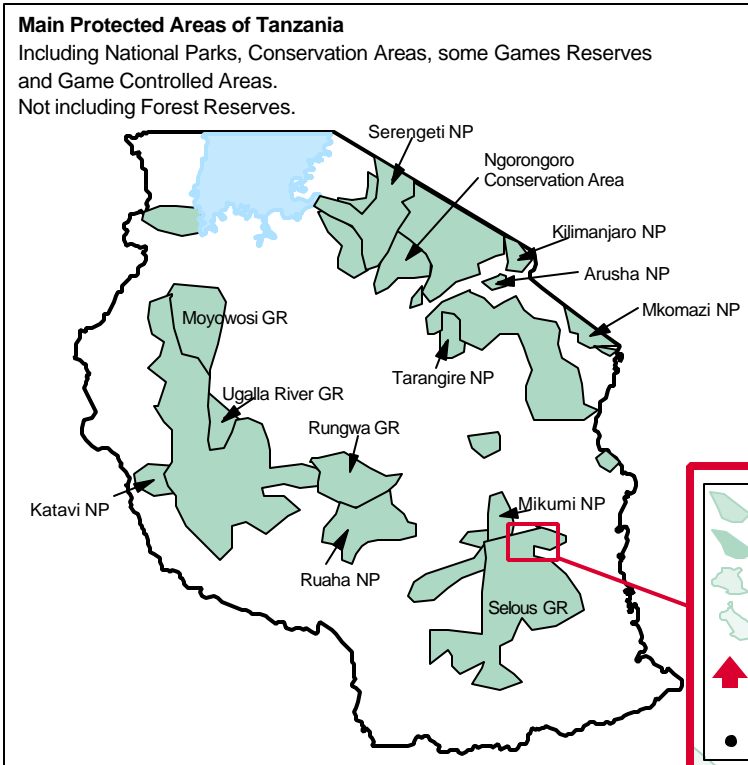
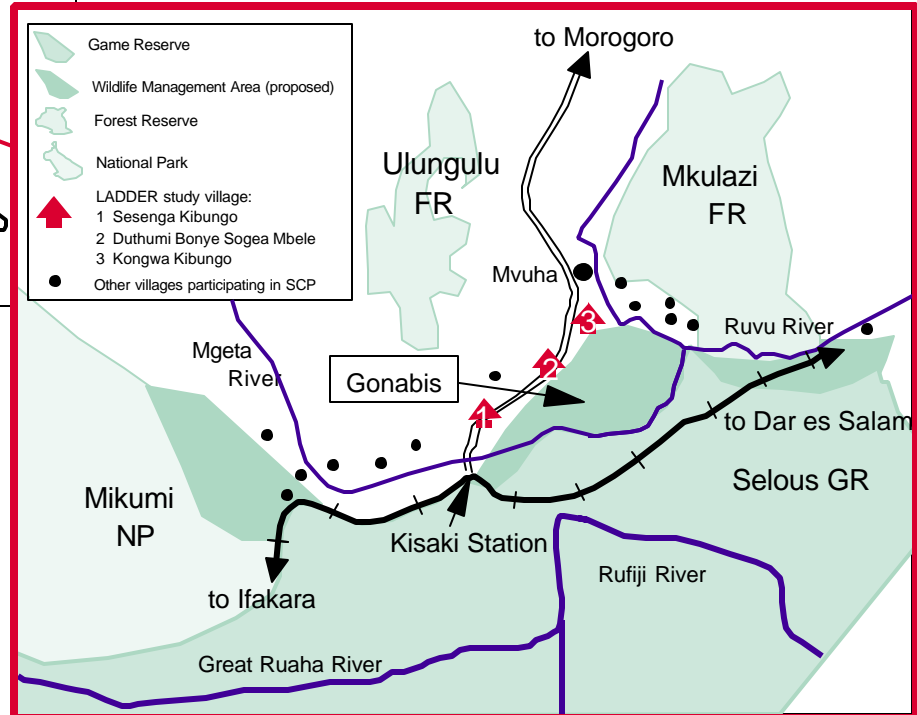


Figure 1 Map of the study area

LADDER Study Villages
in relation to nearby Protected Areas and roads



It is reported that the need to benefit communities was one condition of financial support from GTZ. GTZ funding totalled over DM 15 million from 1987 to 1998 (IRG, 2000), and current funding runs until 2003 (Dr Siege, SCP pers.comm).

In the initial years, SCP focused mainly on cash injections into visible developments, such as water, medicines and pumps in order to build trust. In current form, there are four main initiatives that are on-going and affect local livelihoods:

- (i) *Game meat*: In 1990, game meat was provided to the communities and the Director of Wildlife gave permission for the villages to sell it. The quota has continued since and, in theory, each of the 19 villages should receive 10 wildebeest and 3 buffalo carcasses each year. The Wildlife Department's Community Wildlife Officer is responsible for killing the game, usually with the help of game scouts employed by Jukumu Society. The carcasses are transported to Village Governments, who arrange for it to be sold by the kilo locally. Village Government is, in principle, responsible for providing ammunition and arranging transport, and is free to keep the net income. A major problem is that in recent years the full quota has not been delivered for a host of practical reasons.
- (ii) *The buffer zone/ Wildlife Management Area*: In the early nineties, SCP invested heavily in drawing up land use plans with the villages. This built on a Government initiative of the eighties to demarcate, survey and register village land. In this case, there were for once sufficient resources for the laborious process, and a particular emphasis on including areas for wildlife management. These were set aside as buffer zones, or pilot Wildlife Management Area (WMA). The most wildlife-rich part of the Mgeta River Buffer Zone buffers SGR and includes Gonabis hunting area, where swampy grasslands provide home to buffalo, wildebeest, impala and reedbuck. The area is the core of the pilot 'Wildlife Management Area'¹⁸. The western block of the WMA buffers Mikumi National Park. The process has involved a great deal of negotiation, boundary disputes, and occasional political appeals and interventions.
- (iii) *Jukumu Society*: In parallel with development of the area that is to be WMA, there has been development of an inter-village association, the Jukumu Society. Jukumu is the institution through which the 19 villages co-ordinate, in order to engage with SCP and establish Gonabis. It is run by a Committee of 10 elected members. In addition there is a Board of Trustees (though undergoing change), and a broader Council, which comprises three representatives from each village and meets at a 'baraza' (forum). The first Council was elected in 1996, for a five year term.

Jukumu Committee members described their twin roles as protecting game and natural resources in open areas, and earning income for villages via wildlife. Their main achievements to date have been: employing 19 game scouts; acting as liaison for allocation of the meat quota; negotiating a contract with Sable Mountain Lodge; securing

¹⁸ During the fieldwork, the terms buffer zone, hunting area, controlled area, hunting block, WMA and Gonabis were all used somewhat interchangeably, though all have slightly different meanings. Different sources of information provide different details. For example, Mgeta River Buffer Zone is described as a 1,670km² area (Gillingham 98 quoted in IRG 2000), whereas the WMA is, by all accounts, 70,000 ha (the minimum size for a hunting block). Gonabis is the area where hunting occurs and is described as the hunting block, but is actually only a part of the WMA. SCP staff explain that originally Gonabis Hunting Block was inside SGR, part of the block known as KY1. Now that KY1 is entirely zoned for tourism, Gonabis Hunting Block is entirely outside, within the MRBZ. These different terms and definitions reflect the fluid nature of the legal situation, as well as the different priorities and information levels of participants. In general, villagers perceive and refer to 'Gonabis' and policy-makers deal with the WMA, thus we use those terms too, recognising their imprecision.

an annual fee from Intercon hunting; establishing a campsite at the scout base camp (used more by fieldworkers than tourists); and acting as the co-ordinating body for Gonabis (currently a small role, but in future a significant one when the WMA is gazetted). Their main frustration is the delay of the wildlife legislation.

- (iv) *Village scouts*: When the SCP began in the area, each village wildlife committee was asked to send six members for scout training by the project. After the training, it was decided that five should return home to be ordinary village members again, while one should be employed by Jukumu, so that he can be fully provisioned with a weapon, ammunition and patrol duties. Thus there are 19 scouts. Scouts patrol inside Gonabis, and are sent to deal with problems in the villages when wildlife damage crops.

There is also a campsite, set up by Jukumu Society along the road. It seems to attract more development professionals than tourists. It earned TSh 30,000 in 2001 (Dr Siege, SCP, pers. comm). Given its very small scale and the fact it is run entirely by the scouts at their camp, it is seen as having minimal impact on local livelihoods, thus is not discussed further here.

Although there have been other donor interventions in the area, particularly in water investments, SCP is the largest and most sustained intervention.

There is currently limited commercial hunting and tourism in the area. Trophy hunting is conducted in Gonabis by Intercon Safaris, a company based in Dar-es-Salaam. Initially this was as an extension of their hunting inside the Reserve, but it is now a separately leased Hunting Block. Tourism is limited: although Selous is a massive and important resource from a bio-diversity point of view, the Southern Circuit is little developed. Tourism activity is concentrated in the north of the reserve and operates from six private camps which run at around 15 per cent capacity. There were around 3,500 visitors to the park in 1997. It appears that a lack of infrastructure is the key to further exploitation of this area by international tourists (Booth & Games, 1996;). Most tourism in the reserve does not stray into the buffer zone. On the west edge of the MRBZ, bordering the Reserve and adjacent to Kisasi village, is a tourism lodge: Sable Mountain Lodge. Both Intercon and Sable Mountain Lodge have agreements with Jukumu Society. Photographic tourists also trickle through the area in safari jeeps – about 3 vehicles a day were seen during the fieldwork in Bonye. They are on their way to Selous, but have little reason to stop in the villages.

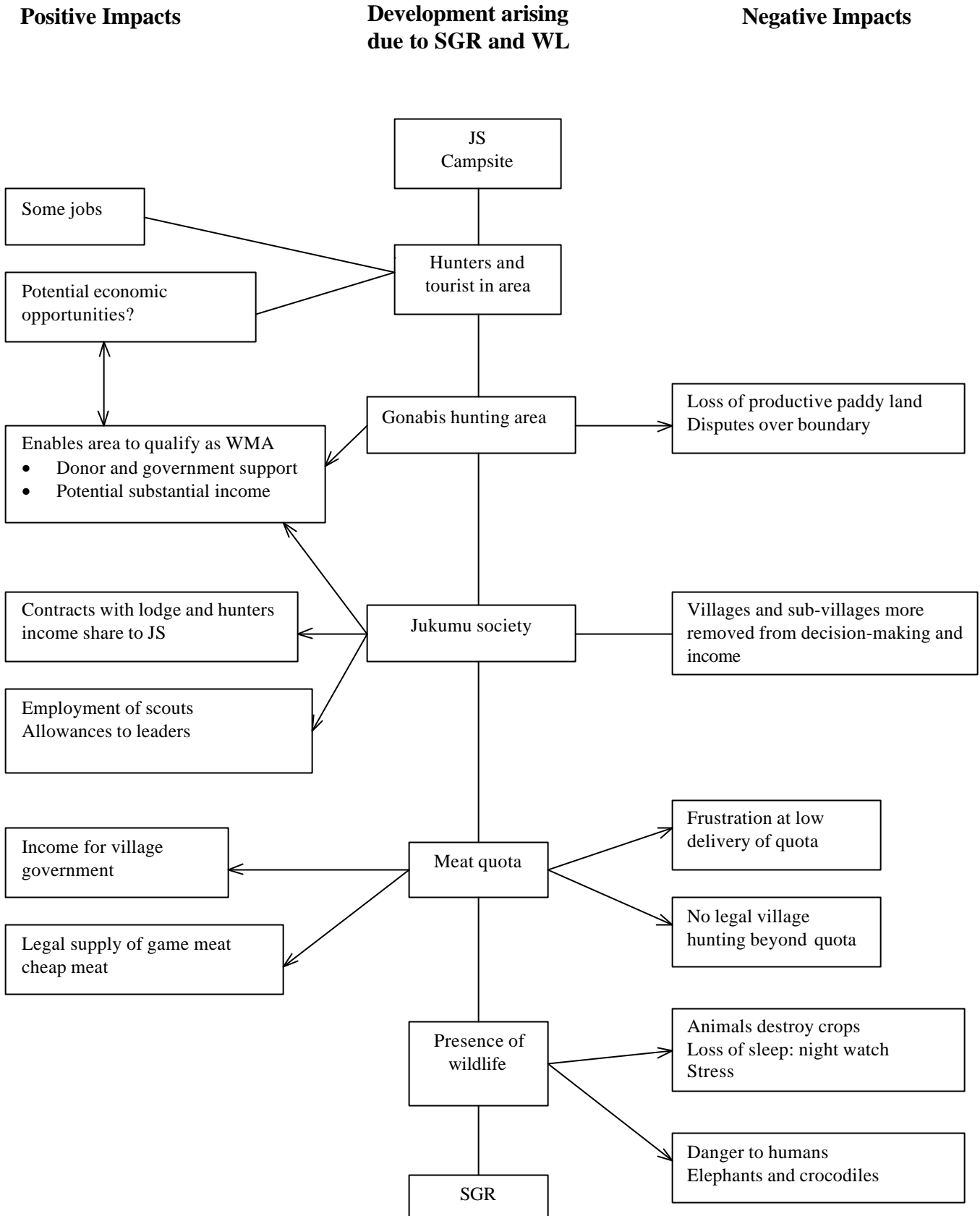
The population of each village is around 3,000 to 4,000 people while the population of the whole buffer zone area is around 8,000 to 10,000 households, or 60,000 people¹⁹.

4 The current situation: role of wildlife in livelihoods

This section first considers each wildlife-related issue – wildlife itself, the Game Reserve, associated industries, and conservation project activities – in terms of its impact on local livelihoods. The issues and impacts are outlined in Figure 2, and explained below. The section then draws out an overview of direct impacts on livelihoods, and indirect impacts through local institutional change. It identifies the most significant issues, particularly noting any diversification opportunities that arise, and the external factors that shape them.

¹⁹ Village population data – 3200 in Kongwa, 3727 in Bonye – is from Village Executive Officers. For MRBZ, sources vary.

Figure 2 Positive and negative impacts of wildlife and wildlife-based initiatives



JS: Jukumu Society
SGR: Selous Game Reserve

The infrastructural investments and support to self-help schemes that characterised SCP in the early nineties are well documented elsewhere (e.g. IRG, 2000) and may well have had substantial impacts. As they are not an evident part of the current developments, they are not analysed further.

4.1 Proximity to Selous and its wildlife

Irrespective of the existence of any specific project, the mere proximity of the villages to a game reserve, wildlife populations, and nascent tourism and hunting enterprise have livelihood implications. The most immediate impact of living on the edge of Selous Game Reserve is that wildlife stray into villages and eat or damage crops. Women farmers at Sogea Mbele, living right on the border, complained vociferously about the impact it has on their farming and personal security.

'It's getting worse not better. We've stopped the late crop of maize completely due to the animals.' 'Since we were born the elephants were here, but there was a control, a special patrol'. 'The biggest agricultural problem is the animals. Even if they don't eat it, they flatten it.' 'People are returning to Bonye due to the services there and the risk of children meeting elephants on their way to school' (participatory fieldwork at Songea Mbele, July 2001).

However, measuring this impact and its attribution to the existence of Selous is difficult. For one thing, research on crop losses usually shows that it is small animals: from baboons to rats and mice, that are responsible for most damage²⁰. Their presence is widespread in rural areas, not just around game reserves, so cannot be attributed to proximity to SGR. Secondly, as Gillingham points out in analysing attitudes to SGR in 1996-97 (Gillingham 1998), vociferous complaint is one of the few tools available to the weak, thus there is a tendency to magnify the losses.

Taking a longer term view, the fact that vast tracts of land are set aside as Selous Game Reserve and are not accessible to residents for farming, grazing or resource harvesting is also relevant to livelihoods. While lost access to land is significant in other East African situations (see Homewood and Brockington 1999), in this case there is currently still virgin land outside the reserve for agricultural expansion, and there does not appear to be resentment of the reserve itself. Our fieldwork reflected the pattern of Gillingham's detailed survey, in which resentment arose on specific issues, such as problem animals, but not on the existence of the reserve.

The reserve also affects transport. On the western edge of the study area, the community benefits from the fact that SGR grades the road from the park gate to Kisaki station. However, in the core study area around Bonye and Sogea Mbele, the fact that it is 'on the road to nowhere' could be precisely because the road has nowhere further south to go. Whereas the area to the south was settled 100 years ago, it is now uninhabited reserve, so the villages are on the periphery of the commercial activity that extends out from Morogoro town and Kisaki station. The road south from Morogoro to the villages veers off west to end at Kisaki station.

4.2 Proximity to hunting and tourism industries

In principle, the main economic benefit of living near a game reserve is that it is an asset for economic activity based on hunting and tourism, and thus a potential source of local

²⁰ During the fieldwork respondents usually used the term 'rodents' but in a way that included elephants as well as mice, thus making it very difficult to distinguish the role of wild mammals.

economic growth²¹. As noted above, hunting and tourism are currently small-scale. In the hunting operation²², approximately 4 of the 17 jobs are filled by locals (cleaner, tent boy, watchman and scout), according to the manager. Sable Mountain Lodge and its parent company, A Tent with a View Safaris, employ 5 residents from Kisaki – two at the lodge and 3 that have now been transferred to other lodges. Casual labour is also sometimes required. Other spin-off benefits from the nascent industries are small. Although 30 per cent of survey respondents report craft activities, there are no craft sites or tourist markets.

Both the tourism and hunting company make community contributions to Jukumu society, which amount to nearly TSh 10 million per year. In monetary terms these outweigh the wages of individuals. However, as they are spent on Jukumu running costs, the actual income is not seen or decided upon at local level. More substantial fees accrue to Morogoro District Council (MDC) from tourist hunting. These are estimated to be around TSh10 million per year, possibly more, totalling around TSh 70 million since 1992.²³

As Table 4 shows, income from hunting accounts for around 3.5 per cent of MDC income from locally-raised revenue (possibly more). Locally-raised revenue is small compared to transfers from Central Government, but is important to councils as the only income over which they have some discretion. It may be less important to local livelihoods, given that most expenditure on health and education comes from the centrally-transferred funds, while locally raised revenue is more used for administration (James, 2002). Written reports state that District Councils pass on a proportion of their hunting income to Village Government (e.g. MNRT, 2000; IRG, 2000), however there was no evidence of this during the fieldwork or in any accounts seen. Two further points are worth noting: reform of the distribution of hunting fees is a key plank of the regulations for the WMAs. The main share of hunting fees will accrue to the AA, not District Council. In the MBOMIPA project, the 25 per cent of tourist hunting fees has been passed down to village level for several years, although struggles over the exact distribution continue.²⁴

²¹ For example, potential for tourism initiatives are now emerging clearly around Ruaha (Walsh, pers comm).

²² Considered here as a product of SGR, where it began, although it has now moved out into the Community's hunting area (Gonabis) discussed below, as blocks in northern Selous have been shifted to photographic tourism.

²³ At national level there are clear procedures for the array of fees to be paid for trophy hunting, and their allocation to different parts of government, including District Council. However, rules vary inside and outside protected areas, within CWM programmes, and are described differently in different sources. According to a Wildlife Division report of 2000 (MNRT 2000), usual practice is for District Councils to receive 12 per cent of the total game fees, but under SCP, Morogoro District Council should receive 25 per cent of the game fees for Gonabis. (Others, (e.g. IRG, 2000) say that the DCs 25 per cent share is of the 75 per cent that accrues to Treasury, equivalent to 17.5 per cent of total game fees.) According to SCP, income from *inside* the reserve goes 25 per cent to the TWPF, 50 per cent is retained by SGR, and of the remaining 25 per cent, 25 per cent accrues to MDC (i.e. only 6.25 per cent of the total). If MDC were to receive 25 per cent of estimated game fees for Gonabis, this alone should amount to TSh 17.5 million per year. However, data from SCP for each financial year from 1992-93 shows income accruing to Morogoro DC from hunting was around 8-10 million TSh in most years, and this was from all hunting blocks (4 inside SGR plus Gonabis). These figures seem low compared to other verbal reports of income accruing to MDC from Gonabis, such as in the realm of TSh 18 million. Thus there is a lack of clear data on this point. The budget line in Morogoro District Council accounts for 'other income,' which includes game fees from Gonabis, was TSh 47 million in 2000, of which game fees are reported to be the main component.

²⁴ Shared equally among the seven Pagawa villages involved, it averaged TSh 0.6 million (or US\$700) per village in 1999. In 2000, the funds went to villages in a neighbouring Division. Since 2000, income is shared among 19 villages, thus averaging around TSh 85,000 per village (Walsh pers comm).

Table 4: District income from trophy hunting fees (estimates for 2000-1)

	Fees from trophy hunting per year
Estimated income to Morogoro DC	TSh 10.1 million
% contribution to DC income	
- as % of DC locally-raised revenue	3.5%
- as % of all DC income, from local and central government sources	0.6%

DC = District Council

Sources:

Data on MDC fees earned from all hunting blocks is from SCP (Dr Siege pers.comm). This accrues from blocks MK1, Y1, LA1 and R3 inside SGR and Gonabis. 10.1 million represents the average for 97-98, 98-99 and 99-2000.

Data on council income is from James 2002.

4.3 The game meat quota

The game meat quota is equivalent to approximately 800 kg of meat per village. Though this might not appear of great significance in villages of over 3,000 people, it has developed as a major issue in the area for several reasons. When it began, in 1990, it was welcomed as a marked departure from the forceful approach to poaching control. Beyond this expression of goodwill, there are two tangible benefits. Firstly, it provides a legal supply of game meat for which people have a high preference (IRG, 2000; Roe, 2002) at low prices. Typical prices are 300-400 Tsh per kg, which is a fraction of the cost of beef or goat meat. Secondly, it provides income to village government. This varies with the quota and fluctuating costs of securing the meat, but in 2000-2001 was in the range of TSh 322,000 per village per year.

However, these benefits are small. Reviewing the quota for the whole of the nineties, IRG (2000) reports that revenue sometimes cannot even cover the cost of hunting, that villagers do not have money to buy the meat even at TSh 300 per kg, and there is evidence that profitability may not match that of illegal uses. There are also negative implications for livelihoods:

- The quota could be seen as a quid pro quo for setting aside Gonabis. Thus villagers have gained a small meat supply through the quota, but have lost access to meat hunting for themselves in Gonabis²⁵. While data is limited due to the illegality of bush meat, data for Tanzania indicates that bush meat plays a key role in diets and the meat trade is an important earner for a minority (Roe, 2002). It cannot be assumed that overall access to game meat has increased. It is clear that income from its sale now accrues to village government with a likely reduction for poachers and traders.
- Villages comprise several sub-villages, which can be dispersed. Thus many do not know of the meat or do not buy it. For example, at Sogea Mbele, 60 per cent of respondents to the Ladder survey had not bought meat. Two thirds of those said this was because of lack of money. At Kongwa, 70 per cent had not bought it. Here lack of supply (partly due to

²⁵ This is not to say that hunting was fully legal before, or never happens now. Technically informal hunting was illegal before if done without a permit from District Government, and according to SCP staff locals never applied for permits. Thus there was zero legal hunting before. Illegal hunting no doubt occurred and occurs. However, it is now a much greater crime to poach in a gazetted Hunting Area, and more likely to be detected. Nevertheless, kudu kebabs were openly on sale for 50 shillings in the village. Thus the actual drop in local bush meat hunting is unknown. A retired Wildlife Department officer estimates that the percentage of households involved in poaching dropped significantly during the nineties.

meat being rotten when it finally arrived at Kongwa) and lack of interest were also factors.

- Expectations were raised and have not been met because the full quota is never delivered. For example, in 2000, only 116 out of the total expected of 260 animals (45 per cent) were killed (Jukumu data). The average for 20 villages from 1991-99 was 58 per cent. (see Appendix 3 for further details of low quota delivery). The frustration that this generates bears little relation to the small scale of benefits at stake (also noted by Gillingham, 1998). People are frustrated that promises are not kept, that they have been cheated and also that they do not know why. Though hard to value as a livelihood impact, it is clearly negative. Frustration with Jukumu and the Wildlife Department was such that villagers made their own plans for a contractor to come to kill the quota. However, permission was refused by the Director of Wildlife, as this would be tantamount to permitting resident hunting which is not possible in a Trophy Hunting area²⁶.

'We will be satisfied with the meat, but where is the ugali? Some meat goes to Duthumi but not to here. You have to buy the meat of the animal that ate your crop yesterday' (Sogea Mbele participatory fieldwork).
'At first people were active. Now they don't see the benefit and don't come to meetings. Last year Kisasi got only three animals. Village Government set up a special account for meat money but now it's getting empty' (a mzee²⁷ and member of Kisasi village wildlife committee).

The Community Wildlife Officer explained the many practical obstacles to delivering the full quota: ammunition is very expensive, transport difficult to arrange and he is short of staff. The window of opportunity is small because the legal hunting season is only a few months, the practical season shorter still as the grass is still high in September, and as trophy hunting activities in Gonabis have increased, it is more difficult to fit meat hunting around it (Kauzeni, pers. comm.)²⁸. These are all understandable but are not understood by villagers. SCP staff in Dar also pointed out that in other zones scouts cull on foot and villagers carry the meat themselves. 'They are the only ones who want the service done for them'. Their suggested ways forward include extending the hunting season, involving the hunting company more, and providing a mix of dry and fresh meat (dry meat being easier to store and transport).

How important is the meat income earned by Village Government to local livelihoods? This question begs three others: how substantial are the earnings? What does Village Government do with it? How relevant is this boost in expenditure to livelihoods of residents? We consider each in turn, using data and opinions from Bonye Village Government and Sogea-Mbele sub-village.

As noted above, game meat income is variable, depending on the quota and how much of the costs are paid by VG. In 2000, Bonye Village Government's net income from meat sales was TSh 322,600 or US\$ 220. As table 5 shows, this increased Village Government revenue by 50 per cent²⁹. If all villages earned similar amounts, the aggregate of net meat income to village

²⁶ Although IRG 2000 reports that in 1999 Jukumu obtained a licence which permits sale of game meat outside the SCP area, the clear message from villagers and officials in 2001 was that this had not happened.

²⁷ Male elder

²⁸ SCP staff in Dar explained that the community season used to include January, February and March as well, but this fell outside the legal season so the Ministry put it back. However, the permitted season could be extended by the Director of Wildlife. They also pointed out that in other zones of SCP, scouts do the cull on foot thus vehicle problem do not arise.

²⁹ Net meat income doubled recurrent village income if a once-off earner from a tractor sale is excluded. If all income is totalled – recurrent, tractor and meat – then one third was derived from the game meat quota.

government institutions was US\$4,100. Estimates for 2001-2 were similar, but data from the nineties indicates lower earnings, probably due to villages paying ammunition costs.

Table 5: Contribution of meat earnings to Bonye Village Government

	1999- 2000, Actual TSh	US\$
Total income to main village account	380,540	409
Gross income from meat	322,600	346
Net income (less transport & other direct costs of sale)	186,600	200
Net meat income as a % of total main account income	49%	

See appendix 3 for details.

Thus it appears that meat income can make a large percentage boost to village government income, but the shilling amounts are small. It's significance lies in the fact that VG has few other substantial income sources – virtually none that can match these amounts. Meat provided by far the largest source of income in 2000, and the second largest, after a water contribution, in 2001. However, if 50 or 60 per cent of game fees for Trophy Hunting in Gonabis were devolved to an AA, and if about half of this was available for distribution to villages (assuming one nineteenth each), then Bonye VG's income from game hunting would be \$1,300 and thus of considerably greater significance in village terms. At MBOMIPA, 9 Idodi and Pagawi villages have already earned income on this scale.

How does increased village income affect livelihoods? Participatory Rural Appraisal (PRA) discussions with Sogea Mbele residents suggest that Village Government is important to them, though less immediately so than sub-village government³⁰. There a multitude of very local institutions (savings societies etc) but very few that link the sub-village or village to higher levels of authority. However, analysis of how village government income is spent suggests that little goes into local investments. In the 1999 game meat accounts, TSh 105,930 of gross meat income was spent on allowances and office costs, TSh 57,000 was paid to Jukumu, leaving just TSh 13,100 (US\$15 equivalent to just 7 per cent of net meat income) on other expenditure which could be classed as development: helping a hospital person, court cases, contribution to the football club, and contribution to Nyerere's condolences. The breakdown of expenditure from the main village budget, is slightly more encouraging: total expenditure comprises roughly one third on each of 'development expenditure' (loosely classified), allowances, and other office costs. Nevertheless, the amount being translated into pipe repairs, market construction, or health costs, is small³¹. Furthermore, the vast majority of survey respondents, and particularly the poor, did not know where money from the sale of game meat goes (64 per cent, N= 69) or what it was spent on (83 per cent).

Before dismissing the small village expenditure as irrelevant to livelihoods, two facts are worth bearing in mind. Firstly, some people did talk about how game meat is used for useful

³⁰ When discussing all institutions, participants at the PRA meeting at Sogea Mbele said that sub-village government was more important to them than Village Government. Nevertheless, when asked to show with leaves how they would like trophy income to be apportioned at different levels of government, Village Government was clearly the main recipient (59 per cent of leaves), over the sub-village (43 per cent), District (11 per cent) or National Government (0 per cent). Lack of knowledge about village decisions in the study area and also in MBOMIPA (Murphree 2000) indicate that there are weaknesses in communication and participation between Village Government and village membership.

³¹ Data from MBOMIPA indicates that about half of VNRC income is spent on scouts and other wildlife management, and about half is handed over the village treasury for 'development expenditure' (not detailed). Villagers report benefiting from services provided (such as health care improvements) and a reduction in village levies that would normally be needed to pay for such services (Walsh 2000)

expenditure, such as repairing toilets or acquiring cholera medicines for local sale³². Secondly, assumptions that income spent on ‘allowances’ is wasteful and inequitable may need to be tempered. Allowances are no doubt concentrated among a few, and offer a convenient way for decision-makers to reward themselves. But at the same time, the quality of village leadership does affect residents – particularly given the role of Village Government in liaising with other villages or higher bodies, and carving out its share of attention or resources. For example, one reason for the delay in addressing the Gonabis boundary was said to be that the Village Chairperson had been ill for some time. Money for allowances may (or may not) affect the quality of leadership.³³

‘Money that goes up does not come down. We want to control it here’
Sogea Mbele resident explaining why hunting fees should accrue to Village and sub-Village Government.

4.4 Establishment of Gonabis and the WMA

The rationale and potential benefits of setting aside land for the buffer zone (now pilot WMA) are clear. By pooling land, the 19 villages formed an area large enough for wildlife habitat and management. This is what makes it possible to be leased out as a hunting block now, to be used for meat hunting for the village quotas, and to be considered a pilot WMA. Recognition as a WMA has led to a great deal of project, policy and donor interest, and some direct affects. It was a key ingredient that led Intercon to negotiate with the community when they wanted to extend their trophy hunting area, and hence to payments of around TSh 3 million a year to Jukumu. Much more substantial financial benefits should flow once the WMA guidelines are gazetted to allow for trophy fees to be channelled to AAs. For example, game fees paid by the hunter to government in 2000 were around US\$82,000 (Tsh 70 million). If 60 per cent of game fees were to stay with the AA, a US\$ 50,000 boost (TSh 42 million) to local revenue would be massive. Other economic rights for AAs are also envisaged (Mabugu and Mugoya, 2000).

The core question is what is the opportunity cost to villagers of setting aside the land? This varies considerably between the 19 villages that provided some of ‘open’ land for the buffer zone³⁴. Bonye village and the sub-village of Sogea Mbele have several reasons to feel the burden of Gonabis more than others: Bonye report that they contributed more land, and their land contains most of the wildlife that provide the meat and trophy quotas; as Gonabis is adjacent to them they have lost open land that they would normally use, whereas for villages further from the reserve such as Sesenga the immediate use value of buffer zone land is lower; and finally farmers of Sogea Mbele (report that they) were moved from good paddy land inside what became Gonabis. Thus our fieldwork represents the views of the most negative sub-village, rather than the average of the 19 villages. But in so doing, it well demonstrates the issues involved.

Inside Gonabis, agriculture, grazing, and local hunting are not permitted, while natural resource harvesting can only happen through arrangement with the Wildlife Department and/or scouts. However, interpretations of the significance of these restrictions for Bonye livelihoods differ widely. It was generally reported that the land is unsuitable for farming. A

³² The cholera medicines were supplied in 1999 and appear as revenue not expenditure in the 2000 accounts, because they were sold. Nonetheless this may have provided valuable, subsidised and timely access to essential treatment. The survey also found that among the 12 respondents that did know how meat income was used, they mentioned health services and development expenditure.

³³ the impressive Bonye Executive Officer, with his detailed accounts and budgets, has continued for the last 6 years despite reporting that his intended salary of TSh 6,000 per month does not get paid.

³⁴ As noted above, there are different reports concerning the number of villages that actually contributed land.

wildlife department official involved in the early nineties reports that Sogea Mbele residents originally supported the proposed boundaries and were not farming there. They later started farming there on purpose, in order to oppose the Gonabis plan. However, residents (mainly men) of Sogea Mbele described with some vehemence how they lost prime paddy land: 'It's Kauzeni's border that took the food from us!' they complained (Kauzeni being the energetic Wildlife Officer in the area). They said that over 20 people lost farming land. Two complainants then took the research team across the Gonabis border (with permission from Wildlife Division staff) the following day to point out the plots they had been moved from. The land they had been given instead was said to have inadequate water for paddy.

There are also complaints that Sogea Mbele residents have lost access to wild plant resources. Women at Sogea Mbele said that when they go to collect reeds for mats they are chased away (participatory fieldwork July 2001). Implications for pastoralists are also not clear. It was reported that the area had been abandoned by Masaai pastoralists when it flooded. However, now that it offers good grazing, it is not clear if they would value returning to it.

The disputes over a few hectares inside Gonabis may seem trivial in the broader scheme of a 70,000 ha WMA and the process of devolving game management rights. The debate over costs and benefits needs to be understood in the wider context, in which three factors are key:

- any snapshot fails to reveal the political, economic, and personal forces at play over the years, in which Gonabis is just one issue among competing interests. Different parts of the boundary have been disputed by villagers at different times, with some disputes involving councillors, MPs, and officials from national departments, all of whom would be expected to bring existing agendas and tensions (for example, tensions between the Wildlife Department and District Council have run high over other conservation issues, such as poaching by government scouts). The dispute over Gonabis is part of the larger debate among the 19 villages over how the benefits and costs of wildlife management should be shared.
- the debate typifies the confusion and lack of information at local levels, that surrounds wildlife issues. There are vastly different interpretations of what 'Gonabis' is, where it is, whether boundaries are confirmed, and how the boundaries came about³⁵. This apparent confusion is partly a result of very limited information flow and participation – for example, it was acknowledged that women were not included in the original activities. It is partly an inevitable outcome of the fact that stakeholders have different priorities so have different perceptions of 'reality.' But it also reflects the genuinely fluid situation of policy and practice.³⁶
- the aim of Jukumu and SCP is to realise the benefits of managing a WMA and acquire trophy fees. Jukumu members explained that there is a minimum size required for a hunting block: 800 km², unless wildlife is highly concentrated, in which case it can be 700 km². So far they only have 700 km², and believe they cannot reduce if further if they wish to qualify for devolution of trophy fees as an AA. Thus a few hectares of paddy

³⁵ For example, Gonabis is defined in many different ways. The women's map drawn during a PRA session did not show Gonabis at all, as they said they had never been told the boundaries. The men's map showed 'Kauzeni's border' that they rejected and 'their border' that they proposed, arguing it is still unresolved. Others see it as a fait accompli. There are events, such as a river changing its course, and a bulldozer clearing the wrong boundary, that play crucial parts in some chronologies.

³⁶ For example, in 1991 Gonabis was being treated as a WMA, being hunted by Intercon as an extension of their hunting block, and was legally still an open area.

cannot be excised without jeopardising the whole. Although SCP staff in Dar pointed out that there are hunting blocks with less than 700 km² and Gonabis has slightly more than that, the perception on the ground is that every square kilometre is crucial in order to qualify for hunting.

While these livelihood impacts of Gonabis cannot all be quantified, it is clear that they are important to Sogea Mbele residents and also to on-going debates about the future of the WMA. While some compromise may be possible, some of these opportunity costs are unavoidable if the WMA concept continues. Perhaps more likely than a change in the distribution of costs is a change in the benefits. Opportunity costs fall more heavily on some villages (such as Bonye) whereas benefits are to be equally distributed. However, some villages could be in a position to renegotiate this due to recent changes in the Jukumu Constitution. Previously, if a village left Jukumu they could not take their land back from the community wildlife area (pilot WMA). That clause has now been deleted (Jukumu Society, undated (a); Jukumu Society, undated (b)). This gives every village a potential veto on the WMA (assuming all 70,000 ha are needed), but particularly increases the bargaining power of villages such as Bonye that contribute the wildlife-rich land. The current plan is still for benefits to be distributed equally among all 19 villages, but as new benefit flows arise, they may be able to renegotiate this. On the other hand, once the area is gazetted as a WMA, or if Jukumu seeks land tenure rights (as mentioned by some) as well as AA rights over wildlife, the negotiating power of individual villages over land use would be diminished.³⁷

4.5 Establishment of Jukumu Society

The existence of the Jukumu Society as an institution is entwined with the creation of the geographical area of the WMA, the livelihood impacts of which have already been considered. Beyond that, the implications of the institutional change embodied by Jukumu are subtle but important for local livelihoods.

The obvious points first. Jukumu spends money on ammunition – to supply the game meat quota and deal with problem animals – employs 19 scouts, and pays allowances of its members (Table 6). These expenditures provide useful local services or local incomes, though of course are not equally shared. Jukumu’s income derives mainly from the tourism and hunting contracts, and a share of village government earnings from meat sales. It could be argued that these funds, all of which are from or for villagers, would be used more beneficially at village, sub-village or household level. On the other hand, without Jukumu, earnings would probably not match current levels.

Table 6: Main categories of expenditure and income of Jukumu Society

Expenditure	% of total	Income	% of total
Scouts	50	Intercon Hunters	18
Ammunition	21	Sable Mountain Lodge	41
Allowances	23	Meat sales/ VG contributions	15
Total	10 to 15 million shillings per year*		

Source: Jukumu planned budget for 2002. Estimated total income was 16 million shillings, but in previous years there have been income shortfalls and budget cuts.

³⁷ This may all change again as Jukumu will need to fit with the forthcoming AA/WMA regulations. Once a WMA is gazetted, it seems difficult for land to be withdrawn unless Government is willing to degazette it.

This brings us to the second obvious point about Jukumu's relevance to local livelihoods. Its creation has enabled donors and government to channel support, resources, and limited wildlife use rights to local level: the meat quota, some problem animal control rights, SCP contributions to Jukumu costs, a great deal of policy attention, access to information and training, etc. Its existence has opened up some new wildlife opportunities so far, and offers the potential for more as a WMA³⁸. If Jukumu received 50 per cent of trophy game fees from tourist hunting in Gonabis (as well or instead of the Intercon fee), its income would roughly quadruple. As the Bonye Village Executive Officer commented on Jukumu: *the villages couldn't have done it alone because we needed 700 km² for a hunting block. We couldn't work at ward or division level to get the wildlife area.*' However, his caveats are also worth noting. He added: *'but its taken too long and is not realising the benefits. Its proving difficult for the villages... The good thing is that Jukumu is not in the Government Structure. So if it doesn't work, villages can take the land back.'*

While rights and resources have flowed down to Jukumu from outside, they also flow up from more local levels to Jukumu:

- Kisasi village suffered a direct loss of income and power, as the deal it thought it had made with Sable Mountain Lodge was supplanted by the contract with Jukumu.
- All 19 villages have been contributing financially to Jukumu from their meat earnings (though contributions for ammunition, transport and general running costs are now being waived according to some reports). Apart from the meat itself, they have not received any shares of wildlife income from Jukumu.
- Previously (and elsewhere in Tanzania currently), wildlife and village scouts were managed by the Village Wildlife Committee or Natural Resources Committee. Today the village wildlife committees have a specific job to do in organising meat sales, but nothing else as the rest is done by Jukumu.
- Information over wildlife management is concentrated within Jukumu³⁹. Although some information flows back to villages, via the Jukumu Representatives and written reports to Village Government, the fieldwork suggested that it spreads little further than this, and does not reach sub-villages. Twenty eight per cent of survey respondents (N= 82) said they did not know what Jukumu does, and about half saw it as a game guard organisation. Two thirds had not participated in the recent village elections for Jukumu (rising to three quarters among poor households)⁴⁰.
- Jukumu is seen as powerful, for example in relation to the establishment of Gonabis. This will certainly be increased should it get Authorised Authority and land rights.

Thus Jukumu has added an institutional layer to the web of wildlife and livelihood related institutions that shape wildlife opportunities. It opens new opportunities but removes the locus of power further from households. Relatedly, it is the subject of a vast amount of suspicion, criticism and misinformation from below, but plaudits from above. Discussions at sub-village level revealed very little understanding of what Jukumu is, and a perception of it as an outside body confused with GTZ, SCP and Government. This issue relates to a wide

³⁸ Although at MBOMIPA, also a flagship project receiving policy attention and support, Village Natural Resource Management Committees were the main focus on institutional strengthening. Only in 2000, once the emphasis on formation of AA's in national policy was confirmed, did they decide to form a single association for the purposes of wildlife management (Walsh, 2000). The community body has just been registered.

³⁹ Problems were also encountered at MBOMIPA: although wildlife power and revenue is concentrated at village level in VNRCs, some committees began to identify themselves with the project rather than being accountable to the rest of village government. Thus a concerted effort was made to reform committees and clarify their responsibility to village government (Walsh, 2000).

⁴⁰ The main reasons were that they were not there or not informed - which indicates the issue is about participation in Village Government, not just Jukumu (Ladder Survey data, 2001).

and on-going debate about the role of Village Government and whether it can and should be the main focus of institution-building and empowerment at local level.⁴¹

'Is it government? It belongs to donors not the village' Comment on Jukumu at Sogea Mbele

Criticisms of Jukumu have now turned into mobilisation for change. In the 2001 elections of village representatives to Jukumu Council, there appears to have been large turnover. In Bonye, one was re-elected ('because he was popular') but the other two were replaced. The new members described how, since that election, the six villages that have most wildlife have pushed for change. The constitution has been amended and the old chairman voted out (reportedly receiving 9 votes out of 57). It was reported that the old leadership was seen as biased with⁴² the SCP advisors, and the GTZ that had created Jukumu was not 'empowering' the people. The new chairman, with 38 votes, is said to be 'in favour of empowerment.' Others told us that the 'project' and GTZ were opposed to his appointment. While this was not confirmed by SCP staff, questions over his past credentials, including poaching activities, were raised.

It is impossible to judge the local politics at play here from a distance. But from a livelihoods perspective this process could be a positive sign, if at least some residents are taking more control, and not being passive recipients. Such processes are difficult but, taking a long term view, they are one way by which residents challenge, change, resolve and improve their situation. Similar conclusions have been drawn elsewhere, such as at MBOMIPA and in Namibia's CBNRM programme, where obstacles and disputes have of course also arisen. Implementers attempt to build on grass-roots criticism to develop constructive participatory processes (Walsh, 2000; IRDNC and Svendsen, 2001).

'The old constitution said that when a village members wants to leave, the land remains in. Now it's changed. They shouted. ... Under the old constitutions, most of the money went back to Jukumu. Paying for bullets etc. We shouted, and now they have waived paying for bullets'. Jukumu Council member from Bonye village, July 2001.

4.6 Employment of Jukumu scouts and problem animal control

The 19 scouts are paid an allowance of TSh 20,000 per month. This is an important employment opportunity for those that get it: equivalent to selling about 8 tins of sesame, 2 goats, or earnings from casual labour every day. Apart from the obvious point that there is one job per village, relatively little is known about who gets access to this work. The decisions seem to be made at village government level. Each Village Wildlife Committee originally selected 6 scouts to be sent for GTZ training, and the one Jukumu scout came from this group. The Bonye scout is the son of one of the sub-village chairmen.

The wider relevance of the scouts to local livelihoods stems from their role in dealing with problem animals. Once incidents are reported to Jukumu, scouts are sent to deal with it. In July 2001 they reported they had killed 5 elephant and 8 hippo during the year. However, ammunition is very expensive (TSh 3,000 per bullet) and often scarce. Thus they usually use blanks to scare animals away, which draws complaints from villagers. Sogea Mbele residents said they were better off when there was a Government Scout who lived in the village, and used real bullets. As one woman put it, *'if you shoot one, the rest stay away'*. However, given

⁴¹ For example, Professor Shivji argues that community wildlife management should be done through existing village institutions and agreements between them, while the focus should be on making village government truly democratic. Counter arguments are that resources and skills will inevitably remain inadequate at the village level and, particularly for natural resources, management on a larger scale is needed. (Walsh, pers comm).

⁴² Its not clear if 'biased with' meant biased by them, or biased in their favour, or, more likely, both.

budget cuts and decentralisation, this alternative would probably not still exist in the absence of Jukumu scouts. When government scouts were devolved from the Wildlife Division to the District Council in 1994/5, three quarters were dismissed, leaving just two District scouts. Another alternative, used elsewhere in Tanzania but not in SCP areas, is for villages to run their own scouts, with funding support from the Tanzania Wildlife Protection Fund (TWPF). TWPF pays scouts an allowance of TSh 5,000 per day when on patrol and pays commission to the village when poachers are intercepted (for example, 10 per cent of the value of a trophy involved). However, according to the Law Enforcement Section Officer in the Wildlife Division in Dar, these scouts focus on poaching issues not problem animal control.

4.7 Overview of direct livelihood impacts

Impacts of the various wildlife developments on local livelihoods are diverse, positive and negative, differ substantially between villages and individuals, and are mediated through important institutions. Table 7 summarises the different types of livelihood impacts for residents, indicating scale and distribution where possible.

To summarise the main findings:

- The main positive impact on households arises from cash earnings – but only for those few that gain jobs or positions. Cash flows to households are currently minor supplements⁴³.
- The main negative impacts are constraints on other activities: farming, grazing, and natural resource harvesting, due to problem animals and loss of land. These are concentrated among particular villages.
- The main mixed (good and bad) impact arises from institutional change provoked by the project. Local level institutions - village Government, Jukumu Society and District Government - all gain some resources, but there are severe problems of weak accountability and information flow.
- The most noticeable absence of impact is in market opportunities, a sense of local economic change. Actual diversification of the economy or livelihoods is minimal.
- The situation is extremely fluid, and there are many different interpretations of impacts.

⁴³ This conclusion is shared by others assessing CBC. IRG's report to the Wildlife Division concludes 'wildlife utilisation can at best, only supplement other forms of agricultural and non-agricultural income in some project areas' (p.57).

Table 7: Current impacts¹ on local livelihoods from wildlife and tourism developments

Who gains/loses?	Cash and other benefits	Negative impacts
Employment (mainly or all male)		
19 scouts employed by Jukumu Society. 1 per village	Allowance (20,000 Tsh per month each), health care, food	Away from home & fields (though at least not far).
Cashier and typist of Jukumu	TSh 240,000 per year each	
4 staff at Intercon camp	Wages, 7 months of the year. Local work	
5 employees of Sable Mountain Lodge & Tent-with-a-view safaris (from Kisaki)	Permanent wages and allowances	
Allowances, occasional work (mainly or all male)		
10 JS Committee Members & 5 Board Members	Meetings allowances Average TSh 72-86,000 / person/yr Statua	Time input, disputes
47 JS Council members, 3 per village	Allowances for 3 meetings per year. Avg, TSh 13,400 /person/yr Status	Time input, disputes
Village Government allowances: wildlife committee, watchman.	Allowances paid from meat sales income TSh 55-65,000 total/yr	
Casual work at Sable Mountain Lodge. From Kisaki.	Ad hoc casual work (e.g. for building the swimming pool)	
Meat seller, meat caretaker. Could be in all 19 villages.	Allowance, meat: TSh 20,000 – 30,000 total/yr	
Occasional participants in project activity: guiding, translating etc	Ad hoc	
Access to game meat		
Households purchasing game meat from village quota. In theory in all 19 villages.	About 500 kg of meat per village Preferred, cheap meat	Frustration at unfulfilled promises
Most households		Reduced flow of illegal game meat. Increased risks to poachers and traders
Constraints on farming		
Farmers close to SGR and Gonabis*. Particular concern to women.		Wild animal damage ² to crops: loss of bananas, rice etc
Sogea Mbele farmers (20 households were moved). Men and women		Loss of farm land to Gonabis. Shift to less productive paddy land.
Farmers close to SGR and Gonabis. Women and men		Reduced access to thatching grass, reeds, honey, fish
Physical assets		
	Grading of road from SGR to Kisaki. Investment in schools, water supply	Villages north of Selous are 'on the road to nowhere' Infrastructure investments not sustained/sustainable
Institutional change		
	Income to village government, District Council, Jukumu Society. Devolution of some rights from central govt.	Locus of decisions & information shifts to Jukumu from village level

1: the table does not include *potential* impacts, such as may occur when the wildlife regulations are signed into law.

2: wildlife damage due to, for example, rodents, is widespread across the area. Damage due to wildlife associated with living near a reserve, such as elephants, is concentrated among reserve neighbours.

Impacts with respect to attitudinal change may be greater than impacts on local livelihoods at present. Certainly at policy level, the narrative that has developed concerning the success of SCP and MBOMIPA has been important in winning support for further change. At village level, several SCP reports state that residents now see wildlife as a source of benefit not just a

problem. This fieldwork did not further test conservation attitudes, but did seek to capture whether people perceive wildlife as a business issue. There was little sign in village conversations that this is so. Jukumu Committee members and some village leaders focused more on the fact that they can earn tourist hunting fees as soon as they are gazetted and registered, rather than on enterprise development. Other residents showed little awareness of either potential.

We do not know the full distribution of each kind of impact, but survey data suggests that poor households have less access to the tangible benefits of meat, and to information and decision-making. Table 8 categorises respondents as having low, medium and high participation and knowledge, based on whether they voted in Jukumu elections, bought game meat, and knew what village income had been spent on. Though sample sizes are small, it is notable that no poor respondents have high involvement. Half of them have low (or no) involvement, compared to only a third of middle and rich households.

Table 8: Degree of involvement in wildlife issues by wealth group

HH wealth ranking	Knowledge of and participation in wildlife issues (% of respondents)			
	Low	Medium	High	N
Poor	50	50		30
Middle	32	63	5	19
Rich	35	60	5	20
All groups	41	57	3	69

HH = household

Those with high involvement answered yes to all 3 questions: have you ever voted in Jukumu elections; did you buy game meat last season, and do you know anything that meat quota income has been spent on? Medium participation represents yes to 1 or 2 questions, while low participation represents no to all three. Source: wildlife questions added to the LADDER survey in Sogea Mbele and Kongwa, July 2001.

How significant are the financial earnings of individuals in total? The summary in Table 9 (details in Appendix 4) shows that 30 local residents earn direct income, 15 earn substantial allowances, and possibly over 250 earn minor allowances from wildlife⁴⁴.

Table 9: Summary of financial earners and earnings among the 19 villages

	No. of earners	Amount per person TSh per year	Aggregate earnings	
			TSh Per year	US \$ Per year
Wage earner ¹	30	240,000 – 480,000	10.8 mn	12,800
Significant allowance earner ²	15	70,000 – 130,000	1.5 mn	1,800
Minor allowance earner ³	256	7,000 – 15,000	2.5 mn	3,000
TOTAL			15 mn	17,600

1: scouts, workers in the tourism lodge and hunting camp, 2 Jukumu employees

2: Jukumu Chairman, Board Chair, Secretary and Committee members

3: Jukumu Council members, Village Government Wildlife Committee members (funded from meat sales), meat sellers in up to 19 villages.

The figures are based on many estimates and interpretations of incomplete data collected in the field (see Appendix 4), therefore figures have been rounded and should be used as rough estimates only.

Thus for 45 households, their livelihoods are substantially boosted by wildlife – but this is not many in an area of 10,000 households. For the other 250, 10,000 shillings or so is no doubt a welcome injection – worth a goat a year but not more than that. Making assumptions about

⁴⁴ There may be some double counting here if the same household earns wages and allowances.

replication across the 19 villages, the total direct earnings of local households amount to around TSh 15 million (US\$17,600). However, it is notable that in the standard village surveys among 90 households across 3 villages in the area, there was not one mention of income from wildlife or tourism⁴⁵.

The negative impacts on farming and gathering have not been quantified, as there is insufficient data and excessive disparity in interpretation. Nevertheless, it is clear that they are a major concern for some. Furthermore, whereas the positive cash benefits accrue to men, the negative impacts on farming are big concerns for women⁴⁶.

To date, direct benefits of wildlife have been concentrated in local institutions rather than households. The changes affecting each institution are summarised in Table 10. Revenue accruing to institutions from wildlife is so far twice that accruing to individuals from earnings or allowances. This ratio will be magnified under WMA plans. To date, the lower level institutions gain least. Table 11 summarises the rough totals earned at each level (again, the fluidity of the situation and roughness of the estimates must be noted).

Table 10: Institutions affected by wildlife and tourism developments

Institution	Role
District Council	Currently earns 25% of the game fee from Trophy Hunting. Employs wildlife officers
Jukumu Society	Created for wildlife management. Funded by donors and village meat sales.
Village Government (19 villages)	Organises sale of meat and earns cash. Elects members to Jukumu council. Loses other roles to Jukumu.
Kisaki village	Lost the direct income from Sable Mountain lodge (to Jukumu)
Sub-village government	No role
Private sector	Investment opportunities as permitted by government rules and market limitations

Table 11: Wildlife related earnings of different institutions, Tsh'000s¹

	Game meat quota ²	Tourism lodge	Hunting in Gonabis	Total
Bonye village	0.186		0 ³	
19 villages	3.55 ⁴			3.55
Jukumu	2.5	6.7	3.0	12.2
District Council			17.5	17.5
Total	6.04	6.7	20.5	33.2
Direct household earnings				15.0

1. rough data, for indicative purposes
2. some other wildlife income is not included, such as 'wildebeest' in Jukumu accounts and problem animals in Village Accounts.
3. according to some documents, Village Government receives a share of the trophy income from District Council. This was not reported by VG officials and did not appear in the budget, so is entered as 0.
4. although gross meat sale income for all 19 villages is known, net income after costs is not. Thus this is simply a multiple of the data for Bonye.

⁴⁵ In additional questions on wildlife, tourism and Jukumu, 3 respondents mentioned that family members had been or were involved in hunting or tourism operations. But there was no mention of income from this in the core survey data.

⁴⁶ However it is noted at MBOMIPA that the benefits of game meat harvesting and sale have shifted from just men (as poachers and traders) to the whole village, male and female members (Arnold, 2001).

The District Council earns 5 times what the village governments combined do, and Jukumu earns 3 to 4 times as much. In the national perspective, local institutions from District to Village level have gained resources, rights and attention from national level or from national assets (SGR and wildlife). From a local perspective, the livelihood significance of institutional changes is hard to quantify. Strong local institutions are needed to develop this remote area, and they are perceived as more likely to invest in the area than national government. But they also suffer from problems of low accountability⁴⁷. These in turn make it less likely that institutional funds will be spent directly on livelihood needs.

At all levels, a large share of wildlife income goes on operating costs, leaving very little for development expenditure. Should wildlife income increase substantially, the key challenge will be to control the operating costs, so that an increased proportion of income flows down to the level where it affects households. The draft WMA guidelines of January 2000 actually insist that *at least* 40 per cent of the net income shall be used in the management of a WMA and therefore not for direct local benefits (Appendix to Majamba, 2000). A Wildlife Division report (Mabugu and Mugoya, 2000) recognises that more benefits need to flow to households, recommending the current focus on community benefits continues only as an 'interim inducement to conservation.' In the longer term, a 'system of shares and dividends from wildlife should be targeted at the household level' (Mabugu and Mugoya, 2000, p33). However, the same report notes that the typical set-up costs for a WMA are about TSh 100 million (US\$ 125,000), thus making it difficult for villagers to declare any dividends initially.

One final implication of institutional change is hypothetical but may be the most significant in the larger scheme of poverty reduction strategies. A key concern arising in the wider Tanzania LADDER fieldwork is the plethora of produce and marketing taxes set by Village Governments and District Governments. These are major burdens on the poor: the enterprise taxes stifle small-scale commerce, while the flat-rate development levy is highly regressive (James, 2002). Thus if a new source of income could reduce the pressure for local government to turn to such unhelpful tax bases, it could be of significant benefit. This is already noted as a benefit in MBOMIPA (Walsh, 2000; Murphree, 2000) where village income tripled to approximately TSh 1 million per year per village from hunting quotas. At both village and District Council level, income from wildlife already roughly matches or exceeds income from the development levy.

Finally, there is the absence of impacts, such as market opportunities, new local dynamics and a sense of change. Table 11 above shows that institutions as a whole gain more than individual households. Much of what is earned by individuals comes from allowances rather than earnings. There is no sign that the institutions are using their wildlife income to develop new strategies or stimulate investments. There are relatively few jobs directly in commercial enterprise, and there is no evidence of spin-off enterprises emerging⁴⁸. The only potential enterprise to date is the campsite, which was set up by the project with very little effort to make it a commercial tourism attraction. It has no defined product, niche appeal, or marketing strategy.

⁴⁷ Marginalisation of village members in Bwakira Chini ward, in terms of information and benefit, is also noted by IRG, 2000 (p62).

⁴⁸ Murphree (2000) also found that at MBOMIPA little diversification appeared to have developed: beyond hunting, there has been limited attention to honey and woodland products. He recommended that MBOMIPA explore tourism and woodland product development, as well as means to tap into international markets more effectively for hunting. Recently, the possibility of a major tourism investment has arisen (Walsh, pers. comm.).

The overall impression is not one of individuals carving out new opportunities: income is passed by agreement or procedure from one level to another, and recipients of positions or fees are decided by one organisation or another.

5 Implications, options and challenges

These findings have implications for two different sets of policy issues. Firstly, the analysis of current livelihood impacts can be used to define ways in which the SCP programme could further enhance local benefits. Secondly, the findings raise the bigger issue of whether and how wildlife could be used as a component of building a vibrant non-farm economy. This debate goes well beyond SCP and indeed beyond community based conservation, touching on issues of rural development, tourism development and cultural attitudes.

5.1 Enhancing livelihoods through Community Based Conservation

The SCP approach taken to date, for very understandable reasons, has focused on building trust, investing in visible local infrastructure, employing scouts, delivering meat, and setting up institutions to manage wildlife/WMA and acquire future rights. These are important, and without the institutional rights, the local level will continue to be excluded from financial flows emanating from wildlife. But the overall approach so far seems to have involved little detailed assessment of the project from a livelihoods perspective, and little emphasis on building long term economic trajectories around wildlife enterprise.

The livelihoods analysis reported here is one small snapshot in a complex and rapidly changing arena. It is clear that thinking within CBC is already looking well into the future, when WMAs are operational. Events on the ground will have changed since the fieldwork, though will still be nowhere near the schemas described in CBC reports. Analysis in the Bonye area does not necessarily reflect patterns elsewhere within CBC, particularly given this is seen by SCP as the most difficult area in terms of local participation and as a WMA with relatively low economic potential compared to others. That said, a core conclusion is that more can be done to enhance the contribution of CBC to local livelihoods in the study area.

First there are some issues of overall direction. They are based on the findings in the study area, many of which will be specific to SCP or those villages. Thus generalisations about current impacts cannot be drawn. Nevertheless, the suggested priorities also have relevance beyond SCP to the current debates on the direction of CBC. Indeed the recommended priorities echo many of the themes already explored by the Wildlife Division (eg in IRG reports), but are worth reinforcing. Priority strategies to increase the value of wildlife to local livelihoods are:

- Focus attention on wildlife as an economic asset, for diversification of livelihoods and diversification of the rural economy;
- Ensure wildlife management strategies support existing livelihoods, particularly agriculture which is the mainstay; and
- Maintain access to wild resources (particularly plant/woodland products) for coping with vulnerability.

Achieving these three implies a number of approaches:

- Focus more on benefits to individuals, not just institutions;
- Prioritise dealing with negative impacts, such as conflicts with farming, and not just increasing cash flows;

- Encourage devolution of rights, resources, information and benefits below the WMA/Jukumu level where possible, to village and sub-village level;
 - Seek mechanisms that increase flow of information to and from household/sub-village level (taking great care not to raise expectations unduly) and strengthen the capacity of ordinary residents to influence the direction of wildlife management;
 - Aim to develop a wider range of enterprises – not just hunting, not just wildlife-based and not just operated at the level of Jukumu⁴⁹;
- and, the most subtle but potentially largest shift of all:
- Seek to shift perceptions about the role of wildlife and the institutions that manage it: seeing wildlife not just as a source of cash to be shared out at different levels, but an asset to be exploited through different opportunities⁵⁰; seeing institutions as catalysts of structural change, not just levels of administration.

Box 2 illustrates how some similar problems or different approaches have emerged elsewhere. These issues will become all the more salient once the WMA is fully operational and earning more income. There is a risk that this will lead to further focus on the percentage shares of game fees, rather than addressing wildlife damage or building entrepreneurial attitudes. It may also further concentrate power and resources at the Jukumu level, as the most easily earned income will accrue to the WMA as a whole. Thus increasing accountability of Jukumu to villages is a key step to achieving greater livelihood impact.

In one sense, a greater focus on enterprise is already underway. Analyses of WMA options (such as Mabugu, *et al.*; Christophersen, 2000; Lungren, *et al.*, 2000) explore a variety of commercial hunting, tourism and wildlife options. They go well beyond discussion of shares of game fees, and see WMAs as having many commercial options. There are important references to encouraging the use of local labour and supplies, and valuing non-market linkages such as technology transmission in Mabugu & Mugoya, 2000. On the other hand, reality on the ground reflected none of this as yet. It is clearly a long term process. Much of the language of current policy continues to focus on ‘benefits’ and ‘shares’ rather than opportunities or profits (MNRT, 1998, see Box 3). Enterprise analysis so far focuses on the level of a WMA and AA, not on diversification options of households. A key first step is to clarify the rights of AAs relative to government authority. But another important challenge will be to untangle relationships between local entrepreneurs of different kinds and the wider community or AA. Putting hypotheses into practice will require more than just legislative change or technical enterprise advice. Attitudinal change, at all levels, and a sustained process will be needed. These would go well beyond the CBC programme, and indeed the Wildlife Department. Thus the issues are taken up further below, in relation to other sectoral policies. But first, some other specific issues in relation to SCP arise from the livelihood findings.

The meat quota: The meat supply has been of enormous value over the years. It transfers a resource of tangible value, and provides a visible benefit, appealing to both consumers and village government. However, given the frustration it now provokes, on the one hand, and the number of obstacles to delivering the full quota on the other, this may be time for a re-think.

⁵⁰ IRG (2000) also argues that ‘conservation must increasingly become part of local people’s economic base’ and wildlife use should be diversified from trophy hunting to include curio sales, tourist campsites and walking safaris.

Box 2: Similarities and differences with experience elsewhere

This is not the place for a comprehensive comparison of these case study findings to the CBNRM literature. However, in addition to comparisons already made in the text, it is worth noting some similarities and differences with two particular projects: MBOMIPA, because it is the other flagship wildlife project in Tanzania, and Namibia's CBNRM programme, because it includes explicit analysis of livelihood impacts (through the WILD project). While the themes are often similar, the details often differ.

Benefits concentrated within institutions not households.

A similar pattern is emerging in north west and north east Namibia, where Conservancy Committees have so far been the main locus of development. Craft production provides a strong exception however. The craft groups assist with training, but income accrues to producers (emerging findings from WILD in Caprivi and Kunene, Long, pers. comm.). Based on Mbomipa's experience, Walsh (pers. comm.) argues that it is essential that CBC strengthens institutions and not just generates benefits at household level, as otherwise the capacity to manage the resource, the private sector, and the development options is insufficient.

Accountability and communication between local wildlife institutions and residents. Inadequate communication has also arisen at MBOMIPA (and no doubt every CBNRM project ever developed). Murphree (2000) notes the '*apparent lack of tight linkages between the VNRCs and the generality of village membership... Most damning of all were the reactions of many who state that they had little knowledge of what MBOMIPA is about*'. Strategies adopted at MBOMIPA (Walsh, 2000; Walsh, forthcoming) including investment in building capacity of VNRC and now of the embryonic MBOMIPA association, and in both cases developing awareness of their accountability to Village Government. While such issues never disappear, it is noteworthy that on an exchange visit to SCP in the late nineties, MBOMIPA residents perceived a lack of participation and institutional development compared to their own experience.

Livelihood benefits from earnings of local institutions.

The problem of wildlife earnings being eaten up by administration is a common one. Nevertheless, there are also clear examples of expenditure benefiting livelihoods. Walsh reports that MBOMIPA income earned by Village Government is invested in essential services (health, education), and productive infrastructure (roads, irrigation). Thus he argues there is a direct impact on livelihoods, in addition to the reduction in local taxes and levies. There are also examples where collective earnings may be invested in developing the productive base. MBOMIPA villages support new income-generating projects. In Namibia, conservancy members at Khoadi Haas are calling for income to be invested in livestock kraals and other marketing support, and Torra Conservancy members have chosen to invest collective income in youth training (Vaughan, *et al.*, 2001).

Importance of transport at MBOMIPA, donor funds were used to improve the road through the villages. This had many positive affects for local residents, while also stimulating tourism: it encouraged tourists away from a road through the bush, and stimulated development of a craft shop and camp.

Diversification and enterprise development.

Reviewing MBOMIPA, Murphree (2000) recommended that the project explore tourism and woodland product development, as well as means through which to tap into international markets more effectively for hunting. Walsh reports that since then, progress has been made in exploring hunting markets and tourism opportunities. A major hotel chain, Serena, is interested in investing in the area and discussions have started. The new MBOMIPA community based organisation is setting up a board of trustees including local business people. A major factor driving the development of tourism in the Mbomipa area is private sector interest. So much so, in fact, that the project is focusing on trying to ensure due process in selecting partners, and on enabling the community to do its planning before entering into fixed deals.

Need for a cross-sectoral approach to wildlife as a development option.

The need to work across sectors is also highlighted in Namibia: '*For the [Namibian] conservancies to truly begin to support livelihoods in concrete ways and to be more than conservation/management institutions, there is a real need for the programme to develop implementation strategies that link poverty reduction, economic growth and sustainable resource use/management* (emerging findings from WILD, Long, pers. comm.).

Box 3: The language of benefits or enterprise? Distributing or stimulating?

The Wildlife Policy of 1998 has many welcome elements, with a strong emphasis on increasing community benefits from and participation in wildlife management, and expanding sustainable wildlife utilisation industries. Three of the seven elements of the 'Vision' (p.5) are:

- fair and equitable sharing of benefits;
- raise the contribution of the WL sector in GDP from about 2 per cent to 5 per cent; and
- contribute to poverty alleviation.

Under strategies, there is a short section on integrating 'wildlife conservation with rural development' which seeks equitable shares for communities from hunting and use of local labour. Another on generating foreign exchange aims to encourage private investment. Strategies for developing the wildlife industry include diversifying the tourist circuit, improving road networks, and promoting small-scale cropping. The words fair, equitable, distribution of benefits, participation, and stakeholder recur throughout. These represent a revolution in government attitude compared to a decade earlier. *However,*

- the emphasis is on *distribution of benefits* not opening up access to *opportunities*;
- there is a much greater focus on *adjusting the share* of benefits between levels of government, private sector and communities, through *state decisions* as to what is fair, rather than encouraging initiative to expand the overall cake. One section (p.13) talks of '*allowing*' communities to benefit from CBC schemes, and '*providing*' benefits;
- although there are a few mentions of the private sector, there is no reference to encouraging local *entrepreneurship* or dynamic growth processes; and
- There are only a few references to tourism development and no cross-reference to any tourism policy.

This is the policy of a ministry whose mandate is conservation, and it is neither a criticism nor a surprise that community benefit is seen as one means to that end: WMAs are to be encouraged 'with the aim of ensuring that wildlife can compete with other forms of land use that may jeopardise wildlife populations and movements'. But there are two more fundamental points to be made. The first is that the Tanzanian culture of government control remains influential in the wildlife sector, despite the desire to 'benefit' communities. Secondly, that conservation perspective of the wildlife division should not be the only part of government that relates to issues of wildlife and rural development.

The Rural Development Strategy (Republic of Tanzania, 2001) highlights the need for growth in rural areas, including the non-farm economy, but does not mention tourism (except as an example in a box figure). Natural resources are dealt with in a separate section, which includes the need to realise economic benefits as well as reverse degradation. However, beyond building capacity, revising legislation, and working with communities and the private sector, clear actions to increase economic benefits are lacking.

Either, delivery of the quota needs to be facilitated by changing procedures in relation to transport, the hunting season, and who hunts. Or, the promise and purpose of the quota should be reviewed. The current system tries to meet three objectives: a source of cheap (but not free) meat for consumers, a source of income (but with a small net profit margin) for local government, and source of funding for Jukumu's activities. If consumers are the main objective, delivering one carcass to each sub-village for free distribution may be better. If maximising wildlife-based income for local institutions is the objective, other options could be more profitable: processing the meat for commercial trade, selling the hunting rights to others.

Initiatives on game meat are an example where livelihoods analysis reveals a complexity of interests behind an apparently simple issue. Reducing poaching and providing legal game meat have a variety of impacts. At MBOMIPA, it was assumed that residents needed legal game meat, to reduce the need for them to acquire poached meat. In fact, it turned out that poaching was supply driven (by hunters' need for cash), not driven by demand for meat. Reduced availability for consumers was not a big issue. Once villages had their game meat quota they found revenues were small, supplies not so important, and debates over fair shares

were considerable. Thus they agreed to opt for sale of their animal quota to resident hunters.⁵¹ A similar example arises in Khoadi Haas Conservancy in north west Namibia, where poorer farmers recently argued in favour of selling zebra to professional hunters rather than using it for meat (of which they expected only a small share from the Committee: Vaughan, *et al.*, 2001). Different concerns about anti-poaching measures emerged in Zambia's Luangwa Valley (Long, 1998) and may also be occurring in Namibian conservancies. Where community anti-poaching patrols are in place, hunting continues clandestinely, but it is much more difficult to transport meat due to the presence of game guards. Thus irrespective of changes in meat consumption, networks of distribution have declined with possible negative implications for social networks. There are many possible implications for SCP: people may prefer commercial options over kilos of flesh, the different distribution networks for illegal and legal carcasses may have significance ... the main implication is to explore new options in the light of local priorities, logistical constraints, and the need to avoid frustrated expectations.

Buffers, borders and benefits: There is clearly a mis-match between the distribution of benefits and distribution of costs. If it is essential to the whole approach that the disputed land of Sogea Mbele stays within the WMA, there may be little scope to change the distribution of costs. Thus the solution may be to reconsider the distribution of benefits. Other communities have found consultative development of an equitable revenue sharing plan to be a painstaking but valuable process (Child, *et al.*, 2001). The process of gazetting the WMA, registering Jukumu as an AA, and conforming to the forthcoming wildlife regulations to achieve these, should provide an opportunity to resolve these.

If there is little scope to compromise on the borders, the permissible activities within those borders should still be reviewed. Diversification of livelihoods, whether to cope with stress or to respond to new market opportunities often depends on wild plant resources. Given that craft income was the most significant source of income based on wild resources in the household survey, ensuring access to craft materials is particularly important. Measures that increase access for resource harvesting deserve further assessment.

Scouts and problem animals: It would be impossible to prevent all wildlife damage to crops. But to invest more effort in dealing with problem animals is a priority from a livelihoods perspective. This may involve changes in patrols, ammunition supply, the licensing of scouts and weapons, or new roles for government scouts or other village scouts.

Jukumu society: The issues surrounding Jukumu are far from unique. The debate over the appropriate 'scale' of wildlife institutions has been critical to CBNRM for a decade (Murphree, 2000), due to the common mismatch between social units for managing people and enterprises, and ecological units for managing habitat and game. The debates about villagisation and decentralisation in Tanzania are also well established. While it is unreasonable to expect perfectly accountable local institutions, there are a number of strategies for reducing what seems to be a large gulf in this study area. These include mechanisms to increase two-way information flow, finding ways to devolve more money and responsibility to village level, emphasising village government as the source of legitimacy of the emerging AA, and valuing the current process of local opposition and debate over Jukumu as a means to eventual participatory consensus building.

⁵¹ This is not possible at Selous under current regulations, because Gonabis is set aside for tourist hunting not resident hunting. Nevertheless, it suggests that villagers may themselves prefer commercial options rather than a focus on kilograms of flesh.

Transport: Given that local livelihood priorities are to market agricultural produce successfully, it may be that the best contribution wildlife initiatives could make is to develop infrastructure that serves both tourists and traders. The news that GTZ is about to improve the road is welcome. However, the central Government has responsibility of maintaining the road using the trophy and other fees collected from the SGR.

Finally, the value of learning from livelihoods and actual field implementation is recognised. It is welcome that the policy reform process has drawn heavily on the pilot projects and on participants from CBC in SCP, MBOMIPA and elsewhere. But it is also noticeable that partial interpretations of local reality get exaggerated as they go up the chain, and that the reporting of these pilots is more rosy, and lacking in details of livelihood impacts.⁵² Ground-truthing based on detailed livelihood reporting is valuable.

5.2 Rethinking wildlife as an asset and opportunity for rural diversification

Is it possible to utilise wildlife as one asset for livelihood diversification, development of the non-farm economy, and rural growth? The fieldwork does not prove that it can, or explain exactly how. But it does illustrate the obstacles, and hence the trends that would need to be reversed. Experience from elsewhere can then be brought in to consider how this might be done in practice.

There are many reasons why household opportunities to diversify into new wildlife-based options are so limited in the Gonabis area:

- **Policy:** the wildlife policy change is not yet reflected in regulations. Until then, local rights to manage and exploit wildlife commercially remain limited, as do cash flows.
- **Focus:** to date energy has been invested in (i) getting legal backing for WMAs (ii) dealing with the ‘indecision and political manoeuvring’ (IRG, 2000, p 49) that arises from the absence of legislative framework and (iii) securing trophy hunting fees for communities (via WMAs). These priorities have dwarfed any attention to other enterprises and processes.
- **Location:** although it directly neighbours tourism blocks within SCP, tourists usually access these areas by air, and Gonabis is not on any of the main overland routes into SCP (e.g. via Kisaki).
- **Perceptions concerning the role of wildlife:** wildlife use is being perceived more as a route to community income than local economic stimulus and household-level opportunities.
- **Institutional focus:** Jukumu Society is removed from people and even village government, but has so far been the focus of development and devolution. While this is necessary for getting appropriate authority it removes benefits and attention from local level.
- **Political economy:** allocation of rights over wildlife and opportunities for profit is a political issue that not only involves a shift of power away from the central government, but is also tied up with substantial opportunities for personal economic gain, significant donor investment (generally with conservation objectives) and conflicting interests among

⁵² For example, IRG (2000, p.63) reports that income from selling the meat quota is ‘used in village development projects and for conservation activities’ – partially true. And that Jukumu’s income from tourist hunting companies is ‘distributed equally to all the village members’ – there was absolutely no sign of this during the fieldwork.

economic groups. There are thus few professional or economic incentives for those in power to encourage entrepreneurialism at the local level.⁵³

- Nature of hunting: sport hunting is a high value industry, generating high returns to the scarce resource, which is trophy quality animals in 'wilderness'. However, it is not labour intensive and has few upstream and downstream linkages. Thus even where it has developed, local economic impact is small.
- Patterns of tourism development: proximity to SGR does not necessarily stimulate tourism enterprise and market access outside the reserves given the current tourism routes and market segments. Given its inaccessibility, many come on fly-in luxury packages. Private sector interest is noticeably higher at Mbomipa, near Ruaha.
- Limited potential: as Booth & Games (1996) note, the buffer zones have limited commercial potential. It is mainly in sport hunting, with some tourism around Morogoro. However, the highest potential remains inside protected areas, and these remain separate from community benefits or market access.
- Lack of local product development: the few that do travel by road through village areas have little reason to stop in them. There are no craft centres or cultural shows to attract them, nor local cafes that explicitly aim and advertise for the travelling market.
- Entry barriers, credit, location, skills, and market access: mainstream hunting and tourism industries involve large up-front investments and commercial experience: difficult for a WMA let alone a local entrepreneur. Rural credit is scarce. Other enterprises, such as live animal ranching, production of animal skins, might be physically possible in the area in principle, but the distance from markets and lack of local business skills would be massive barriers to viability. SCP staff point out that major businessmen who have tried game ranching in Tanzania have failed, so it is not an option to introduce for community enterprise.
- Socialist legacy and attitudes to entrepreneurialism: Overviews of the LADDER research in Tanzania, Ellis & Mdoe (2002) comment that the legacy of past villagisation and nationalisation strategies is 'a society and polity that still, after 15 years of economic liberalisation, leans instinctively towards public control over private action... The public sector is still considered the career choice for anyone with the requisite qualifications, and private sector development in Tanzania tends to occur as a by-product of public office, rather than obeying the separation of public and private roles typically considered to characterise a market economy.'⁵⁴ Some observers remark on the 'tall poppy syndrome' still being influential in rural areas, meaning those that stand out above others get cut down to size.

In addition to these obstacles to 'new', market-based diversification, there are obstacles to 'old' subsistence exploitation of a variety of natural resources. These are restrictions on resource harvesting in the WMA, and lack of market development. There is often a lack of information and understanding on the role that wild resources play in livelihoods, and hence they get neglected in policy (Roe, 2002; Shackleton, *et al.*, 2000).

⁵³ While this is more discussed than documented, a case study of experience at Ruaha/Mbomipa (Hartley, untitled paper provided by the author) illustrates the conflicting economic interests and negotiations that were involved. Hartley argues that far from being unique, these processes are to be expected and illustrate 'why community-based initiatives are more likely to be controversial in implementation and variable in their success.'

⁵⁴ Interestingly, a sister project to LADDER, in Southern Africa is also identifying local attitudes and lack of exposure to enterprise as a key issue limiting diversification. In the Wild Coast of South Africa, for example, most perceive business to be about trading (hawking or micro shops), with few considering options in production or services. This is despite the plethora of policies aimed at catalysing tourism enterprise in the area (Ashley, 2002).

The list of obstacles appears daunting. Is it realistic to aim for creation of local growth through wildlife use? This is a matter of debate, for which wider experience from Tanzania and elsewhere needs to be considered. The potential seems considerable:

- Tanzania as a whole has massive tourism potential (UNCTAD, 2000; Wade, *et al.*, 2001).
- There is anecdotal evidence that tourism is expanding around the Southern Circuit (at 5 per cent per year, now totalling 5,000 visitors a year (Elliott, pers. comm.).
- It also has a very strong wildlife asset suitable for a range of other wildlife-based productive industries (Christophersen, *et al.*, 2000; Lungren, *et al.*, 2000).
- Other African countries have developed tourism to a much more substantial scale (Botswana, Kenya). Others are also successfully developing business in wildlife-based production, such as ostrich meat, crocodile skins, and live sale of game (as well outlined in Christophersen, *et al.*, 2000).
- Elsewhere community initiatives in tourism have expanded to the point where they are of local economic significance (Nicanor, 2001).
- It is early days and far too soon to rule out potential options. As the Wildlife Policy (1998) argues, the wildlife industry ‘remains underdeveloped in relation to its potential.’ (p.15). While the present system concentrates on tourism, hunting and live animal capture, it ‘has not promoted successfully other forms of utilisation such as farming, ranching and village utilisation schemes.’ Bearing in mind that liberalisation of the economy is relatively recent, and neither wildlife nor tourism departments are normally at the forefront of developing trade and competitiveness, there is everything still to be done.

However, effective support for these industries would be one large step. To get to the point where they are substantially contributing to rural development is yet further away. A single enterprise will provide a few jobs. A cluster of enterprises, with backward and forward linkages locally, is hard to develop in remote areas. Although it can happen incrementally, as a growth strategy it would probably require significant investment in transport, communications, and marketing, with considerable private sector involvement.

Once a tourism destination does take off, does this substantially boost livelihoods and reduce poverty? There is a remarkable paucity of data on this question at a destination level - looking below the level of the national economy and the trade account but above the level of one business. Research by Homewood and others on the Mara-Serengeti ecosystem notes that the number of households earning any income from tourism varies from 86.4 per cent in Talek (near Kya gate to Masaai Mara Nature Reserve) to 12 per cent and 3 per cent at Ngorongoro Conservation Area and Loliondo Game Controlled Area on the Tanzanian side (Homewood, *et al.*, 2001). Where 86 per cent of households are involved, it is presumably a significant component of livelihood diversification options. Nevertheless, they note that it is rarely the principle source of income, and the amounts earned are highly skewed towards the elite. Econometric studies examining national economic impacts are more rosy. Kweka, *et al.* (2001) find that tourism in Tanzania has a high output linkage to other sectors, thus its growth is likely to stimulate growth in related sectors. On this basis it counts as a ‘key sector’ for development of the Tanzanian economy. However, they note it has low income and employment multipliers.

The isolation and low infrastructural development of areas such as MRBZ put paid to any idea that commercialisation is easy. ‘Low potential’, ‘remote’ or ‘late modernising’ areas pose particular policy challenges, given that potential for both agricultural modernisation and for urban-oriented non-farm enterprise are low. But where wildlife exists, can it provide one

of the few sources of comparative advantage for such areas (Ashley, *et al.*, 2001)? Analysis elsewhere, such as South Africa, Nepal and Ecuador, indicates that in such areas the absolute level of tourism activity is lower than at mainstream destinations, but the significance to livelihoods is all the greater due to the paucity of alternatives. Tourism is valued as a means to greater access to communication and market exposure (Braman, 2001, Poultney & Spenceley, 2001).

This paper can only stimulate, not answer, the debate on the long term value of investing in wildlife enterprise. Taking into account the product potential in Tanzania, there appear to be three main reasons to maximise local enterprise benefits from wildlife-based industry. Firstly, if the commercial wildlife sector is expanding, as it seems to be, currently through incremental private investment, and shortly perhaps through WMA investment, it should be harnessed for poverty reduction where possible. Research on pro poor tourism strategies suggests that the ideal time to pursue them is when the core sector is expanding. Many decisions made at the start – for example about siting of facilities, consultation and partnership processes – can influence the degree to which developments are pro poor (Ashley, *et al.*, 2001). Secondly, wildlife enterprise may not be easy but the options for rural growth are not abundant and no ‘easy’ answers stand out. Tourism fares no worse, and in some ways fares better, than other potential rural goods and services, particularly given the small size of the Tanzanian domestic market and need to tap into international markets. Thirdly, a core finding of this research is that an entrepreneurial approach to wildlife utilisation, let alone a pro poor growth approach, has not been tried yet on the ground. The limited livelihood impacts to date are a reason to try a different approach, not to ignore the potential.

What policy shifts would be required?

If the aim is to make best use of wildlife assets in stimulating a local environment in which rural enterprise and diverse livelihoods can flourish, several policy directions are important. Specific recommendations would require detailed analysis of markets and the opportunities they create at household level. Nevertheless, it is worth outlining the different types of components of a wildlife-based economy providing options for poor people. This could include:

- Individually run businesses (micro-enterprise or self employment), such as production and sale of crafts, or supply of inputs (food, fuelwood) to larger businesses.
- Small-scale business, owned by one local entrepreneur or some form of community group: e.g. craft association, cultural centre, tyre-mending service, small-scale cane-rat farmer.
- Businesses owned or leased by the whole community (at AA level), such as hunting, accommodation, woodland product marketing. If operated locally, they may be small to medium size businesses. If commercial rights are leased to private operators, they may be small or large formal sector up-market operations.
- Privately run (formal sector) businesses, such as lodges, tour operators, medicinal plant marketing. Ideally these would make maximum use of local employment, casual labour and local suppliers.
- Local employees, engaged in the above.
- Investment of earnings – of individuals and the community – in measures that further support the productive base.

These elements are by no means static. Indeed, the constant interplay between employees and formal businesses is an important route to the emergence of local entrepreneurs. Similarly those supplying services or leasing rights to formal sector businesses are likely to evolve into

new commercial roles. There are a vast number of other ingredients necessary to make these elements work: trained human resources, commercial competitiveness, a conducive regulator environment. The discussion here will not focus on the detail, but on the broad policy directions.

The core principle is that efforts to stimulate enterprise and non-farm rural economy (NFRE) should embrace wildlife activities. At the same time, investments in wildlife should seek to stimulate entrepreneurial activities. Though current policy approaches to wildlife and rural development touch on these indirectly, further reorientation of CBC, SCP, tourism policy, reserve management, and rural development strategy are needed.

Attitudes

As noted above, attitudes towards wildlife and community involvement have already undergone two or three revolutions. Another revolution is required, however, to exploit the local enterprise opportunities to the full:

- local residents would need exposure to micro businesses and small and medium enterprises that can develop around wildlife, apart from the illegal bush meat trade;
- conservationists would need to go beyond a focus on benefits, to dynamic processes; and
- non-conservationists would need to incorporate wildlife and tourism issues into their thinking on local economic development.

Re-orienting CBC

As indicated above, CBC thinking would need to progress from exploring commercial options for WMAs, to exploring options for households. Legislation to allow the devolution of rights over wildlife use, and particularly trophy fees, is very important to alter the total distribution of benefits from national to local level and provide incentives for wildlife investment. But this is just one step. The current approach focuses on absolute levels of cash income, and on cash as a means to conservation change. Such income may still stop at the institutional level. In the SCP study site, only a fraction of institutional income reaches villages, and institutional mindset is not one of investing in stimulating local enterprise. So far, relations between national government, district government, and WMAs have been explored in detail. Encouraging household opportunities would involve analysis of options at household level, from the perspective of their overall livelihoods, and their relations with the WMA level. Difficult questions over to what extent individuals should be able to profit from natural resources conserved by the community will need to be addressed in each locality.

The shift would also involve further redefinition of the benefits of CBC. Conventionally, development benefits of CBNRM are seen as a means to conservation, and are categorised as either economic benefits, in terms of cash, or empowerment benefits, in terms of participation in decisions (product and process). These categories are too restrictive. It would be more useful to see cash benefits as just one part of a process of expanding economic opportunity.

Thus both cash flows and increased local decision-making are contributors to a longer term structural change in poor people's ability to respond to opportunities⁵⁵.

Enterprise development

Enterprise development would need to be a key component of such an approach, but this does *not* mean simply NGO or donor support to set up some community enterprises using wild resources, such as honey production. This is unlikely to be sufficient for three reasons. Firstly, the CBNRM field in Africa is littered with small enterprise efforts that were not integrated into the market and struggle to survive. Catalysing enterprise is not something that can be done by conservationists, or conservation-and-developmentalists alone (the Jukumu campsite could be considered a case in point). This suggests that CBC will need to become part of a wider cross-sectoral alliance for the WMA schema to be realised. Secondly, the operating environment and mindset need to be addressed, not just support to specific enterprises. This involves stimulating local awareness of commercial opportunities, discussing mechanisms for wildlife income to flow into commercial investments and not just village government running costs, using spatial planning decisions to facilitate commerce, encouraging dialogue between private operators and residents, and using the private sector to access markets. Thirdly, spin-off enterprises that are upstream or downstream of wildlife-based enterprise, but are not themselves based on wild resources can be invaluable. These may include supplies of food or building materials to lodges, and services for tourists, such as cultural attractions. Craft making is an unusual example that is both a user of wild resources and a tourism-linked industry. It is important not to ignore other more mundane supplies to tourism operations, such as food.

There is a host of good practice in stimulating enterprise development which highlight the importance of disposing of red tape, ensuring access to financial services and credit, business training, identifying lead sectors, engaging with the private sector, and starting off with market and product assessments. Means of bringing this into Tanzanian practice on tourism and wildlife are needed.

Types of enterprise and product

The appropriate type of product - tourism or hunting, large or small, luxury or budget - will vary by area and market. The larger scale and up-market enterprises are important as anchors, to provide employment, linkages, and visibility. But it is important to also encourage enterprises that can be run individually. For example (Lungren, *et al.*, 2000) notes potential for grass-cutter (cane rat) farming to supply meat, and this can be as a 'backyard' enterprise in rural Tanzania. Work on pro-poor tourism highlights the importance of providing market access for informal sector operators (Ashley, *et al.*, 2001).

Patterns of tourism development

Policy-makers have highlighted the importance of the growing tourism sector to the Tanzanian economy, and set targets to expand and diversify the sector. Despite the reported

⁵⁵ Focusing on long term developmental processes rather than snap-shots of cash flow also enables better integration of the developmental and sustainability objectives: instead of seeing a trade-off between short term cash and long term conservation, the issue becomes one of developing dynamic processes that interweave sustainability with expanded opportunity. Sustainability objectives of CBC are not analysed here but nonetheless remain important, and need to be integrated with the diversification goals discussed. There are some parallels here with Marshal Murphree's review of MBOMIPA, where the overall aim has already shifted from economic benefits as the means to conservation, to livelihood support as the end. He warns that a focus on cash benefits can ignore other important poverty issues and mask the synergy with conservation goals. A more important benefit is 'enhancement of resourcefulness,' or institutionalised capacity to deal with risk, uncertainty and change. The idea of resilience and adaptation are certainly critical to supporting long term livelihood development, though the approach outlined here would also emphasise capacity to exploit opportunity.

growth of tourism, it is clear that obstacles to realising potential are vast. It would therefore be inappropriate to call for a priority focus on developing *pro poor* strategies within tourism rather than on the core issue of creating a supportive policy and operating environment for *tourism growth* per se. On this point, it should be noted that the emphasis in the Wildlife Policy (1998) on expanding the system of regulations and fees from hunting to tourism may be counter to the overall approach of encouraging investment.

But the type of tourism growth also matters. The policy objectives of geographic diversification are very important for areas such as SCP: only if the southern route takes off will tourism have any substantial impact on poor people in the area. Other measures are also needed to maximise poverty impact. These include an emphasis on tourism in areas adjacent to protected areas, not only inside them; a focus on stimulating tourism-*related* enterprises, particularly small-scale and informal sector ones; designing transport and siting facilities according to goals of bringing tourists through poor areas; exposing local residents to what commercial opportunities tourism can offer. Trade-offs need to be recognised: the emphasis on ensuring high value/low impact tourism by facilitating access by air rather than road improvement to protected areas limits the amount of tourism activity, and infrastructure benefit, that can be expected around parks and reserves.

A wide range of products and niche markets need consideration. It is worth noting that recent UNCTAD survey data show that package tourists spend only 19 per cent of the cost of their holiday in country. This amounts to around one tenth (US\$220) of the in-country expenditure of non-package tourists (on business or independent travel: UNCTAD, 2001).⁵⁶ Thus local benefits from package tourism are likely to be substantially less and the value of developing independent traveller products needs to be explored.

Game Reserve Management

At present there seem to be minimal commercial linkages between SGR and its neighbours. Hunters and animals stray out. Poachers stray in. While there is admittedly much less immediate potential for SGR to stimulate local enterprises than in some other cases (such as local taxi services or a craft centre in reserves in KwaZulu Natal (Poultney & Spencely, 2001) new developments need to be planned with the linkage approach in mind. Stronger links are evident at Mbomipa/Ruaha, where the National Park management plan spells out investment opportunities, residents are among the investors and workers in the Park, and Friends of Ruaha is a local organisation that includes entrepreneurs and works with the Park.

Rural development strategy

The RDS currently focuses on agricultural productivity. The goals of encouraging growth and the non-farm economy are vague and do not mention tourism or hunting. While wildlife assets are not relevant across all rural areas, it is important to recognise their long term potential to stimulate growth in some rural areas. Unless rural development and poverty specialists engage in issues of wildlife utilisation and tourism development, these sectors will continue to be planned within narrow sectoral perspectives (generally conservation for wildlife and foreign exchange maximisation for tourism).

The question of 'spatial approaches' to rural economic development also arises. Until recently, co-ordinated economic development strategies for a specific locality had more traditionally been the preserve of urban or industrial areas, and rural applications have been

⁵⁶ Part of the expenditure paid to tour operators in their country of origin should get transferred to ground handlers and other service providers in Tanzania, but such fractions can be quite small.

more in developed countries (US, New Zealand, UK). But there is growing interest in spatial approaches in other countries of sub-saharan Africa, such as South Africa and Mozambique. The 'destination' basis of tourism makes it an obvious candidate for such a spatial approach, and pilot attempts have begun to apply it in areas with tourism potential in developing countries. Though not particularly encouraging so far (Rogerson, 2000; Ashley, 2002), it can be argued that this long-term, cross-sectoral focus on one area is needed to give a kick-start to tourism, or develop a critical mass (cluster) of wildlife-based industry.

Working across sectors

There is a noticeable absence of cross-referencing to tourism or rural development in CBC documents, to wildlife or tourism in rural development documents, and to CBC in tourism documents. A senior member of staff in SCP mentioned that the EU was working with government on up-grading the Tourism Master Plan but 'we hardly work with them'. Conversely, awareness among interviewees in the tourism ministry on SCP and CWM seemed low. Collaboration between sectors is essential.

Risk-reducing diversification

A secondary theme is the need to maintain opportunities for survival-driven diversification relying on wild resources to reduce vulnerability. This other type of diversification is also critical – not as an exit from poverty, but as a buffer for those that are trapped in poverty. However, this is not currently reflected in policy approaches towards CBC, management of protected areas, or rural development.

CBC reports focus heavily on wildlife and spatial areas for game management (GCAs, WMAs). But developing multiple-use areas and ensuring continued access for wild resource harvesting is very important from the perspective of the poor in many areas. This is particularly relevant to SCP in the Gonabis area, as trophy hunting, wildlife and scouts in the area seem to be resulting in a drop in harvesting of plant and fish products, and there is little evidence that benefits to date have accrued to women in the study site. The Wildlife Policy (MNRT, 1988) 'recognises the role of women and children' in relation to firewood, wild foods, fishing, small animals, plants and medicines, and includes a strategy to 'enhance women's access to natural resource products in PAs where appropriate'. But this theme has not been strongly developed in the raft of technical reports produced since then.

The Rural Development Strategy has reduction of risk and vulnerability as one of four key goals (United Republic of Tanzania 2001). But it does not mention access to natural resources in this regard.

6 Summary and conclusion

Livelihoods in the study area are affected by wildlife, SGR, SCP and tourism in numerous ways, negative as well as positive. In the last decade there has been substantial positive change in the policies and attitudes surrounding wildlife issues. Building blocks have been laid, but impacts at household level are slow to materialise in the study area. To date, overall direct livelihood impacts are limited, and are minimal with respect to diversification. Benefits from SCP and commercial activity are more at institutional level, which has also been the focus of policy attention. Given a lack of downward accountability of local institutions, these institutional gains have not been fully invested in supporting livelihoods. A core finding

therefore is that more can be done to enhance gains to livelihoods in SCP, particularly given the near completion of the current policy reform process.

Enhancing wildlife's contribution to livelihoods means:

- Focusing attention on wildlife as an economic asset, for diversification of livelihoods and diversification of the rural economy;
- Ensuring wildlife management strategies support existing livelihoods, particularly agriculture which is the mainstay; and
- Maintaining access to wild resources (particularly plant/woodland products) for coping with vulnerability.

Achieving these three has implications for approaches to wildlife management, particularly for increasing local participation in decision-making.

Key missing impacts are in relation to developing wildlife as an enterprise opportunity and a process of local economic change. This is not surprising, as it is early days yet – in terms of commercial development in the area, and in terms of local rights to use wildlife. But looking ahead, if wildlife use is to contribute to rural development goals, considerable attention needs to be invested in a long process of creating wildlife-based economic opportunities.

The case study identifies several obstacles to using wildlife as a growth pole of the NFRE. Detailed strategies to address these are not covered here, but it is clear that an attempt to do this would involve policy support from many sectors. To summarise, policy priorities include:

Within CBC,

- an emphasis on creation of opportunities, not just 'distribution of benefits';
- A focus on livelihood benefits at household level
- A balance between empowerment of institutions and empowerment of individuals, to enable collective management of resources while ensuring downward accountability of local institutions to their members;

Beyond CBC:

- Policies to both expand and diversify tourism, including the Southern Circuit and small-scale tourism-related enterprises;
- Development of parks and reserves in ways that increase linkages with neighbouring entrepreneurs;
- Attitudinal change from household to policy level: towards the importance of entrepreneurialism versus public sector control, and towards wildlife as an economic asset;
- Enterprise development: going well beyond classic community/NGO approaches, to strategies that develop markets, mindsets, and up-stream/downstream linkages; and
- Rural development strategies that view wildlife not just as something in need of more sustainable management but an opportunity to exploit for growth and for supporting coping strategies of the vulnerable.
- Cross-sectoral co-ordination, between growth, poverty, rural development, tourism, and wildlife sectors.

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Appendix 1

Table 12: Tourist Arrival and Receipts

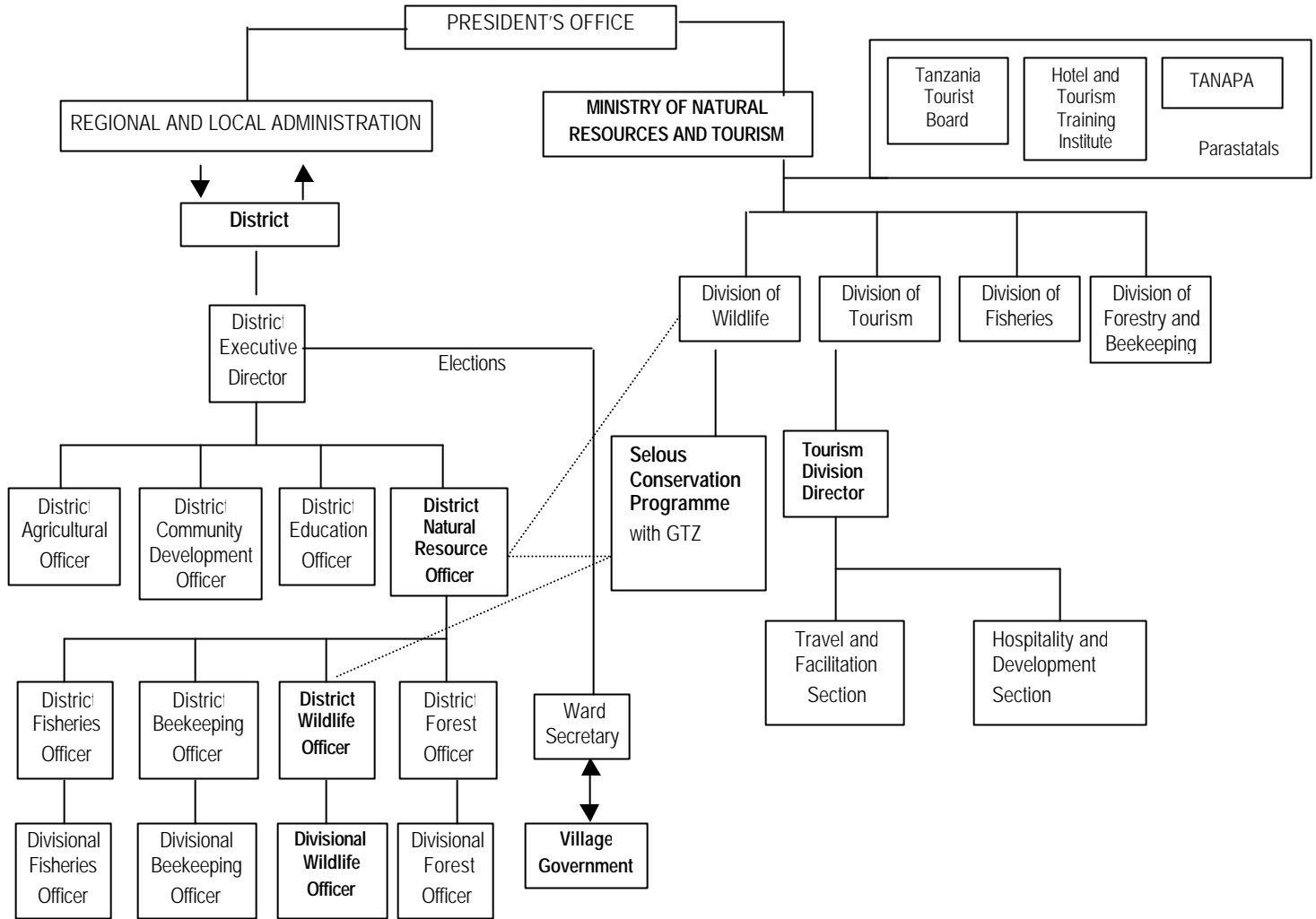
	1995	1996	1997	1998	1999	2000
No of tourists	293,834	326,192	360,000	482,331	628,188	501,669
Growth (%)		11	10.4	34	30.2	-20.1
Receipts (US\$ mn)	258.14	322	392.41	570	733.3	739.10
Growth (%)		24.7	21.9	45.3	28.6	0.8

Source: Tanzania Investment Centre website at: http://www.tic.co.tz/IPA_Information.asp?hdnGroupID=26&hdnLevelID=1.5

The rapid development of tourism dates back to around 1990. From the late eighties to 1998, arrivals quadrupled and tourism receipts increased sixteen-fold.

Tanzania is now the fifth largest African destination, in terms of tourism receipts, falling only behind South Africa, Morocco, Tunisia and Mauritius (WTO, 2001). However, sub-saharan Africa as a whole accounts for only 1.5 per cent of world tourism receipts (Frangialli, 2001; Wade, *et al.*, 2000)

Appendix 2



Bold: Highlights key institutions in management of wildlife and tourism

Institutional roles in Tourism:

The private sector role is not depicted in this organogram of government, but has evolved as public sector roles evolve. Until 1992, main tourism facilities were owned and operated by government, through the Tanzanian Tourist Corporation. Since 1992, the Tanzania Tourist Board (TTB) is charged with developing and marketing the country's tourism sector, while the private sector has moved into provision of tourism facilities. Government control lingers on. For example, the government maintains some hotels (Seronera Wildlife Lodge and Mt Meru Hills) through the parastatal Tanzania Hotels Investment Co. Ltd (TAHI). It is expected that these will be made available to non-government investors in due course, continuing the trend towards a free-market economy (Wade et al, 2001).

Institutional roles in hunting:

The Wildlife Division (WD) is the department authorised to formulate hunting and game utilisation procedures and regulations, to oversee game cropping for meat to sell, process trophies for local sale or export and live animal capture.

There are 36 hunting companies, members of TAHOA (Tanzania Hunting Operators Association) conducting tourist hunting, wildlife cropping and live animal capture. However, other figures have given 47 companies.

Community Based Conservation

Falls under the Wildlife Division and includes donor-funded advisors and programmes.

Appendix 3:

Table 13: Village income and meat supply from game quota, 1991-99 and 2000-1

Village Income from Game meat in Morogoro District 1991-9										1991-99		
	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9		Average	Total	US\$
Sesenga	90,000	61,400	85,050	57,000	187,530	210,300	366,410	197,950		156,955	1,255,640	1,349
Bonye	129,000	124,640	143,340	229,951	247,450	449,100	190,600	274,850		223,616	1,788,931	1,921
Kongwa	60,000	-	100,300	242,455	-	243,000	139,100	74,700		107,444	859,555	923
All 20 Villages in Morogoro District												
Total	1,455,000	1,219,670	2,055,727	2,732,968	3,639,685	4,896,725	5,186,980	3,858,565		3,130,665	25,045,320	
US\$	1,563	1,310	2,208	2,935	3,909	5,259	5,571	4,144		3,362	26,899	
Average	72,750	60,984	102,786	136,648	181,984	244,836	259,349	192,928		156,533		
US\$	78	65	110	147	195	263	279	207		168		

In addition to the meat income the original source include 'other' income from WL. In most years this is in the range of TSh 16,000-100,000 with an unusually high entry for 1997-8. There is no information on what it is or where it is from.

Adapted from International resources Group (2000)

Table 14: Game meat quota supply and variation in Morogoro District, 1991-1999

Percentage of quota supplied										
Village name	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9		1991-99 average
Kisaki station	89	44	62	69	46	100	85	85		73
Gomero	89	44	62	61	57	92	100	100		76
Nyarutanga	78	44	54	23	57	92	54	69		59
Sesenga	44	22	31	30	46	61	77	54		46
Milengwele	78	33	31	30	57	107	85	77		62
Vigolegole	111	33	46	76	57	84	77	77		70
Mngazi	78	33	62	38	57	76	69	69		60
Dakawa	78	44	62	54	61	100	85	69		69
Bwakirachini	89	44	54	61	38	76	92	85		67
Bonye	100	33	38	57	84	100	108	100		78
Mbwade	100	33	77	92	84	76	38	92		74
Tulo	89	22	77	46	7	38	0	38		40
Kongwa	89	0	54	54	7	54	69	69		49
Mvuha	78	44	38	92	138	107	69	23		74
Kiganila	0	0	62	69	0	84	77	31		40
Bwilajuu	0	0	46	46	84	92	46	31		43
Bwilachini	0	0	46	46	84	46	54	31		38
Magogoni	33	22	38	69	46	84	46	46		48
Lukulunge	78	22	46	76	92	123	54	61		69
Kidunda	0	0	62	7	69	30	23	77		34
For all 20 villages										
Average quota supplied	65	26	52	55	59	81	65	64		58
Meat supply										
Kg per village (average)	243	266	411	342	495	497	533	555		
Total Kg	4,850	5,326	8,218	6,840	9,900	9,933	10,668	11,094		

Note: where -, assumed to be 0, rather than data missing

Table 15: Contribution of meat earnings to Bonye Village Government, 2000–1

	1999- 2000, Actual TSh	US\$
Total income to main village account (B1)	380,540	409
Total recurrent income less one-off payment* (B2)	180,450	194
Gross income from meat	322,600	346
Net income (less transport & other direct costs of sale) (NM)	186,600	200
Net meat income as a % of total main account income B1**	49%	
Net meat income as a % of B2	103%	
Net meat income as % of all total VG income (regular, one-off and meat)	33%	
What if?	Net meat income	% boost***
VG had paid ammunition costs	51,800	14%
VG had not paid Jukumu contribution from meat income	236,000	62%
VG had also received one nineteenth of 25% of the trophy game fees	1.1 million	298%

* TSh 200,000 from sale of a scrap tractor

** The financial year is approximately July 1999 to June 2000 according to village accounts. Game meat income is based on sales of 14 wildebeest and 1 buffalo.

*** to main account revenue

Appendix 4

Table 16: Individual earnings from wildlife

Who	Number of earners	TSh/yr person	TSh/year total	
Scout ¹	19	320,263	6,085,000	
JS Committee ²	10	72,000	720,000	
JS Board ²	5	86,400	432,000	
JS Council ²	47	13,404	630,000	
JS Chairman, Board Chair, Secretary	3	128,000	384,000	
JS typist, cashier	2	240,000	480,000	
Intercon workers ³	4	480,000	1,920,000	
Lodge workers ³	5	480,000	2,400,000	
VG Government WL Committee ⁴	133	7,157	951,900	
VG: WL Committee chair & secretary	38	10,000	380,000	
Meat seller/watchman ⁴	38	15,000	570,000	
				US\$
TOTAL⁵	301		14,952,900	17,592
No of wage earners (240 -480,000 per year)	30		10,885,000	12,806
No of allowance earners	271		4,067,900	4,786
- of which, earn approx 70,000 – 130,000 per year	15		1,536,000	1,807
- of which, earn 7,000 - 15,000 per year	256		2,531,900	2,979

1, includes cost of food and health care

2, rough estimates only: based on JS budgets, unclear division between Council and Committee, and reported number of members of Board and Council

3, wage rates not known. Survey data used.

4, assumes the Bonye use of income is replicated across all 19 villages. Guesses 7 members per WL Committee

5, Sum of the above minus 3, to avoid double counting the Jukumu Committee members who are also Board, Chair and Secretary. If they do receive committee allowances also, their total income is greater than suggested. If they don't, the per person allowance of the other members is slightly higher than suggested.

JS: Jumuku Society

VG: Village Government

WL: wildlife