



WORKING PAPER SERIES

ENVIRONMENTAL GOVERNANCE IN AFRICA

**PARTITIONED NATURE, PRIVILEGED
KNOWLEDGE:
COMMUNITY BASED CONSERVATION IN THE
MAASAI ECOSYSTEM, TANZANIA**

by
Mara Goldman



WORLD RESOURCES INSTITUTE

Institutions and Governance Program

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Mara Goldman
December 2001

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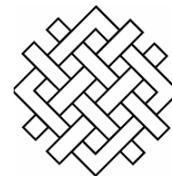


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Partitioned Nature, Privileged Knowledge: Community Based Conservation in the Maasai Ecosystem, Tanzania

INTRODUCTION

Community Based Conservation (CBC) has become the recognized trademark of what many claim is a “new conservation” unfolding across Africa.¹ In response to the recognized failure of top-down approaches to development and ecological limits of protectionist (“fortress”) conservation, “the community” has become the catchall solution for effective conservation *and* development.² CBC shifts the focus of conservation from nature as protected through exclusive state control to nature as managed through inclusive, participatory, community-based endeavors. To effectively make this shift, CBC devolves natural resource management to local communities and hence is often referred to as community-based natural resource management.³ However, in the process, the “community” is often reified and presented as an “organic whole.”⁴ Viewed as small and homogenous units, communities are seen as better positioned to effectively realize conservation goals, and as essential allies in expanding conservation beyond national park boundaries and into human-inhabited rural landscapes.⁵ While the hollow romanticized image of the community is itself problematic, so are the claims being made regarding the participation of communities in “new” conservation processes.⁶ A close look at various CBC processes across Africa suggests that while communities are now included in the politics and policies of conservation, they remain peripheral to defining the ways in which conservation is perceived and nature managed. That is, although conservation is expanding geographically, devolution and participation remain elusive or passive in nature.⁷ Nature is still partitioned into protected and unprotected units through the privileged knowledge of state and non-state conservation agencies.

¹ Hulme and Murphee 1999.

² Western and Wright 1994; McNeely 1995; McNaughton 1989.

³ While the two terms are often used interchangeably, Community Based Natural Resource Management (CBNRM) is often perceived as a more encompassing term, to better discuss projects that are not at all related to national parks or other protected areas. The famous CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) in Zimbabwe is often cited as a model CBNRM project (see Murombedzi 1999 on CAMPFIRE and Adams and Hulme 2001 for a review of the various forms CBC takes).

⁴ Agrawal 1997.

⁵ Neumann 1997.

⁶ On images of community, see Agrawal 1997 and Naughton-Treves 1999.

⁷ Agrawal and Ribot 1999; Pimbert and Petty 1995.

The geographic coverage of protected areas in Tanzania is already among the highest in the world, with twenty-seven percent of the total land area under some form of protected status. About sixteen percent is comprised of areas which prohibit human settlement (national parks and game reserves) and eleven percent is comprised of areas which allow co-habitation of wildlife and human settlements (Game Controlled Areas and Ngorongoro Conservation Area) (Leader-Williams 2000).

Agrawal and Ribot 1999 assert that when devolution is only administrative in effect, it is not devolution at all, but rather a deconcentration of central power. Providing communities the power to administer rules without providing the power to create and refute these rules brings claims of participation, devolution and democratization into question.

Local communities are, in the process, viewed as tools for, or “commodities” of, conservation rather than as active knowing agents.⁸

In this paper, I follow Ribot’s call to carefully analyze “new laws and projects masquerading as political decentralisation or community participation” by looking specifically at the new CBC agenda in Tanzania. In doing so I draw from Ribot’s reading of community participation as community “power-sharing in decision-making,” which must include the “real devolution of significant powers.”⁹ At times, I use “community” to refer to the “local villages” being targeted by conservationists, and at others, to imply a more abstract notion of organized Maasai societies.¹⁰ In this paper, I outline how, despite the rhetoric of devolution and community participation, conservation planning in Tanzania remains a top-down endeavor; communities and the knowledge claims of local people remain delegated to the margins. This is shown by analyzing the context of the new government policy document, planning papers, and subsequent policy, legal and academic debates regarding the building of a new CBC in Tanzania. I suggest that in addition to the difficulties associated with the transfer of power from state to community hands, there are also complex challenges that CBC pose to the culture or institution of conservation.¹¹ The intended (and at times unintended) landscapes of conservation are crafted for legibility, manageability and foreign scientific expertise, leaving little room for the inclusion of “indigenous” or “local” knowledge claims.¹² CBC initiatives which favor the inclusion of complex local knowledge systems and uncertain, unbounded ecological processes are difficult to administer, they do not fit into the neat managerial categories of conservation, therefore challenging the imagined (and at times created) landscape of conservation.

The second half of the paper addresses how the challenges posed by an inclusive and participatory CBC, as discussed in the first half, are particularly salient in the Maasai ecosystem, in Northern Tanzania. Here, many of the consequences or “constellations” of unsuccessful conservation projects further challenge the implementation of CBC initiatives. I discuss the need to address these challenges and engage Maasai as active knowing agents in the conservation process, the result of which may better match the political rhetoric and social and ecological goals of CBC.

⁸ See Ribot 1999 and Igoe and Brockington 1999.

⁹ Ribot 1999: 30.

¹⁰ While the homogeneity assumed in this use of “community” is extremely problematic, a more thorough analysis of the complex social relations embedded within villages and Maasai social-organizational units as well as the ways in which these different units relate is beyond the scope of this paper. See Hodgson 2001 for a nuanced look at Maasai communities.

¹¹ On the transfer of power, see Agrawal 1997; Ribot 1999, 1996; Agrawal and Ribot 1999.

¹² Scott 1998; Ferguson 1994.

The New Wildlife Policy in Tanzania: bringing the community into conservation

Unequivocally this shall be the beginning of a new chapter in wildlife conservation in Tanzania, the success and failure of which our children will live to witness.¹³

Tanzania is in the process of redefining its wildlife conservation agenda to more directly engage local communities. At the center of this movement is the new Wildlife Conservation Policy, drafted in 1998 (hereafter referred to as “the policy”).¹⁴ The policy purportedly moves beyond the outreach efforts of “community conservation” employed by the Tanzanian National Park Authority (TANAPA) by proposing real engagement through “community-based conservation.”¹⁵ The distinction between these two approaches is expressed as that between *passive* versus *active* participation. The approach employed by the “community- conservation” efforts of TANAPA involves communities as *passive* recipients of “park-outreach” benefits. *Active participation*, on the other hand, *actively* incorporates communities in the ownership and management of resources.¹⁶ The policy draws from the experiences of other countries (namely Botswana, Zimbabwe, and Zambia) as well as from pilot projects within Tanzania.¹⁷ To achieve “active participation,” the policy proposes the creation of a new category of land, Wildlife Management Areas (WMAs), where local people will have *full mandate* of managing and benefiting from their conservation efforts, through community-based conservation programmes”.¹⁸ As such, the new policy redefines the place for “community” within the conservation arena in Tanzania; the significance of which is expressed in the following words by the Director of Wildlife:

[This] point of departure towards accessing to the local communities the opportunity to manage wildlife on their land, in a category of protected areas to be known as “Wildlife Management Areas” constitute[s] a major “about turn” from the protection approach in conservation to a situation where rural communities will participate in resource planning and management, thereby benefiting economically from the resources they have lived with since time immemorial.¹⁹

WMAs and the Community: A Problem of Oversight²⁰

While WMAs are not yet an official category of land they are more than a mere policy suggestion. With still no concrete guidelines informing WMA creation or management, they are being initiated as pilot projects across the country. Still shrouded in ambiguity, the WMA concept has prompted much optimism for the future of community conservation in Tanzania, but it has also sparked much debate and much unease. A close reading of the policy and of subsequent discussions regarding the creation of WMA guidelines reveals the ambiguity and

¹³ WD 1999: 67.

¹⁴ URT 1998.

¹⁵ TANAPA’s Community Conservation Service (CCS) initiated the “Ujirani Mwema” program in 1991. Swahili for “good neighborliness,” the program works on improving relations with neighboring villages through the provision of benefits (e.g. the building of schools, clinics), outreach education, and conflict resolution.

¹⁶ On the distinction between active versus passive forms of participation see Hulme and Murphee 1999; Someshwar 1992; Barrow et al. 2000.

¹⁷ Wildlife Division 1999.

¹⁸ URT 1998: 31, emphasis added.

¹⁹ WD 1999: 68.

²⁰ Latour 1999: 38 suggests that the term “oversight” captures the two meanings of the “domination by sight, since it means at once looking at something from above and ignoring it.”

potential contradictions surrounding its conceptualization and plans for implementation. This suggests that the WMA concept ought to be approached with caution and perhaps an optimism tempered by a critical perspective.

Many of the inconsistencies and shortcomings of the WMA concept were pointed out at a roundtable discussion held in Bagamoyo, Tanzania in 1999 on the formulation of WMA guidelines. To begin with, as one of the participants acknowledged, the very definition of a Wildlife Management Area is contradictory and reflects a colonial conservation mentality.²¹ A WMA, as defined in the Wildlife Policy, "...means an area *declared by the Minister to be so* and set aside by village government for the purpose of biological natural resource conservation."²² This short definition powerfully dispossesses the very community the WMA is established to represent. As a cornerstone of community-based conservation, WMAs are defined through centralized state power for the sole purpose of conserving biodiversity. Additionally ironic is the proposed fragmentation of village lands into yet more protected areas to achieve this goal.²³

The emphasis of the policy is clearly to protect wildlife and the focus remains that of supporting and, "where necessary," enlarging the Protected Area (PA) network as the core of conservation activities towards achieving this goal.²⁴ Communities present a new means to improve wildlife conservation—they are transformed from enemies to facilitators of the conservation process. WMAs constitute an *extension* of the PA system, rather than an *alternative* to it, as evidenced by the policy objectives for wildlife protection.²⁵ Whereas the first two objectives discuss the protection and enlargement of the PA system, the third is "to promote the conservation of wildlife and its habitats outside core areas ... by establishing WMAs."²⁶ The "community" only emerges in the fifth objective, which states: "to transfer the management of WMAs to local communities thus taking care of corridors, migration routes and bufferzones and ensure that the local communities obtain substantial tangible benefits from wildlife conservation."²⁷ The

²¹ Sosovele 1999: 11.

²² URT 1998: 35, emphasis added.

²³ The current re-evaluation of land rights in Tanzania reflects a similar degree of irony and confusion.. The two new land acts of 1998 (the Land Act and the Village Land Act), celebrated for addressing the needs of rural Tanzanians in fact render most Tanzanians powerless and reinstate the absolute power of the President over all lands (as Trustee). Under the Acts, all land is designated either public, village or reserve status. It is not clear how a WMA will fit into this land-classification. Other official protected areas (eg national parks) are administered as reserve lands, under the authority of a public body. WMAs, however, are proposed to be established within village lands, which are to be administered by village councils. It should be noted that the President retains the power to "transfer land" from one category to another, and the power of a public authority to manage reserve land is not restricted. Additionally, there is still great uncertainty and apprehension regarding the meaning of 'general lands.' See Shivji 1999 a & b.

²⁴ URT 1998: 7.

²⁵ URT 1998: Section 3.2.1 of p. 8.

²⁶ The core protected areas in Tanzania are divided into four types: National Parks (NPs), where all human habitation and use are prohibited (outside of wildlife-viewing tourism); Game Reserves (GRs), where human habitation and use is prohibited but hunting is allowed on a permit basis; the Ngorongoro Conservation Area (NCA), with the unique status as multiple land-use area (It incorporates human habitation and use by Maasai "pastoralists" with wildlife conservation and tourism, under the management of a parastatal body); and Game Controlled Areas (GCA) (not listed in the policy), where protection is limited to controlled hunting, with other forms of human activities (farming and grazing) allowed and unmonitored.

²⁷ URT 1998:8. Specific benefits noted in the policy include revenues from wildlife tourism viewing enterprises established in the area and the regulated utilization of wildlife through local hunting.

“community development” aspect most characteristic of the CBC is presented in the policy not as a collaborative goal to conservation but as a necessary means to achieve the end result of an enlarged conservation system.²⁸

Communities appear in the conservation objectives of the policy only when they are geographically relevant to pre-existing PAs. They are not recognized as assemblages of individual decision makers and resource users, but are reduced to a single dimension of beneficiaries, and thereby supporters of conservation.²⁹ This approach differs little from the park outreach approach that the wildlife division is striving to move beyond and suggests that the “new” conservation being proposed in Tanzania differs little from the fortress model it is posed to replace.³⁰ In fact, the discussion of WMAs cited above closely resembles the community conservation program of TANAPA, which sought to “keep protected areas viable by enrolling neighboring communities in their preservation.”³¹ This strategic use of communities is also reflected in the activities of conservation NGOs who work closely with government conservation agencies in Tanzania. They too are focused on signing communities on to conservation projects primarily as a means to protect the integrity of the national park system.³²

Rather than embracing active participation, WMAs present new ways in which communities can be acted upon. Communities are clearly not to be trusted to completely take over the management of a resource as valuable wildlife, and therefore in the end, despite the discussion of a “transfer of management” of WMAs to local communities, “the State will retain the overall ownership of wildlife.”³³ As one of the many stakeholders, the community is entitled to receive “*user rights*” to wildlife, provided they follow policy guidelines outlined by the state (the Wildlife Division, within the Ministry of Natural Resources and Tourism).³⁴ While this provision of use rights to wildlife is a radical break from past wildlife conservation policies in Tanzania and a definite positive step towards embracing the community, it falls short of constituting active participation.³⁵ The allocation of use rights by the Minister (who also maintains the right to revoke such rights) reflects a top-down distribution of privileges to community members, rather than *active* participation.³⁶ Even where management rights are transferred, local communities are not recognized as capable decision-makers. Rather, they are seen as “subjects of the state,” or

²⁸ On the community development aspect, see Western and Wright 1994.

²⁹ Agrawal 1997.

³⁰ Neumann 1997.

³¹ Igoe n.d.a.: 2.

³² AWF n.d.a, n.d.b. In a speech delivered to Hillary Clinton during her trip to Tanzania in 1997, Patrick Bergin of AWF (African Wildlife Foundation) stated, “the uniqueness of Tanzania’s wildlife stems in large part from the fact that the parks and reserves are not fenced and are part of larger ecosystems. In order to be able to maintain this situation, however, Tanzania urgently needs to work with the communities and local government authorities in areas outside of parks and reserves, and to assist these communities by giving them the legal rights, the technical knowledge and the economic incentive to maintain wildlife as one form of land use in their areas.”

³³ URT 1998:6. By Tanzanian law, all wildlife in the county are under the ownership of the Director of Wildlife under the Minister of Natural Resources and Tourism. The exception are those wildlife that belong to TANAPA, by virtue of being located in national parks.

³⁴ URT 1998.

³⁵ Sosovele, et al. 1999.

³⁶ On revocation, see URT 2000. This distribution of use right privileges reflects the participatory forestry projects critiqued by Ribot 1999:48, where communities are allocated cutting “privileges” rather than rights to manage the forest. Ribot asserts that the legal structures of such projects, “assure that few decisions are in local hands except as a privilege allocated by administrative authorities.”

tools of conservation, that need to be “educated, informed and guided” through standardized training, technical assistance and supervision to properly manage natural resources.³⁷

The degree to which communities are guided to effectively manage wildlife conservation in their lands is reflected in the draft guidelines proposed by the Wildlife Division for the creation and management of WMAs. The guidelines, still in draft form and still being debated within policy circles, outline a detailed, highly bureaucratic procedure for interested communities to follow. The process that communities must navigate is so bureaucratic and cumbersome that it is prohibitive rather than inviting to local communities, and far from participatory.³⁸ A reliance on “scientific information and research results for decision making” has been noted as a “constraint” of the proposed process.³⁹ In order for a community to have a WMA established, the village council (local elected government unit) must first acquire an official title for all village land, a procedure which not only overshadows customary mechanisms regarding land tenure but often in the process radically transforms the fluid nature of customary tenure negotiations in place within villages.⁴⁰ The village must then prove, through systematic scientific data collection, the existence of significant wildlife resources (of economic value and ecological viability) within the area proposed for WMA status.⁴¹ An official land-use plan then needs to be prepared and approved by the District Council. The land-use plan must include a designated area set aside exclusively as a WMA within the communal village lands.⁴² Zoning is also conducted for other land-use practices within the village such as seasonal grazing, cultivation, forests, social services, and reserved land.⁴³ The delineation of “exclusive zones” is also suggested to accommodate the resource needs of “traditional communities” such as hunter-gatherers (Dorobo, Hadzabe) and pastoralists (Maasai), residing within a WMA.⁴⁴ Official land-use maps are presently being created with the guidance and technical expertise of outside NGOs (AWF Instituto Oikos) and District government officers, to prepare villages for WMA creation. It should be noted that these activities are strategically occurring in areas where conservation agencies would like to protect important wildlife corridors and grazing dispersal areas, such as the Maasai Ecosystem, discussed below.⁴⁵

Once official land-use plans and scientific inventories are in place, they must be approved by district and state governing bodies. An “Authorized Association” must then be formed and approved within the village to effectively manage the WMA.⁴⁶ Upon the Minister’s review and

³⁷ Ribot 1999:43.

³⁸ LEAT 1998.

³⁹ Sosovele, et al. 1999.

⁴⁰ LEAT 1998; Neumann 1997; Leach et al. 1999. See Shivji 1999a on the problems associated with village titling in Tanzania as envisioned in the Land Act (1998) and Village Land Act (1998). The most destructive outcome of village titling is the ease with which village land is then leased to non-village members and effectively put out of customary use by villagers..

⁴¹ URT 1998, 2000.

⁴² Wildlife Division 2000.

⁴³ Njoroge 2000.

⁴⁴ Severre 2000.

⁴⁵ AWF is actively working in partnership with WWF, an Italian NGO (Instituto Oikos), TANAPA, the Wildlife Division and District officers in this capacity in the Maasai Ecosystem in lands thought to be vital to the maintenance of wildlife corridors and dispersal areas.

⁴⁶ URT 2000. District Council approval is needed first, then the approval of regional authorities and finally the Minister of Wildlife and Natural Resources, through the Director of Wildlife. The creation of Authorized Authorities

approval, a WMA is declared within the said village. The village level Authorized Association, is not, however, in sole management authority, they are one of a long list of partners forming a *joint* management team for the WMA. Other partners include village, district and national governing bodies⁴⁷ and wildlife authorities (from TANAPA). Additionally, to “...ensure the success of community-based conservation,” the village (through the Authorized Association) is required to utilize officially trained village game scouts in administering their limited powers.⁴⁸ These game scouts must be trained at official government institutions, where they are taught “basic knowledge about methods of monitoring and sustainable utilization of natural resources.”⁴⁹

The guidelines outlined for the creation of WMAs suggests that local communities are only capable of “active participation” in the conservation process after receiving extensive “official” training and then, only in partnership with other key (and presumably more informed) players. In fact, in a recent speech at Mweka College of African Wildlife Management, the Director of Wildlife clearly spelled out his belief in the inability of local communities to effectively manage a WMA. He explained that in order to avoid the “legacy of failure of community imposed development organisations” characteristic of Tanzania, “it is necessary to put in place guidelines and regulations pertaining to the establishment and management of WMAs, which *must* involve many partners.” These partners, are to provide respective communities with “the necessary skills, money, and investment opportunities” to manage a WMA.⁵⁰ However, if one flips the coin to view these “partnerships” from the side of the state, local communities surface as “necessary” partners, to the enlargement of wildlife protected areas, or as Director Severre states in his speech, as “defined operational cushions to core protected areas, thereby increasing the total area under effective conservation.”⁵¹ The Director further clarifies the importance of WMAs in protecting those habitats defined as wildlife corridors and dispersal areas, which he claims currently have no legal form of protection. To assure that “community-based” conservation in WMAs runs smoothly, the government will not only be involved in training community members, but will remain an active partner, and will for “sometime...partially have its hands off but its eyes on, to ensure that sustainable conservation and development is attained.”⁵²

The Unmanageable Uncertainty of the Local

In reviewing the social and legal aspects of the new CBC plans for Tanzania, a team of lawyers and scholars made the following suggestion:

also involves a long process of guidance and approval, where a village first establishes a CBO, whose constitution and structure needs to be approved by the District Council. The CBO then needs to apply to be upgraded into an Authorized Association (WD 2000).

⁴⁷ These bodies include the Village Council, District Council, and the District National Resources Advisory Committee at the District level. The latter to be made up of representatives of eight different district officers, one Authorized Association representative, and outside experts (who will have advising powers only). At the government level the members are to be from the Wildlife Division and Ministry of Natural Resources and Tourism.

⁴⁸ URT 1998:14; LEAT 1998; URT 2000.

⁴⁹ Sekamaganga n.d.; WD 1999.

⁵⁰ Severre 2000:15, emphasis added.

⁵¹ Severre 2000: 14.

⁵² Severre 2000: 21.

Since the [wildlife policy] encourages the use of indigenous knowledge in the conservation of natural resources, the NRC [Natural Resource Council] should ensure that any training builds on and develops indigenous knowledge systems and does not merely replicate the modern game scout training which government is so fond of.⁵³

Indeed the policy does suggest that “enhancing the use of indigenous knowledge in the conservation and management of natural resources...” should be a strategy for recognizing the “intrinsic value of wildlife to rural communities.”⁵⁴ At the workshop on the formulation of WMAs, Dr. Songorwa, the CBC Officer for the Wildlife Division, stressed the use of indigenous knowledge as one the four rationales of a CBC approach to conservation.⁵⁵ Nonetheless, the policy’s objectives and procedures for WMA formation (some identified above) reflect a lack of attention to indigenous knowledge. The words of the Director of Wildlife exemplify the general lack of trust in the capacity for the village to manage natural resources without close supervision and official scientific training and guidance.

Why is it that the new defining legislation to bring the community into conservation in Tanzania effectively circumscribes the community’s rights of participation, keeping the community peripheral to the process? And how is it that “indigenous knowledge” is favorably mentioned in the document and within policy circles, while at the same time it is effectively ignored in practice? I argue here that in addition to the difficulties involved in the relinquishing of power by the state, the implementation of CBC requires a radical transformation of the culture and institution of conservation.⁵⁶ On the one hand, this transformation requires a simple shift in viewing local people as partners rather than enemies of conservation.⁵⁷ This shift, while occurring at the policy level, is more difficult to put into practice on the ground. Conservation policies in Africa have been, and continue to be, enforced through paramilitary forces charged with protecting nature from human (usually local) disturbances.⁵⁸ In some places, CBC is no more than a changing of the guards, as local village game scouts are trained in fortress-based conservation procedures such as the use of firearms, and the maintenance of paramilitary anti-poaching patrols.⁵⁹ It is therefore questionable if a shift is being made at all.

However, another more-subtle, but perhaps more-challenging, shift is one towards accepting the value and legitimacy of local, indigenous knowledge claims. Here, the neat administrative boundaries and scientific categories utilized by conservationists face the challenge of incorporating (or acquiescing to) the uncertain and complex patterns of local ecological and social processes. I argue that this challenge, while difficult, is necessary to truly integrate

⁵³ Severre 2000: 17. This team, the Lawyers Environmental Action Team (LEAT) was comprised of three lawyers (Rugemeleza Nshala, Vincent Shauri, and Tundu Lissu), an anthropologist (Bwire Kaare), and a community conservation specialist (Simon Metcalfe). The preparation of the report was requested by TANAPA and AWF.

⁵⁴ URT 1998: 17-18.

⁵⁵ WD 1999: 78.

⁵⁶ On relinquishing, see Agrawal 1999; Ribot 1999.

⁵⁷ Barrow et al. 2000; Kiss 1990.

⁵⁸ Peluso 1993. Not only do military trained game scouts have trouble redefining their relationship with communities, but members of these communities are often confused and distrustful of such attempts. The irony of the situation was aptly expressed by a Maasai informant regarding the “good neighborliness” community conservation project of TANAPA in border communities of Tarangire National Park, ““good neighbors’ they say, good neighbors with your enemies, why? They beat us, take money illegally [fines], now they want to be friends.”

⁵⁹ Sekamaganga n.d.

communities into CBC processes, and to more closely address the ecological processes of concern to conservationists.

Alternatively referred to as traditional, practical, or indigenous, local knowledge claims are now recognized by many scholars as “valuable” for conservation in being more responsive to temporal and spatial heterogeneity and intimately connected with an understanding of historical ecological processes.⁶⁰ Scott (1998:324) suggests that “[t]he power of practical knowledge depends on an exceptionally close and astute observation of the environment.” One could easily see why such local insight might be readily embraced by conservationists eager to understand the ecological details of the local landscape.⁶¹ This would, however, require those in power to acknowledge that such knowledge exists, that it has value, and that it can be “utilized” in a scientific manner.⁶² The current CBC policy of Tanzania makes none of these assumptions and rather sees local people as needing education, “technical advice” and “training” to effectively manage and especially to conserve natural resources.⁶³ At the base of the education campaign is the village game scout training mentioned above, which includes the teaching of western scientific techniques for the identification of plant and animal species, range management, and water conservation. There is no room in the syllabus for the incorporation of the local knowledge of the trainees. In fact, there are presently no attempts to ascertain the knowledge claims of local villagers, despite recognition by some conservation agencies that such knowledge exists and would likely be valuable to their efforts.⁶⁴

Several explanations could be provided for this disparity between the praise for indigenous knowledge in policy circles, and its simultaneous disregard on the ground; explanations which stem from the constraints of the conservationist culture and institutions. Despite growing ecological and social research suggesting the contrary, the conventional wisdom associating rural, “traditional” people as backward and ignorant is difficult to dislodge.⁶⁵ Where local knowledge is recognized as valuable, it does not readily lend itself to the precise measurement, exact calculation, or rigorous logic called for by conservation agencies.⁶⁶ Here, pastoralists, following transhumance migrations in response to climatic variability pose a particular challenge to precise zone-based land-use planning. Institutions such as the World Bank and USAID, leaders in the development industry and now actively involved in conservation, have made their way on denigrating local knowledge and proposing Western scientific alternatives.⁶⁷ The African Wildlife Foundation (AWF), possibly the most active conservation NGO in Tanzania, was founded as an American elite conservation organization to train and educate Africans to ensure the continuation of wildlife conservation after independence.⁶⁸ Pedagogy and the replacement of traditional mechanisms and local knowledge with western scientific tools is just as fundamental to the institution of conservation as it is to that of development.

⁶⁰ Zimmerer 2000; Fairhead and Leach 1996; Brush and Stabinsky 1996.

⁶¹ Berkes et al 2000.

⁶² Hobbart 1997.

⁶³ URT 1998:15.

⁶⁴ Kahurananga, pers. Comm.

⁶⁵ Hobbart 1997; Brockington and Homewood 1996.

⁶⁶ Scott 1998:320.

⁶⁷ Scott 1998; Ferguson 1994; Hobbart 1997.

⁶⁸ Bonner 1993.

The need to present indigenous knowledge as other and opposed to scientific knowledge maintains the power of science as an antidote to local backwardness in both development and conservation activities.⁶⁹ Despite (and perhaps because of) its present glorification in the literature, indigenous knowledge remains the “other” or “alternative” in opposition to Western scientific expertise. This polarization suggests we heed caution, as Agrawal suggests in focusing too much attention on the *differences* between the indigenous versus Western scientific knowledge claims.⁷⁰ However, it is nonetheless, important to acknowledge certain differences between indigenous and/or local and Western Scientific knowledge claims, as played out on the ground—through processes of negotiation and conflict—in specific conservation initiatives. Here, the fluid, locally situated and “practical” nature of local knowledge claims is often silenced by the official conservation science discourse, as upheld by more powerful actors of state agencies and international conservation NGOs.⁷¹

Scott uses the term *metis* to depict a knowledge that is different yet not so distant from, and continually interacting with Western scientific knowledge. As he suggests:

Metis, with the premium it places on practical knowledge, experience, and stochastic reasoning, is of course not merely the now-superseded precursor of scientific knowledge. It is a mode of reasoning most appropriate to complex material and social tasks where the uncertainties are so daunting that we must trust our (experienced) intuition and feel our way.⁷²

In addition to experience and intuition, the power of the “practiced eye,” *metis* is also about experimentation, precise skills, and complex knowledge. While finding Scott’s term *metis* appropriate, I prefer the term “local” to underscore the spatially situated aspect of the knowledge held and utilized by community members regarding their local environment. While much indigenous knowledge arguably transcends the local, the particular expertise it imparts regarding local ecology is specifically relevant for conservation planning.⁷³

Conservationists working with dynamic ecological processes such as those characteristic of semi-arid environments, may well benefit from the insights and practical experience of local knowledge.⁷⁴ However, both the dynamic nature of ecological systems and the fluid, negotiated nature of much local knowledge, pose direct challenges to state-sponsored conservation activities, which rely on the creation and maintenance of legible and manageable landscapes.⁷⁵ There is little room in these landscape creations to incorporate the uncertainty and complexity of

⁶⁹ Ferguson 1997.

⁷⁰ Agrawal 1995.

⁷¹ While state agencies, NGOs and academic scientists often differ in opinion and approaches to conservation policy, they are all working within the framework of Western scientific traditions of wildlife ecology, conservation biology, landscape ecology and resource management. In fact, there is a transparent association between the thoughts expressed in many scientific articles regarding wildlife conservation in Tanzania and the desires of State and Conservation NGOs regarding conservation policies. See Prins 1987 and Mwalyosi 1991.

⁷² Scott 1998:327.

⁷³ See Agrawal 1995 also on transcending the local.

⁷⁴ Scoones 1995; Niamir Fuller 1999; Leach et al. 1999; Zimmerer 2000, 1994.

⁷⁵ Here, I draw from Scott’s (1998) discussion of the creation of legible and manageable landscapes by a high-modernist authoritarian state. While his discussion aims to uncover the motivation and rationale behind large-scale social-engineering projects, the analysis is directly relevant to the transformation of society and nature through conservation endeavors.

natural and social systems, let alone the adaptable nature of local knowledge claims. The process of land-use planning that is currently unfolding as part of the CBC initiatives in Tanzania is a case in point. Although communities are being brought into the planning process, their land-use techniques and forms of social and ecological organization need to conform to recognized land-use categories and approved land-use planning practices. The rigid boundaries and neat land-use zones make the landscape much more legible and manageable (for conservation officials) than the “buzzing complexity and plasticity” of customary tenure negotiations.⁷⁶ In the process however, much of the intricate institutional framework coordinating local resource management systems is lost.⁷⁷ The codification of land ownership and use contradicts more flexible “customary” laws often applied to land-tenure negotiations.⁷⁸ The rigidity in time and space of the land-use planning ignores, and as a result disrupts, flexible land-use management techniques.

The consequences of denying the legitimacy of local knowledge claims goes beyond the political and social ramifications felt by the communities themselves. The landscapes created in the process are much less responsive to the local ecological processes to which local knowledge has adapted. This is particularly true in the semi-arid environments where, people and animals migrate in response to seasonal and annual changes in local ecology. Semi-arid savanna ecosystems are characterized by extreme spatial and temporal heterogeneity, where seasonal and annual variations in rainfall interact with topographic and edaphic variation affecting vegetation quality and quantity across the landscape.⁷⁹ In such ecosystems local land use practices reflect intimate understandings of complex ecological processes at local and regional scales.⁸⁰ Attempts to transform local land use systems that do not consider this complexity and diversity will likely fail at the very least, and, at worst, have detrimental effects on both the social and ecological systems in question. The continued promotion of such Western-scientific management strategies despite recurrent failures can be contributed in many ways to the culture of conservation I have been referring to throughout this section.⁸¹ Such practices are a vital part of conservation and development planning, universalized for use everywhere. I now turn to an area that is receiving much attention from conservationists, the Maasai Ecosystem, to address these issues more specifically.

CBC in a natural social landscape of the Maasai-Ecosystem

Nature, like taste, is subjective. In the broadest sense, nature means the realm of animals and plants. But does it also mean, as many Western cultures would have it, the absence of human activity?⁸²

The existence of wildlife in Africa cannot be detached from culture. Wildlife are not found everywhere in Africa.⁸³

⁷⁶ Scott 1998.

⁷⁷ Leach et al. 1999; Turner 1999b.

⁷⁸ Neumann 1997; Leach et al. 1999; Igoe n.d.

⁷⁹ Hopkins 1998; Menaut 1983; Little 1996; Turner 1998; McNaughton and Georgiadis 1986.

⁸⁰ Turner 1999a; Walker 1993; Coughenour 1991.

⁸¹ See also Leach and Mearns 1996.

⁸² Western 1989: 158.

⁸³ Parkipuny 1991.

Haraway (1989: 15) suggests that the theoretical separation and compartmentalization of that which “we have come to know historically as nature and culture” is itself problematic.⁸⁴ The practical application of this artificial dichotomy onto existing landscapes proves overly simplistic and unrealistic. The current debate about the ecological limitations of national parks stems from the difficulties of segregating out pieces of the landscape that are often intricately interconnected.⁸⁵ The limitations of neat demarcation are well exemplified by the Maasai Ecosystem of northern Tanzania.⁸⁶ Here, every wet season thousands of wildlife migrate from Tarangire National Park (TNP) east, across several Maasai villages, to graze alongside Maasai cattle in the nutrient rich Simanjiro Plains, while others migrate between TNP and Lake Manyara National Park, across Maasai occupied lands in the Kwakuchinja corridor.⁸⁷ The national parks, far from maintaining enclosed ecosystems, have been drawn around only dry season watering and grazing areas. For more than six months of the year, the majority of wildlife are found outside of the national parks.

This movement of wildlife between protected “patches” and Maasai grazing lands highlights the importance of wildlife conservation outside of park boundaries and in the humanized landscape of the Maasai Ecosystem.⁸⁸ It also reflects the relative ecological compatibility of Maasai pastoralism with wildlife conservation.⁸⁹ CBC initiatives are therefore expanding throughout the region, to integrate wildlife conservation with the socio-economic needs of the Maasai in order to achieve “large-landscape”-level conservation.⁹⁰ The CBC initiatives are being led by AWF in partnership with WWF, TANAPA, and the Wildlife Division and are based on the formation of WMAs throughout the area.

The critiques presented in the previous section are of great significance here for two main reasons. First, the migratory behavior of the wildlife makes fluid land-management regimes necessary, yet land partitioning, land-use planning, and zoning are still employed. Second, the conservation of wildlife is dependent on local Maasai, whose land they share. Yet, while the image of Maasai in conservation circles has shifted radically from that of degrading, destructive pastoralists to the new custodians of wildlife, Maasai knowledge claims are still ignored or considered inadequate for conservation purposes.⁹¹ Here, “the Maasai” have replaced “the community” in the new conservation discourse; reified and romanticized, yet simultaneously marginalized. In this section, after briefly describing the Maasai Ecosystem, I outline some of problems that these contradictions produce in achieving landscape level conservation in this region. I first problematize the political and ecological fragmentation of the landscape that is

⁸⁴ cf. Braun and Castree 1998; Cronon 1996.

⁸⁵ See Schonewald-Cox and Bayless 1986; Newark, 1993, Western and Gichohi. 1993.

⁸⁶ Borner 1985; Mwalyosi 1991.

⁸⁷ Kahurananga and Silkiluwasha 1997; Hassan 2000. The Simanjiro Plains are in “Maasailand,” lands inhabited and “claimed” by Maasai. In Swahili, such areas are referred to as “Maasaini,” literally the Maasai place.

⁸⁸ Kahurananga and Silkiluwasha 1997; Western 1989.

⁸⁹ Igoe, J. and D. Brockington, 1999; see also Homewood and Rodgers 1991.

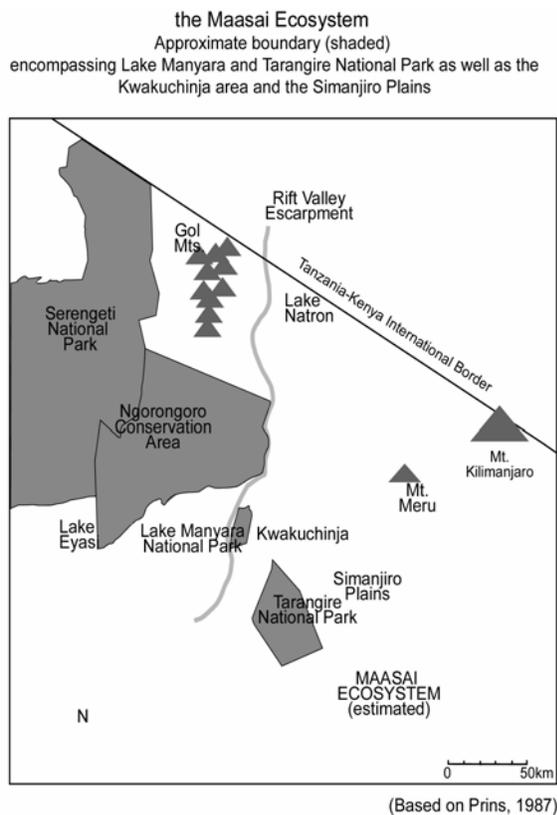
⁹⁰ AWF n.d.a.

⁹¹ Interestingly, this shift has not been complete and since both views are romanticized exaggerations and not based on any direct understanding of Maasai land use practices, they can co-exist. That is, Maasai grazing practices can be demonized as unproductive and primitive, while the image of the “indigenous Maasai” living in harmony with nature is called on when needed.

occurring as a result of conservation initiatives and then turn to address the role that Maasai could play in the CBC process as active, knowledgeable participants/agents.

The Maasai-Ecosystem

The ecological and social boundaries defining the Maasai Ecosystem, or the Tarangire-Manyara Heartland remain conspicuously ambiguous (see map 1).⁹² Central, however, to all definitions is an explicit attempt to define the ecological and social systems integral to the functioning of the Lake Manyara and Tarangire National parks. This implies ecosystem boundaries that correspond to the migratory movements of wildlife, similar to the way the boundaries of the Serengeti-Mara ecosystem were drawn to incorporate the movements of migratory wildebeest between Serengeti National Park and Maasai Mara game reserve.⁹³



AWF defines the Tarangire-Manyara Heartland in its conservation project proposal as an area “defined *naturally* by ecosystems and patterns of human land-use.”⁹⁴ The project document further states that, “[t]he [conservation] aim is to maintain a rich continuous mosaic of landscapes, wildlife, and the human enterprises stretching from the Rift Valley escarpment through the baobabs and elephants of Tarangire to the Maasai steppe.” In actuality, the harmonious, continuous landscape envisioned in this report is fragmented into a series of different conservation areas and human settlements. The “Heartland” or Maasai Ecosystem covers a total of 370,000 hectares.⁹⁵ Tarangire and Lake Manyara National Parks constitute approximately 28,000 hectares and the Manyara Ranch constitutes another 16,300 hectares (Manyara is a government owned ranch on the Eastern border of Lake Manyara

⁹² The region is alternatively referred to as the Manyara-Tarangire Complex (LEAT 1998), the Tarangire-Manyara Heartland (AWF n.d.a, b), Masai [sic] Ecocomplex (Mwalyosi 1992), and the Masai Ecosystem [sic] (Prins 1987).

⁹³ cf. Sinclair and Norton-Griffiths 1979.

⁹⁴ AWF n.d.a: 1; emphasis added. As spelled out in the project report, “USAID support to Partnership Options For Resource Use Innovations (PORI) Project of the African Wildlife Foundation in Tanzania” which was a summary of goals and achievements of the USAID funded project to date for the period of April 1998 to June 1999.

⁹⁵ Ibid; Prins (1987) puts it at 35,000 square kilometers.

National Park (NP) that AWF is in the process of acquiring). The remaining area is comprised of 263 villages across five districts, where Maasai constitute roughly eighty percent of the population.⁹⁶ Several of these villages are in game controlled areas of minimal protected status.⁹⁷

The boundaries of the Maasai Ecosystem mirror the socio-cultural boundaries of Maasailand, an area historically occupied by Maa speakers, which stretches from Southern Kenya into Northern Tanzania.⁹⁸ To some extent, other political and physical designations shape the region. The western boundary of the Maasai Ecosystem is clearly delineated by the Rift Escarpment, which divides western from eastern Maasailand and subsequently prevents the movements of some wildlife species, such as wildebeest and gazelles of which different sub-species have formed.⁹⁹ To the north, south, and east, the boundaries are more difficult to recognize, although the northern boundary strategically stops at the international border with Kenya on most maps. Watershed boundaries are invariably vague in arid areas and therefore difficult to pinpoint as ecosystem boundary edges.¹⁰⁰ The system boundary, however, is roughly designated by the international border with Kenya to the North and the Simanjiro plains to the East. The southern boundary, as well as the shape of the entire system as mapped, most closely resembles the socio-cultural boundary of Maasailand. The dominant ethnic groups in this region continue to be Maa speakers (Kisongo Maasai and Parakuyo pastoralists and Arusha agro-pastoralists) and therefore of “Maasai” ethnicity.¹⁰¹ Other ethnic groups, however, are also represented, such as Dorobo hunter-gathers within Maasai communities, and other agro-pastoral and agricultural groups.¹⁰² The predominance of Maasai residence in the region leads Prins to suggest the title of “Masai [sic] Ecosystem” in reference to those who have had the most “profound effect on the largest part of the ecosystem”.¹⁰³

Most of the Maasai Ecosystem falls within the arid and semi-arid eco-climatic zones, with some of the highlands characterized as semi-arid to humid.¹⁰⁴ Rainfall patterns are bimodal, consisting of orographic “long rains” from March to April and “short” monsoonal rains from November to December. Mwalyosi reports an average of 686.7mm of rainfall a year for the western part of the region, with lands farther from the Rift Valley escarpment receiving less.¹⁰⁵ The Simanjiro

⁹⁶ AWF n.d.a,b.

⁹⁷ Most human activities are permitted, but local hunting is prohibited. Tourist hunting is encouraged. Hunting privileges are delegated by the Minister, through the distribution of licenses for hunting in specified hunting “blocks” within the Game Controlled Areas.

⁹⁸ Sutton 1993.

⁹⁹ Prins 1987; Pratt and Gwynne 1977; cf. Georgiadis 1995.

¹⁰⁰ Prins 1987.

¹⁰¹ “Maasai” means speakers of Maa. “The Maasai” consist of various geographically defined sections, of which the Kisongo are the largest in Tanzania. Parakuyo and Arusha are the next largest sections in Tanzania, although the classification of Arusha is somewhat contentious. See Jacobs 1965 and Galaty 1993 on Maasai sections, see Spear 1993 on the Arusha ethnic description, and see Von Mitzlaff 1988 on Parakuyo.

Whether one is defined or defines oneself as Maasai, Arusha, or Parakuyo depends on the context. While members of all ethnic groups would define themselves as Maasai in relation to non-Maa speakers, in reference to each other, the distinctions of Arusha, Parakuyo, or Kisongo Maasai are reinforced.

¹⁰² Igoe and Brockington 1999.

¹⁰³ Prins 1987:145. Prins and others (Mwalyosi 1992) utilize the older spelling of Masai. The new spelling, Maasai, is phonetically closer to the way the word is spoken and reflects the centrality of *Maa* (the word for the language) to the word *Maasai* (see fn 99).

¹⁰⁴ Mwalyosi 1992; Pratt and Gwynne 1977.

¹⁰⁵ Mwalyosi 1992.

plains, on the eastern edge of the system are somewhat drier, with a reported average of 450-600 mm of rainfall a year.¹⁰⁶ These averages do not reflect the often dramatic inter-annual variations in rainfall. These variations include a one in ten year likelihood of receiving less than 250 mm of annual rainfall.¹⁰⁷ Such variation is reflected in readings from Oliver's Camp on the Eastern boundary of TNP, where 227 mm of rain were recorded in 1994 and 716 mm in 1995.¹⁰⁸

Topographic variations across the Maasai Ecosystem result in the occurrence of various broad vegetation types. These range from the low-lying alkaline grasslands of Lake Manyara NP, to the varied topography of Tarangire NP, which supports riverine woodlands, bushlands, and wooded-grasslands, to the undulating short grassland plains of Simanjiro, which primarily support *Digitaria -Panicum* short grasslands as well as *Acacia-Commiphora* woodlands and bushlands.¹⁰⁹ The region is predominately used by Maasai pastoralists and migratory wildlife, but cultivation is increasing at an alarming rate.¹¹⁰ Variations in grazing and browsing quality across the system, which occur as functions of topography, soil quality, rainfall, the occurrence of fire and grazing history, determine the movements of wildlife and domestic stock. By delineating boundaries to incorporate these movements, which reflect ecological processes across the larger landscape, the hope is to maintain the integrity of the heart of the ecosystem: the national parks. The ultimate goal is to extend protection to the wildlife that do not respect the boundaries of the national parks.

A Divided Landscape

In drawing lines between and within natural and social systems, conservation activities have in effect bifurcated the continuous landscape of the Maasai Ecosystem that they are promoting. Now, realizing the continuous nature of many ecological processes (particularly wildlife migrations) across the landscape, conservation endeavors are striving to blur the very lines they have drawn. Here, the (un)intended consequences of conservation projects can be seen as the creation of politically and ecologically fragmented landscapes.¹¹¹ That is, even where conservation projects have failed to maintain the ecological integrity of boundaries between nature (national parks) and society (neighboring communities) as planned, a political boundary was constructed and remains powerful.¹¹² The boundaries' power lies in politically dividing communities from nature conservation and in transforming local land-use patterns to adhere to this division. As they strive to "unite" conservation and development to achieve landscape-level conservation, conservationists need to mend these divisions—politically and ecologically.

¹⁰⁶ Kahurananga and Silkiluwasha 1997.

¹⁰⁷ Muir 1994.

¹⁰⁸ Lama 1998 as cited in Cooke unpublished document.

¹⁰⁹ For vegetation descriptions see Prins 1988 and Loth and Prins 1986 for Manyara NP, Lamprey 1963 for Tarangire NP, and Kahurananga 1979 for Simanjiro NP.

¹¹⁰ Prins 1987; Igoe and Brokington 1999; Mwalyosi 1991.

¹¹¹ On the unintended (yet very real) consequences of development initiatives in Soweto, see Ferguson 1994.

¹¹² Examples of the ecological failure of boundary drawing is reflected in continual movement of people and resources across the boundary: the annual migrations of wildlife beyond park boundaries into neighboring village lands, and the utilization ('poaching') of resources inside the park boundaries by local people. See Schonewald-Cox and Bayless 1986 on the importance of boundaries in national park management.

Ironically, in the Maasai Ecosystem, this task is being approached through the creation of yet new ecological divisions to partition the landscape: WMAs.

AWF claims that thirty-five percent of the Maasai Ecosystem will be “brought under conservation management—both community and protected within the next couple years.” They plan to utilize CBC and work in partnership with Maasai communities to achieve this goal. Seeing Maasai pastoralism as compatible with wildlife, they view the expansion of CBC as a step towards uniting the landscape and its various conservation and development needs. However, Maasai view the situation differently. To them, it appears to be a step towards the further fragmentation of their landscape. The following observation from the LEAT report clearly illustrates this point:

What is now the MTC [Manyara/Tarangire National Parks Complex] was part of the Maasailand pastoral ecosystem, until when it was separated to become exclusive lands for wildlife [sic]. ... This development greatly reshaped and reoriented Maasai's notions of spatial organization in their entire habitat. What hitherto constituted a broad Maasai cosmological mosaic was replaced by a fragmented habitat characterized by dual landscapes separated by unequal power relations, originating from the utilisation and management needs differential of the now split ecosystem. Ever since, the Maasai have developed a kind of popular discourse which distinguishes the exclusive wildlife zones from their pastoral domain.¹¹³

Maasai pastoralism as a form of land-use in the area relies on access to various patches of grazing resources across the larger ecosystem throughout the year.¹¹⁴ The seasonal movements of Maasai cattle are quite similar to the migratory movements of wildlife.¹¹⁵ While maintaining semi-permanent homesteads in areas with year-round water and grazing, they migrate to wet-season pastures where mineral-rich grazing is available during the rains (November or December to May). The Maasai use organized systems of land-use management to coordinate migrations, grazing and watering patterns.¹¹⁶ However, as the above citation by LEAT illustrates, the creation of conservation areas has disrupted this system, forcing Maasai to re-structure their movements accordingly. The creation of Tarangire National Park removed important grazing and water resources, including early wet season grazing areas, permanent water sources (the Tarangire River and Silalo Swamp) and drought refuge sites, from use by Maasai pastoralists in the region.¹¹⁷ This caused distortions in the utilization of resources throughout the Maasai Ecosystem.¹¹⁸ Maasai in the region, while maintaining a predominately pastoral livelihood, are finding it more difficult to subsist on pastoralism alone. Thus, they are supplementing their activities with subsistence and small-scale commercial agriculture.¹¹⁹ The loss of land to conservation areas is of course not the sole reason for these changes. The increase in large-scale agriculture also poses a competing threat to pastoralism.¹²⁰

¹¹³ LEAT 1998: 20.

¹¹⁴ Homewood and Rodgers 1991; Igoe and Brockington 1999.

¹¹⁵ Arhem 1985; Lama 1998; Western and Gichohi 1993.

¹¹⁶ Igoe and Brockington 1998. This simplified overview does not do justice to the complex range management regime employed by the Maasai. For a more detailed review see Potkanski 1994; Homewood and Rodgers 1991; Igoe and Brockington 1999.

¹¹⁷ Igoe and Brockington 1999; Igoe n.d.

¹¹⁸ LEAT 1998.

¹¹⁹ *ibid*; Igoe and Brockington 1999; Lama 1998; Muir 1994.

¹²⁰ While many Maasai in the region are now practicing small-scale cultivation, the large farms are mostly owned by Waarusha residents or other people from outside the area.

Increased large-scale cultivation is not only a threat to pastoralism, but is viewed as a huge impediment to wildlife conservation. However, although conservationists are embracing pastoralism as a more wildlife-compatible form of land use, they are not addressing the needs of pastoralists. These needs, among other things, include access to grazing and water and freedom of movement, not dissimilar to the needs of migrating wildlife.

Conservationists realize the importance of the needs of migrating wildlife. Research in Tarangire National Park has verified the ecology behind the migrations, stating that, “if animals were forced to stay year-round in their dry season range, current population numbers of migratory herds would decline.”¹²¹ As a consequence AWF and others are working to protect these migratory routes. This involves preventing the spread of cultivation as well as supporting pastoralism. While the full-stop creation of new strictly protected areas in the region may not politically be an option, the establishment of WMAs is.¹²² Recall from the above discussion that establishing WMAs requires creating land-use plans, including an area exclusively for wildlife conservation. Participatory Land Use Maps (PLUMS) are being created throughout the area to locate different land-use activities into discrete categories that are then digitized into Geographic Information Systems (GIS) maps.¹²³ This process contradicts the fluid nature of wildlife movements as well as those of pastoral herds, and therefore risks further disrupting both Maasai pastoral practices and wildlife movements. Here the desire to create a legible system of management based on Western understood notions of tenure and management could have effects quite contrary to initial goals.

In addition to the ecological and socio-economic “segregation effects” discussed above, the creation of national parks in the Maasai Ecosystem has also produced cultural transformations within Maasai communities.¹²⁴ As the above citation from LEAT illustrates, the reshaping of the landscape into protected and unprotected areas effectively transformed the way Maasai in the area frame their relationship with nature, particularly wildlife. As a by-product of fortress-style conservation, communities that once accepted wildlife in their midst now view them as intruders and see conservation as a threat. Again, I draw from LEAT’s analysis to illustrate this point :

[L]and alienation among these communities has left scars far beyond what can be explained just in economic terms. The alienation has also recast Maasai political as well as cultural perceptions on those who were/are involved in managing lands alienated for wildlife purposes. This has invariably led to Maasai redrawing their traditional relationship with the animals of the wild and the institutions charged with managing them.¹²⁵

These changes ultimately threaten the culture of acceptance the Maasai have historically displayed towards wildlife. Wildlife were seen as creations of God with equal rights to grazing

¹²¹ Voeten et al. forthcoming: 96.

¹²² The proposal for the creation of a new multiple-use protected area, similar to NCA (see fn 6) was vehemently opposed by resident Maasai.

¹²³ These activities are being conducted by the Italian NGO, OIKOs, in conjunction with AWF and WWF as a part of the larger Tarangire Conservation Project.

¹²⁴ Western and Gichohi (1993) argue that the very creation of national parks often produce a suite of social and ecological impacts as an effect of segregating otherwise joined ecological and social processes. They refer to this suite of possible consequences as “segregation affects.”

¹²⁵ LEAT 1998: 22.

lands as Maasai cattle, as evidenced in the names given to smaller plains animals: *inkinejie Nkai* (“the goats of God”) and *inkishu e Nkai* (“the cattle of God”).¹²⁶ Today, Maasai make a clear distinction between “...what they see as their animals and what are the animals of the government.”¹²⁷ Wildlife are now animals of the government. This same division has occurred with regards to conservation. Maasai often refer to themselves as good “caretakers” of their environment and see themselves as a part of the ecosystem.. For instance, the Maasai of the Ngorongoro Conservation Area refer to the Serengeti/Ngorongoro highlands as *Ramat*, meaning “a healthy habitat for people and animals.”¹²⁸ However, the word conservation, or its Swahili equivalent *kuhifadhi*, is thought to reflect the men in the buildings of the conservation area authority.¹²⁹ Similarly, at a CBC workshop in the Manyara-Tarangire Heartland area, conservation was interpreted by Maasai participants as the “preservation of wild animals only” and for the sole benefit of TANAPA (Tanzania National Parks Authority).¹³⁰ The leaders of the meeting (members of a Maasai NGO, *Inyuat e Maa*) acknowledged that:

It was only after serious discussion that participants appreciated that: conservation includes more than just wild animals [and] as a community, they are already involved in conservation, and therefore there was nothing new.¹³¹

This statement is quite telling—in many ways the Maasai do not see wildlife conservation as anything new, which they feel is reflected in the high number of wildlife that live in their lands. As Parkipuny states, “It is not a mere accident of history that many of the most spectacular wildlife protection areas in East Africa were carved out in territories previously part of Maasailand.”¹³² Conservationists are also grasping on to this notion, as witnessed in their attempts to expand CBC throughout the Maasai Ecosystem. The Maasai in many ways are seen as natural allies of wildlife. However, over the past several decades, Maasai have come to view conservation, and often by association, wildlife, as enemies. These feelings reflect a history of land alienation to conservation, repeated most recently with the eviction of Maasai from the Mkomazi Game Reserve in Northern Tanzania.¹³³ The effects of this eviction continue to be felt throughout the Maasai Ecosystem, as evicted herders renegotiate for grazing rights and Maasai land-use strategies spatially readjust to accommodate their needs.¹³⁴ For many Maasai, conservation is synonymous with the loss of grazing land. Thus, they remain distrustful of any “new” conservation initiatives. Continued CBC discussions focusing on the strict demarcation of land into protected and unprotected areas, and pushing Maasai resource management practices and ecological knowledge to the margins will only reinforce these fears.

¹²⁶ Berger 1993.

¹²⁷ LEAT 1998: 22.

¹²⁸ Taylor and Johansson 1996; cf. Parkipuny 1989.

¹²⁹ Goldman 1998.

¹³⁰ Njoroge 2000: 4.

¹³¹ Njoroge 2000.

¹³² Parkipuny 1989: 8.

¹³³ Brockington and Homewood 1996; Neumann 1995.

¹³⁴ Igoe and Brockington 1999.

The Missing Piece: The Local Knowledge of Maasai Pastoralists

[A]ny formula that excludes or suppresses the experience, knowledge, and adaptability of metis risks incoherence and failure; learning to speak coherent sentences involves far more than merely learning the rules of grammar.¹³⁵

Memut elukunya nabo eng'eno

One head does not encompass all knowledge.¹³⁶

An AWF project director, in a conversation with me, acknowledged his perception of the final outcome of Maasai livelihood practices—the maintenance of large wildlife herds in Maasai-occupied lands. He also acknowledged having limited information on why this was the case. This is the common story—anecdotal accounts about Maasai being the “custodians of wildlife” abound, yet few attempts have been made to understand the practical relationship Maasai have with wildlife and the resulting specialized Maasai knowledge. While the comments of the AWF officer acknowledge the value of examining and incorporating Maasai indigenous knowledge into conservation initiatives, there is no space within the current CBC structure to do so. AWF is constrained in many ways by the guidelines dictated by the Wildlife Division (as spelled out above) regarding WMA formation. Additionally, their own institutional history and that of conservation in East Africa constrains them. Nonetheless, AWF does claim to have not only “found community”¹³⁷ but also the promise of harmony and indigenous knowledge embodied within the notion of a Maasai community. They now claim in their funding proposals that “the Maasai have lived in harmony with wildlife thereby having large numbers of wildlife on their lands.” Why then is every CBC project in the Maasai Ecosystem based on education and training? Why not ask why the belief of a harmonious relationship between Maasai and wildlife exists; what the real relationship looks like; and what Maasai know about wildlife conservation? Teaching of “official” wildlife-conservation policies to Maasai without first asking these questions not only contradicts the espoused rhetoric of the CBC project, but risks transforming local practical knowledge and land-use patterns in adverse ways.

The official game-scout training discussed above is particularly popular in Maasai villages, and the number of young Maasai men almost always present at the AWF Community Conservation Center in Arusha is impressive.¹³⁸ There is a growing interest among many Maasai communities to participate in CBC, as long as they see the potential for direct benefits. They acknowledge a need for training to assure the receipt of economic benefits, which implies training in the business aspects of wildlife conservation management, namely enterprise building and fiscal management.¹³⁹ The game-scout training on the other hand, is a different story. One young Maasai man assured me that while the young warriors (*illmurrān*) participate in the training, they do so because they get paid to, and because they get to see fellow *illmurrān* from distant villages. They do not, however, enjoy the training itself and usually pay little attention to it.

¹³⁵ Scott 1998:319.

¹³⁶ Maasai saying, Rigby 1992:1.

¹³⁷ Agrawal 1997.

¹³⁸ The Community Conservation Center is the base of AWF activities in the region, and especially of conservation education activities. It is not the place where game scout training takes place, although often acts as the meeting place for transport, etc.

¹³⁹ Sangale 2000.

Ilmurran have their own mechanisms of training, which include: direct teachings by sponsors or instructors (*olpiron*; elders who belong to the alternate age-set above them), meetings and peer gatherings among themselves and with young girls (*Orpul*—rare, bi-annual gatherings, and *Obulin*—afternoon gatherings), daily activities of herding, and seasonal moving of cattle to wet season pastures or in search of water during droughts.¹⁴⁰ As a result, *ilmurran* receive an education that includes detailed ecological understanding of their surrounding environment. The system of learning during *murranhood* is explained in the following words of a Maasai *olmurrani*:

Our education is acquired out there on the grazing grounds. We spend our days, months and years exploring the brown plains which extend to Siringet (Serengeti). Instead of passing *intemat* (tests) about things that are foreign, we test our knowledge of our environment by actually getting into thorny bushes, the home of many wild animals. Instead of playing *empira onkejek* (football), we chase after colorful birds and hunt small animals in the open woodlands. Instead of *dansi oo nkeresa* (English dance) we have our *enkipaata and emowua olkiteng* (boy's ceremonial dances which mark the formation of new age-sets).¹⁴¹

The above words provide much insight into the ways in which Maasai obtain detailed knowledge of their surroundings, a process that continues beyond the period of *murranhood*, and is different for men and women.¹⁴² It suggests that knowledge is obtained through daily interactions with local ecology, both plants and wildlife. For men, this interaction revolves around herding. According to Lama's research in a village in Simanjiro, "herders' livestock management depends to a great degree on wildlife movements, for reasons of predation, competition for water and pasture, and disease/parasite interaction, they are therefore very aware of seasonal wildlife movements."¹⁴³ My own discussions with Maasai elders and warriors confirmed this statement. I would also add though, that in addition to avoidance mechanisms, Maasai herders closely observe the movements of wildlife to indicate the coming of the rains.

Two Maasai elder warriors, in a meeting with me, indicated in Swahili and Maa the specific places from which wildlife leave Tarangire Park, the routes they use to reach specified locations in the Simanjiro plains and for how long they stay. While this information has not been empirically tested, the confidence with which the two men drew the map, and pointed to similar locations on a printed map was revealing. Additionally, the locations they named where wildlife exit the park closely match those named by Kahurananga and Silkiluwasha (1997:181). Research has also revealed the level of detailed local-plant knowledge many Maasai employ for the purpose of human and veterinary medicine production.¹⁴⁴ The same attention has not been accorded to knowledge regarding wildlife.

¹⁴⁰ cf. Kipury 1983; Homewood and Rodgers 1991.

¹⁴¹ cited in Berger 1993: 24.

¹⁴² The lives of Maasai men are organized into distinct age-sets, of which the *ilmurran* represents an important time for peer education. While women are not collectively organized into age-sets, they collectively share activities such as collection of fuel wood, building materials, water, and medicals, as well as caring for the young and sick livestock.

¹⁴³ Lama 1998: 62-3.

¹⁴⁴ Ole-Lengisugi and Mziray 1996; Kipury 1983; Minja 1999; Karehed and Odhult 1997..

While not suggesting the production of an inventory of Maasai ecological knowledge, the above discussion begins to illustrate the degree to which Maasai produce and utilize detailed local knowledge about their environment. Also implied in this discussion is a recognition not only of Maasai knowledge in the abstract, but also of Maasai knowledge as inseparable from Maasai resource management practices, land-use techniques, tenurial arrangements and institutional structures. This suggests that, first, the official game scout training and land-use planning procedures required for WMA creation may not be entirely appropriate. Second, Maasai have much more to offer CBC as *active knowledgeable participants*, than is currently recognized.

While this section has suggested the wealth of information regarding wildlife and local ecology within Maasai communities, I should stress that this “information” should not be viewed as easily codified and extracted, but rather as knowledge utilized, and continually transformed, by active agents. I refer back to Scott's (1998) *metis* to denote a locally situated group of knowledges stemming from a combination of formal-cultural learning mechanisms, practical skill attainment, experimental techniques, and social dialogue. This type of knowledge is not easily codified or translated into the concrete management regimes upheld by conservation agencies in the area. However, I would argue that the ability to combine certain aspects of Maasai practical knowledge with certain scientific understandings should not be dismissed. While remaining cautious to not force each “type” of knowledge to fit into the mold of the other, the differences between the scientific and the indigenous should not be exaggerated;¹⁴⁵ for such an exaggeration would deny their necessary engagement. That is, the concentration on the difference between “indigenous” and “scientific” knowledges keeps the indigenous as reified yet inaccessible, and the provision of expert knowledge remains justifiable. Rather, we should begin to focus on the dialogues that emerge at the intersection of these discourses.

Concluding Comments

In this paper I have attempted to uncover the many contradictions inherent within the current CBC movement in Tanzania: between rhetoric and practice, as well as those between the desired goals of conservation and the suggested means to achieve them. While NGOs, donor agencies and government authorities may claim to have “found community,” this paper has revealed the limited impact this finding is really having on conservation policy. It seems these agencies need to continue to grapple with the question of how to reshape their own institutions and agendas to really fit communities—with their diverse needs, knowledge, and complex social and ecological structures—into conservation. In the Maasai ecosystem, this would suggest a shift in focus from the “village” unit of community, to Maasai social and ecologically defined boundaries and their accompanying governing institutions, from statutory to customary-tenure structure, and from exclusive-scientific management to a dialogue of reconciliation between Western-scientific and local-Maasai knowledge claims. It would in effect, require an acceptance of a Maasai geographical understanding of the landscape—from notions of boundary drawing, to ecological knowledge and resource-management processes. Such a shift was in fact recommended by LEAT (1998: 2):

¹⁴⁵ Agrawal 1996.

Implementors of CBC should recognise the indigenous knowledge systems of the communities they work with, including governance systems, as a critical part of community management. “Scientific” and “local knowledge” should complement one another, as should statutory and indigenous institutions.

These suggestions require definite shifts in the existing power-structure regarding conservation in Tanzania. Agrawal (1997: vii) argues that “community-based conservation is unavoidably about a shift of power.” However, as this paper implies, Tanzania’s new wildlife policy falls short of providing the space to make that shift. In fact, the policy has been critiqued for failing to provide concrete guidelines regarding what type of participation will be utilized to incorporate communities into the conservation process.¹⁴⁶ The policy is silent on how to best utilize and/or modify the existing CBC structure and legal system to achieve the active participation for which they claim to strive. Rather, both participation and community are shrouded in ambiguity-raising questions about the operationalization of any “new” participatory *community-based* conservation. The current decentralization structure in Tanzania renders the local people, and thus their knowledge, powerless.

¹⁴⁶ Sosovele, et al. 1999.

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