CONFLICT AND CONFLICT RESOLUTION IN
THE MANAGEMENT OF MIOMBO WOODLANDS:

Three Case Studies of

Miombo Woodlands in Zimbabwe

By

P.W. Mamimine, N. Nemarundwe and F. Matose
July 2001

# CENTRE FOR APPLIED SOCIAL SCIENCES

A MEMBER OF THE WORLD CONSERVATION UNION UNIVERSITY OF ZIMBABWE



#### **CENTRE FOR APPLIED SOCIAL SCIENCES\***

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This paper examines the nature of conflict and conflict resolution over the use of miombo woodlands in three study sites in Zimbabwe, namely Nyamayaro, Mafungabusi and Romwe. The data was collected mainly through the participatory rural appraisal technique, specifically using group discussions and interviews with key informants as the research tools. Conflict is generally conceptualised in literature as a discourse of negotiating rights and obligations in natural resources. Insights from the three case studies indicate that the ethnic friction, contest over boundaries, institutional conflict, intergenerational conflict and conflict over token co-management that characterised the management and use of miombo woodlands was more than a discourse of negotiating rights and obligations. It was a conflict fuelled by people's struggle to secure access to resources that were of core-significance for survival in a rural economy, such as land, timber and thatch-grass for construction, pasture and others. The issue of rights did not seem to matter to a people who were in dire need for particular resources. In essence, what mattered most was gaining access to resources that held a key to rural livelihood. Therefore, conflict resolution depended on either adaptive management of miombo woodlands to accommodate the survival imperatives in a rural economy or providing people with alternative forms of livelihood.

**Key Terms:** institutional conflict, ethnic friction, intergenerational conflict, contested boundaries, co-management problems, rural livelihood, adaptive management.

## CONFLICT AND CONFLICT RESOLUTION IN THE MANAGEMENT OF MIOMBO WOODLANDS: Three Code Studies of Miombo Woodlands in Zimbobus

Three Case Studies of Miombo Woodlands in Zimbabwe<sup>1</sup>

P.W. Mamimine<sup>2</sup>, N. Nemarundwe<sup>3</sup> and F. Matose<sup>4</sup>

#### INTRODUCTION

The prevalence of conflict over natural resources is well documented (Anderson et. al..,1996; Ayling & Kelly, 1997; Ortiz, 1999; Sithole & Bradley, 1995; Moyo et. al.., 1992; Murombedzi, 1992; Scoones and Cousins, 1991). Scoones and Cousins (ibid) argue that resources that are highly valued are also highly contested. However, they find, as does other common property resources (CPR) literature that such competition for resources can result in tightly controlled property rights (Bromley and Cernia, 1989). But there is lack of consensus in literature about the impacts of such contests, as others suggest that conflict result in chaos, which abates natural resources degradation (Murphree, 1991; Buckles & Rusnak in Rusnak [Ed] 1999; Little and Brokensha 1986). Social scientists like Fortmann (1995), suggest that conflicts are an important aspect of the discourse where resources, rights and obligations are negotiated. Similarly, resource economists like Becker and Ostrom (1995), suggest that conflict or such contests are part of the ongoing negotiations for resources within CPRs. For example, Ostrom proposes that when such conflicts occur, users and their officials have rapid access to low cost, local arenas to resolve conflict among users or between users and officials (Becker and Ostrom, Ibid). Nevertheless, one major weakness with the 'high value-high contest' and 'conflict as discourse' approach to conceptualising conflict in the use and management of natural resources is that they down play the role that the social structure plays in either fomenting or averting conflict.

With regards to causes, conflict is perceived as an artefact of human needs denied (Burton, 1990), resource competition (Hirsch, et. al. in Buckles [ed] 1999), lack of equity, justice and fairness (Kant & Cooke in Buckles [ed]) and governments' centralised "fences-and-fines" approach to conservation policy of the expropriation of lands and the forced relocation of communities (Weitzner & Borras in Buckles [ed] 1999). In Zimbabwe, conflicts highlighted so far are between communities over resource management boundaries for grazing (Cousins, 1989), within communities, over individuals attempting to privatise communal resources and among institutions, over the control and management of key communal resources (Scoones, 1991). In addition, the case of Zimbabwe, where 80% of the population, mainly blacks, were confined to 20% of the land resulted in a communal area shrinking in land size and trees available to a given population. This, in turn led to contestations over the scarce resources (see Fortmann, lbid). All the causes sketched above are significant in explaining conflict in natural resource use. However, in order to unravel causality with practical implications on conflict resolution we need to focus on patterns of interaction at micro-level, that is, between the individual and the grassroots institutions involved in a particular resource enclave.

<sup>&</sup>lt;sup>1</sup> We wish to thank Dr B. Sithole for her invaluable assistance in the formulation of the structure of this paper.

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This paper examines conflict over use of miombo woodlands in three study sites and argues that livelihood imperatives at household level are at the centre of conflict in the management of miombo woodlands. We argue further that, unless we understand the internal logic of an illegal act, the rewards of non-conformity and the mind-set of a desperate man, we are far from diagnosing and resolving conflict in the management of woodlands and forest reserves. The paper also spot-lights some attempts at conflict resolution from some of the case studies to reflect on the extent to which some of Ostrom's design principles for enduring institutions in governing sustainable resources in CPR fits actual practice.

#### METHODOLOGY AND STUDY SITES

This paper uses three case studies from Zimbabwe, namely, Nyamayaro Village, Romwe Catchment Area and Mafungabusi Forest Reserve to explore the nature of conflict over woodland resources. A village in this paper refers to a kraal under a kraalhead. A VIDCO refers to administrative boundaries that encompass more than one kraal. A forest reserve is an area designated as a protected area under the Forest Act. All these sites are EU – Miombo project sites. The EU-Miombo project is a regional project involving 3 southern African countries, Zimbabwe, Malawi and Tanzania. The project covers wide-ranging issues such as governance, institutions, socio-economics and others.

Miombo woodlands are a type of vegetation found in seven countries in eastern, central and southern Africa, namely Zimbabwe, Angola, Malawi, Mozambique, Tanzania, Democratic Republic of Congo and Zambia (Lind & Morrison, 1974; White, 1983). In Zimbabwe, miombo woodlands referred to as "musasa or munondo" (Shona names), are the most extensive woodland type covering most parts of the central watershed of the country. A number of sub-types are found within this woodland, based on the dominant species (see Zimbabwe Bio-diversity Strategy and Action Plan, 1998). Miombo woodlands have diverse uses and are central to the livelihood systems of millions of rural and urban dwellers (Campbell et. al., 1996; Lawton, 1982; Dewees, 1993). See Figure 1 below for a summary of uses of miombo woodlands extracted from Campbell et. al., (Ibid).

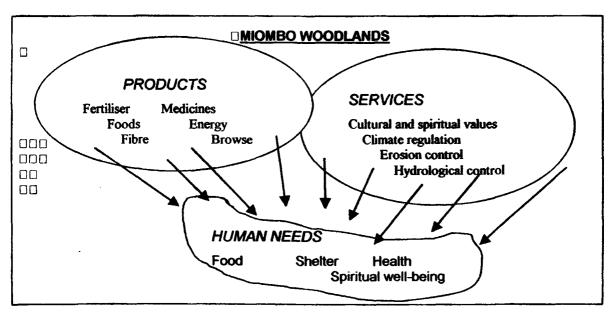


Figure 1: Goods and services provided by miombo woodlands (Campbell *et. al.*, 1996)

The data for this paper was collected using participatory rural appraisal techniques. In particular, due to the study's focus on conflicts, data collection relied heavily on key interviewee and group discussions. Some interviews were also conducted with officials and other representatives of external organisations working in the study areas. Names of individuals who were interviewed for the research have been withheld for confidentiality purposes. The following section presents research findings from three research sites.

Table 1: Characteristics of the 3 Research Sites

Research Site Characteristics	Nyamayaro Village	Romwe Catchment Area	Mafungabusi Forest Reserve
Location	Murehwa district, 154 km east of Harare	Chivi district, 86km south of Masvingo town	Gokwe South district, 130 km north west of Kwekwe Town
Number of Villages	1 village	3 villages	20 VIDCO Villages
Population	210	250 People	28 000 People
Land Use Category	Communal Lands	Communal Lands	State Forest Reserve
State of Vegetation Cover	Most of it cleared for crop fields, only nearby hills have vegetation cover	Sparse in settled areas but dense in surrounding hills	Dense vegetation cover

#### CASE STUDY 1

#### MAFUNGABUSI FOREST RESERVE

#### Background

Mafungabusi Forest Reserve is located in Gokwe South district (Zimbabwe) spanning 82 000 hectares and dominated by miombo tree species. Except for a small part in the South East, which shares boundary with small-scale commercial farmers, communal lands surround the rest of its boundaries. The forest reserve was gazetted a state forest in 1954, retaining people who lived in the area. In the 1960s the status of these people was consolidated to tenants. However, due to the outbreak of civil war in the area, in 1986 people were forcibly removed from the forest reserve by government forces. It was feared that their presence in the forest would turn the forest into a 'hive' of insurgents. The evicted people were compelled by circumstances to live as squatters in the surrounding communal lands. Mafungabusi is the site for an experimental pilot program by the Forestry Commission (FC) in co-management, which served as an instrument of "resolving the contested and overlapping rights to forest use" (Matose, 1997:71). The comanagement principles underlying the scheme included the sharing of responsibilities, stakeholder participation in decision-making and joint sharing of forest benefits. It focused on settlement areas up to three kilometres away from the forest edge (Matose: Ibid.). These communities were assumed to be most reliant on forest resources for their livelihoods, Resource Management Committees (RMCs) were established in each ward as vehicles for the implementation of both community and FC decisions through the formulation of plans for harvesting and marketing of various products. The committees comprised locally elected people whose mandate was the setting up of harvesting patterns and monitoring resource use by villagers, as well as reporting offenders to the Forest Protection Unit (FPU) of the Forestry Commission (Ramachela, 1996). Eleven RMCs were formed around the forest.

#### **Types of Conflicts**

Conflicts in Mafungabusi were generally over the state's gazetting of an originally communal land into a forest reserve. The gazetting of the forest did not only displace people from their original habitat but also made it difficult for people living on the forest-edge to continue to have access to various forest resources.

#### Ethnic Friction

The Mafungabusi forest-edge communities comprised people of Shona, Shangwe and Ndebele ethnic descent. The Shangwe people were traditionally hunter-gatherers and considered themselves to be the earliest settlers in Mafungabusi area. They therefore perceived the Shona and Ndebele people in the area as migrants. It seems hardly contestable that the Shangwe people were the first to occupy the land in and around Mafungabusi forest reserve because all the chiefs in the area were of Shangwe descent.

With regards to access to some of the resources in the forest reserve, the RMCs predominantly composed of the Shangwe people were responsible for issuing permits to people intending to collect thatch-grass in the forest reserve. In principle, RMCs were expected to issue the permits to any member of the forest-edge community in need of grass without discriminating. Nevertheless, in practice, RMCs tended to favour people of Shangwe descent in their issuing of permits. This resulted in some Shona and Ndebele people deliberately violating rules and regulations of appropriating resources from the forest. As a protest measure, some members the non-Shangwe ethnic group refused to co-operate with the institution of RMCs in ensuring sustainable utilisation of forest resources. One strategy they adopted to deal with the unfair distribution of permits by RMCs was to refuse to co-operate in reporting some members of their ethnic groups who 'poached' or illegally appropriated resources from the forest reserve. It is important to note that although the ethnic friction did not result in open confrontation, it posed a serious threat to sustainable management and utilisation of forest resources in Mafungabusi, as the Shangwe and non-Shangwe people used and abused forest resources respectively, to express their ethnic differences.

#### Contested Boundaries

When the Forestry Commission gazetted 82 000 hectares of land as a forest reserve in a communal land, it automatically and initially rendered that piece of land and its resources out of bounds to communities living within and outside the forest reserve. The new boundary separating forest edge communities and the forest reserve put resources beyond the reach of local communities. Local communities were against this development because they perceived the forest reserve area as their original homeland. As a result, in spite of the government gazette, they continued to appropriate resources illegally from the forest reserve. In essence, they did not recognise the state-imposed boundary of the forest reserve.

#### Institutional Conflict

Resource Monitoring Committees worked hand in glove with the Forestry Commission's Forest Protection Unit (FPU) in the management of the Mafungabusi forest reserve and ensuring a sustainable utilisation of the resources therein. The former was composed of representatives of local communities and kept funds paid by local people to obtain thatch-grass from the forest reserve. This did not please the traditional leadership in the area. They felt that the collection of funds by RMCs was making them more powerful than traditional leaders. Consequently, traditional leaders, especially kraal heads started

discouraging their people from co-operating with RMCs in the management of the forest reserve such as the reporting of some local people who `poached' various forest resources.

#### Intergenerational Conflict

The impact of the creation of a forest reserve on land previously under communal tenure reflected generation differentials. Generally, the older generation secured cropping land outside the forest although with poor soils. Hence, they were not as dependent on the forest resources as the young generation. Firstly, the young generation was strongly against the creation of a forest reserve because it deprived them of an opportunity to 'own' land that they could use for growing crops. The local communities' recognition of the forest as a reserve, in a co-management arrangement with the Forestry Commission, put paid the local youths' hope of securing arable land in the forest. Furthermore, one area of concern to the youth with regards to the gazetting of the forest was the denial of access to wood for carving purposes. Although most youths in the area were involved in woodcarving as a source of income, the Forest Commission denied the youth permission to obtain wood for carving from Mafungabusi. Part of the blame for this problem was targeted at the older generation who were accused of co-operating with the FC in the enforcement of the no-wood-for-carvings rule because they themselves were not involved in woodcarvings.

#### Co-management Problems

In the co-management scheme forged between the Forest Commission and the local communities, RMCs were supposed to serve as structures for implementing both community and FC decisions through the formulation of plans for harvesting and marketing of various products. However, RMCs never participated fully in co-management and resource sharing. Project documents were full of the rhetoric of community participation and empowerment but a closer look at what was happening on the ground indicated tokenism at play (see Matose, 1997:75). Box 1 sums up the FC's lack of sincerity in forging a co-management scheme with the forest-edge communities.

#### Box 1: Brief Profile of the Co-management Scheme in Mafungabusi

- Constitution of the scheme drafted in English by the Forestry Commission and Ministry of National Affairs and Employment Creation.
- Draft circulated to forest edge communities for comment.
- The FPU excluded RMCs from decision-making and policing of the forest.
- Local communities denied access to poles, game meat and arable land in the forest.
- Resources to be shared decided by the FC and limited to non-timber resources such
  as access to grazing land, thatching grass, broom grass, mushrooms, mopane worms
  (a type of edible caterpillars), fruits and firewood.
- Traditional leaders not part of the team leading in the co-management scheme.
- Projects to be undertaken by the community in the forest reserve dictated by the Forestry Commission.
- RMCs accountable to the FC.

It is also important to note that RMCs, which were supposed to be sub-committees of VIDCOs, were not even trusted by the FC. For instance, they did not hold joint patrols with the FPU. Furthermore, RMCs could not hold meetings alone. There had to be a Forest Commission representative at every meeting they held. Whenever RMCs wanted to withdraw money from the community project account, the FC had to counter-sign the withdrawal.

Due to lack of sincerity on the part of the FC, forest edge communities refused to cooperate in the co-management scheme. Local communities shielded forest resource poachers from arrest by the Forest Protection Unit. In fact, most local people did not perceive the culprits as poachers but hunters.

#### CASE STUDY 2

#### ROMWE CATCHMENT AREA

#### **Background**

Romwe Catchment is located near Ngundu business centre in Chivi district, about 86 km south of Masvingo town. The catchment area lies in wards 23 and 25 of the southern part of Chivi district. Three traditional villages, namely Dhobhani (in ward 25), Zihambe (in ward 23) and Tamwa (in ward 23), fall in the Romwe catchment. Of the three villages, two are partly contained within the catchment. In 1998 Dhobhani had 40 households, Zihambe 33, and Tamwa with 56 households. The Dhobhani and Zihambe people are of Ndebele origin while those from Tamwa are of Shona origin.

The area began to be referred to as the Romwe catchment in 1995. Some local people say prior to that it was referred to as *kumaNdebele* (the area of Ndebele people) because the original immigrants from Shurugwi who were settled in the area were Ndebele speaking (Nemarundwe *et. al.*, 1998). The Shona people in the area argue that they were the original inhabitants of the area. According to them, the area belonged to the Nemavuzhe clan, who were Shona speakers of the *ngara* totem. Around 1950, these people were evicted from the area when it was designated grazing land by the colonial government. In 1952 the displaced people were surprised when they saw the Ndebele people settling in the land from which they had been evicted. On realising that their land was being taken over by foreigners, most Shona people flocked back but others could not come back to be subjects of the Ndebele who had established leadership structures in the area.

Rainfall in the area is low and erratic, ranging from 450mm to 600mm per annum. Crop failures and livestock losses result from the drought lead to greater pressures on the woodland resources (Nemarundwe et. al., 1998).

#### **Types of Conflict**

The Romwe catchment study identified major conflicts centred on the conversion of grazing areas into settlement and arable land (from communal to private ownership). This resulted in restricted access to areas where community members previously had access to woodland resources such as firewood, fruits, poles, thatching grass and pasture for livestock.

#### Ethnic Friction

The set up in Romwe was that only two villages, Dhobhani and Zihambe were in the catchment area and predominantly constituted of Ndebele speaking people. Of all the neighbouring villages, Tamwa is closest to the catchment area. Although all villages composed of Shona speaking people are located outside the catchment area, the Shona people 'poached' resources from the catchment area. They argued that when the Ndebele people settled in the area that originally belonged to the Shona, they violated the Shona people's norms and values pertaining to resource conservation and sacredness of certain places in the catchment area. Therefore, the Shona people perceived their 'poaching' of resources in the catchment area as an expression of their general disgruntlement with the Ndebele people's lack of sense of conservation for resources in the area. Ironically, the Ndebele perceived the Shona people's illegal appropriation of resources in the catchment area as indicative of a people who had no respect for natural resources in general. Owing to this scenario, the Ndebele people felt they did not have an incentive to conserve since the Shona would illegally appropriate whatever they conserved.

#### Contested Boundaries

The conflict over boundaries in Romwe was at two levels, namely, inter-village and intra-village. Inter-village conflict took the form of neighbouring villages, that is Tamwa and others outside the catchment area, refusing to recognise the catchment area boundaries that put resources in the catchment woodlands out of bounds to them. People from neighbouring villages claimed that the catchment area was originally theirs before eviction and subsequent occupation of the land by migrants-the Ndebele speaking people. In fact, people from neighbouring villages felt that they had more rights to the resources in the catchment area than the Ndebele speaking people of Dhobhani and Sihambe.

Intra-village conflict was mainly over the conversion of grazing land into arable and settlement land. Most of the woodlands in the catchment area were being cleared for farming. Some local people who either had inadequate or lacked arable land could not recognise the demarcation of land into arable and grazing area. They desperately wanted arable and settlement land regardless of the boundary.

#### Institutional Conflict

Traditional authorities, namely, the kraalhead, headmen and chief were effective in resources management during the 1950s and 1960s. Local people reported that at that time, cases of norm and rule breaking were very limited because traditional leaders' commanded respect among their people and worked closely with extension officers and district administrators.

However, with the attainment of independence in 1980, the new government instituted elected village development committees (VIDCOs) and ward development committees (WADCOs). As in other parts of the country, these institutions had a mandate to monitor resource use in Romwe. Nevertheless, reality on the ground indicated that VIDCOs were abating the conversion of grazing land into arable and settlement land. The Communal Land Act of 1982 conferred VIDCOs with the authority to allocate land in their areas of jurisdiction. In pre-independent Zimbabwe, this function fell in the office of traditional leaders, namely, the Chief, Headmen or Kraalhead. Consequently, despite the traditional leaders' objection to the change of land use from grazing to arable and settlement land, the VIDCOs proceeded to allocate some local people land for farming in areas originally designated as grazing land. The conversion of grazing land into arable land resulted in

he destruction of woodlands, depriving most local people of both pasture and woodland esources such as wood for carving, timber, thatch-grass and others.

#### ntergenerational Conflict

n Romwe, the conflict over woodland resources also assumed an intergenerational imension in that it was mostly the young generation who converted grazing land into rable land. The young generation argued that the older generation could afford to espect the delineation of land into arable and grazing land because most of them leady had land for cultivation. Moreover, it was the older generation which needed arazing land most because most of them owned livestock. A majority of the young generation did not have livestock. Hence, to the young generation the setting aside o land for grazing purposes was a waste of arable land. On many occasions, elders who openly protested the conversion of grazing land into arable land were threatened with being beaten up by the youths concerned.

#### Co-management Problems

Romwe did not have a state-community partnership in the management of its woodlands which could be studied under the co-management scheme. Nevertheless, one may note in passing that under a management arrangement one might refer to as 'state-assisted natural resource conservation' (SNRC), the state neglected its role. Ideally, in an SNRC arrangement, the Department of Natural Resources (DNR) has a mandate to promote natural resources conservation in all communal lands. This also involved punishing people violating conservation laws. In the case of Romwe, the DNR officers who were responsible for monitoring natural resource use and conservation in the area did not make any effort to stop the conversion of grazing land into arable and settlement land. The kraal-heads who were compelled to watch by while woodlands were being destroyed, expressed concern over the DNR officers' failure to take action. The kraal-heads observed that it was as if the officers condoned the action.

#### CASE STUDY 3

#### NYAMAYARO VILLAGE

#### Background

This traditional village is found in Nhehweyembwa ward (Murehwa district) and is located between two mountain ranges to the east of Chivake River Bridge. It is about 500m north of the Harare-Murehwa highway and about 7km west of Murehwa Growth Point. It is a small village with only 35 households of Shona speaking people.

The people of Nyamayaro originally migrated from a village called Chiweshe, after Nyamayaro, then an ordinary villager, had a misunderstanding with the incumbent village head. He and other disgruntled villagers decided to leave Chiweshe. The six households sought the permission of the District Commissioner and the reigning Chief Mangwende to settle in the area, latter named Nyamayaro, after the new kraal-head. The conditions for starting a new settlement such as surveying of land and pegging of contour ridges were met before people settled in the area. Neighbouring villages claimed that the Nyamayaro village was sited on land that was originally designated as grazing land, hence people from neighbouring villagers referred to them as vanhu vekumafuro [those who live in the grazing lands].

the time these people settled on what is now Nyamayaro kraal, the area had thick rests, replete with wild fruits. Firewood was abundant since there were many dry trees in the area. There was no need for anybody to cut down live trees for firewood. Arable and grazing land was in abundance too. However, the increase in population was not met by a concomitant increase in the woodland, arable and grazing lands. This resulted in an alarming level of deforestation that threatened his people with shortages of woodland resources such as firewood, timber and others. The only woodlands that remained were in two hills that formed the northern and southern border of the village. The situation compelled the kraal-head, Nyamayaro, to seek measures of stemming further degradation. He therefore initiated a woodlands conservation program by consulting his people to decide on rules and regulations that needed to be put in place to ensure a sustainable utilisation of the woodland resources. At the time, neighbouring villages had had all their woodlands degraded due to uncontrolled wanton appropriation of woodland resources.

#### **Types of Conflict**

#### Ethnic Friction

Some cases of ethnic friction noted in Romwe and Mafungabusi were non-existent in Nyamayaro because most members of the community were of Shona ethnic descent. However, at the time of fieldwork a migrant from Mozambique joined the community.

#### Contested Boundaries

As in Romwe, conflict over boundaries in Nyamayaro had also an inter-and intra-village dimension. Inter-village conflict resulted from people from neighbouring villages, especially Chiweshe, to the north, who 'poached' woodland resources such as firewood, poles, carving-wood and others from Nyamayaro. The culprits usually justified their acts by pointing out that Nyamayaro village was established in what was originally their grazing area. In fact, that was the reason the boundary of Nyamayaro village was not recognised by most people from neighbouring villages. The following case captures the boundary wrangle that existed between the people of Nyamayaro and Chiweshe villages:

Most people in Nyamayaro village conformed to the new rules and regulations of obtaining resources from the woodlands. One of the rules was that, if a member of the community needed firewood, he or she approached the kraal-head, who would accompany the community member to the woodlands and select a tree which one could cut down for firewood. Although the rules and regulations were beginning to be effective tools in the management of the woodlands in Nyamayaro, people from Chiweshe continued to 'poach' the resources. This undermined the Nyamayaro people's motivation to conserve their woodlands.

Consequently, kraal-head Nyamayaro arranged for a meeting with kraalhead Chiweshe seeking his assistance in discouraging the illegal appropriation of woodland resources by his people. The following case material summarises what transpired at the meeting:

#### Box 2. Kraal-heads' Meeting

When Nyamayaro arrived at Chiweshe's homestead, the two leaders exchanged friendly greetings and updated each other on a number of general issues. However, the atmosphere turned tense when Nyamayaro introduced the issue of degradation of woodland resources in his village by some of Chiweshe's people. At that point, Mr. Nyamayaro advised his visitor to change the subject if at all the good personal relationship existing between them was to be maintained. However, Nyamayaro insisted on discussing the matter since that was the main purpose of his visit. From thereon, the host became annoyed and told his guest that he needed to be reminded of two issues.

The first issue was that Nyamayaro people were squatters on land originally set aside as grazing area for the Chiweshe people. The fact that the Chiweshe people allowed Nyamayaro people to settle and cultivate crops in their grazing area did not mean that they had totally surrendered their right to the resources on the land. It was only out of the spirit of good neighbourliness that they did not go on an all-out war to drive the Nyamayaro people out of the area.

The second issue was that woodland resources were not only for people living next to the resources. Anybody, from any village had a right to fetch fire-wood and any other resources one needed from any other village. The practice was only illegal when one obtained the resources from a farm without the permission of the farm owner. Furthermore, Nyamayaro was asked whether he had ever complained about people from the city (Harare) who often came into the area to collect fire-wood and wild fruits for sale in town. "Saka imi vokwaNyamayaro mava kuda kuzviona savana Matenganyika<sup>1</sup>? Zvatinoziva ndezvokuti ruzevha nderwe munhu wose!" Chiweshe said.

Nyamayaro maintained his calm in the face of the outbursts. He did not respond to any of the remarks until Chiweshe asked, "What do you want from me?"

"Stop your people," Nyyamayaro said.

Chiweshe responded, "I can only stop people I have sent. How then can I stop people I haven't sent?"

#### Institutional Conflict

The existence of dual structures of authority in Nyamayaro village, namely, the kraal-head and VIDCO resulted in institutional conflict. The kraal-head's authority over the village was rendered ineffective by the introduction of the VIDCO. This institution assumed jurisdiction over natural resource management and other issues, which previously were the responsibility of the kraal-head.

Nevertheless, when the VIDCO took over control of Nyamayaro village, most local people started behaving as if they were an authority on their own. During this period, many woodland resources in the village such as fire-wood, poles, wild fruits and others were lost. The VIDCO did not make an effort to stop the abuse of resources because they were afraid of losing political support. When the kraal-head expressed his concern over the degradation of the resources, VIDCO officials and their supporters threatened to beat him up and reminded him of the fact that he was not an authority in the village anymore. They would only consult him on any matters requiring spiritual leadership (ritual ceremonies).

#### Box 3. Tale of the Kraal-head (Nyamayaro)

What happened in this village when the VIDCO assumed authority was a disaster. I have never seen anything like it in my life. It was a case of people coming together to elect a group of children to run the village. Some of the children elected to lead the village had just finished their Form Four ('O' Level). The elections made them masters over their mothers and fathers. I'm not just talking about my own shock but imagine your 18-year-old son becoming a member of the VIDCO to be in charge of the affairs of a village you live in. If you are the father and you commit an offence, how would you feel being summoned for trial before this committee of children?

Although it is not proper for me to say all of them were children<sup>1</sup>, their behaviour in general was that of children. They did not seem to be serious about anything. All they cared about was to be liked by many people the bad and the good. But how can you be a good leader when even men of evil deeds regard you as a best friend?

People were doing whatever they wanted in this village. The VIDCO would turn a blind eye to the destruction and theft of forest products. The Committee told me that I could not have a say in what was going on in the village because I was not elected in the VIDCO. Therefore, I had no choice but to watch idly as the woodlands were being destroyed.

#### Intergenerational Conflict

In Nyamayaro village, conflict in the management of miombo woodlands also indicated the existence of intergenerational conflict. It was the young generation that was mostly accused of cutting down trees for poles to build houses. However, the young men argued that it was unfair for anyone to prohibit them from cutting down trees because almost all new homesteads in the village were built of pole-and-dagga. Brick houses featured later as one became more settled in life.

#### Co-management Problems

Nyamayaro woodlands did not fall under a state-community co-management scheme but in the SNRC system. Therefore, the issue of co-management was not investigated. However, as in the case of Romwe, the SNRC system never worked in Nyamayaro. The Department of Natural Resources had officers at Murehwa centre but they never visited Nyamayaro village to assist in the community-based woodlands management program. The officials blamed it on lack of transport, whereas their offices were just 4 km away from Nyamayaro village. Their failure to assist the community's conservation efforts annoyed the Nyamayaro people. The community strongly felt that they would have not lost their woodland resources to neighbours if the officials were doing their job.

#### CONFLICT RESOLUTION: GLEANINGS FROM THE CASE STUDIES

This section focuses on some insights on conflict resolution in the management of *miombo* woodlands gained from the three case studies presented above. From the outset, it seems necessary to point out that not all forms of conflict and case material mentioned in this paper offered clues on conflict resolution.

#### **Ethnic Harmony**

Ethnic friction over access to woodland and forest resources, noted in Romwe and Mafungabusi respectively, was never resolved to ensure a sustainable management of

the resources. Instead, the friction persisted with each ethnic group positioning itself to optimise its benefits from the illegal appropriation of woodland and forest resources.

#### **Recognition of Boundaries**

In the case of Romwe and Nyamayaro, the issue of contested boundaries remained unresolved. The continued poaching of woodland resources in Nyamayaro village by outsiders and the conversion of grazing land into arable land by some people of Romwe was indicative of lack of recognition of existing boundaries. However, in Mafungabusi, the once strongly contested forest reserve boundary started gaining the respect of most forest-edge communities after increased community participation in the management and utilisation of forest resources.

The first phase of the co-management scheme institutionalised the alienation of forest-edge communities from accessing forest resources. The Forestry Commission (FC) aimed at merely incorporating the community in the enforcement of the state's forest conservation rules and regulations, applying in the area designated as a reserve. This was done through the setting up of RMCs that were more accountable to the FC than to the communities they represented. At that point, local communities, through their RMCs were assisting in the management of the forest without deriving any benefits from it, as had been promised at the launch of the co-management scheme. It was therefore difficult for them to co-operate in the management of the forest, let alone to respect the forest reserve boundary. They continued to appropriate resources from the forest illegally. However, when the FC started delivering on the tariff of benefits promised, most forest-edge communities started developing a keen interest in ensuring that people who crossed the forest reserve boundary to steal resources were arrested and punished.

#### Institutional Integration

The degradation of woodland resources in Romwe's grazing land was abated by the power struggle between kraal-heads and VIDCOs. The VIDCOs chose to express their authority over the kraal-heads by sanctioning the conversion of grazing lands into arable and settlement land. By the time fieldwork for this paper came to an end, the two structures of authority had not yet coalesced into a united front for the sustainable management of the woodland resources in the area. In the case of Mafungabusi, conflict between the Forestry Commission and local traditional leaders over the appropriation of forestry resources tapered off when a co-management scheme was forged between the FC and the local community. More importantly, the co-operation between the state (FC) and forest-edge communities, in the management of the forest reserve was predicated on the state's acceptance of the communities' right to appropriate certain resources from the forest in a manner that did not compromise sustainable utilisation. In Nyamayaro, a more organised and sustainable utilisation of woodlands began to be realised when the VIDC0 and the kraal-head subsumed their authority in a new structure of control-the village assembly<sup>5</sup>. The VIDCO and the kraal-head no longer jostled for recognition as the authority in the village. Instead, they came together to lead the village assembly.

#### **Bridging Intergenerational Differences**

The intergenerational conflict in Nyamayaro was mainly over access to poles for building purposes. The young generation needed shelter. In order to ensure that the youth had access to shelter without decimating existing indigenous woodlands, the village started a eucalyptus plantation. Although small, the plantation catered for most of the local youths'

<sup>&</sup>lt;sup>5</sup> The term 'village assembly' is used here loosely to refer to an informal administrative structure in which all members of the village participated in deciding the affairs of the village led by the kraalhead and the VIDCO.

demand for timber. Meanwhile, in Romwe catchment area, the intergenerational conflict persisted without a solution in sight. The youths continued to convert grazing lands (woodlands) into arable and settlement areas because they were in dire need for land. In Mafungabusi, the youths continued to pose a problem in the management of forest resources because the elder generation and the FC had completely denied them an opportunity for woodcarving, which was the predominant economic activity among the young generation in the area.

#### Involvement vs. Incorporation

The conflict of interest between the state and forest-edge communities in the management of Mafungabusi forest was expected to end with the forging of a commanagement scheme. Nevertheless, in its early stages, the FC-proposed commanagement scheme was manipulative in character. It did not recognise forest-edge communities as stakeholders in the conservation of the forest. In essence, the FC was failing to live up to the terms and conditions of the co-management constitution that it had formulated and imposed on forest-edge communities to authenticate. In practice, local communities objected to be part of this deal and continued to illegaily appropriate resources from the forest. The co-management scheme only started securing community co-operation when the FC showed a commitment to fulfil its promises of 'active involvement by the local communities' in return for specified benefits. From thereon, RMCs began to enjoy the support of most of the forest-edge communities.

#### SOME INSIGHTS FROM THE CASE STUDIES

One school of thought views conflict in natural resource management as a form of discourse where rights and obligations in common property resources are negotiated (Fortmann, 1995; Becker & Ostrom, 1995). Another view, to the contrary, argues that conflict results in chaos, which in turn leads to the degradation of natural resources (Buckles & Rusnak in Rusnak [Ed] 1999; Murphree, 1991; Little and Brokensha 1986). Data from the three case studies referred to above indicate that conflict is both a discourse of clarifying rights and obligations to CPR and of licensing wanton degradation of resources, especially where intervention by a more authoritative agent is not secured in time to avert the chaos. Perhaps, more importantly, the data seems to indicate that conflict over access to *miombo* woodlands has a more fundamental dimension, that of defending livelihoods. It is more than a discourse of negotiating rights and obligations, but the pedagogy of securing one of the essentials of rural livelihoods.

The ethnic friction in Romwe and Mafungabusi over access to woodland and forestry resources, respectively, brought into sharp focus the issue of entitlement on the basis of a common language and migration history. Both the Shona of Romwe and the Shangwe of Mafungabusi referred to migration history to legitimate their actions and claims of right to resources. They claimed to be "pioneer settlers" (Sithole, 1999:214) to the lands with the contested resources. Ethnic groups that came after them were the migrants (see Sithole, 1999, for different types of migrants). Essentially, in each of the cases, a common language and history defined ethnic identity, more than descent. In the case of Mafungabusi, the RMCs that were predominantly composed of Shangwe speaking people used the 'pioneer-settlers' argument as a basis for claiming and defending the Shangwe people's 'entitlement' to most of the forest resources. This behaviour supports Blau's (1967) observation that groups whose interests are served by existing organisations defend them against attack and fortify them. The tendency to use the ethnic divide to defend a group's interests or access to scarce resources against out-

groups<sup>6</sup> is a common phenomenon in Zimbabwe. In 1999, a Member of Parliament for Chiredzi South was arrested after he mobilised 50 Shangani men and attacked Karangas (a minority, migrant ethnic group in the area) in Jeka village. The Shangani men had been at loggerheads with the Karangas over a tract of land along the Runde river in Chief Chilonga's area where they wanted to forcibly remove the Karanga people (The Herald, 5 April, 2001:1) from a predominantly and originally Shangani territory. Becker and Ostrom (1995:119) posit that the existence of "rapid access to low cost, local arenas to resolve conflict among users or between users and officials" is a prerequisite for sustainable governance of resource use. In the case of Romwe and Mafungabusi, there were no institutions put in place to resolve conflict among users of forest and woodland resources. The institutions, which once existed to deal speedily with all forms of conflict, that is kraal-heads and chiefs, were dis-empowered by the post independence government and replaced by VIDCOs ad WADCOs. Unfortunately, the latter were institutions essentially meant to spearhead development in their respective areas rather than deal with conflicts per se.

The issue of boundaries has attracted a lot of attention in CPR literature (see Becker & Ostrom, 1995; Ostrom 1997; Shackelton et. al., 1998; Sithole, 1999; Scoones, 1989; Lewis 1991; Mandondo, 1998; Sithole & Bradley, 1995). One camp perceives boundaries as a panacea for conflict in the management of common property resource (see Becker & Ostrom, 1995; Ostrom 1997; Shackelton et. al., 1998). The views of these scholars duster around Becker & Ostrom's (Ibid: 119) design principle or theory that sustainable CPR have clearly defined boundaries. On the other hand, there are scholars who are sceptical about the efficacy of this theory in explaining conflict and its resolution in CPR management (Lewis, 1991; Nhira & Fortmann, 1993; Rocheleau, 1992; Mandondo, 1998. Sithole, 1999; Scoones, 1998). The latter perceive boundaries as negotiable (Rocheleau. 1992), defined by interaction or social networks (Lewis, 1991), blurred by multiple layering of rights over a resource (Nhira & Fortmann, 1993) and, as soft and porous to allow use of resources by other people living in villages far from the resource. Mutepfa et. al. (1998) contend that "as long as communal resources are both formally state and informally customary lands, authority and management will be compromised, and open access tendencies will thrive," despite the existence of boundaries.

The case studies of Romwe and Nyamayaro indicated that despite the existence of clearly marked boundaries between villages, people still ignored boundaries that were meant to put resources beyond their reach (see also Sithole and Bradley, 1995 for conflict over boundaries of dambos in Mutoko and Chiduku [Zimbabwe]). With regard to Becker and Ostrom's (1995) principle of 'clearly defined boundaries', the three case studies seem to point at the need for drawing physical boundaries of a resource, taking into account the multiple layers of socio-economic interests that cut across the use of a particular resource. In other words, it is not enough for common property resources to have clearly marked boundaries. The physical boundaries should reflect a consensus view of all interested parties or stakeholders. Nevertheless, the prevalence of contestations over boundaries in the management of CPR seems to warrant further studies on the social dynamics of boundaries. Such studies may be instrumental in influencing physical planners to approach the marking of boundaries as an exercise in social engineering<sup>7</sup>.

The degradation of woodland and forest resources in Romwe, Nyamayaro and Mafungabusi was abated by institutional conflicts. Conflicts between and among

<sup>&</sup>lt;sup>6</sup> The term out-group is used here loosely to refer to other ethnic groups to which one does not belong.

<sup>&</sup>lt;sup>7</sup> Social engineering refers to a deliberate process of influencing social interaction between and among people to be controlled by the boundary.

institutions over the management of natural resources have drawn the attention of many researchers (see Gore et. al., 1992; Sithole & Bradley, 1995; Murphree, 1993; Becker & Ostrom, 1995; Sithole, 1999; Marnimine in Nherera et. al. [ed], 1999; Murombedzi, 1990). In the case of Romwe and Nyamayaro, the conflict between VIDCOs and traditional leaders, that is kraal-heads, has a jurisdictional antecedent. Gore et. al.. (1992) observe that "In situ lineage leadership8institutions had, for many years, taken responsibility for resource allocation and use. These traditional institutions provided for rights of avail and defined and enforced rules and regulations that controlled resource use." They argue further that the relegation of the traditional structures to non-functional roles after independence has led to a breakdown of some of the time-tested environmental conservation approaches, e.g. selective tree cutting and others. Instead of operating as government conduits for the sustainable management of natural resources VIDCOs in Nyamayaro and Romwe have tended to operate as stumbling blocks in that regard (see also Sithole, 1999:135; Mamimine, in: Nherera et. al. [ed] 1999: 153). Murombedzi (1990) sees the conflict between traditional leaders and VIDCOs as a fight over the control or authority over land.

In Mafungabusi, institutional conflict over the management of forest resources pitted the Forest Protection Unit against traditional leaders. Traditional leaders refused to coperate with RMCs, which were perceived as another extension of the Forestry Commission. The leaders felt that RMCs were becoming more powerful than them, with regards to the management of forest resources. Moreover, RMCs were more answerable to the FC in the conduct of their work than to the traditional leaders. In fact, they functioned as "extensions of central government, accountable to the centre rather than to the community" (Murombedzi, 1992).

Institutional conflict in Romwe, Nyamayaro and Mafungabusi point to the dangers of placing institutions in a hierarchical relationship or what Sithole, (1999), calls 'parallel systems of adjudication'. The traditional or lineage institutions were relegated to a position of least significance in the management of woodland and forest resources. Ironically, a 'modern' institution, that is the VIDCO, elevated to the highest position in the management of natural resources at the local level, through a legal mandate, proved to be highly dysfunctional, and worse still, facilitated the degradation of woodland and forest resources. Although RMCs, (also a modern institution) did not work against the conservation of forest resources, their closeness to the FC rather than to the local people and its leadership, rendered the co-management or resource sharing scheme suspect. Therefore, it seems reasonable to argue that a sound institutional framework for the management of natural resources should be characterised by change and continuity. In essence, traditional institutions should be integrated or be accorded a role in the management of the resources. This is not to suggest that the traditional institutions should have their past roles in natural resource management reinstated fully, but to blend best practises from the past (represented by traditional leadership), with what is envisaged to be the strengths of 'modern' institution.

Each generation of resource users may have interests and needs that are different from that of earlier generations. The need for arable land (Romwe and Mafungabusi), timber for building purposes (Nyamayaro) and wood for carving (Mafungabusi), pitted the young generation against local elders who did not require these resources. The situation rendered any efforts by adults to restrict the youth's access to such resources irrational thereby generating conflict. Strum cited in Western et. al..,[ed] (1994) notes that when interests diverge, often most dramatically between generations, the means of arbitration may no longer function. Seemingly, in order to accommodate the interests of the young

<sup>&</sup>lt;sup>8</sup> Refers to kraal-heads, headmen and chiefs.

generation without compromising sustainable utilisation of the resources, there is need to shift to adaptive management<sup>9</sup> of resources.

The Mafungabusi forest's co-management project between local communities and Forestry Commission, fall under the relational management system. Characteristically, conservation projects of this nature seek to obtain the co-operation of protected-area neighbours by making such areas a source of economic and developmental benefit to surrounding communities (see Murphree in Western & Wright, [Eds.] 1994). It is worth noting that in this type of projects, the issue of benefits, (of whatever form) as incentives for community co-operation in natural resource management, is of cardinal importance to the attainment of conservation goals. This is in keeping with the argument that, "communities view conservation as a means rather than an end" (Murphree cited in Western & Wright, [ed] 1994:404). The term co-management implies that the Mafungabusi forest-edge communities were participating fully in resource management and sharing. Nevertheless, in reality, both local communities and RMCs meant to represent them never participated fully in the co-management scheme. Project documents were full of the rhetoric of community participation and empowerment but a closer look at was happening on the ground, indicated tokenism at play (see Matose. 1997:75).

It is difficult for one to comprehend how the scheme could be termed `co-management', when in actual fact the FPU excluded RMCs from decision-making and policing of the forest. The claim of resource-sharing was just a facade since local communities were denied access to poles, game meat and arable land in the forest, which were prime resources to them. The resources to be shared were decided by the FC and limited to non-timber resources such as access to grazing land, thatching grass, broom grass, mushrooms, mopane worms (a type of edible caterpillars), fruits and firewood. Unfortunately, the above concession did not succeed in eliminating conflict between state agents (FC) and local communities since the most contentious resources are those that are most valuable for local production (see Scoones & Cousins, 1994). In this case, it was the land. Why then did the state agent (FC) exclude land from the tariff of benefits to derive to communities from the co-management and resource-sharing project?

Arnstein (1969)'s "ladder of participation" adopted by Matose (1997:75-76) in forest management identifies, *inter alia*, two levels of community participation in order of importance. The first one is where local people manage their own resources, that is, taking over forests controlled by outsiders such as the FC. The second one is in form of a partnership, equivalent to effective *joint* forest management or resource sharing. But the latter has a major weakness of the probability of being reduced to mere consultation. Such was the situation obtaining in Mafungabusi, clearly negating the basic principle of popular participation in forest management. The highest degree of co-management involves equal partnerships in decision-making (Moyo, 1995). Hence, in situations where the state fails to accord communities a meaningful say in the management and sharing of forest resources, such as in Mafungabusi, the whole 'edifice' of co-management of forest resources turns out to be a spurious partnership. Habermas foresaw an increasingly powerful bureaucratic state undermining the possibility of local people participating usefully in decision-making processes via the usual democratic institutions (Craib, 1984: 211).

Under the sophistry of 'co-management', the state invites local communities to take part in their own systematic dispossession. This occurs under the guise of what Scoones et. al., (1994:586) call the state legitimation ideology of "conservation and protection". In

<sup>&</sup>lt;sup>9</sup> Adaptive management refers to the adoption of a management style that caters for the interests of all stakeholders without compromising the goal of sustainable utilisation.

order to stem the conflict between local communities and forest resources in Mafungabusi a more participatory approach should be adopted (Bradley & McNamara, 1993), with communities becoming guardians and managers of resources (Matose, 1997).

The failure by state agents to assist or punish offenders of conservation rules and regulations in Romwe and Nyamayaro was also a clear indication of state's lack of commitment to work with communities in ensuring sound utilisation and management of miombo woodlands. For instance, villagers surrounding Nyamayaro continued to poach woodland resources from Nyamayaro village without courting punishment from the Department of Forestry or Natural Resources Department officers. The state did not also do anything to ensure that the people of Romwe respected land designated as grazing land.

#### CONCLUSION

Unless we understand the internal logic of an illegal act, the rewards of non-conformity and the mind-set of a desperate man, we are far from diagnosing and resolving conflict in the management of woodlands and forest reserves. Without the provision of alternative forms of livelihood in rural areas, people are compelled by circumstances to interact with woodlands and forests in a manner that may be construed as fundamental irrationality by a people who are naïve to believe that rural people lack a survival instinct. The case studies discussed above indicate that people violated woodland and forest management regulations in order to secure resources that were core to their rural livelihoods. There is nothing wrong with setting aside land for grazing purposes but there is something fundamentally wrong with it, when people without livestock are forced to respect the zoning when they have nowhere to cultivate. State forest reserves are a commendable conservation scheme but not when gazetted next to a people who are critically short of arable land. As long as conservationists continue to regard some rural people's genuine demand for arable land and essential forest resources as mere stumbling blocks to conservation efforts, attempts at sustainable utilisation and management of miombo woodlands would remain elusive and a flash-point of conflict among stakeholders.

Conflict and conflict resolution in the management of miombo woodlands is a complex issue that requires the tackling of socio-economic fundamentals. With regards to this, shortage of land looms large both as the barrier to sound management of woodlands and forests and a causal factor to the conflict. A people who are short of arable land in an agro-based economy and other natural resources critical to their survival, cannot be convinced that setting aside some pieces of land exclusively for the conservation of trees or for grazing purposes is a sensible and viable land use option. To them lack of access to adequate arable land means lack of a reliable source of food. Saraph cited in Oneka (1996) observes that "when the only tool you have is a hammer everything begins to look like a nail". This statement summarises the place of land in conflict over natural resource management such as woodland and forest resources. Therefore, conflict resolution in the management of miombo woodlands would succeed if the illegal appropriation of resources were approached as a symptom of a broader problem of lack of access to arable land and woodland products of critical importance to rural livelihoods. Once the distribution of these key resources is responsive to the needs of rural livelihoods. communities and individuals are likely to be more supportive of conservation efforts from both within and without the communities, thereby minimising conflict in the management of miombo woodlands.

#### REFERENCES

- Amstein, S R (1969), A ladder of participation. *Journal of American Institute of Planners*, 216-223
- Aylen, D. (1942), Conserving Soil in the Native Reserves. *Rhodesia Agriculture Journal*, 39:152-160.
- Becker, C.D. & E. Ostrom (1995), Human Ecology and Resource Sustainability: The Importance of Institutional Diversity. *Annual Review of Ecological Systems*, 26: 113-133.
- Blau, M.P. (1967), Exchange and Power in Social Life. New York: John Wiley.
- Bradley, P. & K. McNamara (Eds.) (1993), Living with trees: Policies for Forestry Management in Zimbabwe. World Bank Technical Paper, 210. Washington: World Bank, 63-138.
- Bromley, D.W. & M.M. Cernia (1989), *The Management of Common Property Natural Resources: Some Conceptual and Operational Fallacies.* World Bank Discussion Papers, 57.
- Buckles, D. & G. Rusnak (1999), Conflict and Collaboration in Natural Resource Management, In: D. Buckles D. [Ed.], Cultivating Space: Conflict and Collaboration in Natural Resource Management. International Development Research Centre (IDRC), Washington DC.
- Burton, J. (1990), Conflict: Resolution and Prevention. New York: St Martins' Press.
- Cousins, B. (1989), Introduction: the elephant in the dark, In: B. Cousins [Ed.], People, Land and Livestock. Proceedings of a Workshop on the Socio-economic Dimension of Livestock Production in the Communal Lands of Zimbabwe, 12-14 September 1988, pp 461. Centre for Applied Social Sciences (CASS), University of Zimbabwe.
- Craib, I (1984), Modem Social Theory. London: Wheatsheaf Books Ltd.
- Campbell, B. [Ed.] (1996), *The Miombo in Transition: Woodlands and Welfare in Africa*, Centre for International Forestry Research, Bogor, Indonesia.
- Fortmann, L. (1995), Talking Claims: Discursive Strategies in Contesting Property, World Development, *Elsevier Science*, 1053-1063
- Gore, C., Y. Katerere & S. Moyo (1992), The Case for Sustainable Resources in Zimbabwe: Conceptual Problems, Conflicts and Contradictions. ENDA/Zimbabwe and ZERO, Harare.
- Hirsch, P., K. Phanvilay & K. Tubtim (1999), Nam Ngun, Lao PDR: Community-based Natural Resource Management and Conflicts Over Watershed Resources, In: D. Buckles [Ed.], Cultivating Peace: Conflict and Collaboration in Natural Resource Management, International Development Research Centre, Ottawa.
- Kant, S & R. Cooke (1999), Jabalpur District, Madhya Pradesh, India: Minimising Conflict in Joint Forest Management, In: D. Buckles (Ed.] Cultivating Peace: Conflict and

- Collaboration in Natural Resource Management, International Development Research Centre (IDRC), Ottawa.
- Lind, E.M. and M.E.S. Morrison (1974) East African Vegetation. London: Longman.
- Lewis, M.W. (1991) Elusive Societies: A Regional Cartographic Approach to the Study of Human Relatedness. *Annals of Association of American Geographers*, 81: 605-626.
- Little, P.D. & D.W. Brokensha (1986), Local Institutions, Tenure and Resource Management in East Africa, In: R.D. Grove & D. Anderson, Conservation in Africa: People, Policies and Practices. Cambridge: Cambridge University Press, 193-207.
- Mamimine, P.W. (1999), The Impact of Commercial Stone Carving for Tourism on the Environment in Zimbabwe: A Case Study of Bepura Ward in Guruve District, In: C. Nherera, P.W. Mamimine & P. Machakanja [Eds.], Capacity Building in Educational Research in Southern Africa: Empirical Insights into Qualitative Research, IDRC/DSE/Human Resources Resource Centre, Harare.
- Mandondo, A. (1998), The Concept of Territoriality in Local Natural Resource Management and its Implications on Livelihood in Nyamaropa Communal Land, Institute for Environmental Studies (IES), University of Zimbabwe, Harare.
- Matose, F. (1997), Conflicts Around Forest Reserves in Zimbabwe: What Prospects for Community Management? In: Community-Based Sustainable Development: Consensus and Conflict? IDS Bulletin, 28 (4): 69-78.
- Moyo, S. (1995), The Land Question in Zimbabwe. Harare: SAPES Books.
- Moyo, S. (1999), Land and Democracy in Zimbabwe. SAPES Trust Monograph Series; No.7. Harare: SAPES Books.
- Moyo, S., P. Robinson, Y. Katerere, S. Stevenson & D.G. Gumbo (1992), *Zimbabwe's Environmental Dilemma: Balancing Resource Inequalities*. ZERO, Harare.
- Murombedzi, J.C. (1992), 'State Versus Local Control in Natural Resource Management: Zimbabwe's CAMPFIRE Program.' Unpublished Paper from Workshop on Common Property, 22-24 September 1992, Stockholm Environment Institute, Stockholm, Swegen.
- Murphree, M. W. (1994), Communities as Institutions for Resource Management, In: D. Western & R.M. Wright (Eds.), *Natural Connections: Perspectives in Community Based Conservation*. Washington DC: Island Press.
- Murphree, M.W. (1991), Communities as Institutions for Resource Management. CASS Occasional Paper NRM Series. Centre for Applied Social Sciences (CASS), University of Zimbabwe, Harare.
- Mutefpa, F, N. Marongwe, E. Guveya & C.L. Mbizvo (1998), *Enhancing Land Reforms in Southern Africa*, ZERO-Regional Environment Organisation, Harare.
- Nemarundwe, N, M. Mutamba & W. Kozanayi (1998), 'An Overview of Woodland Utilisation and Management in Three Communal Areas in Zimbabwe.' IES Special Report No. 16, (Unpublished).

- C. & L. Fortmann (1993), Local Control and Management of Forests and invironmental Resources in Zimbabwe: Institutional Capacity. Background Paper or the Zimbabwe Forest Sector Review, Washington DC, World Bank Technical Paper, 210:139-155.
- Ottowa-Bennun, P.N. & A.M. Mwangi (1996), Land Tenure and Forest Resource Management, In: C. Juma & J.B. Ojwang (Eds.), In Land We Trust: Environment, Private Property and Constitutional Change. Nairobi: Initiatives Publishers.
- Ostrom, E. (1990), Governing the Commons, The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press.
- Institutions to Govern Common-Pool Resources, Centre for the Study of Institutions, Population and Environmental Change, Indiana University, Indiana, USA.
- Ramachela, K. (1996), 'Community Co-management of Mafungabusi Forestry Resources,' Forestry Commission Internal Document, Harare.
- Rocheleau, D.E. (1991), *Midwives of the Living Landscape: Rural Women and Biodiversity*, Kennedy School of Government, Harvard University, October 4-6.
- Saraph, A. (1996), Toolbox for Tomorrow: Exploring and Designing Sustainable Systems, In: M. Oneka, On Park Design: Looking Beyond the Wars. Tropical Resource Management Papers, No.13; Ph.D. Thesis, Wageningen Agricultural University. University of Groningen, Groningen.
- Scoones, I. & B. Cousins (1991), Wetlands in Drylands: The Agro-ecology of Savanna Systems in Africa. Part 3. Key Resources for Agriculture and Grazing: The Struggle for Control over Dambo Resources in Zimbabwe. IIED Drylands Programme. 29p. Institute of Environment and Development, London.
  - Scoones I. & B. Cousins (1994), Struggle for Control Over Wetland Resources in Zimbabwe, *Society and Natural Resources*, 7: 579-594.
  - Scoones, I. (1998), Sustainable Rural Livelihoods: A Framework for Analysis. Working Paper No. 72, Institute for Development Studies, Sussex.
  - Shackelton, S. & A. Tapson (1998), *Proceedings of the Mini-Symposium on Common Property Resource Management*, Nylsvley Nature Reserve, 4-5 August 1998.
  - Sithole, B. (1999), 'Use and Access to Dambos in Communal Lands in Zimbabwe,' Centre for Applied Social Sciences (CASS), University of Zimbabwe. (Unpublished Doctoral Thesis).
- Sithole, B. & P.N. Bradley (1995), *Institutional Conflicts over the Management of Communal Resources in Zimbabwe*. Stockholm Environmental Institute, Stockholm.
- Western, D.M. & R. Wright [Eds.] (1994), Natural Connections: Perspectives in Community-Based Conservation. Washington DC: Island Press.
- Weitzner V & M.F. Borras (1999), Cahuita, Limon, Costa Rica: From Conflict to Collaboration, In: D. Buckles [Ed.], Cultivating Peace: Conflict and Collaboration in Natural Resource Management. International Development Research Centre, (IDRC), Ottawa.

White, F (1983), The Vegetation of Africa, UNESCO, Paris.

imbabwe, Republic of (1998), Zimbabwe Biodiversity Strategy and Action Plan: Status of Biodiversity, Unmet Needs, Strategies and Actions. Ministry of Mines, nment and Tourism & UNDP, Harare.



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