

A report prepared for the project

Lessons Learnt on Sustainable Forest Management in Africa

LESSONS LEARNT ON COMMUNITY FOREST MANAGEMENT IN AFRICA

DR. J. ODERA National Museums of Kenya Nairobi, Kenya

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Royal Swedish Academy of Agriculture and Forestry (KSLA)



African Forest Research Network (AFORNET) at the African Academy of Sciences (AAS)



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by

Dr. J. Odera

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National Museums of Kenya P.O. Box 45547 Nairobi, Kenya Email: jodera@rpsud.org

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LIST OF ACRONYMS

ATO	-	African Timber Organization
C & I	-	Criteria and Indicators
CBFM	-	Community Based Forest Management
CBO	-	Community Based Organization
FMA	-	Forest Management Authority
FSC	-	Forest Stewardship Council
ITTO	-	International Timber Trade Organisation
JFM	-	Joint Forest Management
MoU	-	Memorandum of Understanding
NGO	-	Non-Governmental Organization
NRM	-	Natural Resources Management
NWFP	-	Non-Wood Forest Products
SAP	-	Structural Adjustment Programme
SFM	-	Sustainable Forest Management
SSA	-	Sub-Saharan Africa
SWOT	-	Strengths, Weaknesses, Opportunities and Threats
TFAP	-	Tropical Forest Programme
VFC	-	Village Forest Committee
WWF	-	World Wide Fund for Nature

1.0 INTRODUCTION

The search for sustainable methods of land use goes back to the 1950s when planned community development thrusts were introduced but later abandoned in the 1960s. In the late 1960s to early 1970s the concept of equity and participation re-emerged, to be buttressed a little later by the concept and approaches based on integrated rural development projects. This period was also dominated by campaigns to avert an impending fuelwood crisis in Africa. These projects promoted tree planting on-farm and reforestation of degraded community forests on hilltops and areas of low agricultural potential.

In response to the outcry over the loss of tropical forests in Sub-Saharan Africa (SSA), many countries, with donor support, attempted in the 1970s and 1980s to bring more forests under state tenure and protection, and urged farmers to plant trees in their farms to relieve pressure from natural forests. Rural development initiatives focused on decentralisation, following recognition that centralised forest regimes, which exclude local knowledge and customary practices, were not achieving sustainable forest management. During this time, the heightened concern about energy supplies, following the energy crisis in 1973, created an awareness of developing countries' dependence on wood for cooking and other household needs. Increased investments were directed to development of improved charcoal and cooking stoves. Forest plantation programmes were intensified in many countries during this period, normally with donor support.

Many countries restructured their forest administrations under the Tropical Forestry Action Programmes (TFAP), adjusted their forest policies, and further addressed opportunities for tree planting and forest development under village forestry, village woodlots, local community forests and peri-urban fuelwood plantations. But forests remained threatened by loss and degradation, a situation that worsened in subsequent years triggered by rapid demographic growth, a decline in governance, loss of transparency and accountability.

The drought in Africa and the flooding in Asia, among other calamities, completed the picture by providing the practical impact of deforestation. Logical interventions consequently focused on strategies on meeting subsistence and nutritional needs, while the maintenance of tree cover was required for environmental stability. Initiatives taken during this period enhanced people's understanding of the dependence of rural people on forests and trees, the role of forests and the forest sector in poverty reduction and food security (*Arnold, 1992*).

What is also clear is the impact - virtually all SSA countries were experiencing difficulties to effectively manage their forests sustainably in the face of rising challenges and pressures. It was becoming evident that centralised management systems were failing to stem resource use pressure through enforcement. This was made worse by different factors, including forest services with too small resources, exacerbated by increased patronage and corruption, and state-people conflicts on who owns, controls and manages the forest? In time, the foresters lost the grip and control - genuine governance, patrols and sanctions based on the rule of law collapsed, and the commitment to application of scientific management literally crumbled in some countries. To crown all these, the forest areas shrank through arbitrary excisions, encroachment, poaching, decline in crop renewal and degradation. According to FAO (2001), the continent continues to loose vast areas of its forests - up to 1 million ha each year, equivalent to about 0.7% per annum.

Forest areas, especially those close to human settlements, have been affected the most by encroachment and conversion to agriculture and settlement. Furthermore, there has been growing recognition that forest policies, legislation and tenure operating in many SSA countries were, until quite recently, incapable of stemming the degradation and loss of forests because they excluded communities' rights to natural resources and the forests. The ever widening gap between policy and practice further accounts for the decline, even in countries with accommodative policies.

It is now evident that the classically structured resource management institutions established during colonial administration (and the authority it commanded), has progressively weakened under changing state and administrative frameworks in post-colonial times, particularly during the democratised multi-party era. With the forest workforce and field patrol force reduced in numbers, as a consequence of downsizing under the Structural Adjustment Programmes (SAPs), a decline in operating funds due to budget cuts, and demoralisation arising from loss of job security and low pay, state forest services are unable to cope with new demands and challenges of enforcement. *Kajembe et al. (2003)* argues that poorly paid foresters are

inherently incapable of keeping away their kith and kin from forest abuse. Ostrom (1996) observed that where tenure is insecure, outsiders can deplete the resource because they have nothing to lose.

This study has attempted to analyse experiences of various initiatives on the search for sustainable forest management (SFM) systems, and to identify the most urgent issues and challenges to Africa's forest development. In addition to sourcing published information, the writer spent some time in Tanzania, Uganda and Kenya, and held discussions with communities (officials and members of the village forest assemblies), forest officials at grass-root level, district, regional and headquarters, as well as with officials of the game parks and wildlife services. Considerable attention is accorded to experiences on the development of community participation in forest management, the evolution of community-based forest management (CBFM) as an alternative option for SFM in the region. The work further examines the overall environment in which CBFM is being implemented, its principles, structure and potential to promote and enhance SFM and use, within the context of rural development. A final chapter recognises the main lessons learnt, status of CBFM, and prospects of scaling-up the CBFM approach as a common SFM practice.

2.0 THE HISTORY OF COMMUNITY BASED FOREST MANAGEMENT

The history of community-based forest management (CBFM) goes back to early African agrarian development, starting from the traditional forms of forest management that were practiced by tribal communities for millennia, prior to colonial administration. At this time, resource governance was the main traditional community management systems in Africa. Indigenous resource management systems reflected the way communities organised their lives, within the constraints of the environment in which they lived.

Traditional resource management practices varied between communities according to social organisations that were largely based on egalitarian principles and kinships, and where disputes were settled through negotiations and/or inter-clan and tribal wars. The pattern of land use was established on a clan (tribal) system in which rights of cultivation and other agricultural land-use rights originated with secular or spiritual chiefs and leaders. These leaders controlled land use, its allocation for cultivation, wood harvesting, access to wildlife resources and their inheritance by kinship. Customary policies were clearly understood and provided a sense of ownership among local communities. Low population densities, use of simple tools and technologies, and limited movement allowed the forests to meet the subsistence needs in amore or less sustainable way. Minimal degradation occurred in places of population concentration but these recovered due to nomadic lifestyles of most tribes, and long fallow periods in areas under swidden agriculture. In well-established chiefdoms, the chiefs and kings enjoyed absolute control and executive powers over natural resources under their jurisdiction (*Makuku*, 1992).

Traditional management systems carried precise control instruments and mechanisms based on shared norms, values and regulations that were based on community-specific customary laws. Rules and regulations governing resource exploitation promoted sustainability and environmental conservation. Unwritten, informal and systematic taboos, rituals and rules, regulated interactions between individuals and the natural environment. A wide variety of local level controls over the use of trees, woodlands and forests were followed, many of which have broken down, or are breaking down, mainly due to external pressures, though the knowledge may still exist. Decision-making institutions focused on utilising and managing environmental resources, based on the knowledge of the community and enforced compliance through their ethics, norms and beliefs. Struggles for land and its resources between competing stakeholder groups were settled through negotiations and or wars. The sanctity of institutional curbs such as the guidelines on the use of sacred areas for purposes of worshipping the deity and for offering sacrifices for cleansing and use by rain making oracles, helped to regulate societal attitudes towards nature. These values further generated and streamlined the evolution of social relationship for conflict management.

Spirit mediums controlled large ritual groves and protected forests where no one was allowed to hunt, cut trees, graze livestock or cultivate (*Little and Brokensha 1987*; *Matose, 1992*; and *Odera, 1997*). This system of resource management and use endured for centuries due mainly to the strong links with the ancestors and the low population densities, which helped to assure a sound ecological balance.

During this time, land parcels were recognised by ridges, streams and rivers and ownership was vested on clan chief/leader/council of elders and the seers. It is recognised that decision-making was knowledge intensive and was made in line with knowledge accumulated over time, in addition to the immediate experiences of the resource users, as well as of scouts and travellers (*Makuku, 1992; Odera 1997; Mandondo, 2003*). But indigenous natural resource tenure systems were rarely static; a notable degree of change occurred over time, often in response to social and economic changes, new technologies, natural calamities, migration and population changes, subordination and war.

Resource use systems based on reciprocal relations among families and communities, for example through livestock sharing with other groups and communities, trade, marriage and other social networks (*Dietz, 1987*), allowed use over wide geographical areas. These relations redistributed risk and strengthened social obligations that provided security during times of drought, pestilence or war. The community generally held the land with clearly defined spatial and temporal use-rights allocated to its members. Accordingly, indigenous tenure systems often provided high levels of tenure security. Intergenerational transfer of family rights proceeded under the control of the community through its decision-making body, according to prevailing rules of succession (*Makuku, 1992; Mandondo, 2003*).

Different communities practiced varying systems of sustainable production through practices such as coppicing, low impact harvesting, and rotational harvesting under the jurisdiction of tribal kings, elders or seers (*Mandondo, 2003*). Pastoralists maintained defined grazing orbits that traversed large areas of grazing blocks, maintained grazing reserves, restricted harvesting of medicinal plants and shifting cultivation practices (*Ahmed, 1994; Dietz, 1987*). According to *Arnold (1992)* such strategies have been used by different communities to promote sustainable management. He noted that when a resource, such as trees, is pivotal to livelihood strategies, resource users will try and secure certain rights to those resources. They will seek local or customary institutional support for such rights. As a result, a range of tree rights exists in many communities as well as reserved grazing areas in many pastoralist societies.

Customary property relations have been under constant strain with the emergence of modern property ownership and use pattern. Traditional systems in themselves are not the answer to present day forest malaise. Rather, they illustrate systems that worked to some degree in the past, but usually under different social and ecological conditions than today, and particularly under much lower population pressure. Many of these practices can, with some modifications, provide useful lessons in the development of new forms of CBFM systems.

2.1 The introduction of scientific forestry in SSA

Classical 'scientific forestry' that was introduced in overseas dominions of the colonial powers from the middle of the 19th century focused on capital accentuation and environmental stability to the exclusion of community welfare and peasant security. Many communities were consequently relocated from their homelands and denied access to protected areas, game parks and their resources through laws that romanticised preservation and pristine protectionism. Although colonial forest policies quite often stressed "satisfaction of the needs of the people must always take precedence to revenue generation", communities were, at best, restricted to subsistence extraction, of prescribed items such as head loads of fuelwood (*Tanzania Forest Policy, 1947; Kenya Forest Policy, 1968*).

Curtailing the rights of these peoples inevitably sparked resistance, which was suppressed through forced removals, fines, and even worse punishments, or accommodated by permitting certain forest-based activities to continue as 'privileges', subject to strict controls. Admittedly, colonial forest administration maintained forest boundaries intact and kept communities from forests through the use of force. Enforcement was also relatively easy at this time, because the human and animal populations, and consequent forest use pressures, were low. To most SSA communities, forests were mostly regarded as a hindrance to "progress". The forests were obstacles to clearing land for crops, pastures, and settlements or for building roads. To many people, forests were associated with the presence of wild animals, mosquitoes or tsetse flies that made life unpleasant or dangerous. Forests harboured wild animals that decimated crops or preyed on domestic livestock and poultry. The forests seemed endless and inexhaustible; it did not seem possible that they could one day be threatened. Nonetheless, right from the start, colonial foresters had to struggle with the reality that the forests that were being arrogated to the colonial state, as 'forest reserves'

were in fact owned, inhabited, used and managed by indigenous peoples. Following the end of colonial administration, the newly independent governments entrenched the same forest management systems. However, with increased populations and declining food production in farmlands, centralised management systems became unable to sustain these types of management simply through enforcement.

What is particularly remarkable in forest management over the post-independence period is the marked increase in challenges to sustainable forest management, never witnessed before in history. This situation has become worse during the last three decades, as vast areas of natural forests have been degazetted and turned to agriculture and settlements. Moreover, the advent of modern land use in Africa promptly entrenched agricultural intensification through the introduction of cash crops such as tea, coffee, cocoa, sugarcane, groundnuts, beef and dairying. Land use became compartmentalised into sectors such as agriculture, livestock, wildlife, forestry, etc. In more recent times, instances of corruption in licensing and allocation of forest land to politically connected people became rampant, in total disregard for technical considerations. Consequently, Africa has been registering a steady decline in forest resources as a result of these factors and forces. During the 1980s, the region lost 7% of its forest cover (1 million ha/yr), (*FAO*, 2001). The current rate of deforestation has significant social, economic and environmental consequences, with serious negative local, regional and global implications.

The failure of the command-control "set apart" forest management system has been attributed to different reasons, among which the following are notable:

- the historical link between land and the freedom struggle, given that local people had been displaced from forests that they had traditionally occupied and depended on for their livelihood;
- low rates of industrial growth, economic development, and increasing reliance on primary production and low value-adding secondary industrial processing;
- communities occupying the surroundings of protected forest lands are poor, yet forced to bear substantial costs, including protection of biodiversity and related forest global goods and services, for few benefits in return;
- foresters have lost faith in the effectiveness of the "policing model" of forest management, a situation exacerbated by budget cuts, staff retrenchments and budget deficits, leaving inadequate manpower and resources to patrol the extensive porous forest boundaries; and,
- the inability of forest guards, mostly recruited from local neighbourhoods, to keep their own people from forest destruction.

Despite the past failure of the forestry sector to meet the expectations of an increasing population in SSA, the fact remains that the majority of people relies on informal forest activities. A major challenge to the emerging forest management order calls on the forest sector to combat poverty and food insecurity by providing multiple goods and services while also guaranteeing environmental protection and supporting development.

2.2 Forests and land ownership in SSA

Forest governance, management and access rights cannot be discussed in the absence of a clear understanding of forest ownership. Three categories of ownership are common in SSA (*Odera, 2003*):

- 1. *Forests as state land* fall mainly in the forest estate that is managed for production of utility products, conservation of environment and biodiversity. Within wildlife reserves and game parks, the forest vegetation is managed for game development and viewing by tourists (a few countries allow villagers to collect some products in game parks, including dry fuelwood and medicines, on allocation of appropriate permits).
- 2. *Forests on customary and trust lands*: Such forests are gazetted under *trust land* or related Acts, and are managed with agreements with the chiefs or local councils on behalf of communities.
- 3. *Forests on private land*: Such forests vary in size from a few hectares in individual holdings to large blocks in commercial estates, owned by local or multinational companies.

The majority of rural people in SSA live on land variously referred to as customary, communal or trust lands. Dualistic land tenure systems were created throughout Africa during colonisation, when western property law was introduced to govern land holding by colonial elites while land used by Africans remained under customary law (*Wily and Mbaya, 2001; Bruce et al., 1993*). In most cases, this communal land was legally owned by the state, with *de facto* ownership by the group (clan, village or family) that occupied the area. African tenure systems were administered by local authorities and involved allocation of rights and responsibilities to land and the resources on land. This tenure arrangement still remains in many countries. Families were granted individual rights and responsibilities to land and the reserves on land, including forests and grazing areas held under the communal property of the village or clan (Bruce *et al., 1993*).

2.3 The sight in search for alternative SFM systems raised

Much attention has been given to the search for solutions to address the declining state of forests on the continent from a broad development perspective. The challenge is how to: (i) re-organise the political economy of land use and forest management to provide equitable systems of ownership, management roles and associated cost and benefit sharing, and (ii) balance the demands for livelihood support and development, environmental functions and conservation, and thus harness sustainable forest management to contribute to development and poverty alleviation.

Over the years, forests have witnessed cumulative use intensifications associated with Africa's agrarian history. The story starts during the last century with entrenchment of production of wood on sustained yield basis. In practice, the disturbance of pristine forest vegetation in SSA dates back to the 17th century. But the frequencies and intensities of disturbance have built up incrementally with rapid population growth, changes in forest ownership and land use practices, and forest management systems, in response to changing market and policy forces. At the time of introduction of forest reservation, dating from about the end of the19th century, many forests had been farmed, and most forests had permanent villages or hunting camps. *Logie and Dyson (1962)* and *Hawthorne and Abu-Juam (1995)* reported that in some areas, a significant scatter of (swidden) farms studded the forests even from the 17th century. These authors had noted that areas close to forts and coastal trading centres in the West, Central, eastern and southern Africa had been exploited for timber and other utility products over many centuries. In some cases, logs were taken from inland areas by floatation down rivers. Considerable efforts were made from the 1960s to expand the area under forest, through additional land acquisitions, intensification of plantations and farm forestry.

Much of the development interventions and initiatives in the 1960s and 1970s used various integrated rural development approaches. The energy crisis and the Sahelian drought of the 1970s heightened public realisation of the forest as bases of renewable resources and of their role in the production of a range of goods and environmental services and people-tree-forest linkages and dependencies. These efforts and related incentives culminated in the World Congress on Agrarian Reform and Rural Development (WCARRD) held by FAO in July 1979 that consolidated a need to promote rural forestry alongside agriculture.

Other important challenges have come from local communities backed by results of global debates under different international processes. The Stockholm Conference on the Human Environment of 1972 had urged sustainable management of forests. The 8th World Forestry Congress in 1978 ("Forests for People") gave international recognition to the importance of developing forests in ways that directly benefit local communities.

The Tropical Forestry Action Plan (TFAP) that became an important landmark in supporting national forest action plans (NFAP) was launched in 1985 as a vehicle to promote awareness of deforestation, intersectoral planning and to mobilise resources for preparation and implementation of NFAP programmes. The 9th World Forestry Congress in 1985 stressed restructuring national forest policies and incorporation of locals in forest development.

The World Commission on Environment and Development in 1987 emphasised sustainable development and the 10th World Forestry Congress (1991) subsequently called for raising awareness of forestry in

development. Thereafter, FAO and the Swedish International Development Authority (Sida) launched the popular network and programme on "forests, trees and people" that has heightened awareness of the importance of community forestry.

The consensus reached at UNCED in Rio de Janeiro in 1992 and the forest principles agreed upon there has led to a revised concept of SFM as aimed at ensuring the continued availability of wood, non-wood forest products (NWFPs), and provisions of environmental, social and cultural services, which forests and ecosystems provide. The main challenge has been how to: (i) use the forest resources without destroying them, and (ii) develop appropriate mechanisms for incorporating local communities in forest management.

This has subsequently led to grounding the concept of SFM in national forest policies, legislation, management regulations and plans. SFM has further evolved to cover multipurpose management of forests to support livelihood and peasant security, and national socio-economic development. This is significant because a forest managed in this way will potentially provide both timber and other utility products and services for development of rural communities, while also providing sustainable biological functions and environmental services. It is therefore not surprising that many countries are finding difficulties in accomplishing commitment to SFM under conventional forest management.

2.4 The emergence of farm and social forestry

National forestry programmes made notable efforts at reforestation between 1960 and 1980. From 1961 to 1975, priority was given to state-run industrial plantations, later scaled back to large-scale plantations with participatory approaches. The 1970s saw a shift in the development theory and practice towards a greater emphasis on agriculture, mobilising the rural sector and meeting basic needs. The shift was based on the realisation that households pursue a range of strategies, including using natural, physical, human and social capital, in order to sustain their livelihoods. In the late 1970s to early 1980s, mounting concerns about deforestation and failure of classical forest management systems provoked different agencies to search for more holistic approaches, embracing collaboration among governmental agencies, local communities, NGOs and the private sector. A major World Bank SSA forestry sector study conducted in the 1980s had estimated that tree planting would have to increase fifteen-fold in order to close the biomass energy shortfall (*Anderson and Fishwick, 1984*), and had therefore added pressure and urgency for intervention.

By the mid-1980s, surveys of non-farm sources of rural household income had shown that production, processing and trading of forest products consistently ranked among the three largest sources of employment from the rural manufacturing sector (*Fisseha, 1987*). Moreover, the large amount and variety of wood and wood products traded showed this to be a very important part of the overall value of forests in developing countries, and one that needed to feature more prominently in forest management and policy (*FAO, 1978*). One common institutional change that developed in the region from the mid-1980s was the introduction of the Structural Adjustment Programmes (SAPs), which were characterised by the emergence of commercialisation of forest products (*Kajembe and Kessy, 2000*). SAPs have had a major impact on poverty management among the rural poor, especially as a result of removal of subsidies on major farm inputs, market liberalisation, and loss of employment in the civil service.

Development assistance to forestry between 1980s and 2003 has placed participation at the centre of tropical forest management. During this time, the SSA countries together with their partners have been searching collectively and individually for ways to manage their forests, on realising that state-centred policies had failed to promote SFM. It has been evident for some time that the costs of maintaining a top-down institutional apparatus necessary to assure forest conservation were too high.

Much of the early efforts in Africa, as was true elsewhere, focused on creating farm and collectively managed woodlots. These efforts were similar to the spirit of the large-scale initiative taken by the South Korean Government in the 1970s to encourage villagers to create collective woodlots on their lands. Around this time, community forestry was being promoted in the hills of Nepal, to address deforestation of watershed areas, while India's social forestry blossomed and caught the attention of global and national audiences.

These initiatives had mixed influence on the development of participatory forestry. According to *Arnold* (1992), some reasons advanced in support of participatory forest development were:

- such tree planting efforts could reverse or offset deforestation, and mitigate the environmental damage caused by the excessive removal of tree cover,
- tree planting could help meet people's needs for fuel and other basic needs at minimal cost, and
- trees could be a potential tool for resource-poor farmers to help them stabilise and improve their farming systems, i.e. through increasing output and income generation, and to secure a greater degree of self-sufficiency, with low inputs of capital and labour.

However, it did not take long before the promoters of these programmes realised that farmers rarely grew trees solely for fuel, and hence the interventions often had disappointing results. Moreover, tree growing was a man's affair, while women dominated the procurement of fuelwood and other utility products important for livelihood. *Arnold (1992)* argues that, many collective woodlots had failed because:

- tree growing practiced this way was not effective in providing subsistence products;
- the change in land use deprived users of existing subsistence supplies of fodder, fuel, etc; and
- the resource created was often one from which the poor could obtain little, if any benefit.

In the late-1980s, a much broader concept of managing forests for both conservation and development gained prominence. This stemmed from the argument that harvesting of NWFPs that rural people exploit and use was less ecologically destructive than timber harvesting, and therefore provided a sounder basis for SFM. It was further argued that increased commercial harvesting of NWFPs added to the perceived value of the tropical forest, at both local and national levels, thereby increasing the incentive to retain the forest resource rather than clear it to use the land for agriculture or livestock.

At the 1982 World Congress on National Parks, it was recognised that parks could only be protected if the conflicts that arose when people who relied on the use of the resources in these areas were excluded from them were addressed. This led to the development of programmes to introduce new livelihood activities in, and adjacent to, protected areas that would compensate those living in them for the loss of use, and encouraging them to participate in the protection of the resource (*Fisher, 1995; Wells and Brandon, 1992*). Philosophies arising from this development have also influenced the evolution of participatory forestry.

In 1985 the Conference on Common Property Resource Management organised by the US National Academy of Sciences (NAS) provided another major stimulus to initiatives on enhanced local involvement in forest management. According to *NAS (1986)*, a significant product of the conference was the realisation that collective management of forests (and other natural resources) by user groups was a viable and appropriate option in certain circumstances.

Henceforth, a number of factors reinforced the emerging attention on local forest management and use in Africa, particularly:

- The escalating rate of forest loss on the continent of up to 1million ha each year (*FAO*, 2001; *Mathews*, 2001) and global pressure for mitigation being exerted through global environmentalism launched in Rio in 1992;
- The recognition of the advantages to be gained by drawing on indigenous knowledge on forests and forest products, and by building on the sustainable systems of the use that local people had created (e.g. *Posey*, *1982; Redford and Mansour, 1996*);
- The growing strength of the argument relating to people's rights to be involved in decisions and actions concerning them and their welfare (*Fisher*, 1995);
- Experience from mainstreaming of participatory approaches in development theory and practice and the concomitant shift to local users/institutions (*Jodha and Bhatia, 1998; Ainslie, 1999*), and recognition of failure of state control, and its attendant costly bill and non-sustainability; and,
- Impressive results of case studies and initiatives on community-based natural resources management (CBNRM) through a wildlife management focus such as the much discussed Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe provided impetus to the search for more equitable and participatory forms of forest resource management.

It did not take long before participatory forest management moved from a more passive interpretation of participation to proactive involvement of local people in decision-making, control and management of the forests they drew their livelihoods from. The search for new approaches to sustainable management of forests and related renewable natural resources was strengthened further by pressure arising from:

- Declining agricultural productivity and increased unemployment, exacerbated by the consequences of SAPs, globalisation, and concomitant rapid demographic growth in the post-independence era that had forced many people to turn to trade in forest products, e.g. fuelwood, medicinal plants, etc;
- Eroded national institutional capacity for SFM, mirrored in rampant corruption in licensing, decline in forest management, increased deforestation and degradation, irregular de-gazettement of forests by leaders, and a tendency by powerful entrepreneurs to ignore forest regulations;
- SAPs led staff retrenchment, left forest boundaries unattended, leaving space for over-exploitation, encroachment and abuse;
- Initial success of communal forest management initiatives in Asia provided a visible potential for CBFM that quickly stimulated interest and enthusiasm elsewhere, including in Africa;
- The wave of democratisation, fiscal and administrative decentralisation of the 1980s and 1990s, with emphasis on the rights of communities;
- Emergence of SFM as embracing multiple products and livelihood support, and the recognition of CBFM as a promising forest management system within the context of rural and community development;
- Influence of international donors and non-governmental organisations (NGOs) (these had literally mushroomed in the post-colonial era) in the forest sector, had focused on community participation; and,
- Impact of empowerment of local bodies and communities to take up management of forest resources, with customary ownership of land receiving legal recognition through legislation.

It is also noteworthy that many states had started pursuing devolution, institutional reforms, and decentralisation policies during the 1990s as part of strategies to bring about structural adjustment. This is because transferring management and protection responsibilities to the community level had potentials for reducing budgetary burdens on forest departments while simultaneously shifting control to a level at which it may be carried out more efficiently and cost-effectively. According to *Brown (1999)*, the principles of local participation, decentralisation and subsidiarity that promote taking decisions as close as possible to affected citizens, and the promotion of the civil society, were consistent with the attributes of the CBFM.

Encouraged by the novelties of the rich aura of traditional resource management systems on the continent and the positive highlights of participatory approaches in sustainable resource management from India and Nepal, governments, NGOs and donor agencies have subsequently accorded consistent attention to strengthening community participation in forest management. These developments and factors were influential in the move to pursue resource conservation in Africa through community management (*Adams and Hulme, 1999*).

2.5 What is a Community Based Forest Management (CBFM) system?

As a consequence of the effects of the factors discussed in the previous sections, several developing countries and their development partners initiated pilot trials of alternative approaches that could promote sustainable forest management. In SSA, these initiatives date from the late 1980s to the early 1990s, touted under names such as rural forestry programmes, social forestry, and woodfuel/agroforestry programmes, etc. They constitute the common effort undertaken under the third generation of the paradigm shift, this time marking a drive from conventional forestry to a people centred forest management system (see earlier sections).

The CBFM approaches have hitherto remained permissive, built on a basic concept based on agreements, MoUs or contracts on forest management between local people and the forest authority. The early

initiatives on CBFM were focused on forestry challenges of the day and many interventions were concentrated on a narrow band of linkages between people and trees. These included provision of access into the forest in exchange for labour, along the models of buffer zones, and co-management approaches whose principles had been borrowed from the wildlife services.

CBFM was initially defined as "any situation, which intimately involves local people in a forestry activity. It embraces a spectrum of situations ranging from woodlots in areas which are short of wood and other forest products for local needs, through to the growing of trees at the farm level to provide cash crops and the processing of forest products at the household, artisan or small industry level to generate income; to the activities of forest dwelling communities" (*FAO*, 1978).

Different countries have continued to develop and use their own definitions for their brand of participatory forestry within the broad understanding and in concert with this normative and generic concept. This use of an open-ended definition has been beneficial in following progress in the evolving development of the CBFM, because it can include experiences from countries that differ in their approaches. It also eases experience-sharing, comparisons of case studies, performance evaluation under networks and progress reporting. In addition, its all-inclusiveness implies that traditional indigenous practices and international donor-guided and government-supported experiences are included in the definition, together with those of private forestry and local timber companies.

Arnold (1995) noted that community forestry stems from the forestry profession's efforts to set up a new partnership with local people and to respond to the subsistence needs and to support livelihood security of growing rural populations. This new perspective was largely influenced by increasing global awareness that the crucial issues of resource conservation and sustainable development could only be addressed if people enjoyed a secure livelihood. But involvement of rural communities in forestry required a new understanding and the recognition of the many important links between trees and people. Of particular significance are the links between forestry and basic needs such as nutrition, food security, off-farm employment, energy and the integration of trees in land use for risk management by rural people, and security of tenure over resource bases.

Arnold (1992) reported that a major challenge to CBFM was how to contribute effectively to solving the problems of environmental degradation and rural poverty alleviation. He noted that experiences during the 1980s had revealed that:

- Local peoples' production and use of trees were, in practice, often embedded in complex resource and social systems;
- Earlier analysis of the matrix of peoples' dependence on trees and forest products were inadequate and had led to inappropriate solutions;
- Many project interventions based on local need assessments had focused on planners perceptions
 rather than through local participation, and had therefore led to wrong conclusions and lack of clarity
 on the nature and purpose of community forestry; and,
- Experience from an emerging set of community forest practices over time had further revealed that local communities depend on trees and forest resources to meet basic needs, livelihood and food security with a focus on fuelwood, a wide array of NWFP (particularly food, medicines and livestock fodder), soil nutrient management, socio-cultural values and income generation.

Gregersen et al., (1989) observed that the basic community forestry tenets advanced in the 1970s and 1980s were consistent and provided a sound baseline for growth. This perception was reinforced by a big increase in knowledge from emerging experience recorded during the 1990s. According to *Arnold (1995)*, community forestry is accurately and usefully understood as an umbrella term denoting a wide range of activities which link rural people with forests and trees and their products and benefits to be derived from them. He concludes that it is therefore as much about improved management of existing natural forests as it is about afforestation.

Other workers, e.g. Byron and Arnold (1999) and Wallenberg (1998), have noted that community forestry initiatives come in many different forms, involving different combinations of users, resources and institutional arrangements. Colchester et al., (2003) have stressed that successful community forestry

requires adequate frameworks, policies, tenure regimes and markets, forest management packages, knowhow, viable community institutions and congenial relations with the forest service and local partners. Reports from most SSA countries show that CBFM is providing an environmentally prudent system for sustainable forest management with viable opportunities for promoting development and poverty alleviation.

The unfolding scenario from these observations shows that community forestry denotes different relations between forest management and community involvement in different countries, and may vary from a token notion of participation to a full role in decision- making. According to *Wily and Monela (1999)*, the common constructs of CBFM in Africa range from full community ownership over forests, to small, organised forest-user groups, and top-down "community" structures imposed on traditional user groups by intervention agencies (NGOs or government). These interventions share a common principle of being developed with the community as the central partner, in an arrangement characterised by some or all of the following traits:

- Forests managed by users as common property through collective management and control;
- Several categories of users and stakeholders with different interests in the resource involved and sharing management roles/responsibilities and some control;
- Users obtain their forest product supplies from state, community forests, agro-forestry and farm forests; and,
- Involvement embracing production, processing and/or trade of forest products.

In this study, CBFM is used as an umbrella concept covering a wide range of activities which link rural people with forests, trees and the products and benefits that can be derived from them (*Arnold, 1995*). According to *Wily (2000)*, concepts such as community forestry, social forestry, common property forest management, collaborative forest management, joint forest management (JFM), and participatory forest management, all refer to approaches that involve local stakeholders in forest activities at some level and therefore qualify for CBFM.

2.6 The common contemporary forms of CBFM systems

Different types of CBFM have emerged and new ones continue to crop up in different countries and more than one type may be used in one country. These range from activities by individual households, via women and men user groups, to those involving a community as a whole. The definition of CBFM remains fluid and any participatory approach to forest management involving communities is reported as a CBFM system. Its locus, rules, powers and structures are still in transition. Adjustments in roles are being made, both between forest administrations and communities, and within communities. But flexibility in definition notwithstanding, scholars of CBFM seem to agree that issues of forest management are primarily matters of governance, tenure and technology whose inter-relationships must be streamlined before technical development can be advanced (*Brown, 1999; Ostrom, 1996; Byron and Arnold 1999*). The following recognitions on the state of CBFM are noteworthy:

- 1. CBFM is shifting from a state-people collaboration in which the people support the efforts of the state to an arrangement in which the state supports the efforts of the people (*Wily*, 2002);
- 2. According to *Byron and Arnold (1992)*, the varying nature of human relationship with resources is a fundamental requirement of CBFM. This creates variations in social structures and complexities in partner categories and state receptivity;
- 3. There is a genuine need to spell out a standard model of CBFM (defined by clear principles, concepts and characteristics) to mobilise the constituencies to nurture its consistent growth into a socially and technically sustainable system (*ODA*, 1996);
- 4. The use of an umbrella term tends to obscure the locus and focus of CBFM;

- 5. According to *Brown (1999)*, CBFM can only become a major component of a forest management system when it is backed up by legislative and institutional mechanisms and structures through which it can engage with other sectors and governance processes;
- 6. The current facet of forest management is under transition and CBFM systems are actively evolving accordingly (*Wily, 2002*).
- CBFM has a broad geographical spread and landscape extending from rich and denuded forest areas, to niches in agricultural lands, on field bunds, on common property resources, even urban localities. It operates in natural forests, plantations and involves indigenous and exotic multi-purpose species that are raised for different management objectives;
- 8. Its management systems, tenure and benefit sharing arrangements may be different from that of conventional forestry; and,
- 9. CBFM often incorporates sideline occupations and supplementary income-generating activities such as beekeeping, mushroom cultivation, hunting, ecotourism, bush meat trade, marketing available NWFPs, etc.

These and related broad changes in the debate about participatory forestry, coupled with an exponential increase in understanding of both the immediate and future obstacles to successful community control of forests, have brought about a general change in civil society's perceptions of what community forestry is. Since the 1980s, the emphasis has gradually shifted from a focus on community forestry as a technical innovation, in which knowledge about forest management is passed down to farmers and authority is shared with or devolved to them. This shift further focuses on the validation or revival of customary systems of forest management controlled by communities. Correspondingly, forest management has been pegged to multiple product management concepts to provide livelihoods. A focus on promoting tree planting for timber and fuelwood supplies has likewise shifted to multiple use forestry, non-timber forest products and the promotion of wider livelihood strategies.

It is already noted that the development of CBFM is still permissive and is constituted through agreements, MoUs or contracts with the forest service. The following are common constructs of CBFM systems and types of management agreements operated between local communities and other partners, based on recent country reports (*Sarrazin, 2002*) and partly adopted from *Wily (2002)*:

Leases. Under lease arrangement, the investor signs an agreement with a community on the use of communal land, develops the facility and pays a lease fee to the community. Depending on the agreement, the community may or may not have some involvement in the running of the enterprise.

Consultation. Participatory forestry established through discussions and consent by the state and the community, e.g. as expressed in the Forest-Farmer Commissions in Côte d'Ivoire or the Forest Committees in Ghana.

Co-management. Collaborative Natural Resources Management (CNRM) is a generic term that embraces approaches to resource management that recognise the legitimacy of development and conservation values and the need to integrate the two in active commitment of participation and collaboration in resource management by local people (widespread, particularly under wildlife services and operates under arrangements similar to JFM constructs).

Contracts. Here a private company provides individual growers with incentives such as loan advances for establishment, technical expertise and subsidised inputs. The community or individual provides land and labour and is conditioned to sell the matured product to the private company. Unlike joint ventures, contracts often lack joint decision-making of both parties whose interests could be diverse.

Consigned management. An arrangement in which the community has all operational powers except ultimate authority for enforcement, licensing and decision-making (e.g. as Gambia and Tanzania in respect of national forest reserves).

Loose confederation. A structure of members operating on their own land and running forest/woodland based micro-enterprises, such as CBOs and/or Community-Trusts (widespread throughout Africa).

Joint ventures. Under this arrangement, a private investor and the community enter into an agreement, with the community holding equity stake and the proceeds are shared according to the value of each party's input. Where the land belongs to the community, it is valued and this forms part of their stake (southern African countries).

Community-based forest management. Here, jurisdiction is a fully devolved managerial and decision making authority, sometimes including ownership of the estate (e.g. as in Gambia, Malawi, Tanzania, Lesotho and potentially Namibia, South Africa and Uganda).

2.7 The spread and growth of CBFM in SSA

CBFM as a structural concept has crystallised in the past two decades or so as an effective approach for the management of tree and forest resources. Experiences from various countries have shown that when communities are empowered with responsibility and legally secured rights for the management of forest resources, and receive benefits from them, the rate of degradation is substantially reduced, and in many cases the forest cover improves visibly (*Kajembe et al., 2003; Reeb, 1999* and *Wily, 2002*). CBFM has gained a foothold in virtually all countries on the continent through these rather informal footsteps. Available country case studies (*Wily, 2002* and *FOSA, 2003*) show that CBFM was underway in over 35 countries in the region by 2002 (*Box 1a* and *1b*, and *Table 1*). As of 1999, only about 20 countries were practicing some form of CBFM and had enabling policies and legal instruments (*FAO, 1999*). *Wily (2002)* and *FOSA (2003)* further note that at country levels, by 2002, the process had stretched to more than 100 projects with 5 000 communities working in more than 100 national forests, and 1000 protected areas. This indicates a rapid rate of spread of the process, despite lack of active support from many states.

Most countries have taken steps to introduce CBFM in forest management and to create a favourable enabling environment within a short time frame of ten years. According to *FOSA (2003), Sarrazin (2002)* and *Wily (2002)*, at the time of the Second International Workshop on Community Forestry in 2002, about 16% of the total area in SSA countries was under CBFM. Some countries, such as Benin, Burundi, Cameroon, the Democratic Republic of the Congo and Ghana, had more than 20% of their total forest areas under some form of CBFM (*Wily, 2002*). But over all, CBFM is still a new development, the process permissive and the majority of cases are established through formal agreements with the forest service or the wildlife resources department. Most initiatives are less than five years old and the remainders are usually less than ten years old. Most begin under the aegis of discrete, donor-funded projects, and are often backed up with bilateral or international NGO support.

A few operate as CBOs, community trusts, associations, or conservancies, registered with a relevant government agency, such as community development ministries, the district authority, the forest service or the wildlife service. Major exceptions are reported from Tanzania and Gambia where formalisation is by registration of a CBFM at the District Council. Under this arrangement, the local communities promulgate village by-laws under which the villagers manage their forests. Gambia and Tanzania are also advanced in the development of CBFM initiatives and have developed supportive forest land management policies and legislation. These provisions further enable communities to be recognised as owner-managers, mandated to manage the forest in more or less autonomous ways. In Niger and Mali, CBFM programmes are involved in fuelwood marketing by associations under sustainable harvesting of resources, and rehabilitation of degraded forests (*Fries and Heemans, 1992*).

In Mozambique, CBFM is applied in forest resource use by local people (*Mansur and Cucuo*, 2002). Uganda, Lesotho and Namibia are also developing along the same line (*Wily*, 2002). Other countries either limit recognition of local tenure in some way, e.g. Cameroon (*Djeumo*, 2001), Senegal (*Wily*, 2002), and Ethiopia (*FarmAfrica*, 2000), or acknowledge local tenure but under limited local jurisdiction in one way or the other. A common arrangement is for the state to retain most or all control over licensing, live felling and enforcement. In this regard foresters prosecute offenders.

The most frequent situation in Africa regarding formal use and management rights of forests involves rights based on a temporal agreement or contract in combination with a management plan for a period of between five and fifteen years. Some countries grant permanent land right or ownership titles. Others, such as Lesotho, Mozambique, Cameroon, Benin, Gambia and Ghana, have reached the stage of granting permanent title over forest resources (FAO, 2003). In many cases, titling of land also requires a management plan in order to ensure sustainable management of the resource. Gambia and Tanzania have formulated by-laws and other countries are considering possibilities of doing so (*Wily, 2002*). Few countries have yet moved into national programming (Gambia is a main exception), although official guidelines for nationwide application increasingly exist, e.g. Cameroon, Tanzania and Senegal (*Sarrazin, 2002*; and *Wily, 2002*). Other countries, including Tanzania, continue to limit the CBFM to community forests and JFM to state forests (*Iddi, 2002*).

Box 1(a). New forest laws in SSA since 1990.

Enacted: Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Equatorial Guinea, Ethiopia, Gambia, Ghana, Guinea-Bissau, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Senegal, South Africa, Tanzania, Zambia, Zanzibar.

In draft: Chad, Comoros, DR Congo, Kenya, Niger, Nigeria, Swaziland, Togo, Uganda.

Box 1(b). CBFM in Africa by 2002.

Under way in more than 30 countries

Largely within more than 100 projects

Involves about 5 000 communities

Affect more than 100 national forests

Introduces more than 1 000 new protected areas (community forests). (Wily, 2003)

Country	Land area	Forest area in FOSA*	Results from questionnaire					
			Forest area	Deviation from FOSA	Area under PFM	Demarcated area	PFM as % of overall area	
Benin	11 063	2 650	7 030	4 380	2 267	2 168	32.2	
Burkina Faso	27 360	n.a **	n.a	n.a.	n.a.	n.a.	n.a	
Burundi	2 568	94	171	77	64	n.a.	37.4	
Cameroon	46 540	23 858	19 598	-4 260	6 173	n.a.	31.5	
Chad	125 920	12 692	21 754	9 062	23	n.a.	0.1	
Comoros	186	8	12	4	n.a.	n.a.	n.a.	
Congo	34 150	22 060	22 000	-60	19 800	n.a.	90.0	
Congo DR	226 705	135 207	n.a.	n.a.	n.a.	n.a.	n.a.	
Côte d'Ivoire	31 8000	7 177	5 500	-1 617	n.a.	n.a.	n.a.	

TABLE 1.	Total forest	and land area	(all figures	s in km²)	under CBI	FM in Africa.
			\ A			

Ethiopia	110 430	4 593	4 505	-88	450	50	10.0
Gambia	1 000	481	500	19	30	5	6.0
Ghana	22 754	6 335	2 000	-4 335	400	0.2	20.0
Guinea Bissau	3 612	2 187	2 034	-153	30	0.5	1.5
Kenya	56 915	17 096	37 600	20 504	250		0.7
Lesotho	3 035	14	52	38	1	0.8	1.9
Madagascar	58 154	11 727	12 000	273	n.a.	n.a.	n.a.
Malati	9 409	2 562	2 642	80	n.a.	n.a.	n.a.
Mali	122 019	13 186	n.a.	n.a.	n.a.	n.a.	n.a.
Morocco	44 630	3 025	8 000	4 975	n.a.	n.a.	n.a.
Mozambique	78 409	30 601	62 000	31 399	1000	150	1.6
Niger	126 670	1 328	8 000	6 672	n.a.	n.a.	n.a.
Senegal	19 252	6 205	18 201	11 996	n.a.	n.a.	n.a.
Sierra Leone	7 162	1 055	6 305	5 250	15	n.a.	0.2
South Africa	121 758	8 917	n.a.	n.a.	n.a.	n.a.	n.a.
Sudan	237 600	61 627	46 800	-14 827	124	12.5	0.3
Togo	5 439	510	3 430	2 920	5	5	0.1
Tunisia	16 362	510	971	461	n.a.	n.a.	n.a.
Uganda	19 964	4 190	4 949	759	3	3	0.1
Zimbabwe	38 685	19 040	19 000	-40	8 800	88	46.3
Overall	2 978 394	649 866	1 284 901	1 043 336	39 435	2 483	

Key: n.a. = no answer

From: Forest outlook study for Africa 2001 (FAO, 2002).

In Cameroon, CBFM may only be established in unclassified forests, and it is restricted to a maximum size of 5,000 ha on a 10 years agreement period (*Egbe, 1997*). By contrast, Uganda, S. Africa, Ethiopia and Guinea Conakry allow CBFM in forest reserves, including those with high conservation priority (*Wily, 2002*). But even in these countries, wide gaps occur between policies and practice (*Barrow et al., 2002*). In S. Africa, several communities are involved in industrial plantations out-grower contract programmes, which, according to *Wily (2002)*, are also emerging elsewhere, for example in Tanzania and Malawi. In Kenya, parliament is still grappling with the new forest bill. The policy and the draft bill show inclinations to a buffer zone approach. Recently, a national workshop for Members of Parliament reviewed strategies and options for forest renewal and further informally debated the draft forest bill with the civil society. A growing number of communities, CBOs and trusts involved in co-management-based CBFM have emerged, and are operating ahead of the bill on permits from relevant state authorities.

Despite this positive trend, the actual implementation of CBFM is not receiving the support that it deserves, thereby hampering meaningful implementation of the system. CBFM is still seen as an innovative but risky practice, hence held on "pilot" scale. The forester is reluctant to let go, for fear of losing influence and authority, and thwarts CBFM on the guise that the people are not yet equipped to manage the forests. The state appears to be buying time and delaying commitment to national adoption of the emerging forest management order. This is happening at a time when the forest services, the agencies responsible for implementing the forest programmes, are undergoing decentralisation, restructuring and downsizing.

Consequently, NGOs are assuming an increasingly important role as intermediaries between governments and communities. In the absence of a clear harmonisation in NGO–government approaches, increasing NGO support in training and outreach, as capacities of government agencies decline, tends to result in conflicts (*Wily, 2002*). At present, government funding is low or absent, and specific capacities are deficient at all levels. Community institutions are weak, under resourced and struggling with low governance capacity (*Shackleton and Campbell, 2001*). It is therefore not surprising that no evident trend on improvement is emerging regarding the quality of the forest resources managed under participatory forestry. At the same time, the extent of benefit flows to communities remains scanty, as the process remains largely confined to legal access to forest to harvest NWFPs. This holds true even for cases where communities have acquired control and management rights, but have not been given permission to harvest timber to allow recovery (see sections 2.8 and 3.1).

2.8 The development of CBFM in Tanzania

The case study of the pioneering Tanzania CBFM is best understood when taken against the background of the country's village administrative structure and the new forest and land policy and legislation. These instruments have allocated control over land to villages and village communities as the foundation of both administration and holding rights. The village, that also provides the grassroot forest governance institution in this setting, is united under one administrative structure. A brief synopsis of Tanzania's village structure and land tenure is provided as a prelude to provide context of these developments.

2.8.1 Decentralised Ujamaa Villages and the development of CBFM in Tanzania

The Tanzanian village is a discrete socio-spatial unit of about 150 households, occupying a defined land area with a village council of elected members that operates as an organised, productive, cohesive and functional government structure. The village is further characterised by:

- A democratically elected and egalitarian institution the village council with a legal local identity, able to own land and resources on behalf of its members;
- The foundation of national governance the most local level of the country's formal and legally defined hierarchy of decentralised administration (albeit subject to direction of the district council); and,
- Spatially cohesive households on growing beyond a manageable size of 300-400 households, a village is assisted to sub-divide into two villages or sub-villages.

In this respect, Tanzanian villages exhibit a unique degree of organisational structure and functionality in the entire SSA region. Members of the village are registered as the supreme authority of the community, the village assembly. The assembly elects a representative government, the village council. CBFM builds on this rather unique and favourable local situation in which the decentralised government allows the village to own property in its own right as a corporate entity. The village is responsible for local level governance under the village general assembly that operates under the District Council and constitutes the lowest level of decentralised administration with a clear grassroot socio-legal framework (*Kikula, 2000*).

The legal functions and responsibilities of the village are wide, mirroring those of the District Council, which may delegate any of its own functions to a particular village government, such as the management of a certain forest. In law, the village (or its elected village council) can constitute sub-committees such as a Village Forest Management Committee to represent the village in any government forum or a court of law. The Village Forest Management Committee can also act on behalf of the village assembly, and is empowered to make rules which, on approval by the District Council and the Minister responsible for Local Governments, become bylaws that are judicially operational and valid in any court according to Tanzania's Local Government Finances Act No. 9 of 1982) and to retain all money from fines, licenses, permits, dues and fees in respect of its bylaws.

This unique governance structure acts as a catalyst in the formation of a community identity and, over time, it empowers the village, both as an authority and a landowner (*Wily and Mbaya, 2001*). Under the 1984 National Agricultural Policy, communities are encouraged to consolidate occupational rights through procurement of village title deeds issued to the village council. This grants the village tenure for a period of 99 years.

The village council as a trust land manager, reports to the Village Assembly regularly. The land reforms have located power of land control, administration and right holding on the village community, with clear recognition of customary holdings. This provides a unique and favourable situation in which the country allows the village to own land (property) in its own right as a corporate entity.

Other government officers, including district council officials, lands officers, the police, the judiciary and line departments represented at the village level also participate. Local and international NGOs with activities in CBFM project areas such as Farm Africa, and friends provide different support elements. In areas under CBFM, government foresters do not play active day-to-day management roles but provide technical backstopping, capacity building on request and progress monitoring.

The National Forest Policy of 1998 gives provisions for bringing unreserved forests or woodlands under local community jurisdiction, as village forest reserves. The policy further allows communities adjacent to forests to become co-managers of both central and local government forests through JFM agreements.

In Tanzania, land ownership is vested in the Village Councils, which now have independent legal status. Village land registers are used to record land rights, which can be both communal and family based rights (*Wily and Mbaya, 2001*). In addition, there are clear links being made between the Land Bill, the Forest Policy and the Forest Statute (*Ndonde, 1999*). The Land Act (No. 6 of 1999) and the village Land Act (No. 7 of 1999) constitute a new basic land law that promotes the establishment of village forest reserves through supporting devolution of authority to grassroots and by designating elected village councils as land managers. Over the last quarter of a century, Tanzania's land policy and law have been built on what is arguably the most decentralised and devolved regime of governance in SSA, in which governance is lodged first and foremost at the village level (*Wily, 2000*). The Local Government Laws Miscellaneous Amendments Act No. 5 of 1999 accords further executive and legislative power to the village government.

The new Forest Act (2002) empowers forest protection using customary laws, while Tanzania's new Land Policy (1995) and Land Law (1999) have decentralised and devolved governance to the village level (*Wily*, 2000) with a clear socio-spatial framework (*Kikula*, 2000). The new law designates the village council as a governing body and land manager. This law further allows local communities the legal mandate to declare woodland as forest in the village areas and common property for management or for titling to a particular group or the entire community (*Iddi*, 2002).

2.8.3 The Duru-Haitemba Village Forest in Tanzania

The pioneering development of CBFM in Tanzania is traced to the case of the Duru-Haitemba forest in Babati district that had been earmarked for reservation in 1990/91. Failure of the "command and control" forest management system and the restricted access to forests under state ownership, had led communities of Duru-Haitemba to oppose gazettement of the 9,000 ha forest. At that time, only 3,000 ha were covered with forests, the rest was degraded through non-sustainable use. The people resented gazettement of the forest as a state forest reserve preferring to gazette it themselves.

After protracted negotiations with the government, gazettement was abandoned in favour of assisting each of the eight villages to reserve its forest under the district council. Encouraged by the handing over of forests into their hands, the eight villages around Duru-Haitemba mobilised themselves into an assembly of members.

Each village constituted a management institution of the part of the forest reserve adjacent to it, surveyed and reset the forest boundaries with the assistance of the forest department. Each forest was zoned according to its land use potential, viz. a crop use zone, grazing zone and a core protected area excluded from use. A manual was later prepared to assist local forest officials and the community to draw up maps, developing work plans and initiate forest operations. Forest use was restricted to the members, except grazing. The community proceeded to draw simple management plans and determined what areas of forest to be looked after by each adjacent sub-village.

The eight villages in Duru-Haitemba have obtained title deeds, and according to statutory local government regulations, making them legal owners and managers of the forest reserve under the various new policies, Acts and laws. The law allows villages to exist as formal government structures and legal corporate entities with the ability to sue and be sued and to own property as a local community (*Wily*, 1996).

Prior to handing over the Duru-Haitemba forest to the community, the village was overexploiting the forest as fast as possible, ahead of its gazettement. It is noteworthy that by establishing secure ownership rights and providing the community with authority and management responsibility, these villages have taken the challenge seriously and are implementing management plans and enforcing rules prohibiting uncontrolled use. This is further enhanced by accompanying security of tenure that is necessary for the development and survival of Common Property Resource (CPR) institutions. According to *Ostrom (1996)*, proprietors have no incentive to invest in an institution to manage their resources if they believe that those resources could be handed over to others or be taken back by the State. *Kajembe et al., (2003)* refers to this style of management as "enforcement by consent". Activities that had previously been flagged as indispensable were readily banned and accorded full compliance, leading to forest restoration and ecosystems recovery. The village forest management rules were subsequently accorded a legal authority as bylaws on endorsement by the legal district council. Consequently, the village forest reserves management rules gained a clear legal recognition and backing with judicial authority.

This is consistent with *Ostrom's (1996)* view that if a CPR can be destroyed by the action of others, no matter what local proprietors do, even those who have constrained their harvesting from a CPR for many years will begin to heavily discount future returns. *Marrow and Hull (1996)* had also observed that having a legal title to land is a prerequisite for the villagers to define their forest boundaries as well as their legal rights to defend those forests.

By contrast, observations from non-titled woodlands under the wildlife or forest departments indicate increased problems with destructive forest resources use. For example, the world famed Selous Game Reserve around the Rufiji River (South of Dar-es-Salaam), is currently experiencing heavy log harvesting for export to SE Asia, despite the government ban on felling. At the same time, Miombo woodlands in trust lands are heavily degraded through extensive and unmanaged charcoal burning, particularly in easily accessible areas.

2.8.3 Rules developed by the Duru-Haitemba Village Forest Reserve

The Duru-Haitemba village government, assisted by experts, has promulgated rules that spell out appropriate practices for rehabilitation and enhancing sustainable management of their forests. In undertaking the forest management programme, the community invests its labour, and observes deferment of current consumption in favour of long-term benefits. The villagers maintain a moratorium on harvesting live wood, and deferred benefits for up to ten years, to allow the forest to recover. The Village Forest Committee (VFC) further enforces protection measures through popular village participation and consent. The following activities are banned:

- Setting fire in the village forest.
- Felling reserved trees, e.g. Pterocarpus angolensis.
- Ring barking trees for making bee hives.
- Settlement or farming, or grazing in non-grazing areas within the forests, out of season.
- Charcoal burning.

The following activities are allowed with permission of the VFC:

- Entering the prohibited zone for any purpose other than passing through.
- Cutting and collecting poles, rafters or withies for house construction.

- Collection of stones for building.
- Collection of herbs, roots or other plant parts for medicine.
- Felling and pit-sawing of trees for community services and development.

The following are freely permitted activities:

- Collecting dry wood for fuelwood.
- Cutting sticks for toothbrushes.
- Collecting wild fruits and vegetables.
- Collecting leaves for plant medicine.
- Seasonal grazing.
- Collecting grinding stones.
- Inspecting bee hives.
- Visiting for recreation.

These plans and forest management rules were formally approved by the full Babati District Council under the District Authorities Act in mid-1995. Each registered sub-village looks after the forest adjacent to it, and each village manages a part of the forest within its traditional village boundaries, under its village forest committee. The VFC members are democratically elected and comprise men and women.

The rules have been established in consistence with the Village and Ujamaa Villages' Act of 1975 that gives powers to villages in Tanzania to make rules in the form of by-laws recognised in a court of law (*Kihiyo and Kajembe, 2000*). Before the rules were instituted, the village government organised an inventory of the forest reserve to assess and take stock of the resource base.

2.8.4 Enforcement

The Village Forest Committees (VFC) has a membership of 15 officials elected by the village general assembly to manage the forest. The VFC has a territorial jurisdiction and provisions for the village forest committee. Gender representation is about 3 men to 1 woman - *Kajembe et al., (2003)* reported gender representation from 32:10 (men to women) from eight villages in Duru-Haitemba. The VFC meets quarterly to look at plan performance, discusses and resolves reported problems. The VFCs demarcate and maintain the forest boundaries, formulate rules on forest management plans according to each zones' management objective, and supervises forest management operations, and the work of voluntary Village Forest Guards.

The Village Forest Guards patrol the forests and report offences to the VFC. In addition, each villager takes interest in what is going on in the forest according to the management plans for each designated zone, use guidelines and rules. Forest guards operate in groups of two or more and one to four patrols per week are conducted in each sub-village. The village committees are empowered to levy fines according to the Villages and Ujamaa Village Act of 1975 and the Local Government District Authorities Act (*Kihiyo and Kajembe, 2002*). Cases are reported to the secretary who convenes an executive meeting to sit as a court of law. Accused persons are given a chance for self-defence, and have the right to appeal. The levels of penalty vary according to the crime, and include forfeitures of property, and sometimes make distinctions between villagers and outsiders. Returns on surveillance, monitoring, enforcement status are given in monthly reports.

Violations of forest management and operations rules are subjected to graded sanctions based on the seriousness and context of the offence. Encroachment for agriculture, settlement, pitsawing, charcoal burning and related destructive activities carry heavy punishment in the form of deterrent fines or confiscation of valuable property. Less destructive activities, such as unauthorised firewood collection carry lighter punishment. According to *Ostrom (1996)*, proprietors who violate operational rules of CPRs institutions must face sanctions adapted to the nature of the offence. *Marrow and Hull (1996)* also state that

graded sanctions are common in established common pool resource institutions to allow flexibility in the system. Based on this, it is prudent to treat with leniency a person who is normally a rule abider but due to a dire need has committed an offence. The contrary applies to a frequent offender who has shown little regard and allegiance to the rule structure of the institution.

Kajembe et al., (2003) refers to the CBFM arrangement in Duru-Haitemba as "forest management by consent". Their observations further reaffirm that policing the forest reserve is effective in all the eight villages, where it has created better enforcement of rules. The principle of management by consent is applied in the system of fines, which does not spare neither patrolmen, ordinary villagers nor the forest officials. Patrol teams are exempted from other village communal activities, such as local road maintenance and building local schools. However, failure to participate effectively in patrolling the forest, subject the patrol staff to a fine just like any other villager who fails to participate in other development activities.

The CBFM has also improved group cohesion and provided a platform for other development activities in the villages. It was noted during the present study that villages participating in CBFM are more active than those that are not involved in forest management. CBFM has promoted local capacity by forging new social relationships and redefining old ones. Local conflicts are resolved through reconciliation committees. These are reinforced by the formal village by-laws and are constituted at the village level through involvement of village elders, who are perceived as the wise persons in the community. The village chairpersons serve as heads to these committees. In the event that traditional laws fall short in addressing certain conflicts, formal by-laws are applied. In the Duru-Haitemba forest, the main conflicts were associated with competition for land use between farmland, grazing land and forestland. This occurred among the villagers, and between the villagers and outsiders.

2.8.5 The Mgori Forest in Tanzania

The Mgori forest is a 44,000 ha woodland managed as five village land forest reserves, with each village recognised as the common owner of their respective reserve. Before 1995, Mgori forest was Government land. When the Forestry and Beekeeping Division demarcated the forest, the community demanded that the western part be excluded for their use. This was granted but it was soon realised that neither the Forestry Division nor the Singida District Council could manage the reserve.

The government consequently allowed the community (five villages) and the Singida district council to manage the whole forest. Between 1995 and 1997 the forest was managed using a joint management approach. The Mgori community has later followed the Duru-Haitemba model in establishing a CBFM system as a village community forest reserve.

2.8.6 Joint Forest Management experience in Tanzania

Following the revision of the Tanzania forest policy in 1998, local communities have been encouraged to co-manage forest reserves with the government through joint forest management (JFM) agreements. Currently, there are a number of forests, e.g. Golgolo and Kipumbwi in Tanga Region, and Udzungwa in Iringa Region, that are at various stages of JFM development (*Wily and Mbaya, 2001; Iddi, 2002*).

In addition, the National Forestry Programme is piloting state-people co-management in more than 30 national forest reserves. A national programme supporting JFM in all rural districts is getting under way and the government has issued formal guidelines for assisting communities in bringing either reserved or currently unreserved forests under community-based management (*Wily, 2001*). Following the establishment of JFM systems in these forests, the incidences of fires, illegal harvesting and forest clearing for short-term grain production have decreased.

JFM is also being implemented in mangrove forest reserves near the Kipumbwi village in Pangani district, Tanga Region, and in the Kipumbwi and Sange Villages under co-management with the government, and in other forests in the country.

2.8.7 Recognition of traditional forest management systems under CBFM

One of the most significant recent developments in forest and woodland management in Tanzania has been efforts to strengthen, or to otherwise reintroduce, earlier management traditions (*Kessy, 1998*; *Kajembe and Kessy, 2000*; *Kajembe and Mwihomeke, 2001*). This has involved building on the customary practices of setting aside tracts of land for rituals or for later emergency use (*Ylhaisi, 2000*). Wily and Monela (1999), reporting on the concept of the traditional forest management system under *ngitiri* in Mwanza and Tabora regions, noted that the concept was originally applied to grazing areas and has recently been extended to include residual pockets of woodlands. *Ngitiri* is a portion of land protected from farming and grazing for a specified period of time, thus allowing natural regeneration of trees, shrubs and grasses. The *ngitiris* provide products such as fodder (especially during the dry season) and poles. The revised forest policy recognises *ngitiris* and other indigenous systems of forest management. According to *Iddi (2002)* local villages and community groups own varying areas of sacred *ngitiris* and forests in Tanzania. *Gerdén and Mtallo (1990)* mention more than 46 traditionally protected forests and their uses in Babati District alone that are protected by customary laws.

Today, more than 1 300 *ngitiris* have been established in the Mwanza Region, and thousands of others in the Tabora and Shinyanga regions. These examples show that traditional forest management has a high potential as a springboard for CBFM in Tanzania. Farmers in other regions are also declaring forest patches in their holding as "*ngitiri*". Since 1995, more than 500 village forest reserves (VFRs) have been declared by communities out of communal lands. In addition, several thousand households, clans, or groups have demarcated *ngitiris* on their land. Together, these developments have brought more than 0.5 million ha into protected status.

2.8.8 Lessons from the pioneering CBFM experience in Tanzania

The CBFM initiatives in Duru-Haitemba and Mgori have shown that approaches that accord genuine seriousness to people's aspirations can enjoy local success. The observed success of CBFM in these forests can be attributed to the following factors:

Clearly defined forest boundaries: The village forest boundaries were resurveyed, beacons set and a resource inventory undertaken. It was further zoned into sustainable use zones, grazing zones, and protection zones, prior to establishment of the forest as a village forest reserve.

Congruence between rules and local conditions: the village government developed rules for SFM that were further legitimised through the District Council as by-laws. Enforcement is effected by village forest guards supported by all villagers to safeguard the forest and ensure compliance with SFM practices. The chances of success were further reinforced by good collective choice arrangements, elaborate conflict resolution mechanisms, clearly defined resource property rights, the rights of villagers to devise their own institutions that are not challenged by external government authorities, and villagers' ability to develop a common pool resource institution where the benefits to be gained from collective action are greater than the opportunity costs.

Kajembe et al. (2003) have stressed that owners of a CPR will have their confidence and security of tenure enhanced if the limits of their jurisdiction are clearly defined. The restructuring under the CBFM re-defined the asset structure such that forest ownership reverted into the hands of local people. In this way, communities are not afraid to invest in the CPR due to fear that others can expropriate their investment. By contrast, where there is no security of tenure, outsiders can deplete the resources because they have nothing to lose (*Ostrom, 1992*). It is therefore not surprising that within a short period of less than 10 years, the CBFM has transformed the state-community relationships, the forest cover has increased, and incidences of forest fires have gone down. Supervised controlled grazing and regulated harvesting have enhanced recolonisation of species that had been eroded, resulting in the ecosystems and habitat recovery. It is also noteworthy, that rivers and streams that had dried up have since returned to all seasons' regular flow, and wildlife has returned to the Duru-Haitemba forest.

3.0 OBJECTIVES OF CBFM

Forests in SSA contribute significantly to the region's economic development and to the socio-cultural and environmental wellbeing of her people. This includes provision of multiple products for livelihood support and food security for many people who live on the land and depend on a wide variety of forest products on a daily basis. The CBFM systems provide democratic strategies that bring communities to the forest management planning table, thereby enabling them to factor their needs and aspirations in their village forest management plans. Under a rationally zoned land use system, CBFM is capable of accommodating the needs of a great majority of community members. It also includes provisions for setting aside areas to be managed for rehabilitation, biodiversity reserves, and for recreational and environmental purposes.

Bojang (1999), giving an overview of the proceedings of the First International Workshop on Community Forestry held in Banjul, Gambia, observed that the principal objectives of CBFM, whether advocated by governments, projects, NGOs or the local communities themselves, are (i) to arrest forest resource degradation, (ii) enhance production of multiple products, and (iii) to enable communities to have a secure access to, and ownership of, the resources and their benefits, through empowerment and building capacity for forest management. Other broad objectives include SFM to promote environmental protection through forest conservation and biodiversity management.

3.1 Production of goods and services

Traditionally, investment in forestry has been driven by the expected returns from a range of commercial timber products generated when the forest is thinned and harvested. Increasingly, however, investors are recognising potential returns from NWFPs and environmental services. The extent of dispensation of direct benefits derived from forests through CBFM varies between countries, forest types and the CBFM model, but generally include both wood (timber, poles, rafters, withes, fuelwood) and non-wood products (fibre, food, fodder, grass, medicines, and extractives).

SSA has great potential for a significant and sustainable timber production, provided it can institute appropriate international competitiveness, processing efficiency, policies, legislation, institutional reforms and marketing strategies, to provide needed checks and balances. Countries rich in natural forests in West and Central Africa, and plantation grown softwoods and hardwoods (mainly Pines and Eucalyptus) in southern and East Africa, are capable of providing industrial logs and processed wood products. At present, CBFM does not handle large volumes of timber and wood-based products, not because of absence of saleable material, but due to restrictive policies and legislation. But with appropriate instruments, CBFM would undoubtedly be able to foster sustainable production of these products and services. Despite reports of a trend towards opening CBFM to all forests in a growing number of countries, this is still largely on paper, while management remains limited to co-management/JFM in which communities are restricted to using a limited range of products, particularly NWFPs (*Wily, 2001*).

Apart from isolated instances, such as in Cameroon where communities are operating in prescribed areas in biodiversity rich forests (*MINEF*, 1998; *Djeumo*, 2001), CBFM remains relegated to degraded community forests in many SSA countries. *Abbot et al.* (1999) reported instances of CBFM involving wildlife management and trial mobile sawmills by communities in Cameroon. In the Cross River State of Nigeria communities receive 70% of the royalty and 50% of revenue from forest reserves under collaborative management with the state (*Saarela-Kaonga*, 2001). Co-management arrangements between communities and wildlife services, and CBFM programmes in Ghana and Cameroon, have developed socially responsible spending arrangements where timber-harvesting companies pay a specified percentage of their profits to local area development (*Amanor*, 1997; Egbe, 1997). Utility products from CBFM currently come through harvesting of woodfuel, poles and other building materials, food, fodder, genetic material, medicinal and other products, e.g. latex, gums, resins and oils.

Under the fuelwood licensing initiatives of Niger, Mali and Burkina Faso (*Fries and Heemans, 1992*) communities are licensed with management powers by the state or its agents. Such arrangements share a focus on the use and benefit of the forest itself. Fuelwood and charcoal are the primary sources of energy in SSA with woodfuel providing the major source at the rural household level, cottage industries (pottery,

brick and ceramic firing) and food processing. CBFM is well suited for production of fuelwood but apart from Sahelian countries where communities are licensed to harvest and market fuelwood, most countries have maintained a ban on felling live trees for five to ten years (*Sonko and Camara, 1999; Kajembe et al., 2003*). During this period, woodfuel harvesting is restricted to collection of dead trees and branches. According to *Arnold and Townson (1998)* about 15 million people generate income from natural forest-based products, and thus support the livelihood of far more people than industrial timber does.

Researchers in the Sahel have recently noted that there are enormous commercial opportunities for the products of *Parkia biglobosa*, the shea-butter nut (*Vitellaria paradoxia*), the baobab (*Adansonia digitata*), the tamarind (*Tamarindus indica*), etc., which are consumed, sold directly or processed and hence contribute to food, nutritional and economic security of households (*Swedfarm, 2003*). Local communities further draw fruits, seeds and nuts, berries, leaves, honey, fungi, oils, roots and tubers, bark, gums and sap, and bush meat from forests. Foods from the wild are eaten as snacks, supplements, and as seasonal or emergency substitutes to household food supplies, and are particularly important during austere times. Many of these items are sold in markets in rural and urban areas for cash generations. Under comanagement arrangements, forest dwellers and communities living in the forest estate and along forest margins, draw food such as fruits, tubers, leaves, bark, honey, mushrooms, arthropods, fish, bush meat, etc., directly from the forest. Many pastoralists do not store or carry food over long distances, but rely on the seasonal products of forested areas.

Communities in dryland ecosystems, which cover vast areas of the continent, rely on forests, trees on farm and farm gardens during difficult times. During lean times, forest foods are consumed as staples, and help bridge the famine period to the next harvest (FAO, 1995). But the consumption of food from the wild is not necessarily restricted to food insecure areas or famine times, because many constitute delicacies and supplementation to regular diets and menus. The quantity consumed vary widely within and between seasons, and range from supplementation with essential bases of vitamins, calories and proteins to otherwise blunt and nutritionally poor diets, to important life saving safety nets during lean times, which are common with recurrent famines and natural calamities. Livestock and wildlife literally live on fodder and forage plants associated with forests and woodlands during seasons of rain failure. In this instance, forests provide dry season grazing pastures for pastoralists and habitats for wildlife, thereby supporting animal production.

Bush meat from game constitutes an important source of animal protein consumed by rural and urban communities, particularly in West and Central Africa. The use of cane rats, antelopes, game birds, and insects is particularly noteworthy. Wildlife contribute not only to income generation but also directly to food production, delicacies to menus and household food security. According to Pol (2002), a number of promising emerging wildlife production systems, including wildlife ranching, farming and domestication, can provide significant contributions to food security and nutrition with the right measures and approaches in place. Initiatives on ostrich ranching, crocodile farming, cane rats, and Guinea fowl domestication, etc., and game culling, hold a great potential for contributing significantly to food and peasant security. According to the World Bank (1994), fish from mangroves and wetlands, lakes, and other water bodies within forest ecosystems support large populations of rural dwellers. Honey and bees wax are also obtained at low cost from the wild and under domestication and are important in all ecozones. Both products are consumed locally, but substantial quantities are traded locally and for export markets. Fitch and Adamsu (1994) reported that SSA countries contribute significant quantities of honey in the world trade valued at 300 million US\$. Unique and specialised markets based on products such as snake venoms tapped for pharmaceutical industries, civet musk tapped for the perfume industry are being exploited in different countries (Pol. 2002).

Shifting cultivators in forest rich countries produce food under slash and burn agriculture, while some use the *taungya* system in establishing forest plantations and thus generate food for household use and for sale (*Amanor, 1997*). In some countries, communities participating in CBFM practice crop production and agroforestry systems in plots neighbouring forests. In addition to food crops, browse and fodder plants are cultivated for bulk production of animal feeds under cut and carry or zero grazing systems. Many experiences reported from agroforestry research during the last two decades show substantially increased crop yields arising from improved soil fertility, food from fruit trees and wealth creation from marketable products (*Kerkhof, 2000*).

Sacred groves, historical sites, plants and animals play significant roles in religious, spiritual and healing rituals and ceremonies (*Odera, 1997*). Forests, animals and their products feature in many anthropological, ethno-botanical, geographic and linguistic studies, which are generally specific to ethnic groups and communities. These and SSA's mega-biodiversity, diverse landscape and geographical richness remain attractive to scientific studies, education and recreation.

Many countries in eastern and southern Africa have taken advantage of wildlife-based ecotourism. Many communities living close to national parks in southern Africa are participating in the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) movement. The major activities include trophy hunting, selling live animals, harvesting natural resources, tourism and selling wildlife meat (*IIED*, *1994*).

Indirect benefits from trees and forests arise from mitigating effects of trees and forests on soil and water resources, support to agriculture, recreation, and aesthetic and landscape quality features, religious and spiritual values, etc. Other attributes include preservation of genetic resources, hydrological balance, and biological diversity, carbon dioxide sequestration, as well as the protection of the environment. Many of these are readily tradable commodities while recreational, landscape and aesthetic attributes provide values that are, or can be, used in developing eco-tourism and other non-consumptive goods and services for direct use and income generation. Community-driven ecotourism that generally builds on unique features of forest landscapes, wilderness enclaves and socio-cultural relics, such as sacred sites and remnants of traditional practices, is steadily evolving as an important income earner. Additional attractions come from those seeking retreats, specialised studies and research, hiking, camping and opportunities for wilderness adventures (*Odera, 2003*).

3.2 Employment and income objective

Forests and their biodiversity have been traditional sources of direct and indirect rural employment and income generation at different levels. Investments in forests and tree crop production, harvesting, product conversion and processing, and trade constitute major pillars for economic development and growth. These activities employ many people directly while providing sources of subsistence and indirect employment for many people, particularly in primary, secondary and tertiary processing, and other modes of value-adding. Trade and distribution of forest goods and services further provide jobs and income to many people along the marketing chains and distribution lines.

In addition to fulfilling domestic consumption needs, forest resources enable countries to generate vital income and foreign exchange. The latter either directly or indirectly through provision of products that otherwise have to be imported. The contribution of forestry to GDP is significant to forest rich countries, averaging 9.7%, 5.6% and 5.1% for Ghana, Gabon and Cameroon, respectively (*World Bank 1994*). CBFM is reputed to have the potential to perform better than the classical forest management system, because of its alleged potential cost effectiveness, but this has yet to be established empirically.

The true potential of CBFM for generation of employment and income at its present stage of development in SSA has not been assessed. Currently, the practice remains restricted to what is ultimately a limited portfolio of livelihood provisions, focused on increasing products and income for the poor, not assisting these same populations to secure a fuller share of wealth that accrues through ownership and authority over this important resource (*Wily, 2002*). Currently, the extent of gainful employment opportunities is still low, and more of subsistence than commercial nature. *Fabricius (1999)* observed that country reports do not provide clear evidence that the benefits of CBFM justify the cost. Quite often, little attention is paid to enhancing the value of natural resources to benefit local communities and other national stakeholders, or to ensuring that they receive a fair share of the benefits. This is not surprising considering that most CBFM systems are still young and different models on the ground are more of a pilot nature with regard to employment opportunities through forest-based micro-enterprises. Moreover, the rich avenues and options for processing and marketing of utility products remain unexplored and under-developed.

These limitations notwithstanding, the trend indicates that the range of direct employment opportunities and those arising from self-employment, start off narrowly but widen over time, following incremental awareness, capacity building and the emergence of new opportunities. Forest management duties undertaken by communities include managerial, administrative work and forest operations activities such as patrolling and rule enforcement. The bulk of these work tasks range from boundary cleaning, seed collection and handling, seedling production, planting and tending activities through to forest management, harvesting, wood processing and marketing. In South Africa, village communities are generating substantial revenue through an out-grower contract with multinational commercial companies. *Mayer et al.* (2001) has reported revenue of up to \$205 per ha per year received by individuals/communities producing wood under lease, crop sharing and market joint ventures with multinational companies in South Africa.

In Ghana, participating communities are engaged in plantation establishment and boundary clearing as direct contributions to the development of community forests (*Asare, 2000*). Other experiences have been reported under timber-harvesting CBFM in Cameroon, and the fuelwood licensing programmes of Niger, Mali and Burkina Faso, where communities engage in cutting and transporting wood from the forests. Others participate in marketing and transporting these to urban centres for sale (*Fries and Heemans, 1992*). Communities operating in forest rich countries/areas are participating in the sale of logs and different forest products, albeit in circumscribed blocks on short contracts under co-management and JFM arrangements (*Djeumo, 2001*).

The marketing chain for fuelwood, particularly charcoal, attracts a network that stretches from charcoal burners, through transporters, wholesalers and retailers. Fibres, including bamboos, rattans, palm leaves and other plant products, are sold directly by middlemen, or converted to crafts and furniture, and sold at higher value. Other NWFPs that are used and/or traded in varying volumes, depending on the level of sophistication, include honey, bees wax, essential oils, tannin, dyes, gums, resins, latex, spices, balsams, various extractives, flavours, medicines, mineral bases, etc. Many of the products are harvested, processed and sold by women and youth. The volume of trade in medicinal plants has recently risen to a commercial scale in many countries, with the sharp fall in public health services and increased cost of medical treatment in private clinics and hospitals.

The level of employment opportunities will increase as governments open more space for CBFM in all forests types. Forests and forest product-based small scale enterprises are emerging as important players in the rural development sector in SSA. A large number of people find employment in small enterprises which depend directly on forest products for raw materials, the level of which has increased following retrenchments under SAPs. Today, the range of micro-enterprises based on wood and non-wood products from the forests vary between forests, but have potentials for providing employment in production and processing including use of mobile saw mills and trade. Wood carving, carpentry and crafting has also seen a sharp expansion in the informal wood industries with a rise in the demand for utility furniture items, and artefacts and curios in the tourist market (*Choge, 2001*). Bottling of drinks based on plant products, sale of honey, bees wax, gums, resins, oils, bitters and gels from *Aloe*, bush meat, insects, ethno-medicines, etc., are promising sources of direct and indirect employment.

Ecotourism is among the emerging forest-based industries that is growing fast in CBFM forests. A company that manages a forest in Narok district in Kenya earns about US \$ 13,500 p.a. from ecotourism alone (*Emerton, 2001*). Another example comes from Kenya's Arabuko Sokoke Kipepeo project that farms butterflies. This project raises \$30,000 annually, and has expanded the range of local income generating activities with enhanced employment opportunities. These benefits have contributed to a positive attitude change with a concomitant drop in forest damaging activities as local people cultivate a more positive perception of SFM.

Although most products from the forests still are subsistence rather than commercial, villagers place a premium on forest goods and services. Forest activities are particularly important in areas where *per capita* incomes are rising, and where there is a growing demand from rural and urban markets. Two levels of interest occur: (i) those featuring survival strategies of the very poor, (ii) those that can increase household incomes, operating in a more stable economic environment. In some cases, activities start from a low-cost technology outfit that is gradually upgraded with improved equipment and increased production efficiency. A shift from the first category to the second and higher levels is often accompanied by an up-scaling from part-time activities undertaken informally by a large number of people, to a more specialised all year round operation employing a core of specialised personnel. The number of people involved in trade on forest products has risen in recent times with an increased retrenchment of salaried staff under SAPs. This has escalated demand on forests for saleable goods and services, with a clear trend towards commercialisation.

The biggest challenge to community forestry is how to balance management to meet the changing needs of subsistence against those wishing to expand commercial activities.

3.3 Environmental objectives considered important under CBFM

Trees and forests have an inherent comparative advantage in providing environmental services and functions that are critical for enhancing the quality of life and global well-being. The environment and sustainable development have grown into one of the most urgent concerns for humanity and have been examined widely in recent times. Although prospects of financial gains have been at the forefront in stimulating community involvement in forestry in many countries, it is the desire to arrest forest degradation resulting from exploitation and the prospects for localising monetary and other benefits that has driven the CBFM process (*Bojang, 1999*). In practice, environmental concerns are accommodated in the objectives of the management plans and spelt out in the MoUs or charters granting the CBFM. The zoning of the forest according to its bio-ecological potential and its management according to set rules, show a clear commitment to the primacy in upholding secure livelihood through sustainable use and environmental security. While the forest conservation (protection) zone is central to biodiversity conservation, the management of the other zones, the utilisation and production zones, are based on practices that promote and sustain environmental functions.

Communities living in the forest and along the forest margins often bear significant costs as a consequence of their proximity to the forest, because it restricts their ability to earn a decent living from the land, prompting them to revert to forest encroachment. CBFM offers opportunities for providing these communities with alternative livelihoods from the forests.

In non-productive and degraded forests, where the bulk of CBFM initiatives are currently lodged, many activities initially concentrate on promoting recovery under a moratorium on harvesting and deferred benefits. During this phase, economic activities are limited to collection of NWFPs, felling of mature trees in the boundaries and fire lines, collecting dead wood for fuelwood, and participation in micro-enterprises such as bee keeping. The important role of trees in watershed managements has led some communities to zone such areas for conservation, closed them to grazing and only to be visited with expressed VFC's permission. In Duru Haitemba, Tanzania, and in some CBFM programmes in Gambia, the VFCs have banned charcoal making, setting fire, felling reserved tree species, ring barking trees, and encroachment into the forests (*Wily, 1996*). In Mgori village forest in Tanzania that was threatened by shifting cultivation and under constant threat of poaching of ivory and fire damage, the incidences of forest destruction have been reduced within a short period (*Iddi, 2002*).

As CBFM enters its fifth year, observations from the Duru-Haitemba forest show that the forest cover has increased, incidences of forest fires have gone down, and rivers and streams have recovered all year round flow, and wildlife has returned. Supervised controlled grazing and regulated harvesting have enhanced recolonisation of species that had been eroded resulting in ecosystems and habitat recovery. Similar developments have been reported in other countries such as Ethiopia (*Kubsa and Tadesse, 2003*), Cameroon (*Gardner, 2002*), Uganda (*Kaboyo, 2003*), and Gambia (*Satto, 2003*; *Wily, 2002*).

Observations from the Kilum-Ijim forest in Cameroon show that destruction of the forest has been halted and that endemic species are conserved. *Gardner (2003)* reported that analysis of satellite imageries shows that the extent of montane forest has actually increased since 1991 through the regeneration of degraded areas within the forest boundary. Consequently, there has been a change in the way communities perceive natural forests. They now recognise that the continued availability of natural forests depends entirely on their attitude and conduct towards them (*Wily, 2002*). Most villagers are now refraining from careless tree cutting and are planting their own trees instead. Although the process has not been perfected, it is evident that a new era of more democratic relations is emerging under CBFM in many African countries.

The role of forests and trees in croplands, grazing fields, settlements and the overall landscape is gaining wide recognition and acceptance by communities and the civil society. Farmers openly acknowledge benefits they derive from intercropping, relay fallows, composting and other tree-based technologies. Benefits from shelterbelts in farmlands and residences are also widely acknowledged (*Kerholf, 2000*). This is crucial in dry areas with low use of fertilisers and a harsh climate. Other environmental benefits from

trees include regulatory uses, biodiversity conservation and existential values that are important for environmental functions and for social well-being.

3.3.1 Regulatory uses

Trees, whether native or exotic, mitigate weather and climatic extremes at village, national and global levels. They moderate temperature and humidity, absorb CO_2 , provide shelter from wind, and in some situations increase fog condensation, thus replenishing soil moisture. Forests managed under CBFM will play similar regulatory roles and functions that are associated with forest development under classical forest management as follows:

- Moderating and buffering temperature and humidity extremes, providing protection against sand dunes and high dry winds;
- Supporting soil and water resources management, stabilising watersheds and replenishing moisture through fog condensation, and purifying waste resources;
- Air purification and sequestering carbon;
- Reclamation of salinity degraded areas; and,
- Enhancing amenity, landscape value (quality) and environmental amelioration.

With increasing awareness and recognition of the important role of environmental services provided by forests, a new attitude is emerging that integrates natural capital with sustainable land management and not as a free and inexhaustible resource. In this regard, the emissions trading system laid down in the Kyoto Protocol provides a window for making commercial gains through use of carbon. The concept of salinity credits is also emerging with a mechanism whereby the beneficiaries of salinity control, such as agricultural producers and communities in areas threatened by salinity, make a financial contribution towards new planted forests in affected areas.

The role of trees and forests in water resources and catchment management also hold potential for earning credits for an early cash flow for CBFM. This is based on the realisation that forest systems improve infiltration, enhance water quality by direct shading of streams and lake margins and through reducing nutrient and bacterial load. The efficiency of forest systems in their filtering capacity is often used to treat wastewater or waste solids, either from domestic treatment plants, from industry, or from agricultural land.

Currently there is no mechanism for recognising commercial returns from the role of forests in providing clean and consistent supplies of water. But in some countries, e.g. Kenya, the forest service is exploring avenues for introducing a forest renewal levy under "user pay principle" to city water supply providers and electricity boards, encouraged by a recent payment by the New York city water supply authorities for protection and management of a forest area in upstate New York.

3.3.2 Shelterbelts

Tree planting in shelterbelts is used as the first line of defence against dust storms and sand dunes, particularly in regions affected by high dry winds for protecting farmlands, settlements, pastures and communication networks. In arid and semi-arid hilly areas, various dry land afforestation techniques have been used by planners to establish plant cover for environmental amelioration. This introduces a viable tool in habitat and agricultural land management under all forest management paradigms, including CBFM.

3.3.3 Biodiversity and existential values

Native forests are generally regarded as the best ecosystems to conserve indigenous bio-diversity, but planted forests can also play a role. Realising a commercial return from biodiversity is a "holy grail" of SFM under CBD-based instruments. Included in this concept is a commercial return from the biodiversity and managing existing forests, as well as designing and planting of new forests, in ways that enhances the

commercially interesting biodiversity. Although these outlets may not, at the moment, be accessible to CBFM communities, the potential certainly exists.

According to *IUCN (1999)*, Africa's forests hold very large numbers of plant and animal species, including species that harbour secrets of enhanced understanding of genetic, bio-chemical and physiological processes. Several countries in the region are also classified as areas of mega-diversity, for example Cameroon, Madagascar, Tanzania and DR Congo. Forest ecosystems include rainforests, savannas, dry zone forests, montane forests, swamp forests and mangroves; these ecosystems also harbour endemic mammals such as the pygmy chimpanzee and a wide range of plants. In mainland Africa, important areas for endemism include the lowland forests of Cote d'Ivoire and Liberia, the montane and lowland forests of Nigeria, Cameroon and Gabon, the montane forests of East Africa, the lowland forests of western Uganda and Rwanda, the coastal forests of Kenya, and the eastern forests of Tanzania. The sustainability of these species lies with communities who own and have stakes in the integrity of the forests. CBFM offers a promising route through which the sustainability of these forests can be secured and managed.

4.0 THE OVERALL ENVIRONMENT IN WHICH CBFM IS PRACTISED

Different CBFM approaches are emerging independently in different SSA countries, driven by different motives but normally closely tied to the centrality of forest governance and tenure, i.e. driven by questions on who owns, manages and benefits from the forest. This is also closely tied to long held desires by communities to correct mistakes committed earlier when they were evicted from their ancestral land. It is in this light that the CBFM drive is focused on custodial rights, forest managerial power and authority.

A broad commonality among emerging CBFM processes in Africa is a paradigm shift in conservation and natural resources management away from costly state centred control, towards more democratised SFM approaches, in which local people play an active role. Country reports consistently reveal that CBFM is evolving through a learning-by-doing process, weaving conventional approaches with traditional forest management methods, but shying away from blue print prescriptive solutions (*Wily, 2002*). The main drivers are the failure by 20^{th} century forest management systems to address the expanded demands of multiple users, the challenges of multiple management objectives and the lack of the resources and capacity to enforce controls.

The process is further accelerated by the continued loss of forest on the continent of up to 1 million ha each year (*FAO*, 2001; *Mathews*, 2001) and the resultant added pressure for action being exerted through global environmentalism, generated through international conventions and processes. The changing mood and practice has also been influenced by changes in forest policy, legislation and land laws, institutional and structural reforms, shifts in attitudes, actions and reactions of the people who depend on forest resources, and opinions of the civil society and the global community.

4.1 Influence of policy and legislative frameworks in the forest sector

It is widely recognised that the CBFM process has been inspired by donor and NGO initiatives. Without risking over-generalisation, it seems fair to say that the demand for change in the system of resources management has been influenced by the globally driven and international concerns over the future of forests, following failure of central governments to stop or reverse the loss of forest resources. In Tanzania and Gambia, a change in attitude by the state came after communities had taken over the management of community forests on a trial basis, ahead of policy change (*FDCU, 1998; Wily, 2002; Iddi, 2002; Kajembe et al., 2003*). This notwithstanding, most SSA countries have reviewed their forest policies and some have revised the laws and restructured their forest agencies (others are currently doing so) to accommodate local community participation in forest management. The new policies have also led to an expanded portfolio of management objectives and programmes to include production of traditional forest products and services, as well as multiple products for poverty alleviation, rural livelihoods support and peasant security.

New laws and associated institutional frameworks that have been developed to promote CBFM practices are various and of mixed utility. The influence of forest and land policies and laws have been presented and discussed in details in chapter 2 under the Tanzanian experience. These examples show that the combination of the long-standing post-independence administrative laws and the innovative new land laws, avail local people and the state the necessary opportunities to promote and sustain custodianship over local forest reserves. According to *Wily (2001)* about 20 SSA countries had passed new forest laws by 1990 and 12 countries had them in draft form. By 2002, about 24 countries had enacted new codes, and 12 had these in draft form. The number of new entrants is steadily growing, a clear sign of a positive interest and prospects for change in forest management. Moreover, the new policies and laws have spelt out new statutory requirements for national forest management plans, stronger environmental control and less leeway in the excision of national forest reserves.

These instruments further provide operational mechanisms and allow flow of benefits and incentives to the rural poor in meeting basic needs and reducing vulnerability, buffering risks and balancing out income flows. The new policy and legislation also accord formal legal recognition to many customary arrangements. Such customary practices include setting aside tracts of land for rituals, such as the Kaya forests in coastal Kenya, or for emergency use, such as the *ngitiris* of Tanzania (*Odera, 1997; Wily and Monela, 1999*).

4.2 Institutional arrangements supporting the CBFM practice

Decentralisation and devolution, products of recent (on-going) reforms further accord communities secure access to forest resources, tenure rights, and provide holders with legal and statutory support against the industry, state agencies, and encroachment from intruders. In many countries, notably Tanzania, decentralisation of government administration and devolution processes and entrenchment of CBFM, have received clout from new land policies and laws and from revised national constitutions. Tanzania's new land policy (1995) and new land legislation (1999) have reconstructed the tenure environment and, with it, the nature and expression of rights at the local level. These instruments further provide links between the village and its land, and have been given a clear and strong legal foundation introducing the "village land" as a land management category. Upgrading land rights in communal land gives local communities more secure rights not only to land but also to forest resources (*Wily, 2002*).

Wide variations occur in constituting local governance structures, such as the VFC. Some CBFM initiatives have built VFC through a superimposition on an administrative or traditional village council. In Cameroon, all sections of the community are consulted and must be equitably represented (*Djeumo, 2001*). In Sudan the government appoints the VFCs. In some Francophone countries (Burkina Faso, Guinea, Niger, Mali and Senegal), decentralisation has been shaped by codes and constitutions (*Wily, 2002*). *Campbell et al. (2003)* reported that a model involving corporate, legal organisations composed of all rights holders and residents, e.g. Trusts (Botswana), Conservancies (Namibia), Communal property associations (South Africa), Villages (Tanzania) and Range management associations (Lesotho), are popular in southern Africa countries. With the exception of Tanzania that has an established village administrative structure, the majority of countries have built local village institutions from existing user groups, community-based development units, or traditional institutions. In a few cases, the CBFM initiative has built new structures from scratch to handle participatory forest management. A common arrangement consists of sub-village to village-based institutions with its committee, the VFC. The members include men and women, although in some cases they may operate in separate sub-groups. The VFC is the functional executive arm of the local resource governance structure involved in the implementation of CBFM.

Traditional institutions can be a boon or a curse, depending on the circumstances in the country. In some countries, those institutions and their networks linking them are the hub for local grassroots development (*Matose and Wily, 1996*). *Kayambazinthu et al. (2003)* reported from Malawi that institutions with better integrated traditional and socio-cultural traits enjoy more political legitimacy at the local level than those with less such traits.

In Tanzania, because of its unique village structure, local people already have the capacity to be recognised as "owners" of natural forests within those areas that have been identified as their "Village Area". The law allows the community to seek and secure forests within the community's spatial influence as village forest. An added advantage of the new forestry laws in all countries where the process has been completed is the introduction of cautious procedures for declaring or degazetting state forests. Such changes must now go through rigorous public scrutiny and consultation. This gives a stronger hand to communities and the civil society in preventing wanton excisions by leaders, a practice that has been common in some countries in the recent past.

Despite much rhetoric about decentralisation and devolution, power and responsibility for CBFM continue to evade local institutions. According to *Barrow et al. (2002)*, participation rather than devolution is still the majority norm in the implementation of CBFM. Decentralisation without clarity as to who has the rights and responsibilities are common. Many countries settle for dispersal of power from the centre to the districts, as the new locus of power, without defined links to communities and their institutions. The districts on their part normally have neither the interest in, nor capacities for, forest management and therefore pass these responsibilities to communities, particularly where there is scarcity of high value resources. But where biodiversity rich forests are involved, district councils often retain these for their own revenue earnings (*Kamugisha, 2000*). In some countries, power is bestowed to the village chiefs (*Shackleton and Campbell, 2001*). Chiefs being government appointees remain aligned to the administrative system, while councillors, though made up of elected representatives, are interested in the wider political constituency and may not have immediate interest in local village forests.

There is also much variation in the kind of management authority communities are receiving. Hitherto, the local right and jurisdiction over forest management and use is legally provided for only in a few countries, such as Uganda, Tanzania, Lesotho and Gambia, and less explicitly in Senegal (*Wily, 2002*). In these countries, it is the community that develops the management plans in which zoning, utilisation and protection actions are included. Inputs from foresters are advisory. In contrast, management plans elsewhere are either strictly dependent on official approval or formulation by officials; this is the case in Burkina Faso, Côte d'Ivoire and Ghana (*Wily, 2002*).

States are also hesitant in empowering communities to take on licensing and enforcement functions. Where communities are empowered to make forest management rules and bylaws, these tend to carry limited judicial weights when challenged. The extent to which a local forest manager may enforce compliance beyond the membership of the forest managing community is thus often restricted.

4.3 The influence of other supportive measures

Though less recognised, the effects of the changing socio-political climate as African states adopt more devolved and inclusive ways of managing the society and its resources have played a significant role in stimulating reforms in forest management. The drive for decentralisation and imperative for participatory forestry has received a strong boost from on-going democratisation, pluralism and the call for accountability and transparency of the multi-party era. Civil society's demand for transparency and good governance has also been growing and changing the course of forest management to involve local communities through:

- On-going democratic transformation in the society as a whole;
- · Reformist land rights and policies, including recognition of customary regimes; and,
- Improved bills of rights and tolerance based on pluralism and enhanced international co-operation.

Wily (2002) has noted that these elements are emerging clearly in South Africa, Lesotho, Namibia, Swaziland, Mozambique, Malawi, Zambia, Uganda, Tanzania, Kenya, Gambia, Ethiopia, Burkina Faso, Mali, Senegal and Benin, among others. Sometimes, these reforms proceed hand in hand with forest reforms (e.g. in the village land management approach in Mali and the Niger) (*Bojang, 1999*). Even where this is not the case, land and governance have a direct impact on the handling of local forest rights.

The wave of change in approaches to SFM has been primed further by a growing realisation that forest management is itself a matter of governance with technically driven activities assuming their proper place as support functions to sound resources management (*Wily*, 2002). This has been heightened further by a growing urge from different quarters, particularly the global processes, to strengthen participation of people and local groups in charting out the management of their resources and to promote environmental integrity.

The political will for increased people's participation in decision-making is also a precondition for promoting community forestry. The general political support for decentralisation, the revision of national forest policies, land law reforms, and the creation of National Environment Management Authorities (NEMA) to coordinate activities of land resources-based programmes, are signs of a growing positive will and support.

There is a growing optimism and political goodwill in most countries, although this remains shrouded with conservatism and circumspection. It is evident that CBFM has not attracted adequate state presence and visibility and continues to run on the steam arising from a fortuitous alliance between donors, communities, and NGOs. One basic way in which governments support CBFM is by formulating appropriate instruments and providing an enabling environment. Such a positive political will and support are at times expressed in decrees, administrative orders or permits by top political leadership. In practice, such pronouncements may lead to quick changes and have expedited implementation in countries like Madagascar (*Rabetaliana and Sahachenmann, 2002*). In some countries, relevant government departments provide some technical backstopping, but it is rare that communities autonomously declare management regimes in which the state's role is largely advisory. The closest exception to these generalisations is found in the creation of village forest reserves in Tanzania, where village governments inform the local district government of the actions they propose to take and will implement (*Wily, 1999*). Quite often, they add a legal force to such decisions, by securing the district council's approval of their village made legislation (by-laws). Support from the central state is only required in respect to work in national forest reserves.

Other indicators of national commitment to the adoption of CBFM include establishment of special units within the forest service structure with a CBFM mandate. At the same time, many countries have registered community-based local management groups - CBOs, trusts or associations - with devolved forest management responsibilities. In most countries, the government grants defined rights to such local groups (*Shackleton and Campbell, 2000; Wily, 2002*).

This urge for change has further spurred the need for providing incremental financial and human resources investment in forest development, although material resources allocated to CBFM remains dismal. It is noteworthy in this regard, that special services for participatory forestry have been introduced in a growing number of countries (*Wily, 2002*). Although this is merely identified as a special service, bureau or desk, within the forest department, more and more countries, such as Gambia, Ghana, Guinea Bissau, Kenya, Lesotho, Mali, Morocco, South Africa, Cameroon and Uganda, have units that are explicitly aimed at promoting participatory forestry.

On the flipside, it is recognised that prolonged delays in implementation of CBFMs are caused by different factors such as inadequate political support, unclear attitudes and commitment among foresters (perhaps due to fear of loss of influence and authority), inadequate empowerment of VFCs, weak local institutions (many of which lack functional guidelines for role performance), misplaced decentralisation of forest management to district councils (that do not have resources or interest in CBFM), and failure to devolve accompanying funds and other resources from the centre to community institutions.

Policies and legislation of other sectors, e.g. wildlife management policies, land tenure, tax credits and pricing, commercialisation of NWFPs, resettlements, agriculture, water development, energy, public service restructuring, etc., may also complicate CBFM implementation. Harmonisation of existing instruments could stimulate effective local resource management by providing incentives for management through clearly defined mandates and jurisdictions.

Perverse policies that restrict CBFM to degraded forests, or limit access to NWFPs within biodiversity rich forests or favour national forest destruction to create room for agriculture, are also negating the commitment to SFM. It is also notable that foresters, who are responsible for taking the process forward, continue to run CBFM projects as pilot trials as an excuse for buying time. Instances of backtracking are not uncommon (*Kerkhof, 2000; Robertson, 2000*). These constraints can be eliminated through (i) awareness creation and education of foresters and communities on the merits and advantages of CBFM in forest management, and (ii) frank and open debates that could readily lead to mutually acceptable, negotiated roles and mechanisms for power and benefit sharing. Such negotiations should be supported by a strong positive public attitude and stand. Changes do not come easily or on their own, and proponents have to lobby and articulate pressures for reforms before governments can and will act.

On the whole, CBFM remains in a pilot trial phase supported by donor and NGO resources with some participation of national forestry personnel.

4.4 The roles of the government and other partners

The roles of different players in CBFM are determined by state organs without reference to stakeholders or an independent debate and open negotiations on responsibilities concerning rights and cost-benefit sharing mechanisms. Although some countries have made advances towards granting communities owner-manager roles, in most cases, communities remain users, collaborators, beneficiaries or actors. Governments seem to prefer to engage community co-operation in various benefit and product sharing models. The need for renegotiating power relations to allow community partners into biodiversity rich forests is an urgent task. At present, the key stakeholders have the following roles:

- *The Central Government* is the custodian of law and order, the umpire and normally the most powerful of the partners. The state wields overriding clout in providing space for CBFM developments through policy and legislation adjustments, allocation of roles and bases for distribution of benefits. The state holds responsibility for protecting wider "public goods" and regulating all activities.
- *Communities* are the *de facto* land and forest owners and beneficiaries of forest resources. They live within or adjacent to forests and are closely dependant on (direct and indirect) forest biodiversity for their livelihood support.
- **District councils** and their equivalents are a lower tier government structure, with delegated authority from the centre. In some countries, district councils are *de jure* community landowners under community trusteeship. The District councils and their equivalents play different roles in promoting CBFM they are vested with authority and responsibility for resource management under current decentralisation arrangements, and they may devolve this role to communities or retain it for revenue generation or levying fees. The majority do not have an interest in, or capacity for, SFM. Some, on the other hand, tend to compete with communities over benefits and control of resources and revenue (*Campbell et al., 2003; Barrow et al., 2002*).
- Non-Governmental Organisations (NGOs). Whereas some international NGOs, such as IUCN, WWF, Farm Africa, etc., have substantial interests in conservation and natural resources management programmes, national NGOs are largely concerned with lobbying, advocacy and mobilisation for change, awareness creation, facilitation, promotion, adoption of new technologies, reviews of organisation and resource management instruments (such as policies, legislation and reforms), capacity building, training, skills development and technology brokerage. NGOs are often ambivalent in their approaches and may therefore collaborate with the state and its machinery or mobilise the people to resent state policies and stand on issues. Some NGOs have been accused of creating dependency rather than empowerment.
- **Donors** are development partners that provide funding and facilitation of development and promote positive change. They also link communities and governments to global policy debates and processes. At times, donors together with NGOs are instrumental in pushing the change agenda towards greater local control, providing an alternative voice for change. Donor funding conditionality and sudden withdrawals remain a matter of concern to programmes with long-term gestation periods, such as the CBFM.
- The *Private Sector* (industries based on forests and forest products) with entrepreneurial interests, normally favours investments in plantations, wood and NWFPs processing, product distribution and trade.

4.5 Emerging conflicts and avenues for conflict resolution

Conflicts are normal and common consequences of decision-making in governance and socio-political relations. They are common outcomes of inter-personal relations within and between community functions and their relations to outside interests and forces. In CBFM practices, conflicts occur when two parties both
claim rights of access to products of common interest or joint participation or ownership of a given forest or forest resources.

Many conflicts arise from changing social, environmental, economic, legal and political conditions, particularly when these factors create new interests and demands on natural resources. *FAO (2002)* has observed that conflicts can also have constructive and positive outcomes. Although CBFM systems are still relatively young and despite contingent measures taken by promoters, conflicts of different magnitudes emerge from time to time. Conflicts over rights of access, lack of a common vision over an activity, and ownership of resources are parts of human history, and may be triggered by one or a convergence of some of the elements discussed in the following sections.

4.5.1 The heterogeneity of interests among villagers

People living in a village participating in a CBFM programme constitute a socio-spatially defined forest village management unit. Common property theory contends that successful common property management is more likely where communities are small, have a homogenous social structure and hold shared views, understandings and norms (Ostrom, 1992). However, communities on the ground rarely display these qualities, and do not represent homogenous but rather heterogeneous entities. The members are made up of families from different clans, and people of different social status (rich, poor, the elite; quite often the majority may be illiterate). They are further highly differentiated with multiple interests and each sub-group can influence processes and decision-making in different ways. Makumuri (1995) observed that a single community can be made up of separate individuals with divergent agendas and different user groups with distinct needs from the common natural resource bases. Residents have different immediate development needs and household development priority ratings. Stratification may occur according to wealth, education, ethnicity, political affiliations, livelihood strategies, access to land, use of resources, access to patronage and engagement in the formal economy (Ainslie, 1999; Kepe, 1999). Some are strongly divided by factionalism. Some individuals tend to group into traditional social units; others rally behind modern leadership structures, while traditional leaders and political elites jostle for power over the populace. Moreover, according to Sithole (1995), these social groupings can change rapidly in relation to commercialisation, in-migration, and economic changes. Such socio-economic differentiation can result in weak incentives to contribute to a common understanding of CBFM (Shackleton et al., 2001; Ainslie, 1999).

It is also a common practice for people with little dependence on a resource base to show limited interest in managing it, but, at the same time, the very poor for whom the resource base is critical may not be able to afford the costs of restrained use in the interests of long term sustainability.

According to *Uphoft (1986)*, visions about resource use between the poor and the rich may not be mutually compatible, creating problems for local organisations and local institutional developments.

Questions about the lack of equity in power and benefit sharing amongst community members are widespread. In such cases, the well-educated elite and the traditional leaders, respectively, come to play key roles in participatory natural resources management systems (*Shackleton and Campbell, 2001*). In Anglophone West African countries, such as Ghana, the traditional authorities are stronger, but are also wealthy, entrepreneurial, more capable and tend to work more closely with traders and loggers than their constituency members (*Amanor, 1997*). *Shackleton and Campbell (2000)* observed that any devolution to traditional leaderships or local authorities tends to derail the process by diverting control and benefits for self interest. This ends up alienating a large majority of the community by leaving little space for the involvement of socially and economically marginalised members (*Shackleton and Campbell, 2001*). Quite often, some community members, particularly the elite, and politicians do not hesitate to join CBFM to gain recognition for future political schemes. This stems from the popular belief that anyone who wants to win votes should always be a major benefactor of the community. Moreover, the elite and politically powerful individuals from government institutions, such as the armed forces and the Forestry Department, tend to undermine the authority of local institutions, thereby losing their credibility in the community (*Wily, 2002*).

Differences in vision and purpose for CBFM may be further widened where different households and individuals participate in the CBFM initiative for different reasons. According to *Ainslie (1999)*, the 'rural

elite' may disengage themselves from attempts to manage natural resources due to high transaction costs and low payoffs. *Kajembe and Mgoo (1999)* observed that in stratified communities, common in villages, the interests of some actors might be inadequately represented. This is common in villages where those with decision-making clout live in cities and towns and are unable to attend meetings, yet their dependants often feel unable to take decisions because of their low education. Incentives for co-operation aimed at resource management therefore become virtually unavailable as a result of these features in some forest villages (*Ainslie, 1998*).

Conflicts may also arise between communities and government agencies, business interests, conservation organisations, development agencies, etc. Struggles for power and influence are common among traditional authorities, political leaders and elected community representatives. On gender, it is notable that women often have a greater dependency on trees and forest products for subsistence and livelihood security, while men's interest are more cash based. Women may not only be excluded from decision-making processes, but are often further marginalised by increased commercialisation. Culture and tradition are often cited as reasons for such exclusion, yet the reality is more related to power at an intra-community level. Women are the principal collectors, consumers and marketers of certain forest products, usually those connected with household livelihoods, e.g. fuelwood, craft materials, wild foods, and some medicines. They also collect forest products for a variety of other purposes, e.g., basket making, dyeing and utensils, and often have a more detailed knowledge of trees and their uses (*Fortman and Rochleau*, 1985).

Conflicts have also been reported between communities and forest entrepreneurs, particularly saw-millers, over concessions where commercial interests are involved. Conflicts over boundaries, breaking of rules, aggression by villagers on forests, timber smuggling, etc., are also common (*Amanor*, 1997; *Asare*, 1998; *Diaw*, 2000; *Ibo and Leonard*, 1997; *Malleson*, 2001).

4.5.2 Decentralisation, devolution and the power locus

Devolution of power from the state to the local people has been inadequate and currently confers SFM roles to district councils (*Wily, 2002; Shackleton and Campbell, 2001; Murphree, 1994*). Many countries still settle for participation rather than devolution, decongestion of power to districts rather than devolution to local institutions. Despite provisions for decentralisation under on-going structural reforms, the extent and pace of entrenchment of power to local community structures remain low.

In instances involving high value resources, such as timber and wildlife, the rural district councils, the village chief or traditional rulers, tend to dominate decisions made about the resource and, where it is possible, undercut communities by levying high supervision fees where funds are remitted through them (*Shackleton and Campbell, 2001; Negrao, 1998*) or they may divert benefit to personal interest. These inadequacies generate conflicts between the district councils and communities.

Conflicts also occur between communities and the state over restrictions of the CBFM locus and focus from biodiversity rich forests, power-ownership sharing, licensing and enforcement.

4.5.3 Land tenure, conflicting sectoral policies and overlapping mandates

Traditional tenure and land ownership often pose conflicts arising from landless youth, who fall back to illegal activities in the forests, and inter-clan rivalry over representation in management. Other sources of conflicts relate to politics and hierarchies of members that already existed in latent form, and tend to spring up simply as a result of the economic stakes brought about by forest exploitation. Conflicts have also been reported from sectors whose mandates overlap those of the forest sector, such as the wildlife service, the ministries and departments of Agriculture, livestock development, mines, etc.

Instances where particular forest blocks fall under the jurisdiction of separate sectors, such as the forest and the wildlife services, which follow different management policies and regulatory instruments, are not uncommon (*Shackleton and Campbell, 2001; Amanor, 1997; Sida, 2000*). These may happen despite effective legislative frameworks. The lack of coherent implementation strategies has also led to competition and contradictions between government departments, thereby negatively affecting CBFM.

Policies espoused by governments and development partners not only undervalue forest resources, but create uncertainty of tenure that undermine incentives for SFM by communities and concessionaires.

4.5.4 Inadequate support and commitment by the Forest Service to CBFM

It is widely feared that foresters are not sincere in their commitment to CBFM. Foresters seem threatened by fears of loosing jobs, authority and influence through up-scaling of CBFM practices. Power is an all important resource and tool in life and every bureaucrat is reluctant to give it up. *Anderson et al. (1991)* and other critics of the Asian JFM, have observed that the local organisations under JFM in India are little more than a proxy for the forest service to perpetuate its hold on key aspects such as the distribution of benefits. This is probably true for African countries as well where many people, particularly foresters, still hold little faith in community's competence to manage biodiversity rich forests, licensing and enforcement.

4.5.5 Institutional failure

At the structural and institutional levels, deficiencies are found in the weak capacities and limited means of action of the institutions operating the CBFM process. These institutions are seriously lacking in basic human capacities and skills needed to develop and put in place appropriate tools, methods and approaches for the development of community forestry. At the level of state institutions, NGOs and local communities, there are insufficient numbers of specialists and professionals well-versed on participatory forest management or community forestry development work. Cases of failure in providing returns and probity in accounting have been reported from some CBFMs (*Shackleton and Campbell, 2001*).

Despite well intended attempts to empower local communities to manage and benefit from their natural resources, the impact seldom reaches the intended beneficiaries. The lack of representation of women and their effective involvement in decision-making and agenda setting is one example of such concerns. Men and women are often involved in different economic activities and should be well represented in all organs of the CBFM structure. This is further constrained by a range of environmental factors, which exacerbate this class divide.

5. WHAT DOES CBFM REALLY MEAN ON THE GROUND

During the last two decades CBFM has gained a wide recognition as a promising route through which SSA forests can be secured and sustained. But experience with participatory forest management and the true meaning of CBFM varies between countries. Despite independent conceptual developments in different states, broad commonalities are evident among processes. Nearly all African states have enacted enabling policies, legislation and institutional reforms, and piloted different CBFM approaches. At the same time, hesitation and apprehension over its replicability, how to scale up experiences and internalisation for the management of all forests remain widespread in all countries.

5.1 What does the community do to manage forests

It has been noted in earlier chapters of this study that the CBFM practice is still in a formative stage, and its principles, concepts and structures are actively evolving and reflect an open-ended character. Although it has hitherto been promoted through joint initiatives of donors, communities, the state and NGOs, the practice has caught the attention and recognition of people at all levels. Its development at the country level is facilitated by new national forestry policies, legislation, regulatory instruments, and institutional reforms operating under decentralised government structures.

The definition and true meaning of CBFM varies between countries, the forest types and the management models. These factors are in turn influenced by the governments' attitude towards participatory forestry, the extent of political will, commitment and public support. So far, the majority of CBFMs are established through formal agreements, MoUs or charters between the community and the dominant forest authority, the state. It is rare for communities to autonomously declare management regimes in which the state's role

is largely advisory. Notable exceptions come from Tanzania and Gambia where formalisation is by registration of the community forest with a clear management plan at the district council. In such instances, village forest committees are empowered to promulgate village by-laws under which the villagers manage the forests (*Wily, 2002; Iddi, 2002; FDCU, 1998*). The Gambia and Tanzania experiences are both advanced in the development of CBFM practice and have benefited from supportive land and forest management policies and enabling legislations. In Gambia, Uganda, Lesotho and Namibia new policies and legislation explicitly enable communities to be recognised as forest owner-managers with the mandate to manage the forest autonomously (*Wily, 2002*). In such instances, communities are involved in fully-fledged forest management according to defined work plans. The forest officers play a facilitating role and provide technical backstopping in planning, surveying and further moderate and umpire conflicts between parties. Apart from Gambia, where CBFM covers all forests, CBFM operations in other countries are still restricted to communities only operate under collaborative or JFM models in state forests.

Wily (2002) has attempted to portray CBFM restrictively as a construct in which jurisdiction is fully devolved and sometimes includes ownership of the forest estate. According to this understanding, community owned and managed forests have been established in Tanzania, Gambia, Malawi, Mozambique, Namibia, Nigeria and Uganda by 2002. In such instances, the establishment of a community forest is validated by titling, as is the case in Tanzania. But in practice, CBFM is still perceived differently in many countries. This is not surprising given its non-fixed character, socio-political inclinations and people's perceptions. Consequently, the community's role in forest management is still restricted to the spirit of the charter or MoU that grants the CBFM to the community. These include forest management according to an approved workplan, in which activities cover boundary clearing, silvicultural operations, surveillance and enforcement, plantation establishment, etc.

5.2 How is CBFM organised on the ground

Today, nearly all countries recognise the need to involve communities and other actors, such as NGOs and the private sector, as partners in SFM programmes. New policies, legislation and regulations in favour of CBFM have either been enacted or are in the making (box 1a and b). Available country reports (*FAO*, 2003) show that CBFM has emerged in the past decade as an effective approach to SFM. CBFM practices that started as pilot projects during the last ten years have paved the way for policies and laws that have in turn embedded the practice in the national forest development agenda. In this regard, the policy and legislation development have benefited immensely from the experiences of the pioneering pilot village community forest trials. Results from these have convincingly demonstrated that when communities are empowered with responsibilities and rights for the management, and receive benefits from them, they come to recognise the importance of SFM and respect forest management rules (*Wily, 2002; Kajembe et al., 2003*).

In broad terms, CBFM is progressing along different paths within and between countries in response to different perceptions, motives and founding rationale. A comprehensive review by *Wily (2002)* shows that:

- The majority of the CBFM approaches are less than five years old and the rest are usually less than ten years old;
- They are normally off-shoots of donor-funded projects;
- CBFM in Gambia and Tanzania are particularly advanced models of power-sharing approaches, that have led the way in providing programmes and supporting the development of legal processes that directly encourage communities to bring currently unreserved forest area under their own;
- Few countries have yet moved into national programming (Gambia is an exception), although official guidelines for application nationwide increasingly exist (e.g. Cameroon, Tanzania and Senegal);
- More and more countries are creating support units in central forestry administrations (e.g. South Africa, Uganda and Ghana);
- A strong wave of CBFM is sweeping across Africa with a clear development trend towards providing an alternative option for SFM on the continent; and,



• As of 2002, action involving local forest communities was under way in more than 30 countries.

Figure 2: Map of Africa showing the extent of adoption of CBFM by countries.

It is already noted that the character and concepts (typology) of CBFM are evolving and marked changes and variations continue to emerge within and between countries. Concepts such as community forestry, community-based forest management, social forestry, joint forest management, collaborative forest management, and participatory forest management have been used in discussing CBFM involving local partners. The broad generic character of the CBFM definition adopted in this study has the advantage of capturing a wide range of experiences, built on common objectives, perceptions and rationale, and it provides a common baseline for comparison and concept refinement. This is consistent with the umbrella concept embracing different types of people-centred forestry, developed by FAO (*Byron and Arnold, 1999; Wollenberg, 1998*). The common models of CBFM that have been tried out in different countries vary with the extent of decentralisation and devolution of power, and with defined responsibilities, rights and ownership (adopted from *Wily, 2002*). They include:

- *Loose confederation agreements* between community members under a registered CBO or a trust, with limited legitimate rights to particular resource usage; ownership and authority retained by the state (widespread);
- *Consultation,* as expressed in the forest-farmer commissions in Côte d'Ivoire or the Forest Commission in Ghana;
- *Cooperative management*, in which community roles and powers are limited (e.g. in Zimbabwe, Zambia and Benin);

- *Contractual partnerships*, in which communities' roles are more substantial but are still inequitable (e.g. in Cameroon, Ethiopia, Nigeria, Madagascar, Sudan, Niger, Mali and Guinea), involves rights based on a temporal agreement or contract in combination with a management plan, for a period of between 5 to 15 years;
- **Consigned management**, in which the community has all operational powers except an ultimate authority (e.g. as is being promoted in Gambia and Tanzania in respect of national forest reserves);
- *Special arrangements* in which community members operate on their own land areas and manage forest- and woodland-based micro-enterprises under a CBO or trust; and,
- *Community-based forest management*, in which jurisdiction is fully devolved and sometimes includes ownership of the estate, e.g. as in Gambia, Malawi, Tanzania, Lesotho and, potentially, Namibia, South Africa and Uganda.

The common CBFM approaches revolve around community cooperation in forest management, through product and benefit sharing under defined terms of agreement. Under these arrangements, communities participate in forest protection in exchange for access to defined products, usually NWFPs, traditional socio-cultural values, and benefit sharing. The second model is based on sharing power and ownership with conservation management responsibility. In this instance, CBFM construct is power-ownership focused and carries responsibility for sustainable forest management, through a real transfer of authority. Such programmes work towards improving resource management through democratic transformation.

Forestry administrations seem to prefer the first model, centred on collaborative arrangements, productbased and benefit-sharing arrangements with communities, rather than the more devolutionary regimes that are ownership-based and power/management-centred systems, to which such CBFM often lead.

Despite much rhetoric about participatory approaches, the state is still taking most decisions and continues to restrict CBFM to community and degraded forests, denying communities access to biodiversity rich forests and forest products, licensing and enforcement.

Implementation of CBFM by the Community.

As already discussed, the structure and layout of a CBFM system is determined by the objective, rationale and purpose for its formation. Currently, the process appears to run on its own steam, being facilitated by NGOs and/or forest extension personnel through a learning-by-doing process. The cost of implementing CBFM systems under donor support appears to be relatively high, to an extent of bringing in question the potential for up-scaling it to all forests. Initiatives in different countries have emerged independently, although mutual learning between countries and projects is quite common. In a situation that is largely driven by communities and without specific budget allocation or guidance from a proven template, this has been by far the best starting option and approach.

Action learning techniques have been widely used in rural development and conservation projects under different labels e.g. *action-learning, action-research, experiential learning and learning-by-doing (Gilmor and Fisher, 1994)*. It is based on the idea that successful development programmes require a capacity for embracing error by learning with people, and building knowledge and institutional capacity through action. The process specifies that learning and action are intertwined, and that development proceeds through conscious and deliberate cycles of planning, acting, observing and reflecting.

Procedurally, the community places a request with an intention to initiate a CBFM project following a standard procedure and guidelines provided in working manuals. Most states have established community support units in the forest service that may assist communities. Such an application is accompanied by a detailed resource inventory, a forest management plan and map. In forest rich countries, harvesting designs are crucial. The CBFM agreement or contract signed between the community and the state defines the primary construct of the CBFM, specifies roles, areas of responsibility, jurisdiction, and the management paradigm. The communities manage the forest through a VFC appointed by a general assembly of members.

The state carries a dominant stake in the development of the CBFM and assigns roles and levels of benefit distribution without prior negotiation with communities. It is only in the village forest reserves in Tanzania

where the village governments inform the district council of proposed action on village forest development. But all cases involving national forest reserves are referred to the central state.

Some of the requirements constraining the growth of CBFM under this approach include demands on communities to conduct surveys, develop a management plan, implement boundary demarcation, forest zoning, all of which go beyond what the forest administration can accomplish with its core staff, government funds and expertise, let alone untrained communities. In countries such as Gambia and Senegal, the community zones the forest and determines an appropriate management regime (*Amanor*, 1997; 2000; FAO, 2000; FDCFU, 1998). By contrast, in Burkina, Côte d'Ivoire and Ghana, the plan is either developed by the forest service or prepared with their in-puts (FAO, 2000). These requirements have been eased in some countries and procedures have been simplified and decentralised to avoid delays (Schindele, 1998; FDCU, 1998).

Throughout the region, the state forest retains licensing and enforcement functions. The VFCs hold both executive and legislative powers to act on behalf of the community, including authority to make judicial bylaws on issues affecting the community and local resources. But their authority is still relatively weak. Quite often, the legal weight of forest rules and to some extent bylaws made by VFC has failed to receive judicial scrutiny (*Wily, 2000*). Despite inadequacies in devolution of power, community level governance is emerging as the most appropriate institution capable of enabling communities to shoulder forest management responsibility previously held by foresters.

Buffer zone developments and JFM have the longest history and are designed to reduce local dependence upon the forest by providing communities with forest access to procure specified goods and services from the forest for livelihood support. Buffer zones are particularly common with the wildlife conservation sector, particularly in wildlife rich countries in southern Africa. Although under hardship conditions, communities accept to provide forest protection services in exchange for limited access to forest products. However, such exchange is unlikely to gain sufficient community support for SFM in the long run. Experience further shows, unequivocally, that approaches that treat communities merely as dependant beneficiaries, risk losing their support for protection and SFM (Wily, 2002). This is because it limits interest in sharing certain forest products, and ignores rights over the resource itself and the authority behind forest management. In this instance, devolution of responsibilities for forest management and ownership jurisdiction goes to those in whose socio-spatial sphere forests fall, an approach that leads to full CBFM acceptance and hence commitment to SFM (Kajembe et al., 2003; Wily, 2002). By contrast, provisions of access to defined forest products merely meet part of the economic costs born by the community. This is consistent with Marrow and Hull's (1996) observation, that having legal title to the land is a prerequisite for the villagers to define the boundaries of their forests as well as the right to defend those forests. State property is a common good that the community finds difficulty to identify itself with, and therefore suffers the same fate as the western forest management system. Kerkhof (2000) concurs with the view that communities can only manage woodland and forest resources over which they have some degree of effective long-term ownership.

Overall, the implementation of CBFM is proceeding slowly with much state vacillation, creating an environment seen by some observers as a strategy for buying time by foresters. *Robertson (2000)* reported an experience from Muzama, Zambia, in which a 10-years old programme lost official support through reallocation of 1 million ha of woodland to more lucrative harvesting interests. Another example of backtracking by the state was reported by *Kerkhof (2000)* from Sudan where the government reallocated rehabilitated CBFM to commercial interests.

Another common weakness facing the CBFM process in Africa is the failure to accompany shifts of responsibility to the local government with a concurrent shift in resources for implementation. It is also noted that devolution of power to the district misses the deserved target, the communities that are responsible for resources management (*Wily, 2002; Shackleton and Campbell, 2001*). At the same time, local government units do not have the training or capacity to assume the responsibilities effectively. Moreover, under such devolution, the final authority still rests at the level of the central/national office and not at the local level. Consequently, local forestry agencies find themselves caught between the demands of the central government, conflicting local claims on the resources and competing demands from external stakeholders (*FAO, 2002*). This weakness is implicit in the failure of policy and legislation that fail to recognise village institutions.

It is stressed that if CBFM is going to turn the forest degradation tide, then it must address the sociopolitical relation that drive state-people conflicts and forest degradation. This, therefore, calls for an understanding of who owns, controls and manages the forest. Despite comprehensive policies, legislative institutional reforms, and in the light of on-going trends and declining government capacities to manage forests, the following two fundamental questions remain unaddressed:

- Who should own, control and manage forests?
- How should costs and benefits of forest management be shared between the community, the state and the private sector?

Wily (1997) and *Brown (1999)* rightly argue that an ideal transformation in power relations devolves authority to those within whose socio-spatial sphere the forest falls, and who alone have the commitment and practical capacity to protect and supervise forest utilisation on a continuing basis. On the strength of this understanding, it is logical for the current arrangement of "forest use rights and responsibility" to shift into a more profound conjunction of ownership "responsibility and authority". In this regard, much can be achieved when the basis of forest management is reframed into a state-people partnership, in which the state supports the effort of the people rather than the people supporting the effort of the state (also see *section 9.1*).

Experiences from the field show that: (a) participation as a whole is visibly moving from consultative and collaborative norms to those in which partnerships between the state and community are being forged, for the purpose of enabling communities to operate effectively as autonomous forest authorities, (b) empowerment of local communities as owner-managers of emergent community forests is gaining particular impetus from corollary land reform strategies that endow customary land interests with much-improved status in state law (*FAO*, 2003).

5.3 People's perception of CBFM

The CBFM practice is building up momentum and gaining confidence of communities, as it moves from a simple arrangement of providing access into the forests to arrangements providing communities with ownership rights and managerial roles. Institutional and professional capacity is developing at the local level, and in many countries people have developed a positive attitude towards increased stakeholder participation in forest management, generally banking on enhanced flow of benefits and forest contributions to local livelihoods.

Prospects of economic, environment and social capital gains are also beginning to emerge. Some communities working on degraded forests access mature trees and poles from fire lines for domestic use and sale (*FDCFU, 1998*) at a time when they have banned commercial harvesting. Those participating in rich forest areas in Central and West Africa are benefiting from the lucrative sale of logs (*MINEF, 1998*). In southern Africa, particularly Botswana and Namibia, those participating in CAMPFIRE have impressive benefits (*Shackleton and Campbell, 2001*). But more importantly, CBFM brings communities to the central planning platform for the first time to participate in planning and implementation of forest operations. Already, some communities are diversifying income sources by engaging in innovative micro-enterprises based on activities such as:

- collecting wild food for sale or processing;
- engaging in consumptive use of wildlife through culling and domestication of animals such as ostriches, Guinea fowls, cane rats and the grass cutter, fish and crocodile farming, harvesting and bush meat, skins and hides from game;
- rearing of insects, e.g. butterflies for sale, bees for honey and bees wax and spot hunting, provide lucrative gains; and,
- sale of chew sticks and medicinal plants.

There are good prospects for drawing benefits from these resources following sustainable harvesting methods, and through engaging in modern processing technologies for effective value-adding to enhance benefit capture.

Although there are no clear reports of improved forest quality under CBFM management (*Sarrazin, 2002*), positive performance in promoting forest recovery and setting management on sustainability path have been reported from Gambia and Tanzania (*FDCFU, 1998; Iddi, 2002; Kajembe et al., 2003*). Examples abound that demonstrate that rural people and communities are becoming more responsible with respect to forest management, as their rights become clearer and the benefits significant (*Murphree, 2000*). This in turn engenders favourable stakeholder relations in forest management.

CBFM and its attributes provide leverage for decentralisation and catalyses devolution of power and authority to local level institutions. This has further opened up remote country areas and brought local communities who were otherwise overlooked by formal rural development programmes. Through a learning-by-doing process, the efforts of different communities have generated immerse contributions to the growth of the CBFM concept and practice. This has particularly fed people's concerns about forest management and rural development in mainstream national development policy and practice.

There are many convincing examples where communities have shown great appreciation for forests they have acquired through CBFM by providing their labour voluntarily, keeping degraded forests for long term benefits or deferred felling to allow enhanced future benefits (*Gardner et al., 2001; Bojang, 1999; Kajembe et al., 2003*). But with the waning of the euphoria from the satisfaction of regaining the forests, some communities have began to show impatience with the perpetuated central government's control over forests (*Campbell et al., 2003*). They find government's in kind support, including contributions to community infrastructure development, limited and inadequate. They argue that socio-economic development is a political obligation that should not be confused with compensation for SFM responsibility. Communities further note that such government support do not meet the extent of their contributions to forest management, opportunity cost on the land and, in some cases, losses incurred through game damage to their crops and animals. Concerns over difficulties in patrolling vast forest boundaries without transport, and attendant risks that are not compensated or remunerated have also been noted. Communities see this as tricks by the state to subsidise its responsibility for supporting development and SFM. These notwithstanding, many communities appear mostly happy with the improving trends in forest and environmental recovery.

Results from Tanzania and Gambia suggest that a shift of control from central government to local communities has seen a change in the resource base from degraded and overused woodland to regenerating ecosystems. *Wily (1997)* reported that security of tenure afforded by conceding of authority and management responsibility to those within whose socio-spatial sphere the forest falls, prompts the community to adopt a longer term view on forest use and management. Granting of a village-based jurisdiction triggers a positive attitudinal change that shifts the status of the forest from an open to a closed access situation (*Marrow and Hull, 1996; Kerkhof, 2000*). *Ostrom (1992)* argues that for resource users to participate in resource management initiatives, the benefits of doing so should exceed the costs.

This understanding provides a basis for calling for more meaningful power devolution to local community institutions, and the need for improving the flow of benefits to communities and developing innovative approaches for community participation in state forest reserves. This should be supported by providing equitable and transparent cost-benefit systems for power sharing arrangements and ownership roles acceptable to all stakeholders, and clearly spelt out in the constitution, the national policy and relevant legislation. The later provisions are necessary to block back lashing by the state.

6.0 LONG TERM VIABILITY OF CBFM

The viability of the CBFM practice will ultimately depend on its ability to provide meaningful and sustainable economic, social, and environmental capital to the stakeholders and the society. At this early stage of its transitory development, the process is still grappling with establishment of viable avenues for sustainable production of multiple goods and services. It is for this reason that the full potentials of CBFM

cannot be realised while it remains restricted from biodiversity rich forests and denied licensing and responsibility for full forest management.

Experiences already discussed show that the CBFM practice is building noticeable momentum and gaining the confidence of communities as it moves from a simple arrangement providing access into the forests to arrangements providing communities with ownership rights and managerial roles. It is also noteworthy that arrangements limiting community interests to product benefit sharing and ignore rights and elements which capture community's long-term commitment, such as ownership and management authority, suffer the same fate as the western forest management systems.

Finally, the capacity of CBFM to meet forest management goals will only be sustained through its ability to assure good governance in forest management and adherence to suitable policies, legislation, institutional reforms and structures. These in turn must be backed up by constructive enforcement of rules, regulations, and equitable flow of incentives, supported by realistic market-based pricing mechanism.

6.1 Economic viability

The concept of CBFM is evolving against an understanding that local people are the first to suffer from the consequences of forest degradation, and on the realisation that policies and legislation promoting SFM would only be implemented if people enjoy secure livelihoods. The current economic viability of the CBFM, when its locus and focus remain restricted and it is untested across the range of forest types, can only be extrapolated from the known production potentials of specific forests. Suffice it to say that, the principle and concept radiate positive capacities for realising these attributes. According to this rationalisation, the potential economic benefits are likely to range from contributions of revenue from timber, various wood products, and a wide range of NWFPs according to the comparative productive potential of individual forests.

It is noteworthy that Africa's share of the global production of wood products is currently higher for unprocessed raw materials than for processed commodities. A few countries produce most of Africa's industrial round wood. These are South Africa (mainly from plantations) and some countries in Central and West Africa (mainly from natural forests). Rattan is to a large extent exported unprocessed from West Africa, mainly to South East Asia.

A number of countries have imposed restrictions on log export in order to stimulate local processing. Processing deserves additional attention as it has the potential to provide employment while also adding value and therefore contributing more substantially to income generation and poverty alleviation. Currently, the level of processing and value-adding of forest products is low and under-developed, to the extent that countries rely on export of unprocessed raw materials. At the same time, domestic market consumers are turning to imported wood products and NWFPs as a result of prevalent relatively low quality product processing on the continent (*UNIDO*, 1996).

In the same token, the official contribution of forest goods and services to domestic and informal sectors remains low. This is because a wide range of forest products and services remain undocumented and unaccounted for in national development books. Moreover, economic benefits from forests through conventional forest management have not been examined on the basis of cash income and value of consumed goods and services (*World Bank, 1997*). It is therefore not surprising that little is known about benefits that can be realised through the CBFM route. In practice, the production, processing and trading in forest products rank top among rural sources of employment and income (*Arnold, 1992; Swedfarm, 2003*), and should be the CBFM's hallmark for delivering benefits for socio-economic development.

Despite the absence of exact statistics, a number of studies suggest that the majority of forest communities depend on forest resources for their livelihoods (*de Beer and McDonald, 1989; Arnold, 1994; Townson, 1994*). According to *Ames (1998)* CIFOR had estimated that timber and other products provide 350 million people living in or around tropical forests with 50 percent or more of their livelihood needs and also 10 percent of jobs in developing countries.

Increasing evidence indicates that, while CBFM has demonstrated efficiency in forest protection, its cost and benefits to communities, including opportunity cost on land under forest management, is extremely low. The irony of this fact is that despite a cost efficient arrangement for forest protection, the state continues to restrict communities to degraded forests and narrow domains of product-sharing arrangements. This relatively dismal picture extends to co-sharing arrangements in lucrative wildlife hunting models such as the CAMPFIRE, where district authorities under-cut communities' dues. *Shackleton and Campbell (2001)* have reported that 96-100% of revenues are funnelled to CAMPFIRE communities in Botswana and Namibia, but only 50% in Zimbabwe (most of the benefit being retained by the district councils as facilitation fees). Consequently, the flow of benefits falls short of costs of their efforts on SFM. Such skewed benefit flow to communities is particularly rampant where community institutions are weak and inadequately supported by policy and regulatory frameworks, technical skills and mechanisms for CBFMs implementation (*Shackleton and Campbell, 2001*). In such circumstances, communities are unable to negotiate favourable terms with the state and to lobby for their rights. This runs against the concept of CBFM that focuses on providing communities with secure livelihoods.

Marked economic benefits from forests to communities come through support to agriculture and food production, directly and indirectly. Forest foods range from wild plant-based fruits, leaves, oils, tubers and rhizomes to mushrooms, insects (including termites and caterpillars), and bush meat. While many of these provide simple food supplements, some constitute tradable delicacies with growing economic potentials in rural and urban areas. The volume of bush meat reaching urban areas and cities in Central and West Africa, has reached levels that may risk destabilising the animal population. Currently, CBFM is providing prospects for reducing vulnerability through access to food and income to meet consumption needs during austere times. In a step-wise manner, CBFM is capable of spreading risks and building assets that would raise them above the poverty line, without necessarily providing immediate cash.

The contribution of NWFPs to national economies is also gaining recognition at all levels. Although there are good prospects for making favourable returns from products communities are accessing from forests, the management of these activities still lack modern business management drives (making money). This low performance of the CBFM system and failure to show clear profitability and indications of sustainability is tied up to the slowness in improving local management, deficient government support, and delayed mainstreaming. Consequently, community managed businesses are not fetching value for time and invested inputs.

Engulfed in unemployment and economic impoverishment, many communities are seeking opportunities for supplementing benefits from forests through forest-based micro-enterprises, focused on forest products such as ecotourism and sale of items made from NWFPs. Many households are shifting their attention to woodland resources to raise cash, and thereby compromising traditional sanctions limiting such exploitation levels. The value of benefits from such micro-enterprises vary widely, many of which are constrained by lack of prior feasibility studies and expert inputs. NGOs and individual collaborators are assisting communities but business seems to drop on departure of such assistance. In cases where locals have teamed up with private business partners, the latter have tended either to undercut the local institutions on benefit sharing or to sideline them altogether.

It is also noteworthy that commercialisation of tree and forest use may yield increased incomes but such benefits may end up benefiting the private sector and exclude communities unless regulated. *Little and Brokensha (1987)* has cautioned that emergence of market values for common property resources often leads to problems of over-exploitation, brought about either by the arrival of outsiders (with different values) to exploit the resource or the need by the very poor to exploit the same for cash income (*Richards, 1992*). With the decline in national economies, people are becoming more money sensitive and more oriented towards material benefits, to the neglect of informal small-scale trade.

While benefits from NWFPs and sale of utility goods and services may provide substantial gains to local economies, a lot more can be realised through mainstreaming and allowing CBFM in more forests. Moreover, with improved secondary and tertiary processing of wood and NWFPs, such products could access national up-markets and lucrative foreign markets with a substantial rise in revenue. Such changes must be supported by state commitment to release power to local institutions involved in CBFM. To date, state readiness to empower communities in respect of reserved state forests or high biodiversity forests with commercial timber and wildlife resources remains doubtful.

6.1.1 Attendant risks and threats to CBFM

The private sector and commercialisation

The need for an increased flow of benefits from forest programmes, amidst growing monetisation of rural economies, has forced development to turn to market forces and involvement of the private sector to promote efficient use of forest goods and services. According to the *World Bank (1994)*, fiscal, trade, exchange rate, and pricing policy reforms pursued under the structural adjustment programmes (SAPs) can promote more efficient forest resource use by facilitating increased involvement of the private sector. But well over ten years experience with SAPs has provided little evidence for this shift in forest resource use or improved benefit flow.

There are many opportunities for the involvement of the private sector in forest development and industrial processing of wood and NWFPs, on their own or in partnership with communities. Commercialisation of subsistence use has great potential for generating benefits from forest products, particularly NWFPs for the benefit of communities. New markets emerging through commercialisation can also enhance the diversity of products from forests. Some of the commercial opportunities are internal to village forest setups, but many are externally driven and may override, or ignore, community mechanisms to conserve communal resources. Moreover, commercialisation often changes internal arrangements and links between actors in resource management and must be approached carefully as it tends to:

- ignore community forest conservation mechanism (Murphree, 1994);
- change direct beneficiaries: from local communities to industrialists, or from women to men (*Cunningham*, 1990);
- shift attractions between countries and localities in response to changing economic and regulatory environments;
- lead to increased competition and increased pressures on the resource base and in time may lead to over exploitation of resources (*Shackleton et al., 1999; Mander et al., 1996*).

It is often assumed that NWFPs exploitation can promote biodiversity conservation, as people are inherently encouraged to manage the resources that provide them with income in a sustainable way. This assumption is being contested as fundamentally flawed by different workers. *Dove (1993)* argues that deforestation has been linked to poverty of forest communities and their lack of control over resources. It is further observed that exploitation of NWFPs does not necessarily lead to economic benefits to forest communities because commercialisation with its extended market chains tends to favour a shift of control to external entrepreneurs (*Fisher and Dechaineux, 1998*).

Conflicts may also occur through effects of commercialisation that create divides between classes and gender. According to *Barrow et al. (2002)* craft production and sale was originally dominated by women who specialised on pottery, crotchet work and palm baskets on a "subsistence plus" basis. This trade has been taken over and commercialised by men selling woodcarvings in urban and export markets. A compromise can be found through enabling a wider array of stakeholder groups to benefit from commercialisation such that the benefits are not concentrated in few hands. This may further be counter-balanced by the community's power to include or exclude outsiders, and especially outside commercial interests.

Long-term commitment by communities

A major challenge is how to make CBFM deliver as much as its potential seems to suggest. Under conditions of low production, resource shortages may create tensions and conflicts that local organisations can not resolve. The roots of social cohesion may change in their substance and combinations. Boundaries of jurisdiction may be forced to shift. The sources of legitimacy may change. Effective organisations must be able to accommodate such changes that are likely to evolve over time. CBFM in its present form is unlikely to adapt in content and structure to cope with the challenges of rapidly changing economic activities and dynamic group interests.

There are attendant fears that communities may not remain committed to the spirit of the contracts they are entering into with the state, unless they are able to draw adequate benefits from the CBFM practice. With growing monetisation, households and communities may be drawn into clearing forests to liquidate standing capital and to turn the land to alternative use. Many group ranches in Kenya, a form of private tenure that started well among pastoralists in the 1960s, have been subdivided in the interest of individual land ownership. Private land holdings seem to appeal to Kenyans for various reasons. These challenges are likely to weaken long-term commitment by communities to CBFM, unless they are able to draw compensatory benefits from the CBFM.

Absence of national land use policies

In the absence of national land use policies, forests remain vulnerable because of forestry's low rating in national development (for forest poor countries). National commitment to SFM should be captured in relevant government sector policies and in the constitution to forestall loss of forests to other land use interests.

6.2 Ecological sustainability

The strength of the CBFM practice lies in the close management tie to the bio-ecological and productive potential of the forest ecosystem. A major challenge is how to develop and engage suitable technologies with efficient management and operational practices that are economically viable, ecologically sustainable and socio-culturally acceptable under CBFM.

One of the important tenets of CBFM is the change it triggers in community attitudes, leading to an acceptance and commitment to SFM, on realising that forests are theirs. Local communities have a long history of association with forests, intertwined with a high degree of dependence on forests and knowledge of SFM (*Campbell and Byron, 1996; Madzudzo, 1997; Makola, 1999*). The CBFM practices provide them with opportunities to use this knowledge base in managing forests that fall within their jurisdiction.

While CBFM practices are not be the same for every forest type, management generally seeks to minimise impacts and maintain ecosystem integrity by preserving the structures of the natural ecosystem by following approved forest management objectives. *Kajembe et al. (2003)* have observed that a group of proprietors can develop a CPR institution if they are confident that the CPR is either theirs or they can exercise clear control over it. Experiences from CBFM reported from different countries unanimously show that placing forests under community jurisdiction through policy and legislation removes them from open access ills and thereby potentially assures sustainability (*Wily, 2002*). Employment of villagers living in or adjacent to forests, underpinned by effective policy and legislative support, provides them with a good chance for excluding poaching and non-sustainable use (*Wells and Brandon, 1992*).

Increasing evidence from countries practicing CBFM indicates promising potentials for reversing the forest degradation spiral on the continent, while providing livelihood security and supporting socio-economic development (*Sarrazin, 2002*). These reports further confirm that where villagers are managing the woodland resources, degraded forests have acquired clear boundaries that are intact, stream flows have again become more regular, incursion has been limited, incidences of wildfires have declined, the flora and fauna status is recovering and the forest is managed and protected cost-effectively. *FDCFU (1998), Kajembe et al. (2003)* and *Wily (2002)* have concluded that this success is owed to community participation and a marked degree of power sharing, to the extent that communities have taken full responsibility and control of the resources as owner managers. In Mgori village, forests that were previously threatened by ivory poachers, shifting cultivation and fire damage have been brought under SFM within a short period (*Iddi, 2002*). Similar observations are reported from Gambia and some other countries (*FDCFU, 1998*).

The significance of community efforts in redeeming degraded forests is further high-lighted by reports from areas not under CBFM. It is particularly notable that, despite national bans on harvesting trees in natural forests, most forests under government administration continue to suffer from these ills. But all these attributes must be taken with caution since long-term sustainability of CBFM is contingent upon its ability to generate adequate benefits to its members. Local communities are unlikely to invest their energy on CBFM unless they receive commensurate benefits from their investments (*Marrow and Hull, 1996*).

6.3 Social acceptance

Despite the recent emergence of CBFM, available experience shows that it can provide communities with an opportunity to repossess forests they had lost during colonial times. In this regard, they take responsibility for management of degraded forests, foregoing benefits for varying periods to enable forest recovery. By deciding to defer benefits from such forests, communities have promptly excluded the same pressures that they had claimed to be inevitable, through enforcement by consent. These strong and positive actions and the readiness with which they volunteer labour for forest management clearly reveal communities' social acceptance of the CBFM practice. An overriding influential element for this is the ownership of forests and authority to manage it to support their livelihoods without government's hindrance. CBFM institutions further provide opportunities for local people to factor their needs, aspirations and interests in the forest management plans and management decision-making for improved local development.

Wily (2002) and *Kajembe et al. (2003)* have observed that local participation is more meaningful and effective where the local population is involved not as co-operating users but as forest managers and even owner managers, in their own rights. In this regard, arrangements based on use interests are less attractive because they ignore local custodial and socio-environmental interests. *Kajembe et al. (2003)* have referred to such CBFM as "forest management by consent". *Wells and Brandon (1992)*, in a global study, observed that a combined effect of enforcement and participation in resource management is essential for keeping communities from destruction. This strongly underscores the major tenet of CBFM, which stipulates that local level participation in forest management only emerges when real power for management is given to communities.

Gardner et al. (2001) have reported an experience from the Kilum-Ijum community in Cameroon, who have demonstrated that their forests are more valuable than cash to the extent that they voluntarily contribute considerable time and effort to long term forest management, in favour of converting them to more immediately lucrative land uses. This is a clear change of attitude. Under ordinary circumstances communities see forests as government resources, and generally value what they can get out of it for their immediate needs without consideration of consequences. In contrast, CBFM is evidently enabling communities to galvanise their efforts to plan together with long-term development commitment.

The new land policies and legislations are also opening up space and legal bases for registering traditional land holdings such as sacred forests and grazing reserves. The CBFM and its local institutions further provide active entry points for grassroots development programmes and initiatives including fora for discussions and implementation of rural development agendas. These have further introduced platforms for promoting good governance, pluralism and democratisation, transparency, accountability and increased civil society roles at the grassroots. This is particularly important to rural communities who are otherwise bypassed from time to time by regular rural development initiatives. It further opens up channels for building local cohesion, galvanising their efforts, and nurturing a corporate image, an important trait for governance. Devolution further opens channels for rural dwellers to communicate their priorities to the government decision-makers and leading in some places to improved community-government relations.

CBFM is taking development to the village floor, on the one hand, grounding forestry as an integral component of rural development, and at the same time integrating forest management in land use alongside agriculture and animal production. These institutions are further providing platforms for community empowerment and capacity building on village level rural planning and development. Consequently, communities with active CBFM are empowered and encouraged to hold regular meetings, consultations and debates on all aspects of rural development and village security plans and welfare. *Wily (2002)* and *Shackleton and Campbell (2001)* reported that active institutions are already providing growth points for networking and promoting cohesion at the community level, with prospects of creating a corporate outlook. Cases of development of lucrative forest-based micro-enterprises, such as beekeeping for production of honey and by-products, ecotourism, consumptive and non-consumptive use of wildlife and various community development initiatives under the CBOs and their committees are emerging.

6.4 Institutional strengthening

The local resource governance institution is a major pillar for forest management at the community level. The success or failure of participatory forest management is contingent on the functional efficiency of this institution. *Bhalla (1996)* has noted that in every society property relations and the elements of social order, including political groups and resource governance policies, are closely linked to the effectiveness of a legal institution. At this stage, while the CBFM system remains donor-driven and standing as a parallel structure to the formal national forest management system (under the forest service), this institution has not been adequately empowered. In the absence of direct government support, and its functions left outside the government forest management mainstream, the institution has tended to remain rudimentary and weak.

Without prejudice to inadequacies of past and current work, it is fitting to recognise that the CBFM process has established local resource governance institutions from different backgrounds in all its areas of operation. Information from different countries shows that effective forest management is only possible through devolution of governance to locally accountable bodies, owing allegiance to a village community or groups, rather than a district level council or central ministry line department (*Shackleton and Campbell, 2001; Wily, 2002*). In many countries, the evolution of CBFM is gradually focusing on devolution of authority and ownership to community institutions within whose spatial sphere the forests fall and who have the capacity to protect and enforce sustainable management and use. But a full realisation of this intention is likely to remain illusive while current decentralisation stops at the district level. In Gambia, Tanzania, Botswana and Namibia decentralisation has gone to the village and VFCs are mandated to undertake forest development programmes, socio-spatial rural development functions, and advocacy and lobbying to enable local communities' views be heard.

Shackleton and Campbell (2001), in an overview of different community institutions in southern Africa, noted that the following arrangements are common:

- The *district structures*, such as the rural district councils in the Zimbabwe CAMPFIRE being the new loci of power, or multi stakeholder fora aligned to the ministries and with a strong representation of traditional leaders in Zambia (these structures are detached from the ground and undercut local community participation and access to benefits).
- **Organisations at village level** sponsored by line departments such as village forest committees in Tanzania and the village natural resources committee in Malawi. Such committees are relatively successful, provided they exclude elitist influence and remain accountable to the community.
- *Committees from outside the state hierarchy*, such as the traditional institutions in Zimbabwe; the performance of such structures are often weakened by lack of a clear policy and legal framework for CBFM.
- *Common initiative groups* economic interest groups, associations or cooperatives for management purposes, each with its own natural constituency.
- *Legally constituted organisations* consisting of community members elected through a democratic process.

Elected executives/boards of such institutions (one or a mix of such committees may operate in one country) are empowered to make rules, approve developments, enter into partnerships and to receive revenue. Such committees are advantaged because their working instruments leave little room for state interference. Given the diverse range and influence, legitimacy and control by traditional leaders, administration officials, the elites and industries, different countries are evolving appropriate arrangements for accommodating their participation in the local institutions. These include providing traditional leaders *ex-officio* or non-executive roles (e.g. as patrons) on committees, e.g. in Namibia (*Jones and Mosimame, 2000*). In other countries, such as Malawi (*Kayambazinthu, 2000*), the NRM committees report to traditional leaders who remain external to the committee. Another model was to leave communities to decide whether or not to elect hereditary leaders onto local committees under open democratic elections.

Shackleton and Campbell (2001), reporting from results of a study conducted in southern Africa, observed that where "appropriate authority" is devolved directly to community level, the situation is greatly simplified with less ambiguity on rights and responsibilities. Wily (2002) concurs with their view and notes

a weakness in the decentralisation of powers to district councils that have neither the interest nor the capacity for forest management. Overall, results of case studies reported from southern Africa (*Campbell et al., 2003*) show that despite rhetoric to the contrary, central authorities have continued to drive the NRM agenda. *Shackleton and Campbell (2001)* have lamented that weak or weakening local institutions is a theme running throughout the reports from southern Africa.

Masangano et al. (2003) have reported cases of breakdowns of local institutions for common property resources (CPR), and the lack of any emerging alternative institution for such management. Cases of parallel hierarchies of traditional leadership, local government and line-department-sponsored committees, often with unclear or overlapping jurisdictions and mandates in NRM abound (*Kayambazinthu et al., 2003*). In other cases, the influence of governments and local elites tend to dominate committee functions leading to a dilution of community representation and inputs with concomitant rise in conflicts and power jostling.

Campbell and Shackleton (2001) have reported favourable organisational models involving corporate, legal organisations composed of all rights holders/residents, e.g. Trusts (Botswana), Conservancies (Namibia), Communal Property Associations (Makuleke, South Africa), Villages (Tanzania), and Range Management Associations (Lesotho). Such models have much to offer emerging CBFM initiatives and those considering up-scaling CBFM to all forests. In strengthening CBFM institutions, interventions should assess strengths, weaknesses and relevance for promising structures. Relevant institutional arrangements should be strengthened through policy and legislation arrangements that ensure adequate devolution of power and authority for CBFM to local institutions and proportionate resource allocation.

6.5 The role of research in CBFM development

Relatively little attention has been accorded to a comprehensive assessment of the role of forestry in socioeconomic, ecological, environmental and cultural development (forestry resource accounting). In the absence of hard data on the role of forests and forest products to development, forestry cannot gain recognition in national development and commensurate resources allocation. Considerable efforts have been given to reforms within the forestry sector geared to promote SFM during the last two decades or so, but these efforts are unlikely to mitigate forest decline and degradation unless macro-economic management of related sectors and public sector investment policies are adjusted appropriately. Policies that promote incentives such as agricultural expansion at the expense of forestry must be reviewed. Worthy of note is the absence of remedial benefits of the consequences of economic liberalisation and structural adjustment programmes.

It is particularly noteworthy that forestry has benefited economies of many European countries and has helped taking their rural areas out of poverty. By contrast, few SSA countries have received commensurate benefits from their forests, largely due to governance and policy failures. Deficiencies in various public administrative offices together with the phenomenon of corruption remain serious obstacles to progress in SSA.

It is therefore important and timely to revisit the low contribution of forestry to development, including the impact of past prescriptive programmes such as the campaigns with fast growing exotic species and the creation of wood processing industries in the 1960s, the local community and social forestry initiatives of the 1970s, and the TFAP interventions of the 1980s, etc. These landmark interventions were unceremoniously abandoned without many attempts to draw lessons from them. The changing circumstances may well show that forestry is no longer the best land use in some places where it has dominated in the past, or reveal alternative sites where SFM is more optimal for social, economic and environmental reasons. But it is important to note that balancing forestry with other land uses requires a greater degree of cross-sectoral agreements than currently prevails.

Currently, many African states lack common land use policies. Separate but related policies involved in land use planning should be harmonised to enable rational zoning for secure natural resource management. It is prudent for countries to undertake land use prioritisation and national debates to provide improved land use policy. Forestry stands to lose in an open land use rationalisation debate given the sector's past and

current low rating in development. At the same time, CBFM remains constrained by lack of well researched information and analytical tools on forest management and assessment.

Scientific research and development associated with CBFM have largely concentrated on *ex-post* performance analyses of the status and PRAs on community perceptions and aspirations. While these have provided useful working information and contributed to the enhancement process, little progress has been made on the development of the state-of-the-art. The process is unlikely to move further in the absence of clear knowledge on tree/forest performance and associated interactions between biophysical, socio-economic and environmental factors. SFM is unlikely to progress without proven technologies and strategies for managing forest resources and skills for efficient conversion and processing of minor wood products and NWFPs. Managerial and entrepreneurial capacities should be research driven and supported through active training and education.

There has been a general failure to involve local communities in the development of technologies and tools for SFM, such as criteria and indicators (C&I), making it difficult for communities to apply such tools in management. Apart from South Africa, most Forest Departments in the region have not internalised the potential value C&I and forest certification beyond rhetoric. The Forest Stewardship Council (FSC) is becoming a widely respected label for wood products from well managed sources. The purpose of certification is to improve the quality of forest management and provide marketing advantages for production from sustainably managed resources. SFM and certification have the potential to increase benefits derived from trees, whether wood or non-wood based, to local communities, thereby enhancing the role of forests in rural livelihoods.

At present, economic incentives are not right for sustainable natural forest management for tropical hardwood production. Moreover, there are few, if any, sustainably managed natural forests in the region (*Rice et al., 1999*), though awareness has increased and some efforts, such as the "Good Woods" initiative, centred on wood carvings, in Kenya show promise (*WWF et al., 2000*).

6.6 Reflections on the prime challenges to SFM

Despite much rhetoric, there is little to show that communities and national stakeholders have all embraced CBFM practices. The state and communities lack a shared vision of CBFM, and foresters find "enforcement by consent", which forms the cornerstone of CBFM, totally revolutionary and far detached from the current conventional system (*Campbell et al., 2003*).

According to *Wily (2002)*, CBFM should be given time - two to three decades - to evolve before being evaluated. Moreover, the growth of CBFM has been stifled by its extended restriction to pilot trials outside the core forest mainstream. This can be attributed to inadequate funding and foresters' strategy to buy time, because of job insecurity and fear of loss of authority and influence.

A lot of ground remains uncovered. Little has been done to link forest development with agricultural production and other land use imperatives. It is recognised that governments are sceptical of communities' abilities and capacities for large scale forests management, given their lack of information, technical and managerial skills, and the danger that forests may be put to other use. Concomitantly, the state is apprehensive of the results from losing power and authority over the forests, and cognizant of the consequences of a rushed adoption of CBFM practices, given the long time frame of forest development programmes. An important challenge to state stakeholders and communities that remains unresolved is how to make CBFM deliver as much as its potentials seems to suggest.

7.0 LESSONS LEARNT ON THE PERFORMANCE OF CBFM PRACTICE

7.1 Factors contributing to the success of CBFM

The CBFM system has captured the interest of foresters, conservationists, and the civil society in developing countries as a promising system capable of providing sustainable forest management. Efforts to

involve communities in forest management are underway throughout the region, and a range of viable CBFM models are emerging.

Up to now, the development of CBFM has been non-prescriptive. Its characteristics remain dynamic, evolving through learning-by-doing, and improving as new information is availed. Each state is arriving at different participatory approaches although broad commonalities among the processes tend towards formation of a common paradigm.

The *aim and shared objective of CBFM* are to provide a management system that assures sustainable production of multiple goods and services for socio-economic development, provision of livelihood support, food security and environmental stability.

The following factors have contributed in different ways towards the success of CBFM in Africa:

The fundamental appeal of the CBFM lies in its *social dimension and focus on production of multiple products for livelihood support*. In this regard, CBFM re-establishes traditional links (that had been severed under classical forestry) between rural people with forests, trees and their various products and benefits. This has further triggered a positive change of attitudes about forests, as people get opportunities to input their interests, needs, problems and aspirations in forest management plans. Local people have realised that they are the first to suffer from forest degradation, but through CBFM practice, backed up by appropriate policies, they can gain substantially from SFM.

The wave of change in approaches to SFM has been primed further by a growing realisation that forest management is itself a matter of governance and tenure, with technically driven activities assuming their proper place as support functions to sound resources management.

The development of CBFM in most states has benefited from the wave of forest *policy and legislation revisions*, accompanied with revised land laws, decentralisation of the state apparatus and administration machinery. These have been supplemented by the impetus from devolution of authority for SFM to lower tiers, and structural institutional reforms from the late 1980s. These instruments:

- provide for local community participation;
- expand the management objectives and programme portfolio to include production of multiple products for rural livelihood and incorporation of traditional forest management systems; and,
- foster the flow of benefits and incentives from forests to communities and further accord formal legal recognition to customary land ownership.

Decentralisation and devolution, also products of recent (on-going) reforms, further accord communities secure access to forest resources, tenure rights, and provide holders with legal and statutory support. In many countries, led by Tanzania, decentralisation of government administration processes and entrenchment of CBFM have gained weight new land policies and laws, and from revised national constitutions. Tanzania's new land policy and new land legislation have reconstructed the tenure environment and, with it, the nature and expression of rights at the local level.

Though less recognised, the effects of the changing socio-political climate, as African states adopt more devolved and inclusive ways of managing the society and its resources (*Wily, 2001*), has played a significant role in stimulating reforms in forest management. This trend is broadly encompassed under the wave of democratisation, pluralism and calls for accountability and transparency. This stimulus has attracted legal expression not only in new environmental, forestry and wildlife laws, but also in founding constitutional, land and local government laws. The process has also gained momentum by political and public support with evident boosts from lobby and advocacy work by NGOs and development partners.

In Tanzania, where the forest policy and law, and administrative structure allow communities to own and manage forests, the village has taken a central position in SFM. The CBFM under this arrangement fosters development of the VFC as an administrative structure with an identity and capacity to manage the forest, enforce rules and regulations, very much like the forest service.

Some countries have introduced stringent conditions in the new forest policies and laws that accord a stronger hand to communities and the civil society in preventing wanton interference in forest management by powerful interest. But on the whole, despite lofty claims about achievements realised in forging

community participation in forest management, few countries have effected meaningful decentralisation and entrenchment of power and forest management authority to local institutions. On the whole, despite policy, legislation and institutional reforms under on-going re-arrangements, the extent and pace of entrenchment of power to local structures remains low.

Local institutions (governance structures) have emerged as CBFM's power-bases as they become democratically instituted with responsibility over local village forest assemblies. With the exception of Tanzania, which has an established village administrative structure, the majority of countries have built local village institutions from existing user groups, community-based development units, or traditional institutions. The common local institutions include community-based organisations (CBOs), trusts, or associations, run by village forest committees (VFC), whose members are elected by the village assembly. The members include men and women, although in some cases they may operate as separate sub-groups.

The VFC is the functional executive arm of the local resource governance structure involved in the implementation of CBFM. Since the foundation of and legitimacy of these organisations were derived from the community itself, interference by the state is less pervasive, but the state still retains ultimate authority. In this regard, the CBFM process and its institutions are promoting social transformation among poor rural people, many of whom are often by-passed by mainstream democratic practices and development processes, which are pegged to the district level or communes. Countries with policies that devolve authority, particularly proprietary rights, over land resources to CBOs empower villages to become corporate entities, enabling them to be more effective on the ground. By contrast, institutions that lack policy and legislative support, and inadequate devolution of authority, have remained weak and incapable of promoting SFM. However, the village institutions still lack stature and corporate recognition. Even in Tanzania, with a freely decentralised administration, the village council often feels more accountable to the county council than to the village assembly. This situation undermines the empowerment of the CBO for effective SFM.

The forest service on its part is often reluctant to let go of their authority over forest management, for fear of loss of power and influence. The state is particularly weary over loss of power and revenue. Foresters still view CBFM as an innovative but risky undertaking, hence to be done on pilot scales and pre-mature for internalising nationally. Foresters also insidiously see communities as incapable of managing the forests.

The shift of responsibility to the local level without concurrent decision-making power, budget support or technical skills for implementation has also stifled the growth of CBFM. Taking forests close to the people would not affect SFM. The forest area is vast and can not be covered through patchy donor supported projects. Communities need similar levels of inputs to those required by state institutions in order to effectively manage forests. Associated transaction costs have been ignored, and should be addressed.

Despite the positive attributes and enabling environments created by policy, legislation and institutional reforms, effective growth of CBFM remains constrained by *inadequacies of policy and legislation failures*. These weaknesses have been used to restrict CBFM practice to degraded, unreserved community forests, and prescribed benefit sharing arrangements such as co-management, buffer zones and JFM. Governments show less readiness to empower communities to manage reserved high value biodiversity forests, or to empower communities to take on licensing and enforcement functions. The spirit of reforms on decentralisation and devolution of power and responsibility to lower tiers has ended with delegation of power to district line departments and the district councils but have ignored the village and community institutions that have central roles in moving the CBFM process forward.

CBFM is not part of mainstream policy and legislation in national forest management programmes. This relegates initiatives to costly project pilot schemes that are bankrolled by donors and implemented outside formal government forest development systems. These elements limit the potentials for replications, in the absence of donor funds. It is noted further that policy and legislative development processes have been non-participatory, having omitted opportunities for debates and negotiations between communities, the state, the civil society, NGOs and the private sector on roles, rights, and cost-benefit sharing mechanisms, and development of a shared vision.

Lack of clarity on specific conditions and situations appropriate for CBFM under these instruments leaves a wide space for interpretation by the state, and this leads to:

- Vacillation and reluctance by the forest service to devolve power to communities, despite their reduced capacity.
- Back-tracking and back-lashing on power and rights accorded to communities such as relocating rehabilitated community forests to private interests.
- Policy and legislative evolution has not benefited from well informed local practices and experiences.
- Planning and implementation remain top-down.
- Policies relating to other sectors, including land tenure, tax credit, resettlement, development, agriculture, public service restructuring, energy and water, are driven along sectoral divides uncoordinated at policy or practice levels.
- CBFM initiatives have continued to run non-descriptively outside the mainstream of forest development, under donor or NGOs backing.
- Governments continue to accord lukewarm support to CBFM and unclear political will.

7.2 Replicability of success stories

Experiences from countries where CBFM is being practiced show that it is a promising approach to providing SFM. Efforts to involve communities in forest management are underway throughout the region. Most countries have adopted, or are in the process of adopting, policies, laws and institutional reforms, which accord greater powers to lower tiers of government. It is also noteworthy that countries are arriving at different CBFM approaches, but its principal framework, sub-sets and implementation guidelines, are now available for general comparison, although the concepts, structure and character are still fluid and dynamic.

A range of options covering collaborative, buffer zones, JFM and community-based management have evolved under different national forest policies, legislation, levels of decentralisation, and land laws with varying degrees of success. These approaches of CBFM that have been tried in different countries can be aggregated under the following three domains: the forest locus (forest tenure: reserved versus unreserved forest); management focus (product or protection-centred); and objectives (benefit-sharing or power-sharing). Participation as a whole is visibly moving from consultative and collaborative norms to those in which partnerships between the state and community are being forged for the purpose of enabling communities to operate as effective autonomous forest authorities. Forest administrations have also begun to find that local participation becomes a great deal more meaningful and effective when local populations are involved not only as cooperating forest users but as forest managers and even owner-managers in their own right. So far, this shift is resulting in most delivery in respect of unreserved community or degraded forests.

It is stressed that if CBFM is going to turn the forest degradation tide, then it must address the sociopolitical relation that drive state-people conflicts and forest degradation. This therefore calls for an understanding of who owns, controls and manages the forest. This utilitarian aggregation provides a range of possible participatory forest management approaches that are available on the shelf for selection, according to a specified management goal, at local or national levels. But results of past assessments of CBFM performance under different socio-political and forest environments show that no CBFM approach can be extrapolated blindly.

Many foresters still look at CBFM circumspectly, seeing it as serious departure from the way government institutions operate. At the same time, the fundamental designs of CBFM, its concepts, principles and platform for developing rules and decisions or roles of different partners are not well established. Forest operations and management rules that are emerging from work undertaken off the mainstream are so far untested. These pose challenges to its replicability. But there is adequate ground to move the process on to all forests, under management by community, government, NGOs and others. It is evident that the true benefits the CBFM will not emerge until it is entrenched as a conventional SFM management system. Convincing the policy makers of the efficacy of CBFM, and the need to adopt it to fit the context of formal forest management depends on successful demonstration in the field, showing its full potential.

Selective elements of CBFM approaches that merit up-scaling and extension to all forests should be tried out and assessed to unravel their full potential. Such assessments of the potentials of CBFM practices should consider the following in a stepwise manner:

- Establish a multi-stakeholder forum at the national level to promote, guide and oversee the change in forest management and the new paradigm building;
- Debate and negotiate the roles, rights and benefits of all key stakeholders;
- Re-appraise and update the policy, legislation, institutional structures and other enabling instruments and mechanisms;
- Undertake a SWOT analysis of promising CBFM models, emphasising performance efficiency, and their relevance to SFM in all types of forests and in cognisance of national and local forest management objectives and global commitments;
- Identify and eliminate the policy, institutional, legislative and attitudinal weaknesses and failures that limit the performance of CBFM;
- Use guidelines for establishing CBFM developed elsewhere (including other countries) with similar working conditions;
- Foster and promote scaling up of success stories, building on areas of strength and merits, and backed up by improved working policies, legislation and reformed institutional environments;
- Mobilise sustainable support from local NGOs, the government and development partners; and,
- Incorporate a research and development support programme.

Major outstanding challenges that appear to be by-passed by students of CBFM are partnership arrangements (i.e. how communities, the civil society, the governments and NGOs can work together in CBFM) and land/forest ownership. State forest reserves have been understood to be national assets, that belong to the nation at large, while communities have hitherto specialised on agriculture and animal production, and turning to forests only during hard times. Because of entrenched polarity in land use, and existing ranges of specialisation in land use, many hard choices with challenging political overtones will have to be made before CBFM can be implemented smoothly in all forests. This complexity is aggravated by the community's difficulty in identifying itself with state property, which it regarded as a common good. In this regard, any arrangement that leaves out communities is bound to suffer the same fate as the classical forest management paradigm. To promote effective conformity, the basis of forest management must therefore be reframed into a state-people partnership, in which the state supports the effort of the people, rather than the people supporting the effort of the state.

Prior to considering extrapolation and up-scaling the CBFM, it is prudent to carry out a critical analysis of extant problems, stakeholder roles and a SWOT analysis (see also 7.2 under this section), of existing CBFM models at the country level, to determine the root causes of constraints to its adoption and expansion. The following elements should be given marked attention during such a study:

- The forest policy, legislative and regulatory instruments, their efficiencies and relevance, including the extent of devolution of responsibility and authority to grassroots institutions;
- The extent of inter-sectoral policy conflicts and opportunities for their harmonisation to effect convergence in approaches to participatory management and to provide a framework for legally guaranteed tenure for CBFM in sectoral policies;
- Forest resources governance, institutional arrangements, stakeholder interests, and behavioural patterns, social structures, gender restrictions, household categories;
- Forest ecology and biodiversity status, crop growth and productivity, and associated opportunities for income generation;
- Technology gaps in forest operations, and forest products harvesting, processing and marketing; and,
- Forest management operations, and rule enforcement by communities.

8.0 SUMMARY OF FINDINGS

Before colonial administration, African forests were preserved through simple rules of exclusion and use based on prevailing tenure system. Community cohesiveness, and homogeneity, backed by common histories and religion helped preserve forests at this time, obviously also under considerably much lower population pressure for agricultural land. Traditional community forest management collapsed with the introduction of new forest tenure and management systems, which in time led to a breakdown of rules and open access resulting in forest destruction.

Many African countries have initiated CBFM schemes during the last two decades or so through a concerted search for an efficient alternative forest management system, based on participatory partnerships with local communities. This initiative is being prompted by different factors including:

- Eroded and weakened state institutional capacity and growing failure of state-run forest management systems;
- Increasing rate of forest loss on the continent;
- The influence of democratisation, pluralism, decentralisation, and calls for empowering local communities to take up natural resource management;
- Initial success of participatory forestry in Asia; and,
- Emergence of SFM as embracing production of multiple products for livelihood support, socioeconomic development and poverty alleviation.

Different countries are shaping out CBFM approaches relevant to their socio-economic conditions and states of the forests through a learning-by-doing process. To date, this effort remains patchy and uncoordinated, being promoted through fortuitous alliances between donors and communities with peripheral state support and NGO backstopping.

This leaves CBFM practice in a youthful state as most initiatives are still under ten years. The majority begins as donor-funded projects based on granting of formal use and specified management rights under MoUs, agreements or contracts, and a prescribed management plan. Issuance of permanent land ownership titles over forests have been reported in a few countries, but the bulk of CBFM programmes remain confined to unreserved forests and JFM in state forests.

8.1 Objectives of CBFM

The CBFM objectives have incorporated needs of local communities by addressing the production of multiple products for socio-economic development, livelihood support and food security. Currently, the production of goods and services, and the generation of direct and indirect employment, do not seem to be as much as their potential suggest. Still, the potential contributions of CBFM to the growth of economic and social capital, to conservation of biodiversity and to environmental sustainability are promising.

It is noteworthy that CBFM systems are conferring communities with cohesion and a shared identity at the village level and providing them with platforms for democratic practices. This is further stimulating local institutions to build management practices that incorporate community aspirations and needs in village forest management plans, and to factor these in the rural development agenda. Under a rationally zoned land use system, CBFM accommodates the needs of a great majority of community members. It also includes provisions for setting aside areas to be managed for rehabilitation, biodiversity conservations, recreational purposes and environmental imperatives.

8.2 Overall environment in which CBFM is implemented

The search for a new forest management order has received much impetus from the changing sociopolitical climate, growing power of the civil society, adoption of democratisation and pluralism under devolved and inclusive administration. These initiatives have been taken on the realisation that forest management is a matter of governance, tenure and the technology of production. Consequently, SSA governments are changing their outlook and approach to natural resources management, to provide space for local communities. These trends and an emerging receptive environment have seen legal expressions in new natural resources and environmental laws, land laws, and incorporation of commitment to SFM in founding constitutions. It is also noteworthy that the society is opening up, accommodating a more positive outlook and readiness to participate in development. Overall, African states have enacted new forest policies, legislation and land laws, decentralised administration and power devolution that allow community participation in forest management. Tenure reforms have further contributed profoundly towards establishing the CBFM practice.

But institutional arrangements dispensed to support the CBFM practice vary widely, according to national administration structures, forest governance, socio-economic and political conditions. New institutions, existing traditional institutions with elected members, or totally elected member committees occur. In most countries decentralisation and power devolution from the centre to local resource governance institutions currently confers SFM roles to district councils, except in a few cases where there is an established village structure. In Tanzania, because of its unique village structure, local people are empowered by policy and legislation to own forests, the village forest estate.

8.3 Policy, legislation and institutional reforms

Significant changes in policy, legislation and institutional reforms have taken place in the last 15 years. Central to them is a generally stronger emphasis on the important role of communities and other stakeholders in forest management. A noticeable global interest in and support for policy and legal frameworks that will promote community participation in natural resources management also influences the governments. These include the Convention for Biological Diversity (CBD), the forest principles developed by UNCED, Agenda 21, the UN Framework Convention of Climate Change and the Convention to Combat Desertification (CCD), among others.

Regretfully, changes in policy, legislation and institutional reforms have tended to occur without benefit and guidance from practice. Pilot trials and experimentations have been carried outside the formal forest management structure, albeit with minimal participation by foresters.

The effectiveness of the new policies, legislation and institutional reforms tend to:

- be stifled with vagueness and inadequacies of specific CBFM provisions within policies that have not been translated into legislation and mainstream forest regulations;
- not specify conditions, situations, and the ultimate role of communities in CBFM and mechanism for cost-benefit sharing;
- be vague on decentralisation, particularly failure to specify the locus of decentralised power and responsibilities; and,
- be reduced because foresters still seem uncomfortable with the new concepts, principles and structures that are being introduced to replace conventional ones.

These deficiencies allow room for manipulation by responsible bodies to retard the growth and development of the CBFM. Effective CBFM implementation is further hindered by inadequate political will and positive support for reforms, institutional rigidities, failure to harmonise policies, inadequate funding, and failure to provide a forum for public policy debate and academic discourse.

Without risking contradiction, it is admitted that the reforms discussed above have come as a result of a positive political will and support. But in some countries, genuine political will and support for reform is either lacking or inadequate, and amounts to no more than window dressing to attract foreign capital. Consequently, the extent of devolution of power from the state to local people and the development of an apparatus for actual CBFM implementation, remain inadequate. The status of CBFM in national forest management remains unspecified in most cases. The state still negotiates and signs contracts with the private sector on behalf of the community, and determines roles, and levels of benefit sharing with little or

no consultation with local communities. Although the potential for CBFM is acknowledged, this has yet to be fully articulated and implemented in practice. Most CBFM activities are restricted to unreserved forests and collaborative management in nationally gazetted forests.

8.4 Sources of conflicts and avenues for conflict resolution

State officials and local people hold different visions of devolution, its structure/model of implementation and approaches for incorporating communities in CBFM practice. States are generally slow to change and tend to stick to contracts with organisations accountable to it as a proxy for devolution. In contrast, villagers espouse different interests according to wealth ranking and land use occupation, e.g. pastoralist vs. farmers, the elites vs. the masses, the rich vs. the poor, the community vs. saw-millers, the gender divide, and producers vs. consumers, are among the main factors contributing to divergent visions about resource use.

Commercialisation was also recognised as a potent source of conflict, while the limited opportunities to participation by women and the youth in natural resources management, land use interests between cultivators, pastoralists, and forest interest, disputes over boundaries, flagrant breaking of rules and aggression by villagers and timber poaching, etc. generate conflicts between the different groups within and across the villages.

Conflicts also arise from land-related disputes, inter clan rivalry, and the representation of chiefdoms, tenure related complexities that surface following the emergence of economic stakes, brought about by forest exploitation and conflicting overlapping sectoral policies (agriculture, forestry and wildlife).

The poor are often forced to overlook SFM rules out of compulsion to address livelihood needs because of lack of alternative options.

8.5 The main actors in CBFM

The major actors are;

- *The state*: undoubtedly the most powerful of the partners, custodian of law and order, and provider of policy, legislation, roles and responsibilities, ultimate land owner.
- *The District Councils*: The representatives of the state, constituting a lower tier government structure, with delegated authority from the centre.
- *NGOs*: Facilitators for change; assist in capacity building and promote change through lobbying and advocacy.
- Communities: De facto land/forest owners with strong dependence on biodiversity.
- **Donors**: Development partners, have been major funders and promoters of CBFM. Donors have become the alternative voice of the people in some countries.
- *The private sector*: Entrepreneurial investment in forest development and forest-based industries a source of employment and income.

8.6 How the community implements CBFM

The structure and layout of a CBFM system is determined by the objective, rationale, and purpose for its formation. The purpose, often a dictum of the state, focuses on sharing forest access or revenue with local communities (benefit sharing) or sharing management authority (power) over the resource between the community and the state.

8.7 The perception of locals

Existing experiences show that local participation becomes more effective where local populations are involved as forest managers and even owners. But governments seem to prefer collaborative product-based and benefit-sharing arrangements with communities *vis-à-vis* more devolutionary ownership based and power management centred systems.

The community tends to be weary over the state's dominant role, become resentful and covertly suspicious of the government with continued permissive approaches. This stalemate is often accentuated by the consequences of heavy costs including the burden of preparing forest maps, resource inventorying and preparation of management plans and forest management itself. Currently, the flow of benefits remains dismal for the transaction cost they are incurring.

8.8 Long-term viability of the CBFM

The long term economic viability, ecological sustainability and social acceptability of CBFM strongly depend on its ability to:

- strengthen its institutions,
- generate goods and services for local communities and overall socio-economic development,
- generate employment and income sources, and,
- provide environmental services and socio-cultural values.

CBFM has demonstrated favourable cost-efficiency in forest protection, but its cost-benefits to communities, including opportunity cost on land under forest management, remains extremely low. But the performance so far is lopsided in disfavour of communities, and growth rate lacklustre by all standards. Present restrictions of communities to degraded, unreserved forests, and their exclusion from biodiversity rich forests and core forest management do not allow accurate assessment of actual economic viability of the CBFM practice. But given its powerful trait of "managing by consent" and improved governance, CBFM is likely to increase forest productivity of wood, NWFPs and other goods and services.

With growing interest in NWFPs and emerging innovative processing technologies, commercialisation of tree and forest products is likely to generate substantial income through improved industrial processing and marketing. Income is an important indicator of forest communities' wellbeing and can further highlight people's resource management and livelihood strategies. Long-term commitment to CBFM depends heavily on its ability to provide them with adequate income (cash income plus the value of consumed goods), improve or maintain the material well-being and their economic security in the long run. In such instances, it would be prudent to ensure that such benefits are not dominated by the rich at the expense of undercutting the poor.

The evolving principles and concepts of CBFM are ecosystem-based, and, generally, forest management and use are determined by the prevailing bio-ecological potential of the land. Placing forests under community jurisdiction through policy and legislation promptly removes them from open access ills and thereby assures sustainability. This is supported by management under defined zones, cognizant of the state of the resource base and the forest management plans.

Experience shows that CBFM systems have promising potentials for reversing the forest degradation spiral on the continent, while providing livelihood security and supporting socio-economic development. But long-term sustainability of CBFM is contingent upon its ability to generate adequate benefits to the stakeholders. Communities and national stakeholders are unlikely to invest their energies in CBFM unless they receive benefits commensurate with their investments.

Convincing country reports show that communities in some countries have openly stated that their forests are more valuable than cash to the extent that they voluntarily contribute considerable time and effort to long-term forest management in favour of converting them to more immediately lucrative land uses. CBFM and its local institutions provide active entry points for different grassroots development programmes and initiatives. It further opens up channels for building local community cohesion, a launch pad for other

locally-based development initiatives, nurturing identities, cohesion, and forging a village level corporate image. This forum further provides communities with a platform for communicating development priorities to the government, and, in the long run, may lead to improved community-government relations.

CBFM has directly stimulated the structuring and streamlining of local resource governance institutions into a major grassroots development pillar. Many local institutions have been established through the states or NGO interventions promoting CBFM. But the lack of endogenous legitimacy built through socio-cultural and socio-economic inertia from its members, is widely evident.

Consequently, many such local institutions have remained relatively weak; a situation worsened by inappropriate devolution of authority to district councils or the local forest service positions, bypassing the villages. The reality of decentralisation in many countries is one of delegating government authority to lower local tiers. Moreover, decentralisation has not been accompanied by a definite transfer of decision-making and executive power, and commensurate funds, within the administrative or technical structure. Where appropriate and definitive authority is devolved directly to the community village level, along the Tanzanian model, devolution has a good chance of providing a strong and credible institution, capable of serving the CBFM and overall rural development.

9.0 RECOMMENDATIONS

9.1 Building of partnerships under the CBFM paradigm

In the absence of concerted national approaches to the development of CBFM, there is a danger of it evolving as a parallel system of informal units scattered in the forest management landscape, and making no significant consolidated contribution to development. Today, the opinion is divided on prospects of handing over forests to communities. One school of thought holds that the devolution to communities is not only desirable but necessary, while another contends that this is not feasible. Proponents of devolution of forest management to communities argue that it is an evitable decision as centralised forest management through forest services has failed. Increasingly high deforestation rates, declining forest productivity and the reality of contributions of forestry to declining state budgets due to SAPs, macro-economic policies, retrenchment and various forces, are tabled as evidence that the current system is not working. Added to this, the granting of rights to local communities who bear the heaviest burden of SFM is considered more desirable on the grounds of equity and natural justice.

Resistance against devolution of forest management to communities is based on the belief by some foresters that communities do not have the ability and will to manage forests. They argue that under the influence of a strong individualised tenure and policy, communities may end up fighting for fragmentation of forest land and to turn those into more lucrative activities. Such a viewpoint reflects an obvious lack of trust and confidence in communities. This comes as no surprise because people have been used to a totally paternalistic forest management system that perpetuates a strong dependency syndrome on the forest departments for forest development. Admittedly, not all the lofty notions about the CBFM make it a paradigm for SFM. Many of its facets must be tested circumspectly to provide certainty that under community-state partnerships, forests can be managed to serve the best interest of the community. The social dynamics of managing forests are often complex and for appreciable success to be achieved, governments must work closely with local users, forest communities and other stakeholders. One can see that the development of an appropriate SFM system would not be realised until the issues of governance, tenure, refinement of technologies of production, appropriate re-structuring of ownership rights, are fully and amicably solved.

It is also evident that a lot of reforms have been made but meaningful impact would not come until this last step is taken. The CBFM package must be pushed forward before a clear breakthrough and the fullness of its potential and manifestations can emerge. This step calls for letting go of old attitudes, on acts of faith and to give a clear mandate to the new community-state CBFM partnerships to manage all forests.

It is therefore recommended that governments should take bold decisions and establish new structures, "Forest Management Authorities" (FMA), an axis constituted through partnerships of the key stakeholders. Such an authority should be supported by clear policy, legislative instruments and the constitution, to

accord it legitimacy and stature. Such an authority should in turn assure equality, mutual respect and equity between all partners in the coalition. Such a body should embrace representatives of the community, the state, the private sector, the civil society, and relevant NGOs and be charged with the task of managing all forests under a defined charter.

The Authority's initial roles should include;

- Developing CBFM implementation modalities.
- Undertaking paradigm building; identifying the knowledge gaps and challenges to SFM that CBFM can solve.
- Taking stock of lessons of what has and what has not worked and why? And under what conditions.
- Negotiating roles, powers, rights and obligations of the state and local communities, and mechanisms for equitable benefit sharing.
- Establishing a clear framework and rationale for costs and benefits sharing, developing and agreeing on criteria and formulae for sharing costs and benefits, ensuring that the level and flow of physical and financial benefits to communities are commensurate with their efforts and investment in forest management, and work for a sound *esprit de corps* in the participatory CBFM business.
- Identifying and developing streamlined and corporate procedures for implementing and managing CBFM under transparent participatory models and avenues to improve governance and accountability.
- Mounting a comprehensive engineering of the forest service, to provide a full devolution of commensurate power, authority and responsibility (decision-making) and resources for programme implementation under a new FMA.
- Establishing machinery for regular reviews and updates of policy, legislation and institutional reforms.

This task should be undertaken in a stepwise manner, borrowing from the corporate world, incorporating traditional values and making incremental adjustments, modifying roles and steering the process towards greater conformity with the principles of common property regimes. Marked attention should be accorded to the development of a streamlined and innovative resource governance structure and efficient management paradigms.

9.2 Research and development priorities

The CBFM process has not benefited from a pro-active research and development effort that is essential for according it scientific legitimacy. The bulk of scientific studies have favoured *ex-post* analysis of on-going processes. Considering the expanded CBFM objectives, the long-term nature of the forest enterprise, degraded state of forest bases, people's short-term perspective for returns on investment, the need for a new research and development (R&D) order becomes an urgent task. Such a R&D programme should tackle areas of knowledge where research can add value to pave the way for greater innovation on an issue and problem driven approach.

For many years, forestry was viewed as a marginal sector (except for the forest rich countries) but has recently taken a centre stage in development throughout the continent. In the recent past, politicians and leaders have plunged into the forest as a last resort resource for drawing capital for funding party elections, and for rewarding favours and loyalties to their supporters. Information on the potential or real income from forests, or people's dependence on them, is critical for providing information on trade-offs among alternative uses, and to provide incentives for people to engage in certain uses of forests. The state of understanding of the role of forests in development under CBFM must therefore be supported by more accommodative macro-economic policies to be able to withstand pressures from sources external to forestry. Forestry cannot stand alone and the general macro-economic environment must be all inclusive of rural development sectors with a clear slot for forestry to play its part fully. It is acknowledged that past forestry research has been heavy on industrial plantation development and agroforestry systems much to

the neglect of management of natural forests, socio-economics, policy, industrial processing, entrepreneurial development and marketing.

The following research themes are suggested for consideration to guide and spur forest development initiatives:

- Forest management models for community foresters based on key elements of working principles, concepts, structure, methodologies and management tools;
- Interactions between policies, legislation, tenure arrangements, gender dimensions, and strategies for effective devolution of power and custodianship, and empowerment for full realisation of CBFM potential;
- Strategies and methods for sustainable harvesting of wood and NWFPs (including reduced impact harvesting), licensing of communities vs. concessionaires, technologies for efficient processing of wood and NWFPs and marketing;
- Legislation to guide policy reforms, institutional strengthening, policy and market failures;
- Arrangements for managing commercialisation of subsistence use (particularly NWFPs) that maintain sustainability of forests and ensures equitable benefit distribution between industry and the local community, men and women;
- Methodologies for forest resources accounting to provide a clear understanding of forests and their contribution to development;
- The scale, scope and variety of tree-based products which rural people either manage on their own lands or access from forests;
- People-plant-forest relationships, and human-wildlife conflicts;
- Opportunities for diversifying income sources through development of forest-based enterprises and other innovative opportunities in developing new income sources from biodiversity, including consumptive and non-consumptive use of wildlife, ecotourism, beekeeping, etc.;
- Research to highlight intra-community complexes, complementary or competing interests and interest groups and gender roles associated with each group to provide building blocks for cultivating group cohesion, protection of local use rights and controls, and to forestall further marginalisation;
- Revitalisation of wood-based industries (primary, secondary or tertiary) to enhance efficiency, waste minimisation, competitiveness, and marketing to promote income generation;
- Research and analysis of the nature of socially constructed barriers that are negating sustainable and equitable CBFM practices, and opportunities for overcoming them;
- Development and adoption of criteria and indicators (C&I) for SFM in collaboration with ITTO, ATO and Dryzone Africa processes, and certification on relevant commodities;
- Rationalisation of forest zones to promote balances between production, conservation and environmental services;
- Typology of traditional natural resources management institutions and systems, procedures for analysis and conflict management and threats to provide innovative structures and mechanisms for improving new management systems; and,
- Decentralisation and ownership, tenure, access, usufruct rights and effective partnership building instruments and mechanisms for transferring authority, power and responsibilities to stakeholders/partners.

9.2.1 Capacity building and human resources development

It is noteworthy that CBFM development has not attracted commensurate support on capacity building. This in turn has led to a perpetuation of weak institutions, incapable of taking the programme to a higher status and it has been exacerbated by the lack of resources by governments for training communities and their own staff assigned to work with communities. The forest services are also affected, particularly through the consequences of decentralisation, restructuring and downsizing that leave too few personnel to manage forests or work on building new institutions. Consequently, NGOs have taken this role in the absence of government personnel, in addition to their own programmes. But in the absence of a clear harmonisation in NGO-government approaches, increasing NGO support in training and outreach tends to result in mistrust, suspicion and conflicts between the two institutions.

CBFM cannot grow from its present raw setting into a respected paradigm by the stroke of a policy and legislation pen. It must be bolstered through positive political will, public support and further nurtured through the willingness, interest and capacity of growing community institutions. Up-scaling the practice should be supported by comprehensive training and capacity building to enhance capability of government foresters and community foresters. Such a practical approach would promote genuine participation in SFM and cultivate leadership acumen in local people, create contacts for credit access and an enabling investment climate. Such a programme should further address:

- Recruitment of a broad range of essential skills and setting up guidelines for efficient implementation of CBFM in different forest types, including preparing management plans that accommodate multiple products while addressing social, economic and cultural aspects in addition to utility aspects;
- Development of improved and relevant forest training and education curricula;
- Retraining of staff through in-service training, refresher courses and workshops (including exposure to new roles, functions and mandates, structures and functions of local community-state partnerships);
- Establishment of a working partnership between local communities, the state, NGOs, and the private sector, including development of procedures, mechanisms for cost and benefit sharing between partners; and,
- Lobbying for a positive attitude change in government so as to provide a positive political will and support to provide budget allocation for up-scaling the CBFM process.

A crash-training programme should be extended to community partners covering modern resource management systems, including planning, forest operations and other skills, resource inventorying and assessment, production and record keeping, procedures on conducting meetings and decision-making processes and principles of CBOs, management of income generating activities and enterprise development, marketing and access to markets. Attention should be given to streamlining new management techniques such as "supervision and enforcement by consent" of forest rules and orders. Strengthening forestry institutions should be part of an on-going process for improved governance, emphasising accountability, the rule of law and order, probity, improved financial management, budgeting and a broad understanding of awareness of issues.

9.2.2 Technology access

Prevailing under-performance of CBFM may be perpetuated unless technologies and methodologies appropriate to emerging management regimes are addressed in good time. Hitherto, poor economic performance of forest products, particularly NWFPs, is triggered by lack of skills in processing, low value-adding technologies and equipments, and weak marketing drives. Many products from African forests are yet to penetrate the lucrative international market niches.

The new forestry management partnerships should address these weakness by:

- Taking stock and building a database of available technologies on forest operations, logging and product processing and market outlets at national, regional and global levels;
- Linking information sources to information users, including the extension service;

- Sharing information on experiences, and introducing new and innovative skills on processing and product packaging; and,
- Developing a regional CBFM protocol for promoting cooperation between member states through sharing experiences and information, collaboration, networking in research, development and packaging case studies of what has worked elsewhere under given enabling conditions for ease of replication.

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