

G:ENESIS



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**PAPER II: Policy Options for Miombo
Woodlands**

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EXECUTIVE SUMMARY

This study contributes to the World Bank Project entitled “*Policies and incentives for improving the management of miombo woodlands to meet household needs in Southern Africa*” by providing an assessment of options to strengthen policy instruments that tackle the issues of miombo use by the poor. A parallel study to this has grouped constraints faced by households into a number barriers to the use & access of miombo by the poor. The barriers and opportunities identified are the focus of this analysis

An initial point is made that the poor in miombo are extremely heterogeneous. Security of access to food, land and miombo varies within a single village community as well as between regions. Vulnerability is recognised as an important way of assessing the impact of policies affecting miombo use: miombo is a vital element in reducing vulnerability in rural households of the miombo biome.

The study takes a contingency approach that takes into cognisance that local conditions determine the effectiveness of any particular instrument – meaning that options should be applied in a phased or sequenced manner sensitive to evolving local conditions. This allows change to be managed in positive direction.

The first policy barrier is identified as the political and economic marginalisation of forestry. Options outlined include:

- Work with decentralised government to generate the local evidence base for securing the forest based needs of the poorest that aids in understanding:
 - The role of miombo in the needs of the poor, the trade-off risks for implementing new development interventions.
 - The services and resources required to secure the basic needs, and build on the current benefits miombo generates.
- Use the evidence generated to strengthen the empirical base of advocacy organisations that tackle livelihood vulnerability or rural development.

- Make sure Miombo is recognised as a safety net and managed as such and incorporated into Risk and Vulnerability planning through Social Welfare departments; don't keep it to 'forestry'. This function is particularly relevant during or after conflict when other means (such as agriculture) are not in place.
- Feed the local evidence base into upstream analyses so that PRSPs and MDBS processes (CSP, CAS) consider the dynamic poverty-forestry relationship in plan design.
- PRSP Monitoring should include benchmarks/ indicators to monitor key drivers of the vulnerability-forestry relation.
- Recognise that it is not (only) forestry policies, it is about the way the landscapes/arenas/actors interact to affect how the poor relate to miombo.
- Map civil society in relation to poverty and forestry as part of the upstream analysis – to understand its potential for raising the profile of forestry in national development planning.
- Making sure institutions responsible for miombo management work together: e.g. that agriculture does not introduce new tobacco varieties that demand large volumes of wood or result in new woodland clearances that impact negatively on the access and use of forests by the poorest.

Decentralised decision makers lack strong local institutional and organisational capacity and rights risk being captured by local elites or external actors. This defined the second barrier. In response it is suggested to:

- Ensure decentralisation of forest management is undertaken sequentially and with consideration of the local conditions. Consider implications of fiscal decentralisation for income generation from miombo and the rent-seeking 'value chain'.
- Ensure local government has greater downwards accountability (to the citizens) and local legitimacy

- Decentralisation/Devolution needs to be the whole 'package': rights, responsibilities, capacity (and resources) and recognise that support will be needed to facilitate delivery of the responsibilities.
- Strengthen the voice of the poor
- Effective legal and regulatory back-up from support agencies (state/CSO) for local institutions to manage their responsibility
- Establish simple regulatory frameworks or requirements retention in scale with the resource capacity and its value. [Miombo has little high value timber – it is a low value woodland (financially) with important subsistence value, which has low intensities of management applied (fire/fuel management, coppice management)]

The next two barriers are dealt with concurrently: At a local level there is limited support for local forest enterprise development; low resource rents coupled with high management transaction costs reduce the viability of forest enterprise development. Options for intervention include:

- Supporting producer organisation (e.g. producer cooperatives) to improve economies of scale, marketing and price negotiation.
- Promoting community-private sector linkages particularly for local processing or value addition.
- Using low risk forms of micro-financing (not credit, but saving schemes) to generate capital for enterprises.
- Supporting the identification of investment need related to financing miombo-related business analysis.
- Assuming security of land and resource tenure and clear benefit sharing rights, payments for environmental services (PES) provides another valuable route to monetising rural communities fortunate enough to own resources important for ecosystem functioning.

The barrier of low inherent productivity seems on the surface to be a technical problem, but to some extent, the problem lies with the understanding or definition of the productiveness of the miombo: this is a term that refers largely to its woody-biomass productivity. Its non timber, multiple-use productivity is much higher and there are other ways to measure the forest's productivity than just its biomass:

- The miombo provides multiple benefits of subsistence and income value simultaneously, the profusion of fruits during the early rains is particularly valuable for the poorest as this is usually the time of greatest nutritional stress,
- It can be managed during the agricultural slack season so reducing the [opportunity] costs of its management,
- Management is simple: fire and grazing control are the two more important prescriptions and the woodland is very resilient,
- It is vast in extent, meaning only a small improvement in productivity can have a huge overall impact on total production.

From a policy perspective, management approaches that prescribe scientific management planning approaches usually developed for commercial or plantation-based forestry need to be debated and critiqued.

In conclusion, the paper notes that an adaptive approach, that monitors impact and uses the suite of options accordingly would be most appropriate. The governance conditions – legal framework, the institutional landscape within which policy instruments operate – are overlying aspects that need to be sufficiently conducive for options to have meaningful impact.

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1. INTRODUCTION

1.1. CONTEXT

1.1.1. PROJECT OBJECTIVES

This paper contributes to the World Bank Project entitled “*Policies and incentives for improving the management of miombo woodlands to meet household needs in Southern Africa*”. This project is intended, in part, to meet the objectives of preparing upstream analytical work on poverty, vulnerability and environment issues which can provide support for the preparation of Country Assistance Strategies, poverty reduction policies and strategies as well as development policy lending with a focus on the likely impacts of social and economic policy development and reform.

As part of the project, this paper is expected to provide a critical analysis of whether current policy opportunities and mechanisms are tackling the specific issue of natural resource use by the poor, and propose what it will take to strengthen such instruments’ effectiveness. The paper also addresses the potential policy approaches for addressing dry woodland management in PRSPs and through donor assistance.

1.1.2. WHO ARE THE POOR?

Policies, Vulnerability and the Poor

This paper focuses on how policies interact with risks and vulnerabilities of the poor. We recognise that ‘the poor’ of the miombo region are highly differentiated and often measured by their relative ability to cope with stress and uncertainty. In the countries of the miombo region this includes food insecurity, income-earning opportunity, asset and land ownership and use of woodland resources (e.g. Devereux, Baulch, Macauslan, Phiri, Sabates-Wheeler 2006; Hegde R. 2007). These characteristics are dynamic: they may be temporal (e.g. seasonal), social (e.g. voice), structural (e.g. culture) or spatial (e.g. geography) and are what makes up the relative vulnerability of a community; household or individual (Box 1). The ‘coping strategies’ employed are mediated both by a household’s individual response and policy interventions (Devereux *et al* 2006).

Box 1: Dynamic Vulnerability

Vulnerability and poverty are not synonymous; specifically, vulnerability is a broader concept than poverty, in at least three ways:

(1) The non-poor are also vulnerable to future poverty (some definitions of vulnerability refer to people whose income is within, say, 20 per cent of the poverty line).

(2) Vulnerability incorporates various non-income aspects of ill-being, such as insecurity, social exclusion and political marginalisation, while poverty measures focus on income and assets.

(3) Vulnerability is a dynamic concept, which is both forward-looking and constantly changing, while poverty is a static concept that measures proxies for wellbeing at a point in time.

Devereux *et al* 2006

People can protect themselves against the risk that a stress situation (e.g. drought) will undermine their livelihood by drawing on savings, diversifying their livelihoods to spread risk, drawing on their natural asset base (e.g. miombo), building social networks that can provide informal social assistance in times of need, and so on. The most vulnerable have the least ability to draw on alternative strategies, they adopt low risk – low return strategies that keep them in the “poverty trap”.

The policy implications of vulnerability are broader than efforts to reduce poverty. According to Devereux *et al.* (*ibid.*) policy interventions to manage vulnerability can either aim to reduce or spread risk, or to strengthen resilience. In the absence or failure of these measures, public interventions need to deliver safety nets and other forms of social protection to those affected by shocks and processes that they are unable to cope with unassisted.

The Poor and Miombo

This paper assumes that the “rural poor” currently use or have the potential to use miombo to reduce their livelihood risks. It also assumes that the sustainable management of miombo, instead of its conversion to other potentially more productive land uses, is an appropriate strategy for the poor. The Social Protection function of miombo is well documented: Insecure access to miombo increases vulnerability of the poorest (Abbot 1997; Hegde 2007). Miombo is very good at providing a social protection function at the subsistence level (e.g. Bwalya 2007; Campbell et al 2007). Investment in improved management should enhance its contribution to risk reduction and poverty reduction and this paper explores what can be done to help take that next step?

1.1.3. STRUCTURE OF THE PAPER

Following a brief description of the methodology and analytical framework used in the paper, a description of the current institutional landscape is presented. This provides an important basis for understanding how current policy processes affect the way the poor can access and benefit from miombo.

Drawing on the published and unpublished (grey) literature, the current policy options for influencing household livelihoods are outlined within the context of opportunities and barriers for miombo use and management. The next section then pulls together implications for development policy. Policy intervention options in relation to risk and vulnerability are subsequently revisited in the concluding section.

1.2. METHODOLOGY AND DATA

1.2.1. BUILDING AN ANALYTICAL FRAMEWORK

The paper builds an analytical framework around the opportunities and barriers for the sustainable use and management of miombo, identified in this project by Campbell and others (Campbell *et al.* 2007). Evidence from the policy research literature is used to review options for strengthening or mitigating the opportunities and barriers respectively. An approach that acknowledges the complex inter-relatedness of policies and their impact is adopted. The framework is developed following the description of the institutional context.

1.2.2. LITERATURE REVIEW

The paper employed a broad review of the aid policy literature to draw on experiences and developments in the agriculture, environment and rural development sectors. Empirical evidence from the miombo region was used where it could be found. The paper relied on extracting data from information available in the public domain: time and resource constraints limited the depth of grey literature that could be brought into the scope of the review.

There is an extensive literature, both published and unpublished on the use and management of miombo by the rural poor¹. However, more recent material related to policy, poverty and forestry has tended to focus on the moist forest regions (Congo Basin, C. & S. America, S.E. Asia) and therefore related to high value forestry (in timber and biodiversity sense. E.g. Smith, Colan, Sabogal & Snook 2006; Sunderlin, 2006; Sunderlin & Huynh 2005; Joshi, 1998; Chomitz; Wertz-Kanounnikoff; Thomas; De Luca & Buys 2007; Nguyen 2007; Muller, Epprecht & Sunderlin 2006.) This is, in part, a response to the focus of donor agencies on the forests of these regions over recent years. Many of the instruments being tried and tested in such areas do still have relevance to the miombo biome, albeit in modified form in some cases.

Trends and themes emerging from the research and empirical literature were identified and cross referenced if possible for triangulation.

1.2.3. BARRIERS TO THE SUSTAINABLE USE AND MANAGEMENT OF MIOMBO

Is miombo not already contributing significantly to the livelihoods of the poor? Evidence from Malawi (Coote *et al.* 1993a,b, Lowore *et al.* 1993), Mozambique (Hegde 2007, Salomão & Matose 2007), Zimbabwe (Mukamuri *et al* 2003), Zambia (Bwalya, 2007) and Tanzania (Monela *et al* 1999) indicate that it is. However, these and other studies (e.g. Kowero, Campbell & Sumaila 2003) have identified there are constraints that limit the livelihood contributions the poor extract from miombo, and with deforestation continually diminishing the available resource, the problem appears to be that current policies and policy instruments are not tackling the problem – or at least not tackling it in a way that provides “routes out of

¹ The 1996 CIFOR book *Miombo in Transition*, edited by B. Campbell, drew together much of the available literature and expert knowledge up to that time, whilst other aspects of this project brings this up to date.

vulnerability” for the rural poor. Campbell, Angelsen, Cunningham, Katerere, Siteo & Wunder (2007) have reviewed these constraints and grouped them into eleven barriers to the sustainable use and management of miombo by the poor (Table 1). They also identify four opportunities that may provide new ways of strengthening the role of miombo in rural livelihoods.

Most of the barriers may be influenced – by a greater or lesser degree – through policy-level intervention. This may be through policy reform, improved policy implementation, development of policy instruments (such as legislation or incentive mechanisms) or reform of policy delivery mechanisms. A few, such as issues of woodland productivity, are most likely to be resolved through technical developments or interventions but may also need to be viewed through a different lens than the traditional technical-scientific one and thus have a policy relevance.

Table 1 also implies that the situation is complex in that the issue has – in most cases – to be dealt with at a range of levels (from local to regional) and will often have to involve sectors well beyond forestry. This complexity presents, if not a barrier, then a further challenge to leveraging national and international finance and influence to strengthen the access of the rural poor to the benefits of improved miombo management.

To enable us to navigate through the policy analysis, the next section will map out the current institutional landscape within which policy and its instruments has to operate.

Issue	Policy Relevance	Geography	Indicative Sector Relevance
<p><i>Economic Barrier</i></p> <p>Low inherent productivity</p> <p>Elite and external actors capture values</p> <p>Restrictive regulations reduce access and increase transaction costs of producers and traders</p> <p>Limited support for local forest enterprise development</p> <p>The lack of strong local organization</p> <p>A legacy of armed conflict</p>	<p>Technical</p> <p>Policy</p> <p>Policy</p> <p>Policy, markets</p> <p>Policy, social capital</p> <p>Policy, sociological, technical</p>	<p>Regional Context</p> <p>National and local</p> <p>Regional, national and local</p> <p>National and local</p> <p>Local</p> <p>Regional and national</p>	<p>Forestry</p> <p>Law, government</p> <p>Land, environmental, forestry</p> <p>Trade, finance, local economic development</p> <p>Government, social development, law</p> <p>Social protection, infrastructure, law, government</p>
<p><i>Sustainable Use Barrier</i></p> <p>Low resource rents – high management transaction costs</p> <p>Weak local institutions</p> <p>'Forestry' is marginalised</p> <p>Domestication of high value species reduces importance of natural forests</p> <p>Cash constraints</p>	<p>Policy, market</p> <p>Policy, social capital</p> <p>Policy</p> <p>Technical and policy</p> <p>Policy and markets</p>	<p>National and local</p> <p>Local</p> <p>Regional and national</p> <p>Regional and national</p> <p>National and local</p>	<p>Infrastructure, land, trade, finance</p> <p>Rural development, law, government, land</p> <p>Forestry, finance, economic development</p> <p>Agriculture and Rural Development</p> <p>Finance, economic development</p>
<p><i>Opportunity</i></p> <p>Forests are still a valuable resource at household level</p> <p>Resource rights are shifting to rural people</p> <p>New integrated conservation-development approaches are emerging</p> <p>New product and service markets are expanding and emerging</p>	<p>Policy and markets</p> <p>Policy</p> <p>Policy and market</p> <p>Policy and market</p>	<p>Local</p> <p>National and local</p> <p>Regional, national and local</p> <p>Regional, national and local</p>	<p>Land, trade, forestry,</p> <p>Law, government, land, local economic development</p> <p>Environment, finance, tourism</p> <p>Water, environment, energy, finance</p>

Table 1: Opportunities and barriers to managing miombo woodlands to meet household needs

Source: (from Campbell et al. 2007)

2. THE INSTITUTIONAL LANDSCAPE

2.1. DEVELOPMENTS IN THE INTERNATIONAL AID ARCHITECTURE

The past decade has seen considerable changes in the delivery of international development support with repercussions on how the policy reforms needed to reduce barriers to access and use of miombo by households can be delivered.

Many of these changes stem from disappointment by the 1990s with technical assistance projects and the rather blunt instrument of aid conditionality (DFID 2003). Greater demands for aid efficiency improvements and greater country ownership led to calls for greater aid harmonisation and an increased demand for monitoring and accountability.

New output, or result-oriented, modalities that relied on achievement of benchmarks to trigger further support, were developed (Box 2, and World Bank 2001a) and by 2005, a new agreement on aid harmonisation, alignment and ownership was reached called the “Paris Declaration”².

Box 2: New Development Policy Instruments

The World Bank has been central to initiatives to improve aid effectiveness and has revised its development instruments: in 2004, it replaced the various adjustment lending instruments (e.g. structural adjustment loan, sector adjustment loan, programmatic adjustment loans) with the Development Policy Loan, or DPL (WB 2007b). The DPL is designed to provide quick disbursing external financing to support policy and institutional reforms in a sector or economy as a whole (WB 2007c). GBS approaches, including the DPL are linked to macro-economic policies of national governments: principally the PRS process, and Poverty Reduction Support Credits are the vehicle for delivering DPL support in HIPC countries.

The new World Bank Forest Strategy (2004c) and operational procedure 8.60 (WB 2004a) should guide the DPL process including upstream analysis and ongoing monitoring of potential impacts on forests not only from the forest sector but from all aspects of its work in a country. OP 8.60 emphasises the use of Country Environment Assessments and Strategic Environmental Assessments to provide upstream analysis to inform the Country Assistance Strategies of the broader context of forests in terms of their contribution to poverty reduction and economic growth.

² 2005 Paris Declaration on Aid Effectiveness. Joint Progress Towards Enhanced Aid Effectiveness, High Level Forum.

The new aid architecture of harmonisation, HIPC relief and budgetary support now emphasises (DFID 2001):

- Improved Aid Management – donor harmonisation, reduced transaction costs and alignment to national priorities in delivering the MDGs
- Improved policy ownership, coordination and implementation by beneficiary country through the development and implementation of a poverty reduction strategy.
- Stronger institutional capacity and government leadership of aid to improve sustainability. Improved expenditure management (usually reflected in the use of medium term expenditure frameworks) and more equitable service delivery.
- Enhanced public-private interface including involvement of civil society on consultative policy processes.

However, for budgetary support to be effective it requires partnerships for the provision of untied budgetary resources and the use of predictable, transparent methods for external finance. It is not suited to all country situations, nor to every sector and so the international community still uses a number of aid instruments to complement each other, the balance depending on the level of earmarking; the state of financial management procedures; the entry point and level of interaction (State, line ministry, local government, NGO) (ODI 2006a, DFID 2003). This maintains flexibility of response related to need.

2.2. NATIONAL POLICY DEVELOPMENTS

2.2.1. REVISED NATIONAL POLICY INSTRUMENTS

Policy developments have evolved rapidly in the countries of Eastern and Southern Africa that comprise the miombo eco-region countries over the past decade. New forest policies and laws have been gazetted to replace outdated (even colonial) ones, new organisations have been formed, governments have changed, and the instruments of development support have evolved. Table 2 outlines the current status of a range of relevant variables in four miombo countries (Malawi Mozambique, Tanzania and Zambia). The findings in these countries are indicative of broader changes in Southern Africa, influenced initially by the outcomes of the

Factor \ Country	Zambia	Tanzania	Mozambique	Malawi
Forest cover (1000 ha)	48 144	63 815	60 931	3 896
Forest ownership	92% public, 8% other	>99% public	100% recorded as public	Assumed all public
Estimated deforestation rate (%)	1.0%	1.1%	0.3%	0.9%
Forest policy and legislation	1998 National Forest Policy 1999 Forests Act	1996 Zanzibar Forest Resources Management & Conservation Act 1998 Forests Policy 2002 Forest Act	1997 Forest and Wildlife Policy 1999 Forest and Wildlife Law 2002 Forest and Wildlife Regulation	1996 Forest Policy 1997 Forest Act
Other relevant legislation	1990 Environmental Protection & Pollution Act 1998 Zambia Wildlife Act 1996 Timber Export Policy 1995 Mining & Minerals Act 1999 Lands Act	1997 National Environmental Policy 1974 Wildlife Conservation Act <i>In prep</i> National Parks Act 1992 Land Tenure Act 1984 National Land Use Planning Commission Act	1997 Land Act 1999 National Water Policy	1992 National Parks & Wildlife Act 1996 Environment Management Act 1998 Local Government Act 2002 National Land Policy
Relevant government ministries and agencies	Forestry Department – Zambia Forestry Commission Zambia Wildlife Authority	Forestry & Bee Keeping Division, Ministry of NR and Tourism, Wildlife Department, (under Ministry of NR and Tourism) TANAPA TAFORI	Forestry Department, Wildlife Department Economic Planning Department, Law Enforcement Department, Legal Cabinet Community Management Unit Forestry Research Centre (all under Min Agriculture and Rural Development)	Department of Forestry, Department of Environmental Affairs (both under Ministry of NR and Environmental Affairs.) Department of National Parks and Wildlife (under Ministry of Information & Tourism.)
NFP and NBSAP	1999 Zambia Forest Action Plan 2006 NBSAP	1990 Tanzania Forest Action Plan No NBSAP	1998 National Forests & Wildlife Program as part of PARPA 1997 NBSAP	2001 NFP 1999 NBSAP
Poverty reduction strategies	2002 PRS 2006 FNDP	2000 PRS 2005 NSGRP	2001 PARPA I 2006 PARPA II	2001 MEGS 2006 MGDS

Table 2: The Institutional landscape in the miombo region: selected countries

Source: Information extracted from FAO statistics, State of Forests Report 2007, World Bank PovertyNet website (www.worldbank.org/poverty)

1992 Rio Convention and the NFP processes, as well as peace and democratisation in the region, and more recently, by donor harmonisation and alignment to national processes in support of the MDGs.

A key driver of the past five years has been the establishment of Poverty Reduction Strategy (PRS) processes. The PRS is usually the overarching policy instrument for guiding poverty reduction. According to Evans (2006) a key achievement has been linking these national planning processes to budgets (through development of Medium Term Expenditure Frameworks – required for General Budget Support). This has had a variable effect on rural productive sectors such as forestry and forests which are multi-sectoral. Details in Table 2, drawn from country-led strategies or policies and statistical or other returns by countries shows the range of state actors in the forestry environment.

In fact, actors include private sector companies, commercial estates, rural and urban communities, individuals as well as the government agencies – parks, forestry, land, livestock, agriculture, water resources management. The overlapping sectors and mandates add to the complexity with respect to the governance environment. Whilst PRS's draw on participatory consultative processes and are cross-sectoral in scope (DFID 2001) they tend to focus on supply side interventions and delivery through the government budget, whereas growth in forestry and rural development also requires broader regulation and off budget enabling actions (World Bank 2005d).

2.2.2. DECENTRALISATION

Linked in to the introduction of the PRS processes is decentralisation as a key mechanism for its implementation. The PRS processes in Southern Africa as elsewhere in Africa (Evans *et al* 2006), envisage increased government withdrawal from direct intervention in production and marketing activities, reflecting an increased expectation at a macro-economic level for growth led development where the private sector plays a stronger role.

As part of this process, there have been various attempts at reforms in the Public Forest Sector in Southern African Countries: Malawi, Mozambique, South Africa, Tanzania and Zambia have all designed plans to devolve services to lower spheres of government where they are often designed to be delivered in an integrated manner designed to improve accountability and improve service delivery.

Box 3: Resistance to Decentralisation and Devolution in Malawi

Malawi is characterised by a neo-patrimonial state, namely a clientelist political system operating within the guise of a legal rational bureaucratic framework. The roots of the system are deep and as such a genuine internal commitment to decentralisation, including an informed and involved citizenry, effective representation and financially empowered local government, is absent. Decentralised forest management threatens the control of valuable resources by political elites and threatens to interrupt the flow of patrimony from local sources via chiefs to the centre. Participatory or community forestry imply both a movement of power from the central to more local levels and participation in decision-making, including transparency in transactions, downwards accountability and environmental subsidiarity.

Cross & Kutengele 2001, Blaikie 2003.

These have had a varied response and impact in the countries of the miombo (e.g. Cross & Kutengule 2001 and Kayambazinthu & Locke 2002 for Malawi; James, Mdoe & Mishili 2002 and Wily 2001 for Tanzania; Blaikie, 2003 for Botswana). There has often been resistance in national forestry institutions to initiatives that undermine their traditional sources of power (Box 3). This is complicated by the institutional space which is crowded with a number of public agencies often with overlapping mandates involved with forests and their stakeholders (communities, entrepreneurs etc). Evans *et al* (2006) found that this often results in conflicting policy and institutional mandates with respect to the role of state, leading to a lack of clear direction in terms of that role.

Another problem may be the limited analysis of poverty dynamics in the forestry context (WB2005c). Although the forestry-poverty linkage is established (e.g. Chomitz *et al* 2007, Shackleton *et al* 2007), and even the link established between NFPs to PRSs in more recent cases (Geller & McConnell 2006), how aid and private sector finance contributes to, or creates, opportunities for people to exit poverty in a sustainable way, especially when a range of things may be needed simultaneously in a number of related sectors, is not articulated in the country-level processes

Referring to community miombo management in Malawi, Blaikie (2003) calls this 'black-boxing' as the benefits of community management are *small scale dependent* and as PRS and GBS processes work at the *macro-scale* they do not consider local conditionalities that reflect whether community management will work in any given situation (Ellis, Kutengule & Nyasulu 2002). Additionally, as the PRS and GBS tend to facilitate nationally driven processes, they risk the recentralisation of decision making and top-down planning; creating a paradox with

reforms designed to implement decentralised and integrated implementation (Coyle & Lawson 2006). Hobley (1996) refers to the phenomenon as ‘centralised decentralisation’ in that forestry departments often formalise *de-facto* (traditional) use rights of villagers to forests, and establish their own structures, so drawing the central forestry department deeper into the locale than they had been before so-called decentralisation. The formalisation of these rights under the banner of PFM or CBNRM can often lead to a decrease in benefits and a loss of local decision making, reducing the capacity to respond to local heterogeneity, local risks and local vulnerabilities (Hobley *ibid.*, Salomão & Matose 2007)

2.3. REVISITING THE ANALYTICAL FRAMEWORK

2.3.1. THE COMPLEX INSTITUTIONAL LANDSCAPE

To support the coping strategies used by rural households in overcoming risks to their forest-based livelihoods, policy responses may be required at the international, national and local level (Peskett *et al* 2006, Devereux 2006). At each level there are a range of institutional actors that can impact on those policy responses (Table 3). At the same time, households themselves adapt their livelihood responses as they manage their risks. Their responses exhibit characteristics of complexity: they are dynamic, multi-dimensional, openly interact with the surrounding environment, and the poorest often have weak relations to social and capital assets, and the natural resource assets too, which mean small changes in conditions can have big impacts on their vulnerability.

Geographical Arenas	National Socio-Political Actors	International Actors
International – Global	The State (central/decentral)	INGOs
International – Region	The Legislature	International treaties,
National	Judiciary	Multinational commerce (particularly the growing influence of BRIC countries).
Sub-national	Civil Society	
Local	Traditional Leadership	Donor conditionalities
	Business	
	The People	

Table 3: Some variables of the institutional landscape that affect policy options in the Miombo

Box 4: The multi-dimensional landscape: example of Charcoal

Charcoal production is a very important use of miombo, particularly as a livelihood activity for the very poor and energy source for urban populations. It is often seen as a “forestry problem”. But is it? Forest is the resource being exploited, but it may be as much about energy and energy pricing, infrastructure, an inefficient value chain or tax regime, lack of technical knowledge, ineffective market representation or group organisation, or, effective regulation and problems of corruption and/or elite capture, or, all of these things. The charcoal problem is identified because it is blamed for massive deforestation in countries like Malawi and Zambia. What elements of the value chain are responsible? Who is dealing with the “charcoal problem” in Tanzania, Zambia, Mozambique and Malawi? Is it the Forestry Departments? Who is benefiting most from the Charcoal trade both through the formal value chain and informally through rent seeking and the flow of patrimonial benefits? What is civil society doing about the issue, what evidence do they have to pressure higher authorities for change?

The illustrative case draws on Chidumayo 2001, Mwampamba 2007 and Kambewa 2007.

In this situation, interventions premised on simple cause and effect policy responses will result in trade-offs that need to be considered and managed (Chomitz *et al* 2007). A range of responses may be needed simultaneously in a number of related sectors at a number of levels. Barriers and opportunities for the poor are often linked; in many cases an opportunity for some may present a threat or barrier to others: a basic paradox of the complex relationships. .

There are many different policies at different levels that apply to poor miombo woodland users; when they combine they can generate new outcomes that may not have been expected. They are often overlapping and incongruent (e.g. land and forest policy in Mozambique.) It means that solution it is not just a case of implementing better forest policies – forest policies may not be the problem it may be other policy/institutional constraints (Box 4 explores one case by way of illustration).

2.3.2. THE ANALYTICAL APPROACH

Unsurprisingly, approaches to analysing the effectiveness or appropriateness of the policy response have been varied. Chomitz *et al* (2007) and Sunderlin, Dewi & Puntodewo (2007) argue for a spatial and scale based approach (international,

national, local), although this may be less relevant in the miombo woodland biome where there lies a closer relationship between the woodland (which is generally course grained, naturally subject to regular disturbance and incredibly resilient) and the prevalent farming system. Others have used the aid modality (e.g. Foster and Leavy 2001) GBS process issues (alignment, harmonisation, ownership – te Velde et al 2006) conditions for change (e.g. laws, incentives, people, policies (Seymour 2000)) or focus of change (e.g. capacity, decentralisation, monitoring, civil society – DFID 2003). In all approaches, it is as much about the location and scale of intervention as it is about the modality, the process and the conditions: they are all relevant and meaningful.

The poor do not exist in a vacuum but in a particular institutional landscape and they have a particular set of assets as a basis for the livelihoods. Because of their vulnerability, for the poor, this initial mix is particularly important in determining policy impact and the principle is relevant at different scales, whether at the local level (what Blaikie (2003) termed the small scale dependants) or at the macro-scale (national and international). We need to consider the mix of policy instruments and their relationship to the variety of groups known collectively as the rural poor, and: under what mix of conditions does the mix of instruments work. Empirical evidence shows that when the conditions are right, the miombo can generate substantial benefits for the poor (e.g. Bwalya 2007, Jumbe *et al* 2007, Monela & Abdallah 2007). However, conditions are not static, but co-evolve: whether these benefits can be sustained (or indeed are currently sustainable) remains dependent on that co-evolution.

The importance of setting the right mix and their sequence or phasing therefore becomes key and suggests that a contingency approach is required: “no one size will fit all”. This also implies that, as conditions change new options may then be applied, in an iterative way.

The opportunities and barriers identified by Campbell *et al* (2007) delimit the analysis and the scope is restricted to those key policies, institutions and processes identified by the literature reviewed.

3. GETTING THE MIX RIGHT: POLICY OPTIONS FOR THE SOUTHERN AFRICAN DRY WOODLANDS

3.1. 'FORESTRY' IS MARGINALISED NATIONALLY, BUT FORESTS ARE STILL A VALUABLE RESOURCE AT HOUSEHOLD LEVEL

3.1.1. THE PROBLEM

The cry that forestry is marginalised is one not only heard in the countries of the miombo biome. However, forestry is not being singled out: rural development and environment sectors generally have seen declining fiscal and ODA contributions for the last decade (Madhvani 1999, World Bank 2005a, ODI 2006a). Forestry has been one of the least responsive however: this is partly a result of slow reforms to the old-style forestry administrations and the fact that forestry is cross-sectoral, with mandates overlapping on a range of agencies, and impacts from economic and social processes outside of the sector (Bass *et al* 1998). In reference to this, the World Bank (2007d) notes that dealing with the problems in forests through incentives and institutional issues within the [forest] sector may be insufficient to address the problems, because many of the major decisions are made in agencies that have little or no involvement in forest issues, and who are relatively rarely contacted by those who do.

What conditions are needed to get the local value of miombo recognised nationally and given the resources it deserves? Several conditions are commonly cited as falling into the mix: Making forestry relevant in eyes of the key strategic ministries; getting forestry mainstreamed in other sectoral ministries (e.g. health and energy) but also getting it relevant at a decentralised level (Geller & McConnel 2006); generating evidence to demonstrate the relevance of forestry to macro-economic policy priorities (Geller & Thornber 2005), and to manage the combination of interacting policies on the ground to maximise pro-poor impact (Bess *et al* 1998). Finally and related to the subsequent sections, forestry itself needs to respond to the new macro-economic growth and poverty reduction agendas by redefining its relation to poverty (Hobley 2007).

3.1.2. CLEAR POLICY FRAMEWORKS

The forests sector needs processes that simplify the complexity of its institutional landscape so that it can 'plug into' the PRS processes at all relevant levels – whether in relation to, say, traditional health, soil reclamation, infrastructure or industrial production. Analysis by Evans *et al* (2006) suggests that a more comprehensive coordinated and nationally owned policy framework for rural development sectors like forestry would enable them to respond to the wider changes and influences derived from the PRS processes and the shift towards budgetary support, civil society reform, decentralisation and the increased private sector participation. A clear policy framework that provides clarity on role of the state in forestry and in poverty alleviation is seen as vital for forestry to compete successfully with other policy priorities on the development agenda (Cabral 2006, ODI 2006a). This framework needs to influence other sector processes, raise the profile of forestry priorities, and mainstream forestry into planning and M&E processes.

The NFP process has been touted as the approach to developing a comprehensive, coordinated and nationally owned policy framework for the sector as a whole and a tool for raising the profile of forestry (Geller & McConnell 2006). However, the success of NFPs in this is limited. For example, whilst the Malawi NFP process was considered relatively strong on consultation and explicit with respect to prioritising livelihood, poverty and equity concerns in community forestry (Bekele 2001), major challenges remain for realising this intent: the political vision for community forestry remains fundamentally controversial; there are problems with the basic institutional and policy framework; the process itself is stalled in practical terms; the impact of and linkages with broader policy and political change in Malawi are ambiguous (Kayambazinthu & Locke 2002). They argue that the Malawi NFP has not, despite good intentions, engaged directly with the broader challenges raised by the changing face of poverty, including HIV/AIDS, food security, land and livelihoods. Similarly Monela (nd) assesses that the Tanzania NFP has been unsuccessful in tackling the key constraints to miombo management which are multi-sectoral and multi-level (national and local) in nature.

If NFPs are not capturing the full range of issues related to the household use and management of miombo and presenting them in a way that provides a clear policy framework, it may be necessary for either the process or the instrument itself to be reviewed. One approach may be to go local in order to go national (notwithstanding the issues with decentralisation discussed later): the production of a general national framework that allows for local flexibility or the development of regional or sub-national frameworks that can feed into integrated planning and

implementation at the decentralized level may be relevant (James *et al* 2002, Hobley, 1996).

Sub-national profiling of the role of miombo by drawing it into the integrated development planning processes of local or regional government levels provides the opportunity for delivering forestry objectives or outcomes through the development plans of other sectors, improving efficiency of resource use. The social protection role of forests can be quite context specific for example, and difficult to define nationally (Farrington *et al* 2004), but at a local level it should be possible to link it up to social protection programmes if the policy space is created nationally for this to happen. . This approach has found success in South Africa, where forestry has been incorporated into Provincial and District development planning through a process of mapping, profiling and stakeholder engagement (DWAF 2003).

This may also be relevant if miombo management is not prevalent in all areas of the country; so whilst its national profile may be low, it can be important at a sub-national level. Additionally, opportunities in Miombo are strongly determined by their biogeography (as illustrated for Zambia by Bwalya 2007) so to capture the locally-relevant value of the dry woodlands requires frameworks that capture the value of miombo in its local context.

3.1.3. UPSTREAM ANALYSIS

The development policy dialogue at the macro policy level can provide an opportunity to engage finance and social policy sectors in dealing with some of the wider, cross-sectoral issues of forestry and as such mainstream forestry into the PRS and related development policy planning processes. However, Lawson *et al* (2005) found for Tanzania that this opportunity was often not grasped – government capacities for cross-sectoral working were weak. In turn it could enable issues impacting on local forest use to be dealt with by a much broader target base than a sectoral programme. It may be that it was the narrow sectoral focus of forestry in the past that lead to its marginalization: it needs to make itself relevant to other sectors it influences or is influenced by. Driving a participatory process that is not [Sector] Ministry-led that can draw in perspectives from a wider range of stakeholders, that can consider options off-budget as well as on-budget processes may be most appropriate. This may require a representative stakeholder body to take the lead.

Box 6: Mainstreaming Forestry into CAS process: The World Bank

Given the diverse nature of the miombo's products and services, an approach that provides for the cross-sectoral benefits and impacts is required. The World Bank proposes that the upstream assessments should provide a broad scoping of the status of Development Policy Loans, proposed forest sector or larger natural resource project activities, and other cross-sectoral developments that are planned in Country Assistance Strategies. This should be done with a view to ensuring that sector work is not based simply on problems within the forest sector, but on a broader appreciation of all influences and changes likely to affect forests, and an analysis of what combination of macroeconomic, cross-sectoral and within-sector measures are likely to produce the best outcomes from national economic, environmental and social perspectives

The new World Bank Forest Strategy and operational procedure 8.60 should guide the DPL process including upstream analysis and ongoing monitoring of potential impacts on forests, not only from the forest sector but from all aspects of its work in a country. OP 8.60 emphasises the use of Country Environment Assessments and Strategic Environmental Assessments to provide upstream analysis to inform the Country Assistance Strategies of the broader context of forests in terms of their contribution to poverty reduction and economic growth.

The World Bank 2004 a, c, 2007d

Donors should ensure forestry is mainstreamed into their assessment processes (Box 6) whilst the forestry sector – state, private and civil society – needs to generate the evidence that demonstrates the importance of miombo to relevant policy priorities. This is explored further in 3.1.4 below.

3.1.4.

MONITORING AND INFORMATION GENERATION

As has been mentioned above, researchers are now generating information on the relations between miombo and poverty. One of the problems has been that the quantification of household values is context specific, irregularly collected and difficult to aggregate nationally (Campbell *et al* 2007). Forestry has to improve its evidence generation and the systems it uses to effectively feed information back up

to policy makers in a way that is digestible to them. The World Bank (2005c) suggest that countries establish a national index (forest governance, contributions of forestry to the economy, forest conservation linkage, forest-poverty linkage) that can provide a useful monitoring tool in the context of General Budget Support (GBS).

The GBS process does provide the opportunity to establish indicators and milestones to monitor progress and provide benchmarks that can raise the profile of forestry and its relationship to broader institutional reforms in a country, bringing it to the attention of Ministries of Finance, even if no direct support is provided to forestry through the instrument (World Bank 2007d). The effectiveness of these conditionalities has been found to be variable however; Seymour & Dubash (2001) found they were most effective when linked to other programmes – such as civil society development programmes – that helped build a string momentum for change in a particular country. That said, sectoral planning processes of the GBS-PRS-MTEF framework seem less able to cope with the cross-cutting issues faced by forestry (Cabral 2006). Table 3 summarises the references made to forestry in the most recent PRSs of three miombo countries (Zambia, Tanzania, Mozambique) and the findings imply that forestry is often poorly (or simplistically) understood in terms of its contribution to the country's growth and poverty alleviation.

Findings from the review shown in Table 3 suggests that the PRSs closely associate local (community) exploitation, particularly for energy, with deforestation, although no data is presented to confirm this. Some other observations are:

- Linkage to other policies and processes are limited (except in Tanzania with land tenure security)
- Local government is scarcely mentioned in relation to forestry: communities and forestry agencies are the main foci, although all the documents stress decentralisation as a main pillar of the implementation process.
- Technical forestry and technical solutions remain central to management responses to conservation and sustainable management.
- None explicitly recognised the social protection function of forests; the economic importance of forests was recognised in Zambia (likely to be the plantation sector) and the livelihood role in Tanzania (although here the income generating potential was the main focus.)

Forest Policy Issue	Zambia FNDP 2006-10	Tanzania NSGRP 2005-2010	Mozambique PARPAII 2006-2009
Decentralisation Local Government Community management	To build up local forest governance through decentralisation and community based forest management Formulate joint forest management plans and appropriate legal frameworks	Village titling to secure tenure and promote PFM Establish village forest reserves and support CBNRM scale up PFM for income generation	Local communities have role in env mgt
Regulations	To develop a conducive policy and legislative framework for enhanced contribution of the sector to the national economy		Collection of public revenues from NR Oversee compliance with natural resources legislation;
Forest Enterprise Development	Encouraging the involvement of local people and the private sector in forest businesses and Strengthen commercial forestry; b) Promote forest sub-sector financing and investment	Value addition from processing primary forest products	Plantation industry important industrial sector
Recognition of role of forestry In economy	>3.7% GDP recognised		Forests a core support for agricultural productivity
In rural livelihoods	The growing population implies that the number of people who exploit natural resources as a means of sustaining themselves will also increase.	Link between forest degradation and increased vulnerability is linked to a need to check deforestation Recognise forestry as one of the main rural non-farm incomes Aim to increase contribution of forestry to rural communities,	Forest conservation and food production linked
Conservation and environmental service functions	Maintain Protected Area Network Strengthen forest resource protection and monitoring.	Environmental conservation and protection, maintain protected areas network, support catchment management	

Access to resources			Improve equitable access by communities and individuals to natural resources for sustainable use and management
Sustainable management Forest & NR	To strengthen management systems for sustainable utilization of natural resources		Ensure sustainable environmental management of natural resources, including new technologies Prevent and control uncontrolled burning of lands; Develop forestry care systems to establish and enrich forest species and formations.
Energy	Significant charcoal market in Zambia	Link energy and deforestation, assume women collecting firewood is unsustainable Concerned with forest exploitation and plan to secure energy supply (forests charcoal)	Curb use of forest for biomass fuel; Increase access and sustainable is of biomass fuels
Central State functions	Enhance capacity of forestry & wildlife departments		Sustainable NR management promote information service on existing natural resources; and improve oversight of the exploitation of these resources.
Forest Governance		Environmental awareness and public awareness of legislation	Public awareness of forest policies and laws.Consolidate and publicize legislation on access to natural resources; Recognise Civil society role in envtl management Implement a strategy to manage the people - animals conflict;

Table 3: Forestry as mentioned in the most recent PRSs for Zambia, Tanzania and Mozambique.

Box 6: The need for policy harmonisation in the miombo

Land ownership legislation is not matched by changes to forestry legislation, they do not confer equal sets of rights. Salamao & Matose 2007 Mozambique

Agricultural policies, particularly those supporting cash crops are causing most deforestation. Chipika & Kowero 1999. Zimbabwe

Land use planning and land tenure and overlapping mandates between sectors and government spheres are key issues affecting sustainable miombo management that need to be resolved. Monela nd. Tanzania

Land and forest tenure conflicts disempower local user groups. Nhantumbo, Monela & Kowero (2003) Tanzania and Mozambique

3.1.5. POLICY HARMONISATION

Local evidence from the field suggests that overlapping or unclear mandates, incongruent or ill-matching policies and a lack of information on legal roles and responsibilities create inefficiencies and disincentives for sustainable use (Box 6 for some examples). Policies should be mutually supporting, by generating evidence through monitoring, the relevant agencies should work to resolve policy conflicts. Even if the problem is structural (for example where legislation requires amendment) there is sometimes sufficient flexibility to allow locally-relevant responses to be piloted. Donors can often support the testing of new policy approaches and the feed back of evidence in to the planning process.

At the national level, cross sectoral or cross-ministry engagement for policy harmonisation may be facilitated through MDBS-PRSP process where donors are working with central ministries. Donors can support these central agencies to manage the dialogue leading to a level of cross-sectoral complementarity in terms of policies and programmes programmes (for example the role of donors in facilitating emerging national processes in the case of Tanzania (Lawson et al 2005)). This can then be fed through to integrated implementation. The most important areas of policy conflict in the miombo appear to be:

- Land and natural resource tenure
- Natural resource, agriculture and land-use policy; and
- The alignment of mandates between Forestry, Wildlife and Agriculture.

3.1.6. INSTITUTIONAL REFORM

As has been mentioned, most forestry departments in the region are in the process of reforming, to better enable forestry as a sector to both account for itself nationally whilst enhancing value of miombo at the household level. We look here at two aspects, that of institutional and policy reform. Clear policy frameworks, if they have been developed through participative stakeholder engagement and have sufficient scope, often have the legitimacy to initiate and guide the changes required. Two aspects of change are identified:

Aligning functions

- Central government (policy, regulatory oversight)
- Local government (integrated, locally appropriate policy interpretation guiding service delivery)

Policy Harmonisation

- Aligning 'old' forestry departments with the updated policy and legislation, and monitoring function
- Aligning 'old' forestry departments with their a new set of clients = the rural poor.

Even with these frameworks in place, there has been considerable resistance from Forestry Departments in countries of the miombo regions (e.g. Box 3). Whilst this is compounded by the slow pace of decentralisation (discussed in the next section), the resistance to external (international) pressure for change and the inherent clientism of the neopatrimonial system means the drive for and ownership of reform has rarely come from within (Hobley 1996, Blaikie 2003). Forestry Departments in the miombo are traditionally growers of plantation (large or small) and protectors of state forest reserves. Capacity for revenue collection is often weak, rent seeking is a problem. In Malawi for example, as charcoal is moved from point of production to the markets, traders incur costs that amount to private taxation by public officials. These officials include people on duty at roadblocks, Traffic Police and the Police 997 Emergency Service. Kambewa et al (2007) has found that such bribes account for 12-20% of the final price of charcoal.

In other countries (such as Ghana and Cameroon where forestry represents a significant economic contribution) GBS has been effectively used with benchmarks that trigger payments to influence the way the state forestry institutions reform themselves. Because the influence can be made through the central budget ministries, the potential for facilitating change is enhanced (World Bank 2007d).

3.1.7. INTERVENTION OPTIONS

The proposed options are based on the need to mainstream forestry into development planning at both local and national levels and the need to safeguard the safety net value of the miombo for the poorest. A lesson from the literature is that getting forestry into PRSPs isn't necessarily about getting forest policies/strategies into macro-planning but making sure that the policies/processes that are in there work together to eliminate the barriers for forestry to work for the poor. The options for intervention include to:

- Work with decentralised government to generate the local evidence base that aids in understanding:
 - The role of miombo in the needs of the poor, the trade-off risks for implementing new development interventions.
 - The services and resources required to secure the basic needs, and build on the current benefits miombo generates.
- Use the evidence generated to strengthen the empirical base of advocacy organisations that tackle livelihood vulnerability or rural development.
- Make sure Miombo is recognised as a safety net and managed as such and incorporated into Risk and Vulnerability planning through Social Welfare departments; don't keep it to 'forestry'. This function is particularly relevant during or after conflict when other means (such as agriculture) are not in place.
- Feed the local evidence base into upstream analyses so that PRSPs and MDDBS processes (CSP, CAS) consider the dynamic poverty-forestry relationship in plan design.
- PRSP Monitoring should include benchmarks/ indicators that monitor key drivers of the vulnerability-forestry relation.
- Recognise that it is not (only) forestry policies, it is about the way the landscapes/arenas/actors interact to affect how the poor relate to miombo.
- Map civil society in relation to poverty and forestry as part of the upstream analysis – to understand its potential for raising the profile of forestry in national development planning.

- Making sure institutions responsible for miombo management work together: e.g. that agriculture does not introduce new tobacco varieties that demand large volumes of wood or result in new woodland clearances that impact negatively on the access and use of forests by the poorest.

3.2. RESOURCE RIGHTS ARE SHIFTING TO LOCAL PEOPLE, BUT WITHOUT STRONG LOCAL INSTITUTIONAL AND ORGANISATIONAL CAPACITY, RIGHTS RISK BEING CAPTURED BY LOCAL ELITES OR EXTERNAL ACTORS.

3.2.1. THE PROBLEM

The ongoing trend in public sector reform is towards decentralisation of service delivery, with national agencies focusing on their policy and oversight functions and the strengthening of civil society capacity to support and monitor (Ribot 2004, World Bank 2007d). Rural resource rights are shifting to local people, often not as individuals but in terms of communities or user groups (*ibid*). In many cases, laws regarding land or resource ownership or the rights to benefit from them, have not kept pace with this change, resulting in people being handed responsibilities without rights or resources to carry them out (Arnold 2001). Without sufficient institutional support to strengthen local institutions to cope with their increased role, they lack organisation to manage their legal jurisdiction and promote development, and risk becoming dominated by elite who capture what value there is in the resource they are responsible for (Campbell *et al* 2007).

It is suggested here that this does not demand a forestry response *per se*: the use of community institutions for supporting policy implementation is an issue for most rural sectors (e.g. agriculture, wildlife, health, water resources) and as such should be organised through the local government institutions responsible for integrated implementation and for coordinating sector interventions in any given area. In Tanzania this is the village, and Wily (2001) notes that this legal recognition has empowered the village to successfully establish its accountability over its jurisdiction in many cases. This reform of forest tenure is the other main success factor that is brought out through the literature as key to effective decentralisation, particularly in the assigning of rights and responsibilities from the state to communities.

3.2.2. DECENTRALISATION: PART OF THE PROBLEM OR PART OF THE SOLUTION?

Opinion is divided as to whether decentralisation of control and management of natural resources will lead to a more efficient, equitable and sustainable resource use (Box 7 presents comment on the issue). The right national and locally specific conditions are required for it to stick successfully. Ribot (2002, 2004) outlines a set of conditions that need to exist or be established to enable decentralisation to occur in a way that is beneficial to the management of natural resources (Table 4).

Box 7: Potential Risks from Decentralisation: Opinions from the literature

Superimposed on the precarious status of rural livelihoods comes the advent of decentralised local government with its idealised projection of participatory processes in communities enforcing good governance on the part of district assemblies, and effective service delivery by public agents at local levels. In the Malawi context, it is difficult to see how this can do anything other than make things more difficult for rural poverty reduction.
Ellis et al 2002

Whilst in principle decentralisation [in Malawi] is desirable, the prerequisites for making this work are absent. Decentralization, as currently undertaken, is unlikely to succeed because it is misconceived - or, at best, that it has been misphased. Current policies seek to 'reform' public sector institutions and behavioural norms based on a notion that the state is failing because of a reversion to a lingering 'traditionalism', and that the political class has been insufficiently diligent in pursuing their often proclaimed goals of the effective construction of a Western type of multi-party democracy
Chabal, 1998

Arguments advanced in favour of decentralization [in Malawi] are that it promotes better service delivery and more efficient government; promotes political stability; and assists in interjurisdictional and other forms of equity. In theory, yes. But the prerequisites are that local government is both more capable and more constrained in its patrimonial instincts than central government; that the promotion of local political party bases is not viewed as a threat by the centre; and that imbalances at both the meso- (rich districts subsidising poorer ones) and microlevels (affirmative action for women) are genuinely addressed. These pose major difficulties.
Cross & Kutengule 2002

A sense of realism about the limitations of decentralised local government [in Tanzania] and its place in the wider policy space is needed. Significant capacity, accountability and resource constraints are identified, which may limit the degree to which the decentralisation process will achieve the goal of meaningful participation. In addition to the challenge of ensuring quality local staff and politicians in remote districts, much will depend on the degree to which officials and politicians are downwardly accountable to their constituents. In many cases a culture of disinformation exists which is not conducive to successful local government. A shift in the values of rural citizens away from the expectation of 'development from above' toward a greater sense of ownership and active citizenship is required.
James et al 2002

For successful decentralisation of natural resource management you need:
Elected and accountable local governments
A set of environmental subsidiarity principles to guide the transfer of appropriate and sufficient powers to local authorities.
An effective separation and balance of executive, legislative, and judiciary powers in the local arena.
The transfer of powers as secure rights not as privileges
Support for equity and justice, through central government intervention if necessary.
The establishment of the enabling legal environment for organizing, representation, rights, and recourse so that local people can demand government responsibility, equity, and justice for themselves.
Minimum environmental standards established that can facilitate ecologically sound independent local decision making.
Fair and accessible adjudication and local dispute resolution mechanisms.
Local civic education of peoples rights, including educating local authorities of their rights and responsibilities to foster responsible local governance.
To develop indicators for monitoring and evaluating decentralization and its outcomes and provide feedback

Table 4: Conditions for successful decentralisation (Source: Ribot 2002)

As can be seen even from the brief comments in Box 8, many of these conditions are just not in place. However, the process, sequencing or phasing of decentralisation also seems to be important (*cf* Ellis *et al* 2002, Cross & Kutengule 2002 for Malawi). A step wise approach may then be taken to iteratively pass along the continuum of decentralisation. Cross & Kutengule 2002 state that the first step has to be enfranchisement and empowerment at the grassroots, arguing that it is this which has to drive the administrative reforms of state machinery, not the reverse process.

Fiscal decentralisation (not mentioned by Ribot – Table 4) is identified by a range of commentators (Hobley 1996, Ellis *et al* 2002, Cross & Kutengule 2002, James *et al* 2002, Smoke 2000)³ as a final step, but remains contentious in terms of its impact, as giving additional resources to sub-national governments that are not politically, managerially and technically prepared to use them responsibly can create enormous problems (Smoke *ibid.*). Generally, rural Africa has very low levels of local revenue raising and the provision of tax raising powers to local government threatens to impose severe burdens on the relatively small monetized economy in rural areas (Ellis *et al* 2002, James *et al* 2002).

Domination of decentralised institutions by the 'Elite', often considered a barrier to local involvement, may not always be a bad thing noted Ribot (2004). In neo-patrimonial societies such as Zambia, Zimbabwe or Malawi, the power and role of traditional authorities remains strong in social organisation and cohesion, and the traditional authority system managed to negotiate sufficient space to retain their legitimacy with the people through the political changes (Maliro 2001). It can be argued that this is less so in Tanzania where strong social engineering re-ordered the rural economy in the 1970s. Olowu (2001, 57 in: Ribot 2004) reminds us that the local elite are required for the success of local government systems - they bring resources, knowledge [and] networks that make these systems become fully operational and effective. Ribot (2004) also argues that elite capture does not necessarily mean that all of the benefits of a reform go to the elite. Evidence from Mansuri and Rao (2003) suggests that the poor are also likely to benefit.

However, the more unequal the society, particularly when members of the elite concentrate their powers, the less effective are efforts to target the poor. Improving governance at the local level can deter elite capture, by making local leaders down and up accountable. A thicker web of reporting and accountability relationships backed up by simple regulations, checks and balances will help. The role of NGOs in holding actors to account has been debated (e.g. Carothers 1999) and in a decentralised context, it is vital that there is a three way relationship, between the NGOs and both local, and, central governments.

3.2.3. STRENGTHENING CIVIL SOCIETY ORGANISATION

Hobley (2006) makes a case for enhancing the participation of the poor in existing political and associational institutions rather than setting up new, sectoral ones.

³ The World Bank website <http://www1.worldbank.org/wbiep/decentralization/africa/africa.htm> provides further debate and lessons on the issue

She argues that civil society can play a key role in supporting the poor to do this. Hussein (1999) similarly notes that farmer participation in research and development delivers policies and technologies more relevant to their needs, and in this way farmer institutions can emerge as service providers for their members. Bukula & Memani (2006) argue that these groups can be particularly helpful when developing small forest-based enterprises (discussed further under 3.3) where there is often a need for processing, marketing and technical inputs that are scale dependent.

Organisation through such civil society groups can, in part, address the limited opportunity or resources the poor have to sustain participation in processes that may otherwise be captured by elites. "It is difficult for poorer people to maintain a high level of mobilisation even for issues that may profoundly affect their livelihoods. Starting with those interventions that focus on securing people's livelihoods and allow them to move beyond sometimes coercive relationships based on patronage but which provide immediate security to those where they have a degree of independence from patronage systems will help to develop a more effective capability to participate in decision-making processes" (Hobley 2006: 33).

3.2.4. FOREST TENURE REFORM

Ribot (2002 – Table 4) refers to the transfer of powers as secure rights not as privileges. Certainly whilst responsibilities are often transferred, the [central] State often retains allocatory powers and revenues over more valuable forest areas (Hobley 2006, Chomitz *et al* 2007) and in the miombo region, regulatory provisions for use and access of centrally-controlled state reserves are considerably higher than for customary land forests. Local governments are rarely involved in these arrangements. Hobley (2006) makes the point that current customary land tenures that grant usufruct rights over land can be exploited by new elites if the value of certain forest products rises, or in some cases is monetised. Blaikie (2003) argues that increasing community rights over miombo threatens control of resources hitherto controlled by political elites, especially when land tenure reform is on the CBNRM agenda but also that the flow of patrimony from local sources, via chiefs and other local leaders to the centre, is potentially interrupted, allowing new political [rent-seeking] entrepreneurs to enter at the local level. This has particularly serious implications for women's land and resource rights and those of the poor (Tsikata 2003 in: Hobley 2006). Tsikata (*ibid*) argues here that the central government has a role even in decentralized forest situations, to protect the rights

of the chronically poor through legal and policy provisions (the “support for equity and justice...” condition from Table 4).

3.2.5. IMPLEMENTATION OPTIONS

Effective local institution can only be built from the bottom up, albeit within an effective supportive environment (such as legislative reform or support to law enforcement). The balance of responsibilities, powers and resources at each level of government needs to be sufficient to allow it to implement its mandate. This goes for devolution to community institutions: the group most unlikely to have the technical management and marketing skills (and possible financial resources) required to manage the forest resource and the group most susceptible to outside influences. Even when resource rights and responsibilities are clear, decentralisation risks the externalising of risks or liabilities to local people.

Issues of local institutional development in the context of decentralisation are cross-sectoral: to ensure they are not marginalised they could be brought in at indicator level in the PRS and CAS processes so that they are monitored. Evidence of tangible results related to decentralisation, capacity (e.g. evidenced by local integrated development plan implementation), legal reform, may be cross referenced to those on forest cover or forest law enforcement. The options for intervention include to:

- Ensure decentralisation of forest management is undertaken sequentially and with consideration of the local conditions. Consider implications of fiscal decentralisation for income generation from miombo and the rent-seeking ‘value chain’.
- Ensure local government has greater downwards accountability (to the citizens) and local legitimacy
- Decentralisation/Devolution needs to be the whole ‘package’: rights, responsibilities, capacity (and resources) and recognise that support will be needed to facilitate delivery of the responsibilities.
- Strengthen the voice of the poor
 - This does not necessarily mean through local ‘forestry’ institutions, which may be the structural problem

- Examine local (new/indigenous) institutions: are they reinforcing structural poverty; ensuring local institutions are legitimate, but, enabling.
 - Enable access for the poor to the right information,
 - Constituency representation through stronger parliament and CSOs,
 - Government and/or civil society providing effective watchdog of local elites
- Effective legal and regulatory back-up from support agencies (state/CSO) for local institutions to manage their responsibility
 - Land and complementary resource rights secured
 - Legal capacity to establish locally relevant rules
 - Establish simple regulatory frameworks or requirements retention in scale with the resource capacity and its value. [Miombo has little high value timber – it is a low value woodland (financially) with important subsistence value, which has low intensities of management applied (fire/fuel management, coppice management)]
 - Management planning, licensing requirements
 - Manage benefit sharing, revenue generation and retention and be aware that benefit sharing mechanisms in the miombo states will attract 'rent-seeking entrepreneurs'.

3.3. NEW INTEGRATED CONSERVATION-DEVELOPMENT MARKETS ARE EXPANDING AND EMERGING BUT AT A LOCAL LEVEL THERE IS LIMITED SUPPORT FOR LOCAL FOREST ENTERPRISE DEVELOPMENT. LOW RESOURCE RENTS COUPLED WITH HIGH MANAGEMENT TRANSACTION COSTS REDUCE THE VIABILITY OF FOREST ENTERPRISE DEVELOPMENT.

3.3.1. THE PROBLEM

There are new market opportunities emerging for products and services from the miombo, but there remains limited financial or technical support for forest

enterprise development. Traditional products suffer low margins and transaction costs often make their commercial viability marginal. Ecotourism and NTFPs can motivate conservation and raise incomes but is difficult to maintain such IGAs in the long-term. Also creating alternative livelihoods outside of forests does not mean reducing pressure on forests (Chomitz 2007).

Domestic private sector participation is influenced strongly by political stability, macroeconomic policies, political attitudes to foreign direct investment/ involvement of the private sector, levels of savings, and domestic market factors. With decentralisation, tax raising powers developed by district/local governments to raise operational funds create potential disincentives to rural investment. Ellis *et al* (2002) quote the example of Uganda where not only does local tax revenue impose punitive burdens on monetised activity in rural areas, it is also almost wholly utilised on sitting allowances for councillors and other functionaries rather than providing locally specific services to rural citizens. Given that the miombo-based enterprises are primarily small, itinerant and seasonal (for rural households agricultural production remains, by and large, the mainstay of the rural economy) revenue collection may be difficult to do effectively.

3.3.2. NEW INVESTMENT OPPORTUNITIES FOR MIOMBO

Overall, private sector investment into forestry is substantial and growing. In 2003 private sector forestry investment in developing countries and countries in transition accounted for circa US\$15 billion – 9 times ODA flows whilst the forest and forest products industries generated an annual production of c. US\$750 billion (World Bank 2007d).

Whilst much of this is commercial investment, NGOs and other bodies are also investing, the latter often involved in conservation related activities and small and medium enterprise development. In fact, conservation activities appear to have greatest potential access to innovative finance (Table 5), but many other SFM related activities can also benefit from such mechanisms (UNDP 1999).

The World Bank strategy (2004c) recognises the potential of partnerships with the private sector and engagement with responsible investors. It notes the importance at a national level of good governance whilst Chomitz *et al* (2007) adds the need for incentivisation at the local level: a good system with incentives is more effective than narrow a regulatory approach (WB 2003). Creating the right environment requires certain policy and market interventions: whilst this will inevitably vary

between country and sub-sector, some common policy issues emerge (Chomitz *et al* 2007, World Bank 2003, 2004c, 2007d, UNDP 1999, Karsenty 2000):

- Policy reform can help reduce and/or make equitable transaction costs, and create the legal space for certain types of investments to operate or markets to become viable.

Mechanism	Type	SFM Barrier Addressed	Main sources	Main recipients	Timing	Likely Scale
Portfolio Equity Instruments	Direct financial: equity	Operational (lack of local capital)	Private commercial	Private commercial	Late stage	Global National
Public Private Instruments	Direct financial: equity, debt	Operational (lack of capital, risk)	Public Private commercial	Public Private commercial	Early stage Mid stages	Global National Local
Private Sector Forestry Investment Funds	Direct financial: equity, debt	Operational (lack of capital flows into new investment areas)	Private commercial (public)	Private commercial	Mid stage Late stage	Global National
National Environmental Funds	Direct financial: grants, concessional credit	Operational (potential for structural)	Public Private commercial	Public Private commercial and non-commercial	Early stage Mid stage Late stage	Sub-regional National Local
Debt-for-nature and development swaps	Direct financial: transfer payment	Operational (structural can be included in conditionalities)	Public (bilateral) Private commercial	Debtor government NGOs	Mid-stage Late stage	National Local (site specific)
Conservation trust funds	Direct financial: transfer payments, concessional credit	Operational (potential for structural)	Public Private	Government agencies, NGOs, CBOs	Early stage Mid stage Late stage	Local Sub-regional
Biodiversity venture capital finds	Direct financial: equity, debt	Operational (risk reduction)	Public Private commercial and on-commercial	SMEs in biodiversity-based businesses	Early stage Mid stage	Global National Regional
Small and medium scale enterprise credit lines	Direct financing: concessional loans	Operational (access to capital)	Public Private	SMEs	Structural (early/mid/late stages)	National Local
Micro-credit	Direct financial: grant concessional loan	Operational (Access to capital; risk) Structural (inadequate financial institutions in rural areas)	Public ODA & locally generated private savings	Private small scale farmers and other land owners	Early stage	Local

Mechanism	Type	SFM Barrier Addressed	Main sources	Main recipients	Timing	Likely Scale
Small Targeted Grants	Operational		Public Private (mostly non-commercial)	NGOs, CBOs, communities, research groups	Early stage Mid stage	Local
Bioprospecting fees	Commoditisation: creating meaning for biodiversity use value	Structural (market creation)	Private commercial Some public research bodies	Non-commercial private land-owners and forest users. Some public bodies	Structural (early/ mid/ late stage)	Global
Water Resource Use charges	Commoditisation	Structural (market creation)	Private and public water users	Upstream land owners	Structural (early/ mid/ late stages)	Sub-regional Local
Tradeable development rights	Commoditisation	Structural (legal and policy)	Public Private non-commercial	Private commercial Private non-commercial	Structural (early/ mid/ late stages)	Global National
Marketable forest protection and management obligations	Commoditisation	Structural	Public (possibly private)	Governments with large forests and small protection obligations	Structural (early/ mid/ late stages)	Global
National Forest Funds	Structural (though can be direct financial through targeted payments)	Structural Operational (risk reduction, SFM costs)	Internally generated income ODA grants	Government forest departments Private farmers and land owners	Early stage Mid stage Late stage	National Local
Environmental Performance bonds	Direct financial: incentive for good environmental performance	Structural (high discount rates, high opportunity costs of SFM)	Large private commercial operators	Public sector	Early stage (payment) Late stage (payback)	National Local

Table 5: Innovative Financing Mechanisms for SFM (Source: UNDP 1999 Annex 4)

- Institutional or governance reform can improve transparency in decision-making processes, in law enforcement, in land and resource ownership and tenure; through establishment of credible standards and monitoring systems, can improve accountability.
- As part of trade reform, fiscal and trade policies can be revised to improve forest revenue collection, increase rent capture and ensure benefits are effectively distributed; to establish systems and processes for the financing of or payment for environmental services.
- Conservationist practices can be rewarded through market-oriented certification instruments, although the degree of penetration this offers is often market-limited.

There is clearly a role for both the public and private sectors, in a range of sectors outside of, but related to, forestry as well as forestry itself. Fiscal, legal and market policy reforms will influence the role the private sector can play in strengthening miombo management and use by the poor.

There are opportunities for policy to facilitate new modes of partnership between public and private sectors (Table 5) and to support, underwrite or regulate the use of novel financing arrangements that support both national and local initiatives.

3.3.3. INSTITUTIONAL OPTIONS FOR FOREST-BASED ENTERPRISES

The multitude of institutional options available and the parameters regarding their appropriateness for various business development situations, can be roughly separated into four categories:

Those that operate at **community/ village** level as the primary business unit for collection and/ or income distribution. These primary business units are normally associations, cooperatives, local partnerships or companies. Often the main determinant of structure is that form of incorporation that requires the least effort to get a collective bank account opened. However structures that facilitate efficiency, democracy, identification at communal level and transparency in their operation are

more important. Some countries have simplified procedures to facilitate a communal “business group” to become incorporated.

Those that operate as a **post harvest, primary storage, processing, forwarding and selling** organisation. Such an organisation can again be an associations, cooperative, partnership or company. They can either be wholly communally owned, or joint ventures with tertiary level organisations. The main distinguishing feature is that they are local intermediaries in the collection/ post harvest/ selling activities and frequently have little control over the added value processing and marketing activities.

Tertiary level organisations that operate with market orientation. This level of institution should understand the importance of meeting/supplying a market need and understands the mix of business ingredients to make this happen. Frequently this means a company structure. Ownership will normally be a mix of the above mentioned intermediaries and primary business units, the in-country private sector, overseas investors, NGOs, and possibly state owned business units.

Service level organisations. This is a more diverse grouping, including private sector business facilitators, government extension services, financing organisations, overseas development assistance agencies, NGOs, legal/ accounting/ technical/ training service providers etc.

The overriding objective when discussing institutions, is to create an enabling environment to encourage the private sector to invest in business development for the opportunities presented. Investment in institutional analysis and development is normally part of the business planning function for each individual opportunity. The wide range of differing institutional factors surrounding each opportunity is beyond the scope of this paper. There is however a generic investment need both at a country or regional level to:

- Research, analyse and document a selection of past economic activities relating to miombo woodlands to identify the critical business success (or failure) features relating individual activities
- Identify and document within each miombo country (and also regionally for those providers that operate regionally) where the most suitable mix of miombo related business extension assistance services are located.

- Recommend capacity building investments to overcome “missing links” in the business development process for miombo related economic opportunities. This could include a wide range of activities, including possibly: selected product market studies, selected product resource availability surveys, subsidised business plan preparation services, capacity building of relevant government/ quasi-government and private extension services, capacity building for miombo related business plan preparation, a contestable fund for business planning/ business establishment, and management training.

The challenges facing the small investor or entrepreneur in the miombo are technical and specific on the one hand (related to the low inherent productivity of the system) but also cross-sectoral and generic to many small enterprises on the other. Sub-national planning and influence may be the tactic to use to draw issues of developing sustainable forest enterprises into national budget processes.

3.3.4. NON-TIMBER FOREST PRODUCTS

Although many miombo-related income generating activities are just that – a livelihood activity to generate income for livelihoods needs – there are some traditional uses that are more viable enterprises: the non timber forest products honey, mushrooms and wildlife being the main products that represent commercial potential. The challenges for commercialising NTFP demonstrate the institutional and management complexities involved in the miombo. Challenges for commercialising NTFP are typically (summarised from Belcher & Schreckenber 2007):

- Production is often dispersed and markets poorly developed
- Markets are diverse and faddish, but product development is long
- Volumes are typically small
- There are frequent misunderstandings about the level of technology required to get NTFPs to market

Box 8: Constraints holding back Zambia's beekeeping industry:

- Conflict over land access between honey producers and loggers, with the latter seeming to have more rights than the beekeepers
- Limited resource base due to existing laws that define honey and beeswax as minor forest products and restrict beekeeping to forests outside national forests
- Lack of monitoring and regulation of beekeepers by the Forestry Department due to financial and human resource constraints
- Absence of accurate industry data in such areas as production levels, output and marketed volume
- Inadequate support for organic certification, which is central to achieving premium export prices, a better and healthier product and better forest management
- Uncoordinated industry regulation by different government agencies who oversee various aspects of honey production (e.g. beekeeping as a commercial activity, bees as live animals, honey as a food item etc.).

From CIFOR: www.cifor.cgiar.org/Publications/Corporate/NewsOnline/NewsOnline39/honey.htm

- Barriers to entry may be high, when the product development costs are taken into account. Barriers are particularly stringent for food and herbal or medicinal products. Very few low-income countries have the high degree of infrastructural and institutional development, to implement and maintain the strict quality control and sophisticated supply-chain management practices necessary to enter the international market with a new product.
- Certification is a mixed blessing in that it requires a high level of organisation and technical sophistication from producers, especially with regard to management planning, monitoring, product tracing and marketing
- There are often intellectual property rights issues.

Box 8 provides the case of Honey in Zambia and the constraints broadly echo the generic points above.

Box 9: Lessons from nature-based tourism in Malawi

Tourism contributes widely towards the costs of managing protected areas. The Integrated Conservation and Development (ICD) approach builds on the protected area approach by linking conservation and tourism development and by involving the people living in or near protected areas.

However, experience in Malawi shows that while tourism can generate significant revenues, this does not always benefit local communities directly. Liwonde National Park (LNP) is one of Malawi's smaller parks, high in biodiversity and popular among tourists. However, local communities forced to relocate outside the park still experience conflicts with park authorities regarding 'problem animals', such as elephants, which destroy their crops and pose a life threat to community members. The Department of National Parks and Wildlife (DNPW) aims to make Liwonde an example of 'best practice' for protecting the biodiversity of Malawi, whilst ensuring its sustainability through tourist revenues.

Research has found:

- While tourism has brought in revenue, the park only retains enough to cover operating costs, with the rest going to the government.
- Tourism employs 77 people in park lodges and a few small local enterprises. Besides this, there is little local economic impact from tourism.
- Local people resent the lack of employment opportunities, which they consider necessary since they can no longer rely on natural resources from the park. While tourism has supported conservation, it has not brought much development locally. The DNPW is looking at ways to generate more benefits and reduce poaching.

Lessons drawn out are that:

- Revenues must be shared fairly, encouraging entrepreneurial development and discouraging poaching. The DNPW has been granted permission to split total park revenues between the LNP and the local communities, but nothing has happened so far.
- Village Natural Resource Management Committees have been formed, but the lack of empowerment and human resource development among park officials and local people undermines the involvement of key individuals.
- Further research should assess community attitudes, particularly after the implementation of the scheme to share tourism revenues.

IDS 2007

3.3.5.

TOURISM

Tourism is rapidly growing in Africa (ODI 2006b) and is also a growing source of revenue for governments. Southern and Eastern Africa's wildlife-related tourism has benefited from the greatest share of that growth. Often the departments of forestry and environment or tourism are in separate Ministries but have overlapping mandates (see Table 2) in terms of managing a country's forest and woodland resource so although revenues may not always benefit public forestry departments, support for forest-dependent households can be significant, although often localised. It of course depends on the nature of the intervention (*ibid.*) but new modalities of tourism that strengthen linkage between operators and local

economic development households can generate benefit through employment, institutional development, profit or related income share (*ibid.*).

Tourism is no panacea (see Box 9 for a case from Malawi) and the potential for community benefits depend on the wider conditions for pro-poor growth (Ashley 2006).

- Growth is more likely to be broad-based and involve the poor if they have decent education and training, health care, access to infrastructure and market information, and do not face too many barriers to entrepreneurship.
- The literature on 'pro poor growth' identifies many factors that can make growth (in any sector) less broad-based and inclusive of the poor, including macro instability, low human resources, inadequate infrastructure, asset inequality, gender inequality, and insecurity.¹
- Interventions to increase the human capital of the poor can have a dramatic influence on their ability to participate in the mainstream economy.

3.3.6. PAYMENT FOR ENVIRONMENTAL SERVICES

The main (forest) environmental services with potential for financing are watershed protection, biodiversity conservation and carbon sequestration. There needs to be a demand, nationally, or internationally for that service and a land-holder that has the rights to modify or cut trees who may be incentivised not to (Chomitz et al 2007). Logistically, it should be possible to cost effectively collect the funds, make payments and monitor compliance with conditions for payment and it must be clear, who is eligible for how much and under what conditions (*ibid.*)

WWF⁴ lists three steps for proceeding with a PES scheme.

- First, an assessment of the range of ecosystem services that flow from a particular area, and who they benefit

⁴ www.worldwildlife.org/pes/

- Second, an estimate of the economic value of these benefits to the different groups of people
- And third, a policy, subsidy, or market to capture this value and reward landowners for conserving the source of the ecosystem services.

Sanders (2006) raises the following lessons from initial PES transactions that it has had involvement in:

- One size does not fit all
- Identify the services being provided clearly
- Understand and document the links between forests and services
- Begin from the demand side, not the supply side
- Monitor effectiveness
- Design flexible mechanisms
- PES is not a universal solution
- Ensure the poor can participate through the planned delivery mechanisms

There are already instances of PES from miombo forests in Mozambique and Zimbabwe (Hegde 2007). There are many schemes operating worldwide, with either internal government funding (e.g. Vietnam for forest protection) or external donor assistance (Indonesia, Central America, China, Venezuela).

Financing for many environmental services is likely to be international, so regional policy interventions are likely to focus on governance issues such as creating credible international standards (World Bank 2007d), monitoring and information management (Chomitz *et al* 2007). The importance of national policy should not be played down however. The State itself may be a buyer, or provider, of

ecosystem services, but it also needs to ensure the appropriate regulatory conditions are in place (Ravnborg et al 2007:26) to enable:

- The legal recognition of private PES arrangements
- The regulation of the participation of intermediaries; and
- The legal arbitration in cases where external parties wish to criticise a PES arrangement.

There is reportedly limited evidence at this stage of the impact of PES on reducing household vulnerability. The focus has been on the scheme (Ravnborg et al 2007) and Hegde (2007) reports that in the case of Mozambique, payments have reduced the need for forest use as an income generating option.

3.3.7. CARBON AND AVOIDED DEFORESTATION

Carbon has been pulled out as a specific PES case due to its particular relevance to the forest context and the reported high applicability (Chomitz et al 2007) of payments for avoided deforestation.

The role of forestry in the international market in green house gas emissions is still marginal (Karsenty 2000): the establishment costs, offset assessment complexities, risks of leakage and forest loss and current carbon values – particularly in the voluntary market – give it marginal value (*ibid.*). Whilst low productivity presents an economic barrier to technical management (Table 1) the scale of miombo coverage (Table 2) and the impact of good management (such as fire management) mean that it has great potential. The voluntary offset market is already using carbon offsetting to co-fund improved miombo management and community utilisation (e.g. Envirotrade in Nhambita www.envirotrade.co.uk/Pages/mozambique_sustdevel.htm) but at this stage it remains largely outside the compliance market defined by existing Kyoto Protocol mechanisms, although recent government discussions in Bali have resolved to include forest conservation in future discussions on a new global warming treaty.

Systems based on the 'compensated reduction' approach are apparently among the most favoured as they would allow avoided deforestation to be incorporated into the CDM market mechanisms (Peskett *et al* 2006). Should avoided deforestation fall under the Kyoto Protocol mechanisms in due course; measurement, monitoring and management will still remain challenging: without defining deforestation and understanding the multiple causes, the distribution of payments and the likely impact of such incentives on deforestation will be complex to calculate.

What does still need to be considered is that enhancing woodland conservation through these new instruments has a trade off by reducing the access the poorest have to miombo for subsistence and commercial use, even if that access is currently leading to resource degradation in the short term. Such instruments would have to be accompanied by interventions that enable rural households to realise their subsistence needs.

3.3.8. CONCESSIONAL LOAN FINANCE AND LIVELIHOODS

Access to concessional lending is seen as virtually essential if communities are to be actively involved either as primary level collectors/ processors or as partners in miombo forestry related business opportunities. Typically concessional lending will be through either a domestic development financing institutions (DFIs) or a micro – finance scheme. For communal resource and communal borrowing situations, some kind of cooperative guarantee arrangement among borrowers is normally necessary to improve credit availability and assure repayments. The micro-finance schemes that have been most successful in Africa have not been those that focus on productive credit, but those that begin with savings (Grant & Allen 2002). From the perspective of the poor, savings are usually more important than credit: Credit increases risk while savings reduces it (*ibid.*). Since the poor are risk averse, they have greater demand for savings services than for credit. Evidence from Tanzania supports this: in a study of six microfinance schemes Wild, Millinga & Robinson (2008 in prep) found that village savings and loan schemes have proved more successful than financial services associations or savings and credit cooperative societies. These schemes can be undertaken as part of an intervention to support improved forest management and household livelihoods (see Box 9 as a case study).

Box 9: Village savings and loans as an intervention to support income generation and forest conservation: Tanzania (Wild, Millinga & Robinson 2008 in prep)

Findings

1. VSL have produced good results and members are overall satisfied with the financial services they receive and have been able to make positive changes to their lives. In communities that have relatively high poverty levels the schemes are having some impact.
2. An often repeated appreciation from many members are the social changes, with the solidarity groups creating strongly social capital for saving and business development.
3. Improved environmental management, is to a considerable extent, mediated via the financial and social benefits, and these have to be functioning to achieve improved environmental governance. Thus the three factors are linked, and when individuals, households and solidarity groups are making money and working together improved environmental governance is possible, and households can make a wider range of choices.
4. Microfinance is showing promise in not only stimulating higher levels of environmentally sound economic activities at community level, but also providing a much sounder platform from which to develop a range of alternative income generating activities than hitherto.

Lessons

1. To be fully effective as an environmental intervention microfinance needs to be part of a suite of related activities that operate in concert. Its effectiveness as a stand alone 'conservation action' is likely to be limited. The other suite of activities will be site specific but may include some of the following;
 - institutional capacity building (at community, government and civil society levels),
 - environmental education
 - common property resource management,
 - enterprise development,
 - judicious resource protection,
 - development and conservation education,
 - cost and benefit sharing.
2. There is a tendency for the microfinance component of conservation projects to be or become implemented separately and to loose synergy and even create conflict. It is very important to ensure that a microfinance component is very well integrated with other development and conservation components, for most effect. This integration does not mean, however, that conservation linkages always need to be writ large.
3. The design of the micro-finance model is critical to performance across all three criteria, financial, social and environmental.
4. The best performing model reached a limit beyond which it needs further financial intermediation: it is self replicating.
5. The use of direct grants for start up financing should be avoided.
6. Initial in-depth training is critical and should not be compromised.
7. Long-term arrangements need to be made for support, motivation and regulation.

Support for development financing/ micro-finance institutions is therefore an important part of the investment package to support miombo forestry related business opportunities. Such support for communal business opportunity lending is invariably more costly in terms of specialised staff time and risks for the institutions involved. The Tanzania example shows how savings schemes linked to forest

conservation can improve financial, natural and social assets for the poor. The value added by micro-finance is strengthened when linked to other interventions aimed at improving people sustainable use of resources.

3.3.9. INTERVENTION OPTIONS

When scaled up to reflect national contributions, the value of miombo to national economies can be impressive (e.g. Jumbe *et al* 2007). The value of miombo at a household level whilst significant (e.g. Hegde 2007, Bwalya 2007) in terms of actual monetary income generation potential, it is limited. One has to be realistic what monetary benefits can be derived from miombo by individual households: there are ecological limits to production in the natural (*in situ*) context. Most woodland derived enterprises are likely to be small and part of the miombo's safety net function. In any commercialisation intervention, trade-off risks for the poorest should be considered: the poorest, whose low-risk low-return practices disincentivise entrepreneurial behaviour are the least likely to be involved in commercialisation interventions except as passive participants.

This is no reason not to invest in miombo enterprise: it may require thinking about enterprises differently – small forestry enterprises are numerous but require different support to traditional large scale enterprise, as the objectives are different (e.g. social and financial capital as opposed to economic growth). We should also recognise, argue Mayers & McQueen (2007), that small forestry enterprises work for local development – when rights and policy are favourable. If we serious about forestry for local development we need to turn much forestry governance on its head – and stop rigging the rules in favour of large scale. We should focus new financial instruments on small forestry enterprises and invest in small forestry enterprise information, connection and capacity. Small forestry enterprises can benefit the poor and the forest (*ibid*) as:

- Wealth accrues locally
- Conflicts due to external resource appropriation are reduced – decisions are made close to home
- Entrepreneurship spreads – ideas move through face-to-face contact

- Service networks develop – through local multiplier effects
- Cultural identity / niche markets are catered for – with products of local relevance
- Local environmental accountability is strengthened – e.g. in patchwork landscapes smallholder producers are more accountable to each other for their actions linked to forest resources

Nevertheless, not everyone is going to want to be a rural micro-entrepreneur – some people just want to have a job. It is the elite that are likely to be at the forefront and the trade offs for the poor (and their subsistence-related risk strategies that rely on woodland access and use) needs to be appraised and their basic needs secured.

More work is needed to identify the viability of potential products and markets for up-scaling [e.g. poles, wildlife, wood energy, carbon and PES]. Where a potential is identified, there will be need to support forestry to engage with the finance and trade ministries to identify and implement appropriate enabling conditions for the development of the forest produce market. Development policy dialogue, focused in the agencies of state finance, can facilitate engagement on such issues.

Options for intervention include:

- Supporting producer organisation (e.g. producer cooperatives) to improve economies of scale, marketing and price negotiation. Evidence suggests (e.g. Bukula & Memani 2006) that the key to making small forest enterprises work is the development of effective alliances, confederations, cooperatives and associations:
- Promoting community-private sector linkages particularly for local processing or value addition. Using appropriate modalities donors could support technical advice on specialist processing technologies or niche markets, standards development processes, and support for building local certification and verification capacity.
- Increasing private sector financing (both domestic and foreign) by “selling” forestry opportunities as investment options that are viable and competitive with other opportunities.

- To support the identification of investment need related to financing miombo related business analysis of the existing development financing/ micro-financing institutions, and the “missing links” in the business finance process for miombo related economic opportunities will be needed. This is most likely to result in a recommendation for subsidised assistance packages (with designated “miombo related funding”) to selected DFIs/ NGOs and micro-finance institutions.

The lack of credit terms that meet the cash-flow requirements of forestry investments (particularly long term tree planting) is a problem worldwide and results in the lack of interest in forestry investment by private landowners in both developing and developed countries (Arnold 2001). Options to gain the confidence of the business community, and enhance its strategies for generating interest in forestry investment (Joshi 1998) include:

- modifying traditional biases against forestry investment and credits;
- increasing private returns through financial subsidies and public technical assistance;
- reducing investment risk and uncertainty; and
- eliminating or significantly reducing the cash flow problems associated with long planting and gestation periods. While the first strategy is critical for domestic, mostly local small landowners, the other three are common to both domestic and foreign private investors.

At the household level, other credit options need to be applied:

- Using low risk forms of micro-financing (not credit, but saving schemes) to generate capital for enterprises. Savings schemes provide a low-risk entry point for the poor to access resources for alternative livelihoods. This may require facilitating engagement between governments and finance institutions.
- At the micro level, there may be need to support the establishment of and oversee the running of credit and saving schemes designed to grow financial resources at low risk levels.
- Focus new financial instruments on small forestry enterprises and invest in small forestry enterprise information, connection and capacity.

Payments for environmental services (PES) provides another valuable route to monetising rural communities fortunate enough to own resources important for ecosystem functioning. PES does have possible negative trade-offs for the poorest:

- Requires secure land tenure – poorest often have no access to land
- PES funds when coming in to a ‘community’ risk capture just as with other benefit sharing
- PES places traditional conservationist (often INGOs) and developmentalist (often donors) paradigms on either side of the forest fence.

The investment opportunity to expand the use of PES in relation to miombo forests will present similar issues to those facing more traditional enterprises. Obviously the size, variability and wide range of differing community situations involved in and around miombo forests, will mean careful identification and prioritisation of opportunities that have both the potential for the greatest environmental gains, plus the potential to interest beneficiaries with a willingness to finance environmental services. This could be facilitated by providing greater clarity on the potential financial benefits of environmental services and greater certainty regarding the associated markets.

One area little studied (judging by the information searched) is the relationship between remittances and reduced dependence on miombo. The role of remittances from urban (and mining) jobs in the Southern African rural economy is well documented (e.g. Crush Frayne & Grant 2006) and studies from Malawi (Abbot 1997, Kayambazinthu & Locke 2002) have found that such financial support reduced the vulnerability of the poorest and allowed them to adopt more risky coping strategies, such as investment in rural enterprises. The low monetisation of the rural economy, with little cash in circulation to promote enterprise development, getting cash into the rural economy is one way to kick-start rural enterprise development. The Malawi Social Action Fund (MASAF) and the public works schemes aim to do this and have had generally positive reviews (Booth et al 2006). That said, while urban to rural remittances has been the predominant direction of commodity and cash transfers, benefiting the rural household economy, this dynamic is changing, direct food transfers from rural households to urban

households are on the rise as urban poverty increases in countries across the region (Crush Frayne & Grant 2006).

This study did not examine the potential new economic risks and opportunities to the poor brought about by the impact of the so-called BRIC countries on forestry trade. Such a study, in the context of miombo, is urgently required, although the impact is already documented for countries like Mozambique (e.g. Mackenzie 2006).

3.4. A LEGACY OF ARMED CONFLICT

Conflict and its management is constantly at the interface between state and community in the management of miombo. But armed conflict, often in the context of civil war destroys social and physical capital and can take years to rebuild to a level where effective local institutions can operate. As Hegde (2007) found in Mozambique, the forest itself is often used as shelter and as a source of revenue in times of armed conflict which often leaves the forest (and its fauna) in a degraded state.

Forests and their use is often vital during and after conflict and the needs of the poorest will need to be considered in any post-conflict reconstruction efforts, so forestry use and management should be integrated into social protection policies and initiatives. This may also be an important area for off-budget financing through support to NGOS or other civil society entities that may be considered neutral parties.

3.5. MIOMBO WOODLANDS HAVE LOW INHERENT PRODUCTIVITY, THOSE SPECIES THAT HAVE HIGH VALUE MAY BE DOMESTICATED SO REDUCING THE IMPORTANCE OF NATURAL FORESTS

At the policy level, there may be little direct response that can be taken to resolve issues of productivity. The dry woodlands exist on some of the poorest soils in Africa, previous attempts at 'improving' production, (for example the World Bank wood energy projects of the 1970s that replaced the miombo with wood energy plantations) have often resulted in failure. Obviously there are natural limits to production in a natural system and there is only so much silvicultural management can do to improve productivity (see Shackleton & Clarke 2007 for a comprehensive review of silvicultural options). If a particular plant-based product becomes commercially successful, *ex-situ* production may be the only viable route for increasing – and securing – production.

The rationale of bringing trees and associated miombo species out of the woodland into the farmland is in many parts of the biome, an oxymoron: the miombo is heavily influenced by man and is part of the agricultural mosaic of southern Africa: miombo trees in farmland will, in all likelihood become trees in woodland fallow at some point, even if only for a short period, and even if regeneration only occurs after continuous cropping of 20 years (Robertson 1984). In farmlands converted to more intensive agricultural production agroforestry, tree crop plantations and scattered trees on farmland can potentially assist with poverty alleviation while conserving forests (World Bank 2007d). As part of the cross-sectoral nature of miombo management, agricultural policy should consider the role of trees on farms (they already do in terms of exotic fruit and nut trees of course).

However, there are other ways to measure the forest's productivity than just its biomass:

- The miombo provides multiple benefits of subsistence and income value simultaneously, the profusion of fruits during the early rains is particularly valuable for the poorest as this is usually the time of greatest nutritional stress,

- It can be managed during the agricultural slack season so reducing the [opportunity] costs of its management,
- Management is simple: fire and grazing control are the two more important prescriptions and the woodland is very resilient,
- It is vast in extent, meaning only a small improvement in productivity can have a huge overall impact on total production.

From a policy perspective, management approaches that prescribe scientific management planning approaches usually developed for commercial or plantation-based forestry need to be debated and critiqued.

One can argue that the notion of community-based, or participatory forestry, based on sustainable natural resource management with communities that incorporating their indigenous knowledge into their management practices as largely meaningless. Sustainable NRM principles (as defined by rational and scientific criteria) are by definition seldom, if ever, community-constructed and yet local knowledge is embedded in particular environmental and social conditions and continuously negotiated on-site and face-to-face (Blaikie 2003). How one reconciles this inherent contradiction is key to the approach of community-based miombo management and the policy space to debate and question the established paradigm should be encouraged.

4. CONCLUSIONS AND RECOMMENDATIONS

The paper has explored the conditions that constrain the use and management of miombo by the poor through a review of the debate around the barriers and opportunities identified by Campbell *et al* (2007). The review only referred to the inter-relatedness of the barriers and opportunities in passing: such an exploration was beyond the scope of this paper. The paper started by acknowledging the exposure of the poor to risks, and the dynamics of their coping responses whilst at the same time recognizing the impact the institutional landscape can have on their ability to cope. This means that:

- Policies responses should be flexible enough to be interpreted and deployed appropriately at a local level.
- Strategies need to recognise the need for long-term support to build local level capacity and effective local management.
- There is need for iterative approaches to supporting the miombo-poverty link that learns from evidence and experience.
- It is not necessarily about forestry and its institutions, but rather about how other institutions relate to forestry and its use by the poor.

In returning to the objectives of the review and the question of whether overcoming these barriers will lead to improvements in the sustainable livelihood benefits the poorest households gain from the miombo, we look at the outcomes of the review and analysis from perspectives.

4.1. ACCESS, USE AND MANAGEMENT

Securing access will require a clarification of land and resource tenure, policies and processes that secure and formalise that access, institutions that establish regulations and standards for resource use and delivery of appropriate inputs.

Effective management will require that roles and responsibilities of central and local government, and of the poor to be properly articulated and appropriate. The local specificities of access, use and management need the space to be interpreted. The institutions of management need not be forestry constructs where local organisation already exists and can be used in way that protects the use of miombo by the most vulnerable.

A system of checks and balances maintained by a strong central government function will also contribute to maintaining that social protection function.

4.2. REDUCING LIVELIHOODS RISK

The relationship between forestry and poverty is complex and cause-effect is dynamic, not Newtonian. People have dynamic livelihoods, their relationship with the woodlands depends on their relations with sectors other than forestry.

Understanding the important role of forests in reducing risk for poorest needs to be incorporated into the development process. Local livelihoods are context specific, but this some how needs to be brought up to the point that there can be cross-sectoral integration. This may be nationally or sub-nationally but, in a policy context, is at the point where budgets can be allocated and brought together.

At the national level, the PRS-GBS mechanisms can provide the framework and the structure for miombo to reduce the risk of unsustainable livelihoods. That coping strategies are a result of local context and history means that the framework and structure must allow for local interpretation (such as delivering income into a local area through opening market access without specifying what it should be used for).

4.3. CONTRIBUTING TO RURAL GROWTH

Miombo woodlands present a limited opportunity for economic growth except in niche markets where investment in service delivery is commercially attractive. But they provide a valuable opportunity for small scale enterprise development and

new techniques for production processing or marketing may raise incomes or reduce vulnerability to insecurities.

Given the spatial extent of the miombo, new economic and financing instruments related to payments for environmental services, biodiversity or carbon offsetting, hydrological services or catchment protection show potential but as yet little large scale impact. Design issues still need to be worked out (such as the structure of financing) and access and rights to the land and service for which payments being made must be clear and secure. The alternative, livelihood uses that the most vulnerable depend upon will need to be sustained.

4.4. GOVERNANCE AND INSTITUTIONS

Countries can benefit from development assistance if they have the right governance conditions in place so say Burnside & Dollar (2004) Seymour & Dubash (2000) World Bank (2005b). Countries with sound governance institutions, policies and political will, that have or are able to develop through reforms effective open processes, transparent and fair justice and fiscal systems, freedom of information for accountability and monitoring, political and popular will be those that can.

A thicker web of reporting and accountability relationships backed up by simple regulations, checks and balances will help, with civil society playing a key role in supporting both Government and the poor to do this.

The ownership of national development process, the recognition of weaknesses and a commitment to driving through the changes that will lead to miombo providing real benefits for the poor is something yet to be really engendered in the countries of the miombo, it need to be for the poor to strengthen the benefits they secure from their dry woodlands.

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GLOSSARY

PRSP	Poverty Reduction Strategy Paper
PRS	Poverty Reduction Strategy
NFP	National Forest Programme
MDG	Millennium Development Goal
SWAp	Sector Wide Approach
DFID	Department for International Development
HIPC	Highly Indebted Poor Country
GBS	General Budget Support
NGO	Non-Governmental Organisation
ODI	Overseas Development Institute
PBA	Programme Based Approach
DPL	Development Policy Loan
SIL	Sector Investment Loan
IMF	International Monetary Fund
SFM	Sustainable Forest Management
UNDP	United Nations Development Programme
PES	Payments for Environmental Services
FDI	Foreign Direct Investment
DFI	Development Financing Institution
MTEF	Medium Term Expenditure Framework
CAS	Country Assistance Strategy
PFM	Participatory Forest Management
CBNRM	Community-based natural resource management

