

Small and medium forest enterprises in Ethiopia



Abebe Haile Gebremariam, Million Bekele and Andrew Ridgewell



Small and medium forest enterprises in Ethiopia

Abebe Haile Gebremariam, Million Bekele and Andrew Ridgewell

2009

Contacts

Abebe Haile Gebremariam

Non-Timber Forest Products Research and Development Project South-West Ethiopia
PO Box 20724 Code 1000, Addis Ababa, Ethiopia
Tel: +251 47 553 87 69
Email: ntfp-rdp@ethionet.et

Million Bekele

PO Box 20891 Code 1000, Addis Ababa, Ethiopia
Tel: +251 911 247 327
Email: millib12000@yahoo.com

Andrew Ridgewell

FARM-Africa, PO Box 243, Robe, Ethiopia
Tel: +251 911 713 138
Email: andyridgewell@gmail.com

Citation: Abebe Haile Gebremariam, Million Bekele and Ridgewell, A. (2009) *Small and medium forest enterprises in Ethiopia*. IIED Small and Medium Forest Enterprise Series No. 26. FARM-Africa and International Institute for Environment and Development, London, UK.

Copyright © International Institute for Environment and Development, 2009

ISBN: 978-1-84369-720-6

Design by: Eileen Higgins, email: eileen@eh-design.co.uk
Printed by: Russell Press, UK on 80% recycled paper
All photos by Abebe Haile Gebremariam and Million Bekele

Contents

Acknowledgements	iii
Acronyms and abbreviations	iv
Glossary	iv
Executive summary	v
1. Introduction	1
1.1 Rationale	1
1.2 Methodology	1
1.3 Forest resources	3
1.4 Human resources	4
2. Governance context	5
2.1 Forest policies and legislation	5
2.2 Rural land administration	8
2.3 Decentralisation	9
2.4 Trade and investment policies	10
3. Description of the SMFE sector	11
3.1 Definition of SMFEs	11
3.2 Extent of informality	12
3.3 Timber subsector	14
3.4 Gum resin subsector	18
3.5 Honey subsector	20
3.6 Bamboo subsector	23
3.7 Economic, social and environmental impacts	27
4. Business formation and support	31
4.1 Institutions with which SMFEs need good relations	31
4.2 Types of ownership	31
4.3 Strengths and weaknesses of business ownership	33
4.4 Government support	34
4.5 Non-governmental support	37
5. Finance and market issues	41
5.1 Market information systems	41
5.2 Tax regimes	41
5.3 Access to credit	42
5.4 Insurance	42
6. Conclusions – Opportunities and threats in the SMFE sector	43
7. Recommendations	45
Bibliography	47

Acknowledgements

This report describes Ethiopian research findings within the international ‘Forest Connect’ alliance that is managed jointly by the International Institute for Environment and Development (IIED) and the Food and Agriculture Organization of the United Nations (FAO). Forest Connect partners are currently active in Burkina Faso, China, Ethiopia, Ghana, Guatemala, Guyana, Lao People’s Democratic Republic, Mali, Mozambique and Nepal. With poverty reduction and sustainable forest management both firmly in view, the central aim of Forest Connect is to better link Small and Medium Forest Enterprises (SMFEs) to:

- ◆ each other (by facilitating the formation of associations);
- ◆ emerging markets (by facilitating market analysis and access to information);
- ◆ business development and financial service providers (by facilitating training and access to finance);
- ◆ national forest programmes (by facilitating engagement with policy makers).

Within Ethiopia, FARM Africa and SOS Sahel Ethiopia were identified by IIED as ideal partners with whom to develop these broader project aims. An initial scoping visit identified a critical preliminary step: the need to gather accurate information about the SMFE sector as a whole. Such research would ensure that future efforts had a firm foundation in fact.

The resulting study was undertaken with the assistance of the Participatory Natural Resources Management Unit (PNRMU) of FARM Africa and the Bale Eco-Region Sustainable Management Programme (BERSMP), established in partnership with SOS Sahel Ethiopia and the Bale Forest Enterprise. The PNRMU Manager, Tsegaye Tadesse, and the BERSMP Field Coordinator, Ben Irwin, both offered a great deal of guidance and supervision as well as valuable inputs into the research process itself. Duncan Macqueen at IIED commented extensively on drafts.

Over 15 government and non-governmental organisations as well as 38 enterprise owners were consulted during the course of the study. All generously gave their time freely and openly and made information available whenever possible. Special thanks are due to Dr. Girma Amente, General Manager of the Oromia State Forest Enterprises Supervising Agency (OSFESA), and Belay Asfaw, Manager of the Bale Forest Enterprise.

It is difficult to acknowledge individually all those who assisted us during our fieldwork. Staff of the zonal Trade, Industry and Transport Departments in Bale, East Showa and Mekele as well as the staff of the regional Agriculture and Rural Development bureaus in Amhara and Tigray Regional States were especially important in facilitating the research. In particular, we would like to thank Assefa Amede, Forester for the Bale Forest Enterprise, and Rigibe Kidane, Head of the Mekele Trade, Industry and Transport Department.

We also extend our appreciation to Dr. Abdu Abdelkader and the library staff of Wondo Genet College of Forestry, Debub University for their hospitality and use of the College’s dissertations and theses. Finally, the map that appears in Figure 1 was kindly produced by Zeleke Kebebew of BERSMP using data from the Ethiopian Rural Economy Atlas and from the Ethiopian Central Statistical Authority. Thanks to Maryke Steffens for copy-editing the report, and to Marie Jaecy for reviewing various proofs and overseeing the publication process.

Acronyms and abbreviations

ADB	African Development Bank
BERSMP	Bale Eco-Region Sustainable Management Programme
EABP	Eastern Africa Bamboo Project
EFAP	Ethiopian Forestry Action Program
EHBPEA	Ethiopia Honey and Beeswax Producers and Exporters Association
EPA	Environmental Protection Authority
EPRDF	Ethiopian People's Revolutionary Democratic Front
ESJE	Ethiopian Sawmills and Joinery Enterprise
EU	European Union
EWNRA	Ethio-Wetlands and Natural Resources Association
FAO	Food and Agriculture Organization of the United Nations
FeMSEDA	Federal Micro and Small Enterprises Development Agency
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross Domestic Product
GNI	Gross National Income
GTZ	Gesellschaft für Technische Zusammenarbeit
ha	Hectare
IFMP	Integrated Forest Management Project
IIED	International Institute for Environment and Development
JICA	Japanese International Cooperation Agency
MoARD	Ministry of Agriculture and Rural Development
MoFED	Ministry of Finance and Economic Development
MoTI	Ministry of Trade and Industry
MSE	Micro and Small Enterprises
NGO	Non-Governmental Organisation
NGPME	Natural Gum Processing and Marketing Enterprise
NTFP	Non-Timber Forest Product
OSFESA	Oromia State Forest Enterprises Supervising Agency
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PFM	Participatory Forest Management
PLC	Private Limited Company
PNRMU	Participatory Natural Resources Management Unit
SMFE	Small and Medium Forest Enterprise
SNNP	Southern Nations, Nationalities and Peoples Regional State
USD	United States Dollar
UNIDO	United Nations Industrial Development Organization
WAJIB	<i>Waldayaa Jiraatoota Bosonaa</i>

Glossary

<i>Darg</i>	'Committee', a popular name for the Coordinating Committee of the Armed Forces, Police & Territorial Army that governed Ethiopia between 1974 and 1991
<i>Tej</i>	Mead made from fermented honey and water
<i>Wereda</i>	Second smallest administrative unit

Executive summary

Little is known about the small and medium enterprises that produce, collect, process, transport, market and sell forest products in Ethiopia. Their role in supporting livelihoods is not fully understood and is probably greatly underestimated. As a result, the future of forest resources in Ethiopia remains uncertain. This report attempts to consolidate existing knowledge on small and medium forest enterprises (SMFEs) and provides an overview of the sector based on fieldwork surveys.

SMFEs are overwhelmingly informal and remain largely unregulated by any government authority. Many operate illegally by using prohibited resources or failing to pay taxes. SMFEs are largely undocumented, with no reliable figures that estimate their scale and extent. Our research indicates that certain subsectors beyond round wood are commercially important, notably fuel wood entrepreneurs (USD 420 million per year), herbalists (USD 216 million per year), wild coffee producers (USD 130 million per year), honey and beeswax producers (USD 86 million per year) and furniture makers (no estimates available). Yet despite their commercial significance, SMFEs produce a limited range of low quality products. While there are some important exceptions that need to be built upon, in general they have limited investment, access to credit, training opportunities, business management and knowledge of the natural resource base.

The timber subsector sources the vast majority of its raw materials from natural forests that are undergoing rapid deforestation. While the formal timber trade is dominated by government enterprises, they have been unable to meet demand and this has led to the growth of illegal loggers and traders. Timber is purchased by furniture makers and the construction industry. Timber products that reach the market are generally extremely low quality with limited added value. Likewise, the full potential of the gum resin subsector remains unrealised. Production is constrained by low yields and there is little investment along the supply chain. Nonetheless, it represents a valuable export market that employs large numbers of collectors and processors.

Greater integration has occurred within the honey subsector with the emergence of entrepreneurs who have invested in improved production, processing and marketing techniques. However, the vast majority of honey continues to be produced using traditional hives and consumed locally in the form of mead. Only recently has Ethiopian honey begun to register as a significant export, although its value continues to be much lower than that of beeswax. Finally, despite vast stands of bamboo, the trade in this most versatile resource is confined to the production of basic household implements and furniture. Innovation is almost nonexistent and only recently have entrepreneurs begun to explore the potential of using bamboo pulp for paper production.

Despite their shortcomings, SMFEs appear to offer significant social and economic benefits. The Government of Ethiopia recognises this and supports SMFEs, particularly through the Micro and Small Enterprises (MSE) framework. The recent establishment of the Oromia State

Forest Enterprises Supervising Agency (OSFESA) and the community's stated role in forest management are also clear indications of the current interest in forest resources and the roles they play in rural livelihoods. Non-governmental organisations (NGOs) have also been experimenting with Participatory Forest Management (PFM) and offer training to SMFEs, particularly those dealing with non-timber forest products (NTFPs).

SMFEs have limited capacity and are unable to add significant value to the natural resources they use. They are not organised into associations that could tap the more lucrative national and international markets; these are currently dominated by large enterprises. SMFEs have great potential to reduce poverty in Ethiopia, but in their present unregulated state they also represent a threat to the country's declining forest resources.

Introduction

1.1 Rationale

This report reviews small and medium forest enterprises (SMFEs) in Ethiopia and identifies how they can contribute to sustainable poverty alleviation and environmental conservation. Many studies have been conducted on different forest products in Ethiopia but few have analysed the enterprises involved in the production, collection, processing, transportation, marketing and sale of forest products. In addition, existing research does not take into account the political, social, financial and technical considerations that offer both opportunities and constraints to SMFEs in Ethiopia.

During the course of this assignment, it became apparent that fully appreciating the SMFE sector in Ethiopia requires A) an outline of the policy framework, B) a means of reliably estimating the scale and extent of SMFEs, C) an examination of specific value chains and market linkages and D) a historical trend analysis. Without this information, the role of Ethiopia's forests in rural livelihoods cannot be fully understood and would probably be greatly underestimated.

While we were unable to fulfil all our objectives, this report nonetheless consolidates a large quantity of 'grey' literature and provides an overview of the SMFE sector and its subsectors based on fieldwork surveys. Estimates of the number of different SMFEs are given wherever possible, as are the employment opportunities that they create, the impacts they have on the environment and the major constraints they face in terms of skills, finance and markets. The key actions required to strengthen Ethiopia's SMFEs such that they become environmentally accountable, sustainable and economically productive are also identified. Finally, particular attention is given to the opportunities created by the new forest policy, strategy and legislation of the Federal Democratic Republic of Ethiopia (FDRE) and the recent establishment of the regional Oromia State Forest Enterprises Supervising Agency (OSFESA).

1.2 Methodology

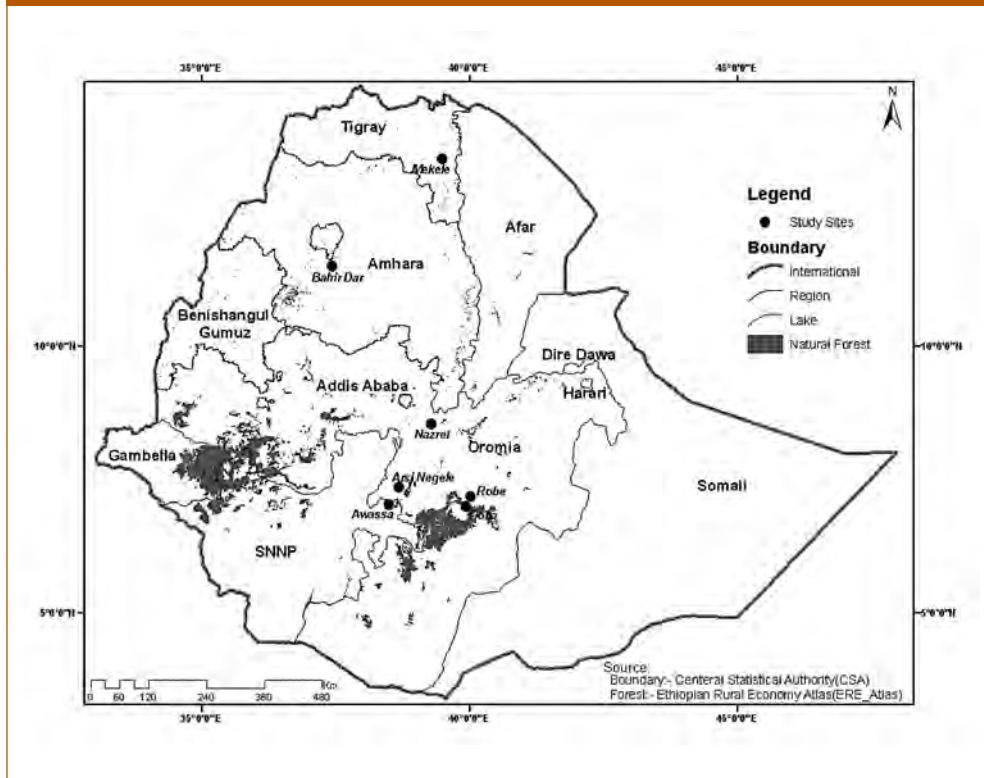
When reviewing secondary literature, it became clear that the SMFE sector in Ethiopia has a relatively large number of subsectors including timber products, coffee, gum resins, honey and beeswax, bamboo, spices, fruits and nuts as well as medicinal plants. The grouping of SMFEs into these subsectors is somewhat arbitrary and reflects the lack of work on subsector mapping and value chain development in the Ethiopian SMFE sector. For example, the timber subsector includes wood originating from both natural and plantation forests as well as a range of products including fuel wood, charcoal, scaffolding poles and furniture. For the purposes of the 'Forest Connect' alliance and with time constraints in mind, only four of these subsectors – timber, gum resins, honey and bamboo – were selected for further attention. The selection was made based on their market potential and ability to involve a large number of people. This selection does not preclude further attention being paid to other SMFE subsectors, many of which are extremely important socially and economically in Ethiopia. Brief information on some of these is provided in the introduction.

Key issues affecting the four SMFE subsectors were identified through further reviews of existing literature, as well as semi-structured interviews and group discussions with government officials, non-governmental organisations (NGOs) and SMFE owners. Value chains and case studies within each subsector are presented in boxed text.

Fieldwork activities focused on six sites known to have some degree of SMFE activity and that would offer a representative sample in the time available. These sites included three regional cities (Bahir Dar, Mekele, Nazret) and three towns adjacent to forests (Arsi Negelle, Goba, Robe) distributed between four of Ethiopia's nine Regional States (Amhara, Oromia, SNNP, Tigray). The sites were chosen in consultation with staff from the Bale Eco-Region Sustainable Management Programme (BERSMP) and visited from July to September 2008.

In each case, the local government offices of the Ministry of Agriculture and Rural Development (MoARD) and the Ministry of Trade and Industry (MoTI) were visited. In Oromia Regional State, visits were also made to the Arsi and Bale Forest Enterprises. Discussions were also held in the capital, Addis Ababa, with OSFESA, the Federal Micro and Small Enterprises Development Agency (FeMSEDA), as well as with key NGOs including FARM Africa, SOS Sahel Ethiopia, the Non-Timber Forest Products Research and Development Project South-West Ethiopia and the Eastern Africa Bamboo Project (EABP).

Figure 1. Map of national forest coverage and study sites



SMFE owners and workers were interviewed at each of the six sites. In Goba and Robe, the Bale Forest Enterprise was able to supply a list of both formal and informal forest enterprises. Such records did not exist at the other sites and enterprises were identified independently. A total of six formal and seven informal SMFEs were interviewed in Goba and Robe. Four SMFEs were consulted in Bahir Dar, five in Mekele, six in Nazret and three in Arsi Negelle. Whenever possible markets were also surveyed to assess the range and prices of forest products currently being traded.

1.3 Forest resources

In the last decade of the millennium, Ethiopia's forests declined by 4.2 per cent to 4,593,000 ha, including 216,000 ha of plantations (FAO, 2001 cited in ADB, EU and FAO, 2003). The country's forests are exploited for timber and non-timber forest products (NTFP), for agriculture and as a grazing, browsing and shade resource for livestock. Forests are often significant for other reasons, including their role as sacred sites, their potential for conservation activities and in recent years as a focus for ecotourism ventures.

In 2000, Ethiopian forests produced 2,459,000 m³ of industrial round wood, 60,000 m³ of sawnwood, 25,000 m³ of wood panels, 1,000 tons of newsprint, and 3,000 tons of printing and writing paper (FAO, 2002 cited in ADB, EU and FAO, 2003). But by far the most significant use of wood in Ethiopia in both volume and value terms is in the form of fuel wood. Ethiopia is highly dependent on biomass for producing energy. Fuel wood consumption in 2000 was estimated at 98,985,000 m³ (Broadhead *et al.*, 2001 cited in ADB, EU and FAO, 2003). This makes for an industry worth approximately USD 420 million per year. Crucially, 90 per cent of Ethiopia's industrial wood and fuel wood supply comes from natural forests rather than managed plantations (Thomas and Million, 2003).

Only a few NTFPs produced in Ethiopia have export value. The most important of these is coffee. Over 80 per cent of exported coffee is grown in small gardens or wild in the forest. MoARD reported in 2005 that Ethiopia exported coffee worth over USD 200 million (Matchmaker, 2006). In addition, 2,720 tons of gum resin was exported in 2003 with a value of USD 4,128,165. This product was harvested from the 2,855,000 ha of forest that contain gum resin tree species of the genera *Acacia*, *Boswellia*, *Commiphora* and *Sterculia* (Wubalem, Getachew and Alia, 2007).

Other economically significant NTFPs include bamboo, honey and beeswax. Bamboo is a particularly important construction material in the lowlands, where few alternatives exist. Lowland bamboo (*Oxytenanthera abyssinica*) is utilised for pulp and paper production while highland bamboo (*Yushania alpina*) is favoured for furniture making and other crafts (Kassahun, 2000). Ethiopia produces an estimated 26,000 tons of honey per year, the largest output in Africa and the tenth largest in the world. The vast majority is used locally to make mead. Traditional hives are the mainstay of production, but they are time-consuming to construct and give low yields (Chowdhury *et al.*, 2005).

The knowledge and use of natural remedies has been documented across the country; anecdotally, 80 per cent of the population make use of medicinal plants. Many remedies are derived from forest sources such as trees, shrubs and herbs. *Croton macrostachyus*, for example,

is reportedly used as a remedy for ailments ranging from skin and intestinal complaints to malaria, rabies and gonorrhoea. Likewise, *Cordia africana* is widely known as a treatment for liver disease, fever and intestinal complaints such as dysentery. An estimated 80,000 healers are involved in the trade and administration of such plants, of which 9,000 are registered with local authorities. Many edible plants are utilised year round and in particular during crises (Demel and Mulugeta, 2005 cited in Aramde, 2006; Ermias *et al.*, 2008; Haile *et al.*, 2008; Kebu and Fassil, 2006; Mirutse *et al.*, 2007; Teferi and Hahn, 2003; Tigest *et al.*, 2007; Tilahun and Mirutse, 2007; Tilahun *et al.*, 2007).

1.4 Human resources

Ethiopia is the second most populous country in Africa and is currently experiencing an extremely high growth rate of 2.1 per cent. A Gross National Income (GNI) per capita of only USD 160 makes it one of the poorest countries in the world. In 1999/2000, 44.2 per cent of the population was living below the national poverty line (World Bank, 2006). However, the economy has registered encouraging results in recent years. From a negative Gross Domestic Product (GDP) growth rate of -3.3 per cent in 2002–03, the country experienced positive growth of 11.9 and 10.6 per cent over the following two years, equating to a 3.6 per cent increase in per capita income. Agriculture accounts for 32 per cent of GDP and 70 per cent of employment (ADB, EU and FAO, 2003).

No geographical region or group has a monopoly on SMFE activities. Forest products are harvested in all regions by a wide section of society. Woodworking castes do exist and have led to social, cultural and economic marginalisation in some cases. But on the whole this caste identity and marginalisation have disappeared. Other craft-based castes such as potters, weavers and smiths still exist and have also suffered some marginalisation. Well known castes include the *fuga* among the Gurage, the *wato* among the Oromo and the *weyto* among the Amhara (Freeman and Pankhurst, 2003).

Forest dependence among rural and peri-urban communities is high, with women particularly conspicuous in their roles as firewood sellers in and around most towns and cities. However, vulnerable groups are not the only people to engage in SMFE activities, as one recent study from Oromia Regional State underlines:

'...the wealthiest quintile extracts roughly twice as much value as the poorest quintile; but the poorest remain roughly twice as dependent as the wealthy (measured in terms of relative contribution). This broad picture can be disaggregated into different categories of forest goods. Thus, while the poor disproportionately cut trees for firewood, the wealthy rely to a greater extent on construction materials, a higher-value output.' (Getachew, Sjaastad and Vedeld, 2007: 925)

Forests contribute to sustainable livelihoods and, as the above example demonstrates, offer commercial opportunities to those who have the financial and technical capacity to invest in such opportunities. Consequently, a large number of people are employed in the Ethiopian SMFE sector although reliable estimates are difficult to come by.

Governance context

2.1 Forest policies and legislation

Successive forest management regimes over the last 50 years have had a largely negative impact on the resource base, stripping local communities of their access to and control of resources to a greater and greater extent.

Following the return of Emperor Haile Selassie to the throne in 1941 after the Italian Occupation, the imperial government made extensive private land grants, limiting public access to forests. In 1975, the revolutionary *Darg* nationalised all lands and attempted to administer them under a highly centralised system, resulting in near open access (Melaku, 2003). The downfall of the *Darg* in 1991 precipitated in an unprecedented period of environmental destruction. With the exception of Tigray, where the Ethiopian People's Revolutionary Democratic Front (EPRDF) had already established itself, rural communities 'liberated' forest resources until authority was restored in 1993. By this time customary management regimes had been severely undermined or entirely destroyed. In the following year the Ethiopian Forestry Action Program (EFAP) was issued alongside a forest proclamation (this proclamation was later repealed by new legislation in 2007) (FDRE, 1994a). The EFAP represented the first attempt to systematically address the development needs of the forestry sector, but was left largely unimplemented following the subsequent decentralisation of the country (Melaku, 2003; 2008).

Forestry in particular has suffered from the frequent restructuring of both federal and regional government institutions over the last 20 years. During the 1980s, the forestry department consisted of around 60 staff. By 1995 it had been expanded into a ministry with over 300 employees. But by 2004 it had been relegated to a section with less than 10 foresters. Today, forestry is almost non-existent at federal level with only three foresters under the newly formed Sustainable Land and Watershed Management sector of MoARD. Conversely, interest in forestry at the regional level has grown with the backing of OSFESA and its eight forest enterprises (App, Anderson and Abebe, 2008). Oromia has the largest forest resources in the country and has led the way in establishing new management regimes. No comparable institutions have been established in SNNP Regional State, which has vast stands of natural forest in areas such as Sheka Zone. The same is true of other regions including Tigray, which nonetheless earn substantial revenues from the trade of forest products.

The basis of the current legal framework guiding the use of forest resources started with the *Environmental Policy* (FDRE, 1997a). The policy was given effect in the *Environmental Protection Organs Establishment Proclamation* (295/2002) (FDRE, 2002a), the *Environmental Impact Assessment Proclamation* (299/2002) (FDRE, 2002b) and the *Environmental Pollution Control Proclamation* (300/2002) (FDRE, 2002c). The first served to reconstitute the Environmental Protection Authority (EPA), which had ceased to exist following its completion of the Environmental Policy in 1997. The second and third provided the EPA with the means to set and uphold environmental standards.

The new federal *Forest Development, Conservation and Utilization Proclamation* (542/2007) provides the framework for making fundamental changes to forest resource management

across the country. Both the proclamation and the country's first policy and strategy on forest development that accompanies it demonstrate a much greater acceptance of community management, and the conceptual links being made between livelihoods and environmental resources (FDRE, 2007b; 2007c). Although similar notions were expressed in the *Environmental Policy* of 1997, these were never put into action. Advocacy from a group of NGOs in 2006 appears to have facilitated greater acceptance at both federal and regional levels of the role communities can play in forest management.

The overall objective of the new policy is '*...to meet public demand in forest products and foster the contribution of forests in enhancing the economy of the country through appropriately conserving and developing forest resources.*' Significantly, this is to be achieved through an overall reduction in the role of the state, the promotion of private investment and the devolution of authority to regional administrations (FDRE, 2007c). To this end, the new proclamation allows for forests to be designated as either private or state owned. State forests may be given as concessions for privately managed plantations or retained for conservation management by government organisations in participation with local communities (FDRE, 2007b).

In effect, small and medium enterprises are precluded from applying as concessionaries due to the significant investment required to cover the cost of permits and the establishment and maintenance of any business venture. They are entirely prohibited from operating in areas retained for management by the government. This is reiterated in the *Development Conservation and Utilization of Wildlife Proclamation* (541/2007), which restricts economic activities in conservation areas under government control to trophy hunting, tourism and the trade of wildlife products (FDRE, 2007a).

Articles 10(3) and 10(4) of the forest proclamation do address the needs of local communities: '*...the local community may reap grasses, collect fallen woods and utilise herbs from a state forest in conformity with the management plan developed for the forest by the appropriate regional body*' and '*...the harvesting of forest products, grass and fruit as well as the keeping of beehives in state forests may be permitted based on the objective realities of the locality.*' However, these articles only attempt to protect the subsistence of households rather than promoting business enterprise growth (FDRE, 2007b).

For those who are able to operate within state forests, permits are required from MoARD to harvest and transport forest products as well as settle within the forest boundary, graze livestock, hunt, carry tools for tree cutting or keep beehives. In addition, private individuals are prohibited from cutting the endangered indigenous species *Cordia africana*, *Hygenia abyssinica*, *Juniperus procera* and *Podocarpus falcatus* in both state and private forests. Utilising products from within a state forest without a permit is punishable by between one and five years imprisonment as well as a fine of 10,000 Birr (USD 1,053) (FDRE, 2007b).

In contrast with state forests, private forests can be legally accessed and used by small and medium enterprises. The definition of a private forest extends to areas developed by government organisations, NGOs, private investors, stands on farmland as well as those placed under community management. Considerable uncertainty still exists over the allocation of forest blocks between state and private management. For example, at present the authorities are not registering individually held land located within high forests, as it is assumed to be within the boundary of a state forest. Nonetheless, article 4(3) explicitly states that a wide range of

individuals and groups can benefit from privately held natural resources, and this must occur in close cooperation with local communities:

'Management plan[s] shall be developed, with participation of the local community, for forests that have not been designated as protected or productive state forests, and such forests shall be given to the community, associations or investors so that they can conserve and utilize them in accordance with directives to be issued by the appropriate body.' (FDRE, 2007b)

Communities and enterprises are offered '*...the necessary support to produce quality and competitive forest products for local and international markets*', while '*[i]nvestment opportunities and incentives shall be provided to investors engaging in the forest industry*' and '*[i]nformation on forest products market shall be collected, organized, and furnished to forest developers and forest product consumers through various mass media*' (FDRE, 2007b). Permits are required to transport products originating from private forests and the preparation of management plans is a prerequisite to resource use, as outlined in article 6(4):

'Forest products trade licence shall be issued in accordance with the management plan taking into account the utilization of the country's limited forest resources [...] in a manner that shall not disturb the natural resource balance of the area.' (FDRE, 2007b)

The new forest proclamation puts much greater emphasis on establishing resource management plans rather than business management plans, which was the main focus in the past. While not explicit, it appears that resource management plans are required of all enterprises registered in the trade of forest products. The proclamation offers no guidance as to how small and medium enterprises will be supported to meet this target. Most lack the capacity to prepare impact assessments.

The legislative structure that stands to be created from this set of documents represents a significant development in the Ethiopian forestry sector for both large enterprises and SMFEs. Yet at present it is something of a paper tiger. The new forestry proclamation has been in effect since September 2007 but has yet to have guidance notes issued for its implementation. This includes the directives necessary for the utilisation of private forests in general and the preparation of management plans in particular. At present, communities and enterprises rarely respect the boundaries of state forests, as they are not consulted in the demarcation process. In most cases, no maps or management plans exist and they have not been gazetted due to lack of resources. The only exception to this is where participatory forestry has been introduced, which is discussed in detail in the section addressing non-governmental support.

Judging from the fact that neither the environmental impact assessment or pollution control proclamations (FDRE, 2002b; FDRE, 2002c) are operational after seven years – the result of having no approved standards or guidelines – there is little reason to expect the new forest legislation to be fully implemented in the near future. For this situation to change, much greater importance must be given to the Environmental Council, which is mandated to review policies, strategies and legislation, advise on their implementation and approve guidelines, directives and standards. The Council is composed of the Prime Minister (or a designate) and representatives from the federal and regional governments, the Chamber of Commerce, NGOs, the Confederation of Ethiopian Trade Unions and the EPA (FDRE, 2002a). To date, not a single

meeting has been convened, which renders the above legal framework, including much of the work of the EPA, largely dormant.

A great deal of confusion exists in applying forest regulations on the ground. For example, in Goba and Robe, Oromia Regional State, it is considered illegal to trade all timber products originating from private farmland, while in the Arsi Negelle area of the same region this practice is accepted. These issues can be further complicated by rural land administration policies, regional legislation that differs from the equivalent federal legislation, and contradictions between different federal policies. These issues are discussed at greater length below.

2.2 Rural land administration

In 2005, the Government of Ethiopia issued a new *Rural Land Administration and Land Use Proclamation* (456/2005) (amended in 2007). The aim was to increase tenure security, improve productivity and avoid expectations of land re-distribution. For example, article 6(3) states that land holders will be issued with certificates that indicate the size and fertility of their holding as well as its borders. Importantly, article 8(5) expresses the rights of family members to inherit rural land (FDRE, 2005).

However, restrictions on agricultural expansion are only explicitly applied to wetlands and land with an extreme gradient. Forested areas are not mentioned. This is contrary to article 20(4) of the new forest proclamation, which states that any person who:

'Settles or expands farmland in a forested area without permit or undertakes the construction of any infrastructure in a forestland without having the necessary permit shall be punishable with not less than 2 years imprisonment and with fine Birr 20,000 (USD 2,105).' (FDRE, 2007b)

Land certification is currently taking place in the Amhara, Oromia, SNNP and Tigray Regional States. But with forest policies and legislation largely dormant, these activities have commenced without due regard for the sustainable use of forest resources. For example, there are serious concerns over the capacity of officials to accurately measure, demarcate and map resources. Also, because in most instances forests have yet to be mapped and registered, rural households are able to clear land and stake a claim to it before the registration process begins.

Such was the case in SNNP Regional State, where large areas of forest were cleared prior to the proclamation being issued in 2005. In particular, remote areas were targeted as it was widely known that government officials had little knowledge of the resource base away from administrative centres. It is estimated that farmers in the Masha and Gesha *wereda* of Sheka and Kefa Zones increased their farm holdings by approximately 10 per cent before certification was introduced (Abebe, 2005). These actions are in part driven by farmers' concerns over securing agricultural land rights to forested land; there is some evidence that claims to cleared and fertilised land are more successful than claims to forested land, despite the provisions included in the forest proclamation.

2.3 Decentralisation

Regional government administrations hold a great deal of authority over land in Ethiopia through the forestry and land legislation discussed in sections 2.1 and 2.2. The authorities in both the Oromia and SNNP Regional States have issued their own forest legislation. Other regions have sought to govern forests under their own rural land administrative provisions. In Oromia authority over forests lies with the Rural Land and Natural Resources Administration Authority. In SNNP, jurisdiction falls to the Agriculture and Natural Resources Development Bureau. These bodies are in practice the regional arms of MoARD.

The most important divergence between federal and regional forest legislation is found in the *Forest Proclamation of Oromia (72/2003)*. Unlike the federal proclamations or those from SNNP Regional State, the Oromia state government defines community ownership alongside that of state and private ownership (Oromia Regional State, 2003). While the notion of community management is prominent in the federal proclamation, it is nonetheless grouped under private ownership. The parameters of what constitutes a community managed forest versus a privately held individual resource is left unclear. This is not the case in Oromia:

'The Oromiya law has, even if not in a sufficiently clear manner, incorporated the constitutional sense of communal ownership of natural resources... The Oromiya laws are better suited in recognizing and respecting the rights of local communities as far as the rights in managing, developing and utilizing natural resources are concerned.'
(Mellese and Mohammad, 2007: 171)

In Oromia, a forest can be given over to community management based on the recommendation of the Rural Land and Natural Resources Administration Authority of MoARD or of an NGO. Communities are responsible for the sustainable use of forest resources and the payment of any taxes or licences. In addition, the Oromia state government has included *Prunus africana* in the list of prohibited indigenous species outlined in the federal legislation (Oromia Regional State, 2003).

Similarly, the Oromia Rural Land Use and Administration Proclamation (130/2007) is much more explicit about the status of forested land than the federal rural land administration legislation. Articles 23 and 24 state that: '*[p]atches of natural forest lands shall be identified, demarcated, protected, conserved, and sustainably used by the local community'* while '*[I]and users are obliged to conserve and protect mother trees found on their holdings.'* The proclamation even goes as far as to declare that '*[p]rivate investors are obliged to plant indigenous trees on at least 2% of the given land'*, which is entirely unprecedented at federal level. Restrictions are also included that prohibit the planting of exotic tree species that are deemed detrimental to agricultural and water resources (Oromia Regional State, 2007a).

However, maintaining policy objectives, rules and regulations across federated states remains problematic. As mentioned above, the federal forest proclamation prohibits any person from felling protected trees from state forests without a permit from MoARD. However, licences for forest utilisation are now often issued at *wereda* level, which has reduced the licence processing time to just 24 hours. In Amhara Regional State, MoTI issues licences for the use of both timber and NTFPs to SMFEs without permission from MoARD. This appears contrary to forest legislation, which does not even mention MoTI as an authority responsible for natural resources. Although MoARD is mandated to oversee the protection and utilisation of forest

resources and is aware that the Amhara Regional State forest resources are declining, it has little information about the increasing number of SMFEs engaged in timber and NTFP extraction and remains powerless to intervene.

Mellese and Mohammad (2007) describe a similar situation in SNNP Regional State. In this case, the regional *Forest Management, Development and Utilization Proclamation (77/2004)* stipulates that licences for forest utilisation shall be granted based on the sustainable supply of the resource (SNNP Regional State, 2004). However, the regional bureau of MoTI again issues licences without taking into account MoARD concerns. As the authors state, a government office tasked with managing forest resources can do little unless there is close cooperation among all government departments.

2.4 Trade and investment policies

These concerns over the status and management of forest resources at the federal and regional level can partly be understood in terms of Ethiopia's shift towards a market economy over the last 15 years. The country has seen a significant increase in the role of the private sector and further integration into the world economy. Although no specific trade policy has been issued, a range of initiatives have been implemented to promote industrial growth and increase exports:

'Since 1992, the government has been implementing a comprehensive trade reform program in the context of [a] broad liberalization package. The trade reform included a significant reduction in import duties and other charges, the elimination of quantitative restriction and export taxes, devaluation of the Birr, the introduction of a system of export incentives (duty drawback, bonded manufacturing warehouse scheme systems) and establishment of the Export Promotion Agency (later absorbed as a department in the Ministry of Trade and Industry). The reforms were initiated to create an environment conducive for economic development and poverty reduction.' (Bulti, 2008: 283)

The export promotion strategy lists five sectors to be supported through improved access to land and credit. These are agriculture and agro-processing, horticulture including cut flowers, leather and leather products, textiles and garments, and tourism (Bulti, 2008). It is unclear to what extent forestry products are included in 'agro-processing', although it should be noted that a recent Ethio-American concession for the production of paper pulp from natural bamboo stands failed to receive duty-free status for the importation of equipment and vehicles (Boa, 2006). In addition, imported timber is exempt from tax as a way of offsetting the pressure on local resources.

A number of important contradictions exist between these trade and investment policies and the environmental legislation discussed above. For example, in 2002 the EPA was mandated to authorise permits for any project deemed to require an environmental impact assessment (FDRE, 2002b). But less than a year later, new investment legislation stated that government institutions such as the EPA only had to be notified of a project after permits were issued (FDRE, 2003). Further confusion is created by the Penal Code of 2004, which states in Article 521 that *'any person who implements any project before fulfilling the EIA requirements and before getting the authorization of the appropriate organ, shall be penalized by a simple imprisonment not exceeding one year'*. As such, it is extremely difficult to assess what the status and role of environmental impact assessments is in Ethiopia today (MELCA Mahiber, 2008).

Description of the SMFE sector

3.1 Definition of SMFEs

An extremely large number of SMFEs operate within the context of Ethiopia's federal and regional legislation and policy framework. However, it is extremely difficult to precisely define what constitutes an SMFE in the Ethiopian economy. This is largely due to their diversity and also because a regulatory body has yet to uniformly categorise them. Neither the Government of Ethiopia nor any NGOs have specifically addressed this sector.

The most relevant definitions are in the *Micro and Small Enterprises Development Strategy*, which bases categorisations on capital and technical capacity. Thus, a micro enterprise is defined as having a paid-up capital of less than 20,000 Birr (USD 2,105) while a small enterprise operates with a capital of between 20,000 and 500,000 Birr (USD 2,105–52,632). In both cases the definition excludes '*...high tech. consultancy firms and other high tech. establishments*' (FDRE, 1997b). The definitions also take into account the number of employees in an enterprise, which is in line with the international definition of small and medium enterprises. The Ethiopian Central Statistical Authority (ECSA) also often adopts this definition. The ECSA definition of small and medium enterprises is as follows, made slightly unclear by the conflicting entries on 'medium' enterprises:

- ◆ Small and medium enterprises are establishments that engage less than 10 persons using power driven machinery.
- ◆ Large and medium scale manufacturing enterprises have been classified as establishments with more than 10 employees using automated machinery.
- ◆ Cottage/handicrafts are household type enterprises located in households or workshops, normally using own or family labour and mostly manual rather than automated/mechanical machinery.

In Ethiopia, most of the enterprises we surveyed employed between two and nine people and over 90 per cent operated with a capital of less than 50,000 Birr (USD 5,263). However, accurate business capital is notoriously difficult to obtain in Ethiopia and this figure is likely to be an underestimate. Furthermore, we found that these enterprises were almost always locally owned and employed labour from within the extended family as well as casual labour if and when needed. Skilled workers may earn up to 600 Birr (USD 63) per month while unskilled labourers can expect to earn around 200 Birr (USD 21). More experienced employees tend to be paid per piece.

To obtain general information on SMFEs, questionnaires were presented to enterprise owners and local government officials at each of the study sites. Markets were also visited to determine the range and nature of products, and supply chains were identified. The field surveys show a rather depressing picture of the typical SMFE, which is characterised by:

- ◆ Simple marketing chains typically involving only two or three players
- ◆ Inadequate market information
- ◆ Crude ranges of products with limited value addition
- ◆ Limited investment
- ◆ Lack of access to credit and training
- ◆ Little or no business planning
- ◆ Limited knowledge of the resource base
- ◆ Inadequate working spaces and sometimes mobile working arrangements

Arbitrary regulations and classifications between different regional states make it difficult to compile data on the numbers involved in different subsectors; this is a clear indication of the lack of awareness of and value placed on SMFEs. We observed, for instance, that in Amhara Regional State furniture makers are classed as ‘artisans’ while those who trade wooden scaffolding poles are in a category of their own. But in Oromia and Tigray Regions the opposite is true. On many occasions SMFEs were classed as anything from retailers and food producers to metal workers. In other instances, MoTI categorised SMFEs by the amount of capital they initially registered with or their legal status as a business rather than the products they produce or the resources they use.

3.2 Extent of informality

Just as regional variations make any assessment of SMFEs difficult, the level of informality in Ethiopia complicates matters. A formal enterprise is a recognised business that is registered with the appropriate authorities as a legal entity. Within the Ethiopian SMFE sector, formal enterprises are in the extreme minority.

An ‘informal’ enterprise may mean one of three things. Firstly, it may refer to an enterprise that is unregistered because it is harvesting products that are not legally allowed to be harvested. In Ethiopia this category most often includes lumber, fuel wood and charcoal traders. The trade of timber from endangered species was banned in 1994, in the *Forestry Conservation, Development and Utilization Proclamation* (FDRE, 1994b). However, this practice continues quite openly; banned lumber can be found in even the most prominent workshops.

Secondly, an informal enterprise may involve the harvesting of a product that is legally permissible, but without the required registration, licence or tax being paid. This is often the case with honey production, which requires a permit when it occurs within a state forest. In practice it is carried out by a large number of people with little regard for the regulations.

Thirdly, informal enterprises may refer to non- or semi-commercial activities where the need for registration or licences is open to question. An example is a household level income generating activity that uses forest products both in the home and as items for sale. These tend to include NTFPs such as honey and wild spices and differ widely in their level of commercial output. Coffee is the exception to this trend; enterprises are subject to a comprehensive regulatory system and operate within established market information systems. Honey is also undergoing a period of formalisation as traders respond to a growing domestic demand for table honey and improved access to export markets.

Table 1 shows a national estimate of the number of SMFEs, calculated from data from the various MoTI bureaus, the Arsi and Bale Forest Enterprises and from interviews. Although these figures offers some indication of the extent of SMFEs, they should nonetheless be treated with extreme caution. In each case a register of companies was obtained from MoTI, which offered categorisations based on product (i.e. food and drink, hides and skins, construction materials, grain, wood and metal work), but there was little standardisation. For example, it was clear that an enterprise was assigned to a category by its name; it was quite possible to have two similar companies in entirely different categories. From these registers, lists of formal enterprises categorised as using timber and NTFPs were made. Due to the poor quality of the data, it was not possible to identify subsectors.

Even more problematic are the estimates of informal SMFEs. In Goba, the Bale Forest Enterprise had carried out a survey of these businesses and the resulting figure is fairly accurate. Elsewhere no such research had been conducted and an estimate was made based on market surveys. Consequently, while it may be possible to scale up these figures to provide a national estimate of SMFEs, we felt that this would be based on extremely unreliable data and could severely distort the picture of the sector.

Location	Number of SMFEs		
	Formal	Informal	Total
Goba	17	52	69
Arsi Negelle	7	25	32
Nazret	380	412	792
Bahir Dar	1,287	644	1,931
Mekele	3,042	913	3,955
Awassa	410	226	636
Total	5,143	2,272	7,415

With these estimates in mind, the following sections describe each of the four selected subsectors in greater detail. It was clear that SMFE owners and employees have very different views on the supply channels of their raw materials. This was particularly true for timber. In general, the supply chains for forest products are not complex and in many cases marketing does not occur beyond the local setting. At most they involve a primary producer or harvester, traders at the local and possibly regional level and finally a secondary processor who adds value and then markets the final product directly to the consumer. However, despite the simple nature of the chain, limited market linkages and clandestine trading mechanisms obscure the different actors from one another.

3.3 Timber subsector

Fuel wood, charcoal, construction timbers, scaffolding poles and furniture products are all part of the timber subsector. As mentioned above, natural forests meet nearly the whole domestic demand for wood, particularly in the case of SMFEs. Fuel wood collection and selling is by far the largest activity and is carried out by household level rural producers. However, in many cases this may not amount to an SMFE but rather is an element of income generation in a household's livelihood strategy. Annual fuel wood consumption per person was recently calculated as 1.10 m³ and 1.43 m³ among rural and urban dwellers respectively in Oromia Regional State. This consumption creates a year round demand and a crucial source of income for poor households often headed by women (Oromia Regional State, 2002).

Women tend to predominate the fuel wood supply chain. In some areas an increasing number of men are involved in the collection but rarely in selling. These activities are particularly attractive to those who have few assets, as only the most basic tools (an axe to split the wood and twine to bind it) and skill are required. The wood is transported to local markets on either their own backs or on a donkey. We observed that on average a fuel wood collector sells between 0.5 m³ and 1 m³ each market day. A number of protected indigenous trees including *Cordia africana*, *Hygenia abyssinica* and *Juniperus procera* often find their way into fuel wood bundles in many marketplaces.

Aside from fuel wood, a large number of SMFEs harvest timber using daily labourers. The timber is then pit-sawn into semi-processed lumber, sold to a local trader before being purchased by furniture makers. While these enterprises are abundant, their number could only be guessed at because they operate clandestinely. A number of SMFEs using small portable



Logs for sale on the roadside

Box 1. SMFEs in Mekele, Tigray Regional State

Gebre Egziabehere Gebre Medhin established his carpentry workshop in 2003 and currently has 13 temporary workers who are paid between five (USD 0.5) and 25 Birr (USD 2.6) per day depending on their level of expertise. He has five permanent members of staff and has been supported by UNIDO to provide extra employment opportunities. The workshop produces household and office furniture and at the time of the visit it was making beehives. They occasionally receive orders from the local MoARD bureau.

An increasing amount of imported timber is used in the workshop, although they still use *Cordia africana*, which is processed in a small Chinese sawmill. However, this species is becoming extremely expensive and difficult to obtain.

The workshop is located on land rented from private individuals. The land allocated for small businesses by the government is reportedly in an area remote from both suppliers and customers. Gebre Egziabehere says he is discouraged by the high level of tax he has to pay, which is estimated by MoFED tax collectors, as well as his inability to secure bank loans. Nonetheless, he has received training from MoTI in wood processing and financial management. In general, he believes that there is a lack of support when it comes to accessing capital, locating suitable working spaces and improving business management skills.

Chinese sawmills were operating quite openly. These machines are too small to process whole logs, which are cut by hand before being processed in the mill.

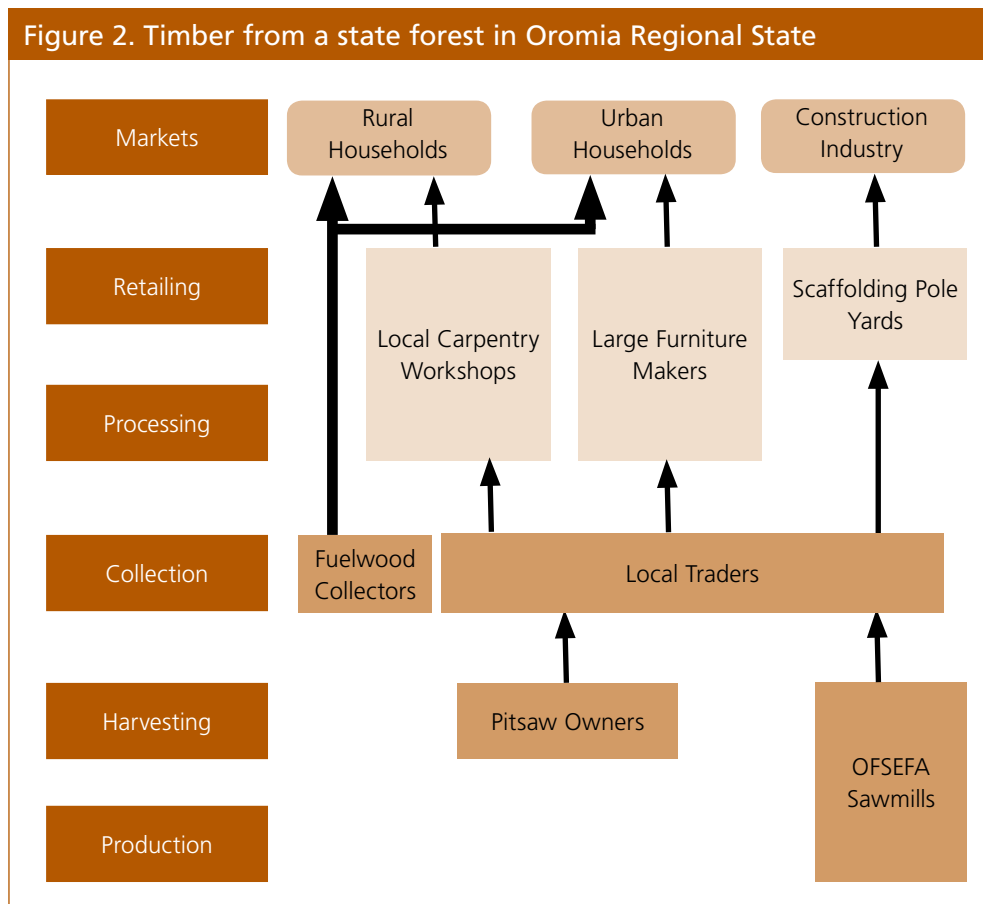
Adugna (2004) reports that half of the 47,590 m³ of timber supplied to Addis Ababa's carpentry workshops originates from natural forests and 30 per cent of the total is protected species. The majority of the supply comes from private dealers who trade in illegal pit-sawn boards. These often enter the city hidden in trucks loaded with grain or cattle, and the dealers often use bribery.

Larger mills dominate formal timber processing, operating predominantly under the state-owned OSFESA. OSFESA has recently begun to supersede the Ethiopian Sawmills and Joinery Enterprise (ESJE) in Oromia Regional State. OSFESA manages 28 mills, 22 of which are currently operational. Over the last decade, prior to the establishment of OSFESA, the ESJE struggled to provide an adequate supply to the market, a situation which facilitated the growth of illegal enterprises. Difficulties in meeting demand first arose in 1991 when the new government decreed that wood should be supplied through auctions, not through the old quota system. In 1996–97, supply to the ESJE reduced further when regional governments began to increase forest protection. Trees could only be procured when a section of forest was cleared for investment or following fires. As a result, by 2003 the ESJE sourced nearly half of its wood from plantations compared to only 10 per cent in 1992 (Adugna, 2004).

Of Ethiopia's 200,000 ha of plantation forests, just under half is classed as commercial plantations that produce sawn timber and poles for larger enterprises. The remaining 35 per cent and 18 per cent are community-managed woodlots and peri-urban plantations respectively. These plantations produce fuel wood and construction timbers as well as NTFPs. Few SMFEs reported purchasing timbers through legal channels, and rely on woodlots and private farmland for logs. They can procure logs from plantations but only after they have been rejected by the larger enterprises. As a result their supply tends to be even less secure than that of the ESJE (Spong, 2007). It is important to note the growing volume of imported timber

on the market, which the government has identified as a means of offsetting the pressure on domestic forests.

Traders link the SMFEs engaged in primary timber processing with those involved in secondary production, namely carpenters, joiners and artisans (shown in Figure 2). Again most timber traders operate illegally, although those engaged in buying and selling scaffolding poles are usually registered and trade largely with construction companies. The poles are almost always sourced from managed eucalyptus plantations and private stands. Yards filled with scaffolding poles exist in every town and city.



Like the timber traders, most of the SMFEs involved in furniture making are informal. A recent survey indicated that there were 737 carpenters producing furniture and construction timber in Addis Ababa alone (Adugna, 2004). Although it falls outside the scope of this study, there are also a number of large furniture makers in Addis Ababa including Finfinne Furniture Factory, Salvatore de Vita & Family and Wanza Furniture Industry. Despite being publicly registered companies, these enterprises are the largest consumers of protected, illegally traded, pit-sawn timbers. This is largely because the consumer demand for products such as furniture, handicrafts and tools made from native timbers remains greater than that made from exotic species, as they are perceived as being of higher quality (Spong, 2007).

As Figure 2 suggests, little integration has occurred along any of the timber supply chains, with actors operating solely at the point of extraction as collectors, processors and retailers. A major constraint for these actors, alongside the issues of supply discussed above, is limited value addition along the chain. In particular, SMFEs involved in secondary timber processing were found without exception to produce a small range of poor quality chairs, beds, tables, cupboards and so on with a remarkable lack of variety throughout the country. These are bought locally and almost exclusively by lower income households.



Roadside furniture workshop



A large furniture workshop

3.4 Gum resin subsector

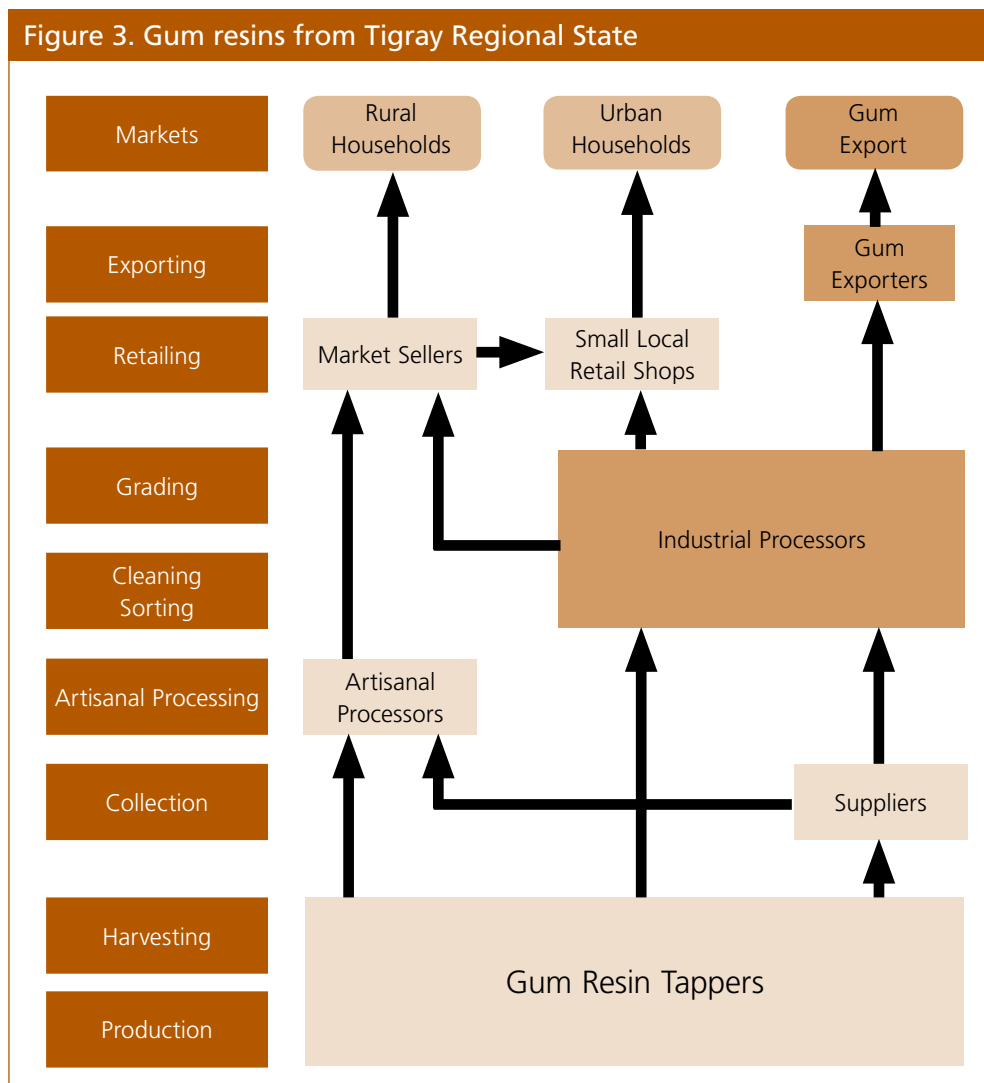
Gum resins have represented a prominent value chain in Ethiopia for many centuries, where they have been traded both domestically and internationally. Production is entirely dependent on natural forest resources that have yet to undergo any significant propagation or management. Significant stands of gum resin bearing trees can be found in all of Ethiopia's regional states, particularly in the north of the country, as Table 2 indicates (Wubalem, Getachew and Alia, 2007). All of Ethiopia's gum resins are harvested in a traditional manner. Individual tappers or small associations operate over large areas of often inaccessible land.

Table 2. Distribution of gum resin bearing tree species

Regional State	Genus	Estimated area (ha)
Tigray	<i>Boswellia, Acacia, Sterculia & Commiphora</i>	940,000
Amhara	<i>Boswellia, Commiphora, Acacia & Sterculia</i>	680,000
Oromia	<i>Boswellia, Acacia, Commiphora & Sterculia</i>	430,000
Gambella	<i>Sterculia, Acacia & Commiphora</i>	420,000
Somali	<i>Boswellia, Acacia & Sterculia</i>	150,000
Benishangul Gumuz	<i>Boswellia, Acacia & Sterculia</i>	100,000
SNNP	<i>Boswellia, Acacia & Sterculia</i>	70,000
Afar	<i>Commiphora & Acacia</i>	65,000
Total		2,855,000

The process is extremely labour intensive and provides jobs for many people. While wounding is the most common collection technique, in Liban Zone of Somali Regional State natural exudates are collected (Mulugeta, Tarekegn and Olsson, 2003).

As Figure 3 demonstrates, the crude product is sold to artisanal processors, local traders and directly to industrial processors, which sometimes employ local collection agents. There are approximately 745 enterprises dealing in this resource in Tigray Regional State alone with a total capital of 138,000,000 Birr (USD 14,526,316). Large industrial processors tend to dominate the formal market. These large processing companies, such as the Natural Gum Processing and Marketing Enterprise (NGPME), transport, clean, sort, grade and then market the resource. Of the resulting five grades, the first two are exported and the remaining three are sold domestically (Mulugeta, Sisay and Wubalem, 2007; Wubalem, Getachew and Alia, 2007).



Alongside the formal industrial processing channel, a more localised supply chain involves traditional processors and sellers trading a crude product in local markets. Domestically these products are used during coffee ceremonies and for fumigation. Internationally, gum resins are used in pharmaceuticals, confectionery, adhesives and cosmetics. Prices are determined by quality from dust and siftings to tears. In 2001, the market price for gum myrrh was USD 3.2 per kg while other gum resins fetched prices of between USD 0.6–1.5 per kg (Wubalem, Desalegn and Alia, 2007).

Despite the number of investors operating in the sector, no significant value chain development has occurred to integrate the supply channel, unlike the honey sector, which is discussed below. In Borana Zone in Oromia Regional State, where NGPME is the major buyer, low yields severely hinder production while lack of transportation increases costs (Yitebitu, 2004). Elsewhere, low returns make gum resin collection an unattractive activity. This is discussed in greater detail under the section addressing the economic, social and environmental impacts of SMFEs.

Box 2. Gum resins in Tigray Regional State

Much of the arid and semi-arid areas of Tigray Regional State are covered by wild stands of *Acacia senegal* and *Boswellia papyrifera* that produce gum arabic and gum olibanum. It is widely believed that the potential for gum resin production is far greater than agriculture in much of Tigray. *Acacia senegal* is particularly common on the plains around Hummera and Shiraro while *Boswellia papyrifera* tends to dominate the hills and slopes in the western part of Tigray. The total estimated coverage is 940,000 ha. At present, annual production is believed to be approximately 30,000 quintals.

Until 1986, the government-owned Natural Gum Processing and Marketing Enterprise (NGPME) was the sole business working in the sector, although today there are nearly 75 large enterprises and many smaller ones. In addition to processing and marketing, these enterprises raise and plant seedlings. They are required to prepare management plans supported by site maps that indicate a management schedule and have available capital of 500,000 Birr (USD 52,632). These are submitted to the local MoARD bureau, which evaluates the proposal and provides supporting documents. These are then taken to the MoTI bureau, which issues a licence. Management practises are then periodically monitored.

3.5 Honey subsector

Honey and beeswax represent extremely significant product value chains throughout Ethiopia. Production is dependent on forest resources and Ethiopia's diverse other sources of bee forage. The vast majority of producers continue to use traditional log hives, although a small number of producers have begun to use both transitional and modern hives. Production in many cases does not exceed subsistence levels and processing within the household rarely goes beyond the separation of the honey and beeswax. Where sales do occur, honey is most often transported by donkey to local markets as a crude product packed into sacks. Significant losses and contamination are common. Major buyers of crude honey are the owners of local drinking houses, who separate the honey and wax themselves. From the honey they brew mead known as *tej*, which they retail themselves. The wax is sold as a by-product to wax collectors who in turn trade with processing companies. The value of the product exported by these companies far exceeds that of honey.

The traditional honey and beeswax value chain described above continues to predominate the sector and suffers from multiple constraints. The first is continued deforestation. Secondly, traditional hives produce an extremely low yield (reportedly under five kilograms in some cases) and combs are usually damaged when they are removed. Thirdly, harvesting is difficult and dangerous, as log hives are suspended high in the trees. Fourthly, as mentioned above, contamination is common because honey is hygroscopic (i.e. it absorbs moisture). Finally, individual producers who have little market leverage carry out the marketing of their product, which results in even lower prices (Matchmaker, 2006).

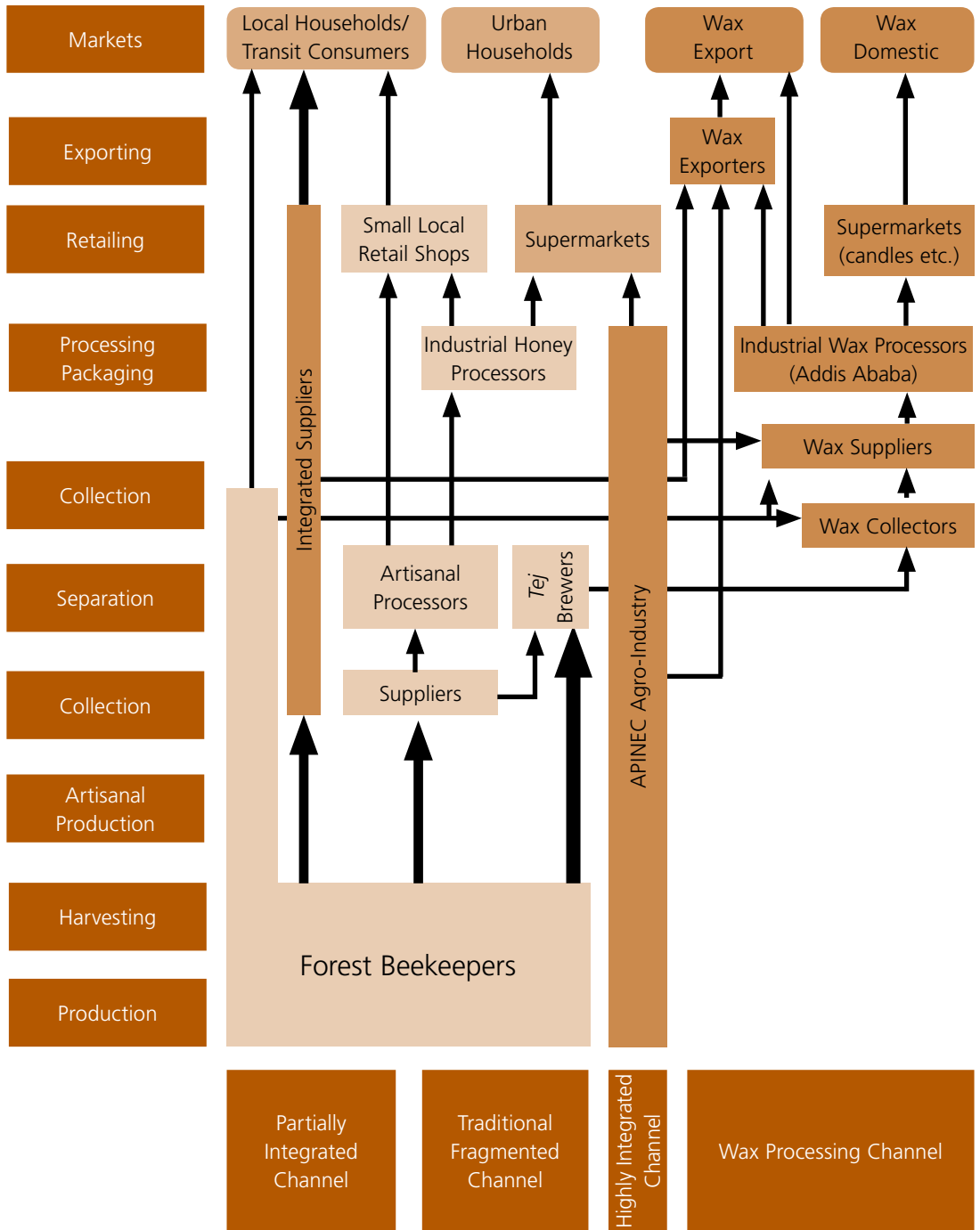
However, there are an increasing number of investors entering the subsector and institutionalising the process. Figure 4 shows a subsector map for honey and beeswax originating in Kefa Zone of SNNP Regional State where integration has occurred along two channels. The first has occurred where producers have formed cooperatives to process and retail honey, while the second represents the intervention of an Ethio-Dutch investor called APINEC Agro Industry.

Since the completion of this study, the Forest Honey Development and Marketing Union has formed, which now links producer cooperatives directly to the domestic market. APINEC still represents a potential rather than an actual channel, as they have yet to start trading in full. Although not indicated in the diagram, *tej* brewers retail their product directly to the domestic market and in fact represent one of the largest links in the value chain. Finally, the domestic wax market is extremely small in Kefa, although in other areas production and sale of candles for use in the Ethiopian Orthodox Church is significant.

The intervention of APINEC is important and not an isolated example in Ethiopia's honey subsector. The company was formed as a joint venture in 2004 between APINEC Apiculture Trading, Trichilla ABC and Clootwijk Apiaries BV. Modern hives have been constructed at a central site and out-growers are contracted to supply honey to local semi-processing centres. From there, it is moved to a regional processing and packaging warehouse. Extension services and training have been provided to the local producers. The intervention came about partly through the work of FARM Africa and SOS Sahel Ethiopia to organise producers in the area into cooperatives and establish forest management regimes. Similarly, Beza Mar, one of the market leaders in the supply of domestic table honey and the only local company to successfully export to the European Union, has recently signed agreements to purchase crude honey from a private limited company (PLC) established in neighbouring Sheka Zone with the support of the NTFP Research and Development Project. These cases are discussed at greater length under the section entitled 'non-governmental support'.

In Tigray Regional State, cooperative unions supply a processing company owned by Dejene Endowments. Finally, the Slow Food Foundation for Biodiversity is marketing two varieties of honey under the brand names Wenchi Volcano Honey and Wuchro White Honey from Oromia and Tigray Regional States respectively. Support was provided to modernise beekeeping practices and to improve the marketing of the product, largely to the Italian market. All of these businesses are responding to the growing demand for Ethiopian table honey on both the domestic and international markets.

Figure 4. Honey and beeswax from SNNP Regional State



Source: adapted from Matchmaker Associates, 2006

3.6 Bamboo subsector

Ethiopia has extremely large stands of both highland and lowland bamboo, which are both extremely versatile raw materials. Lowland bamboo originates from large natural stands managed by the state. No management plans exist for bamboo, open access largely prevails and degradation is rapid. Natural stands can be found along river valleys in areas neighbouring the Sudanese border. Mapped areas are listed in Table 3.

Area	Regional State	Total area (ha)
Hinde/North of Nekemte	Amhara	8,670
Asossa	Benishangul Gumuz	77,947
Bambasi	Benishangul Gumuz	64,245
Begi	Benishangul Gumuz	21,509
Nejo	Oromia	27,612
Dibate	Benishangul Gumuz	14,200
Guba	Benishangul Gumuz	7,757
Kemashi	Benishangul Gumuz	33,723
Pawe	Benishangul Gumuz	53,830
Gimbi	Oromia	29,125
Guten	Oromia	6,044
Metema/Dansha/Humera	Tigray/Amhara	425,000
Didessa Valley	Oromia	135,000
Dangur	Benishangul Gumuz	27,350
Bulen	Benishangul Gumuz	16,780
Galesa	Benishangul Gumuz	10,870
Total		959,662

Source: Ensermu *et al.*, 2000

Many farmers manage and harvest highland bamboo in small stands on private land in the highlands (Kassahun, 2006). Bamboo is generally harvested from November to February and in June and September. Pure stands can be found within montane forests of *Afrocarpus falcatus* and *Juniperus procera*. Mapped areas are listed in Table 4.

The major actors in the bamboo supply chain are producers and harvesters, who generally supply culms to local markets or directly to traders although some also make furniture themselves. From local markets, bamboo is bought by local furniture makers and consumers who use it for construction materials. Further afield, traders supply bamboo yards in large towns and cities. These yards primarily sell culms to roadside furniture makers but also often make furniture themselves.

One such yard, which employs 14 people on site, contracts local collectors to purchase bamboo from producers. A truckload of up to 1,000 culms costs 3,000 Birr (USD 316) to transport and around four to five Birr per culm (USD 0.5). Unprocessed culms are then sold for 10 Birr (USD 1) each to furniture makers. In addition, the yard has recently started supplying a bamboo factory that produces mats, toothpicks, etc. at a wholesale price of seven or eight Birr per culm (USD 0.8) (Berhanu and Statz, 2007).

Many of the roadside furniture makers that these yards supply can be found in Addis Ababa and are owned by young men from Injibara or Kosober where much of the bamboo originates. They generally produce cheap, low quality products, although there are a smaller number of modern workshops that supply high quality products. The roadside workshops are generally clustered in small groups of between three and seven enterprises, although none of them jointly source their materials or advertise their products to increase efficiency (Berhanu and Statz, 2007; Ensermu *et al.*, 2000; Statz, Dede and Berhanu, 2007).

From these workshops, products sell for the following prices: dining chair 175 Birr (USD 18), double bed 1,400 Birr (USD 147), six piece sofa set 1,450 Birr (USD 153), sofa chair 250 Birr (USD 26) and corner shelf 150 Birr (USD 16). Most Ethiopian consumers do not regard bamboo

Table 4. Highland bamboo distribution

Area	Regional State	Natural stand (ha)	Plantation (ha)	Total area (ha)
Injibara	Amhara	30	2,350	2,380
Agaro	Oromia	-	1,500	1,500
Bale Mountains	Oromia	56,851	-	56,851
Shenen/Jibat	Oromia	1,774	2,561	4,335
Gera	Oromia	36,000	1,250	37,250
Bore/Hagereselam	Oromia	-	2,460	2,460
Chencha/Arbaminch	SNNP	2,460	3,250	5,710
Indibir/Jembero	SNNP	-	1,850	1,850
Jima/Ameya	Oromia/SNNP	-	900	900
Mizan Teferi/Kulish	SNNP	-	1,850	1,850
Debresina/Wofwasha	Amhara	35	-	35
Wushwush/Bonga	SNNP	-	1,120	1,120
Bonga/Ameya	SNNP	7,997	-	7,997
Masha	SNNP	18,652	-	18,652
Munesa Shashemene	Oromia/SNNP	4,183	-	4,183
Total		127,982	19,091	147,073

Source: Ensermu *et al.*, 2000



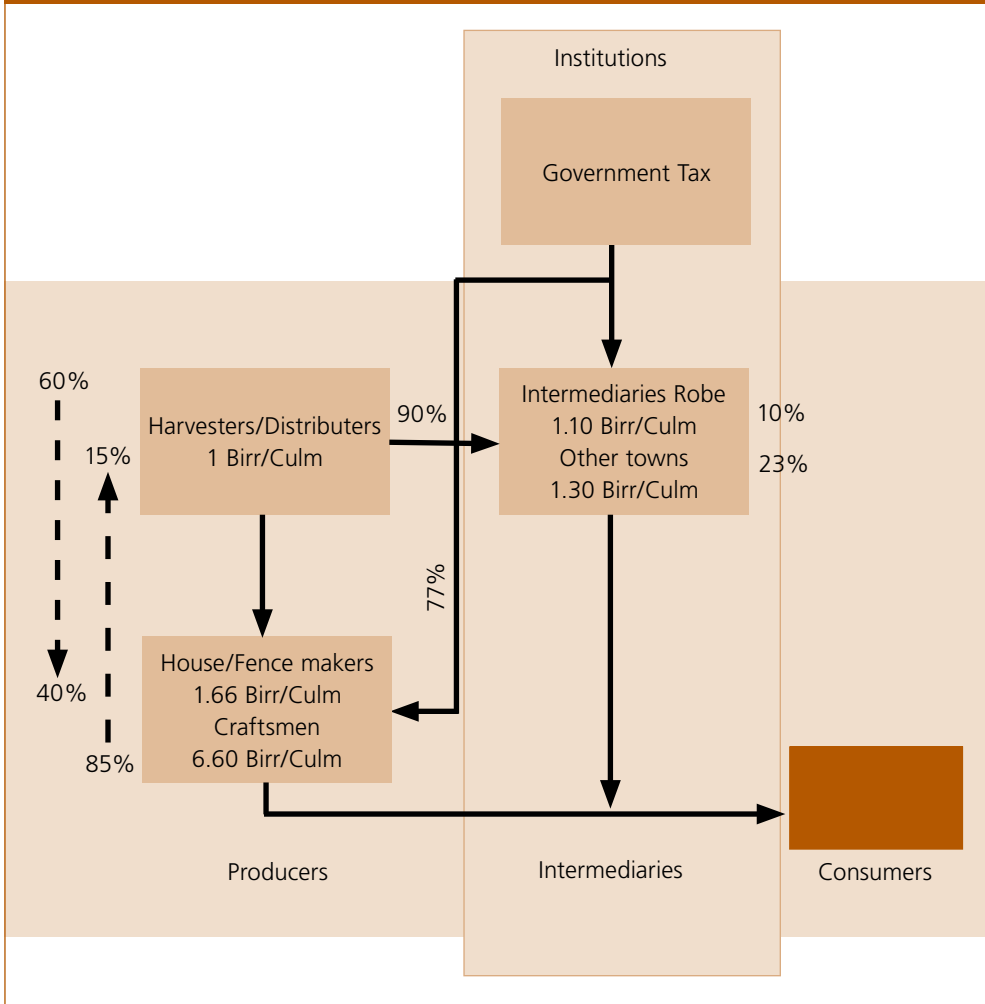
Bamboo furniture makers

as a quality product. As a result, much of the demand comes from expatriates establishing temporary homes in the country as cheaply as possible. This perception of low quality is based partly on the poor craftsmanship on display in the market and the tendency of craftsmen to use immature culms that have not been dried properly. The result is furniture that is prone to distortions, cracking, termite attacks and fungi (Berhanu and Statz, 2007; Statz, Dede and Berhanu, 2007).

Figure 5 represents a bamboo value chain at the local level, originating from Bale Zone in Oromia Regional State. As would be expected, craftsmen, who mainly produce basketry and traditional beehives for the local market can add substantial value to the end products (5.60 Birr per culm or 85% of the total end product value in comparison with the bamboo producers who make 1 Birr per culm or 15% of the total end product value). House and fence-makers add much less value (0.66 Birr per culm or 40% of the end product value). Crucially, there is no institutional input into the chain beyond tax collection despite the potential of this sub-sector (Arsema, 2008).

There is an extremely high degree of waste during both harvesting and processing. Only the top half of the culms are harvested, reportedly due to transport restrictions and a demand for thinner, greener, more easily workable bamboo. The remaining culm is difficult to coppice and represents a significant loss of raw materials. The bamboo workshops also do not use the raw materials effectively, most likely a result of the low value attached to the resource.

Figure 5. Bamboo from Oromia Regional State



Source: adapted from Arsema, 2008

A significant factor affecting supply is the periodic flowering of both bamboo species. Little is known about the flowering behaviour of Ethiopia's two native bamboos despite the enormous impact that diebacks have on supply. In Mandura *wereda*, Metekel Zone of Benishangul Gumuz Regional State nearly all the bamboo flowered a decade ago and subsequently died. Today it can only be found in isolated areas; the natural death prompted locals to convert the previously forested areas to farmland (Kassahun, 2006; Statz, Dede and Berhanu, 2007). Similarly, in Masha *wereda*, Sheka Zone of SNNP Regional State nearly all of the 18,000 ha of highland bamboo died in 2006.



Bamboo furniture for sale on the roadside

3.7 Economic, social and environmental impacts

The contribution of forests to Ethiopian GDP is often unaccounted for. Forests are thought to generate only two or three per cent of GDP, but this does not account for the role of forest products in subsistence and in rural livelihood strategies as well as its importance to the large number of informal SMFEs. Data for various forest sectors is presented in Table 5, although the figure of USD 2.02 billion for the total annual gross financial turnover of the Ethiopian forestry sector is carefully qualified.

Table 5. Annual wood products production, import, consumption and values

Product Type	Import		Export		Production		Consumption		
	Unit	Quantity (x1000)	USD (x1000)	Quantity	USD (x1000)	Quantity (x1000)	USD (x1000)	Quantity (x1000)	USD (x1000)
Sawn wood	m ³	1.8	455	0	0	60.0	15,167	61.8	15,622
Wood-based panels	m ³	15.1	3,913	0	0	10.1	2,617	25.2	6,530
Veneer sheets	m ³	3.1	1,030	0	0	0.0	0	3.1	1,030
Industrial round wood (logs)	m ³	0.0	0	0	0	2,459.0	38,251	2,459.0	38,251
Fuel wood	m ³	0.0	0	0	0	84,134.6	420,673	84,134.6	420,673
Round wood (poles, posts, construction wood)	m ³	0.0	0	0*	0*	86,532.0	1,047,999	86,532.0	1,047,999
Wood pulp	mt	12.0	9,960			9.0	7,470	21.0	17,430
Other fibre pulp	mt	0.0	0	0	0	9.4	2,350	9.4	2,350
Recovered paper	mt	0.0	0	0	0	2.5	625	2.5	625
Total		15,358		0		1,535,152		1,550,510	

Source: Mulugeta, 2008

* There is some intermittent export of round wood, e.g. to the Sudan, but quantities are not known.

Table 6. Gross annual value of Ethiopia's major NTFPs

Product Type	Estimated annual turnover USD (x1000)
Wild coffee (90,000 tons/yr)	130,590
Gum/incense	3,700
Honey and beeswax	86,510
Herbal medicine	216,367
Ecotourism (20% of the tourism industry)	15,400
Bamboo	10,556
Forest grazing (fodder)	0
Forest food	0
Essential oils	0
Live wild animals	0
Spices (1,208 tons)	2,700
Civet (400 tons)	183
Total	466,006

Source: Mulugeta, 2008

One of the major qualifiers of these figures is that many forest products are used wholly for subsistence and/or traded at local markets that remain unaccounted for in official figures (Mulugeta, 2008).

In Gore *wereda*, Illubabor Zone, Oromia Regional State, 88 per cent of households collect NTFPs. On average these households will collect 117 kg of coffee, 55 kg of honey and 21 kg of forest cardamom annually. Of this, the household will sell 85 kg of coffee, 49 kg of honey and 20 kg of spice, generating an average annual income of 457 Birr (USD 48). This equates to 23 per cent of their average annual income of 1,895 Birr (USD 199) (Berhanu, 2004). NTFPs also contributed a similar figure of 27.4 per cent towards the average annual income of households around Menagesha Forest, West Shewa Zone, Oromia Regional State (Aramde, 2006).

The mean annual income from beekeeping among households in Walmara *wereda* of West Shoa Zone in Oromia Regional State was between 450 and 3,300 Birr (USD 47–347) or 11.6 and 81.9 per cent of total household income. Only 12.5 per cent of the honey was consumed or given as gifts (Debissa, 2006). Fuel wood, fodder, honey and construction materials are also significant in the livelihoods of households in Dendi *wereda*, also in West Shoa Zone, contributing an average of 39 per cent to annual incomes (Getachew *et al.*, 2007).

The role of gum resins has likewise been recorded in Liban *wereda* in Somali Regional State. Here, a household generates on average USD 80 annually from trading gum resins, which

equates to 32.6 per cent of income. Crucially, harvesting is conducted during the two dry seasons and fills an important income gap (Mulugeta, Tarekegn and Olsson, 2003). Conversely, in Amhara Regional State, it was found that not a single household was benefiting from the production of frankincense despite the area having an annual production potential of 79,168 tons. This is reportedly because of a preference towards agriculture, the poor remuneration associated with the gum resin trade and obstructive government policies:

'Most of the respondents indicated that the current regional government policy forbids frankincense production by individual farmers. According to the farmers, not only the production for sale but even tapping of incense for household consumption will lead to imprisonment, which discouraged them from producing frankincense at the individual household level.' (Mulugeta, Sisay and Wubalem, 2007: 400)

In Hagare Salam, SNNP Regional State, nearly all farmers have a stand of bamboo on their land although there is wide variation as to the amount. Bamboo represents the fourth most important product in the area behind enset, milk and seasonal crops (beans, peas, barley, potatoes and onions). Farmers sell culms for six to eight Birr (USD 0.7) each to local buyers. Rich households make on average 800 Birr (USD 84) a year from this trade, or 20 per cent of total income, while middle income households make 400 Birr (USD 42), or 16 per cent of total income. Poor households do not produce bamboo (Statz, Dede and Berhanu, 2007). In Goba *wereda*, Bale Zone of Oromia Regional State, bamboo was recorded as generating the high figure of 47.3 per cent of total average income (Arsema, 2008).

But while SMFEs are economically and socially important, they also make a significant impact on the environment, a fact that is not always recognised by enterprise owners and workers. Resource depletion is clearly in evidence and is a result of the growth of the unregulated informal sector and the large degree to which natural resources are wasted. As has been mentioned, bamboo workshops are one of the main culprits.

Business formation and support

4.1 Institutions with which SMFEs need good relations

To operate in a financially and ecologically sustainable manner, SMFEs in Ethiopia require a very different set of positive and negative incentives, support structures and enforcement agencies than is currently available. Such incentives would have to appeal to informal SMFEs since this is how the vast majority of SMFEs operate. Constructive relationships need to be forged with numerous institutions, not least within the government hierarchy. These institutions include:

- ◆ *Wereda* offices of MoARD, MoTI and MoFED that govern licensing, business support initiatives, taxes and monitoring of regulatory compliance for sustainable exploitation of forest resources
- ◆ Justice and security services that implement meaningful and workable deterrents against illegal timber extraction
- ◆ State-owned forest enterprises that can form commercial partnerships with SMFEs so they remain financially solvent
- ◆ State-owned and private timber traders that work with the forest enterprises to ensure supply
- ◆ Producer and export associations that can improve value addition and exploit the potential of international markets
- ◆ Microfinance institutions that make their services accessible to those with a limited capacity for development

4.2 Types of ownership

The Commercial Code of Ethiopia (Imperial Ethiopian Government, 1960) provides for five types of business organisation: sole proprietorships, PLCs, partnerships, joint ventures and share companies. In addition to these, provisions for cooperative societies and Micro and Small Enterprises (MSEs) have also been enacted, which allow for the growth of community-based enterprises that focus on social development. There are no known associations of individuals and enterprises working in the Ethiopian forestry sector, aside from a recently formed producers and exporters association for honey and beeswax, which is discussed below.

The most popular registration for SMFEs is as a sole proprietorship. This is seen as having the simplest procedure, as only the most basic documentation is required, no standard accounting systems are needed and they are rarely audited. A joint committee comprising representatives of MoTI and the business community estimates taxes, which is often perceived as advantageous by business owners. However, although the SMFE sector appears to have a preference for sole proprietorships, nationally PLCs are much more common. In Ethiopia, a PLC can be formed with between two and 50 people and there are strict procedures to transfer partnership interests, including the requirement of a three-quarter majority among shareholders. Registration requires the preparation of Articles and a Memorandum of Association as well as USD 1,500 in paid up capital (guidelines for which are included in the Commercial Code). Audited accounts need to be maintained and applicable taxes paid.

Partnerships, joint ventures and share companies were not observed in the SMFE sector; this is due to a number of factors. Partnerships are extremely rare and government offices, let alone business owners, have little experience with their operation. Share companies are more common and are formed with fixed capital assets and limited liability. Similarly to PLCs, Articles and a Memorandum of Association are required and the company must be made public. Crucially, a fixed capital of USD 10,000 is required for legalisation, which effectively precludes SMFEs.

More conducive to SMFE formation are the more recent provisions for cooperative societies and MSEs. The *Cooperative Societies Proclamation* (147/1998) stipulates that a cooperative can be formed with a minimum of 10 members with the objective of collectively solving their economic and social constraints. Capital requirements are low and flexible while various support mechanisms are available including technical advisers and tax exemption. These are not offered to other businesses (FDRE, 1998). Similarly, MSEs are defined as commercial ventures, excluding technological and consultancy services, that are made up of between 10 and 20 people (in Oromia Regional State this number has been reduced to a minimum of three). No initial capital is required upon start up and microfinance institutions have been established to specifically fund MSEs, which are generally unable to fulfil the requirements to access credit facilities from formal banking institutions. Crucially, they have also been made exempt from most taxes. At present, most MSEs have formed in urban areas although they are spreading to rural settings.

Whichever business registration is followed, few SMFE owners have any knowledge of the different options available or the rights and obligations attached to their own registration. Their only contact with government bureaus is to pay taxes or penalties and there are few mechanisms by which they can obtain support. It was clear time and again that very few of the formally registered SMFEs identified any benefits of operating within state controls other than the option to bid for timber that has been confiscated from illegal traders.

Box 3. SMFEs in Nazret, Oromia Regional State

Masho Hailu established his woodworking enterprise as a PLC in 2000 and is registered with the Nazret MoTI bureau. Like many SMFEs, the workshop produces furniture and has also received orders from World Vision to make beehives. In addition, the workshop sometimes produces metalwork. Timber is sourced from markets in Nazret, much of which originates from SNNP Regional State. Imported timbers are currently too expensive. He employs five temporary workers and owns a small Chinese sawmill for processing boards. However, none of the workers or the owner has ever received any technical training and each has learnt their craft working for others. Further, Masho maintains no financial records of income or expenditure and is forced to rent land from a private owner.

The major challenges facing the enterprise are a lack of space to work and display products, extremely limited credit facilities and an insufficient and erratic supply of legally traded timber.

4.3 Strengths and weaknesses of business ownership

Establishing a sole proprietorship involves a relatively simple registration process. However, this business form does leave the owner exposed to unlimited liability. Tax is also considered unfavourable because it is based on estimations of tax officers. Reportedly, tax is calculated largely on estimates provided by tax officers that are considered extremely subjective and open to corruption. The only support mechanism we observed was in Mekele, the capital of Tigray Regional State, where the MoTI bureau has recently started offering assistance to business owners to obtain credit and secure land. Nonetheless, there is little incentive for business owners to develop business skills, as they are not required to establish a financial management plan or keep any records. As a result, most SMFEs would be better off establishing a PLC, although without support they are likely to find the procedures daunting.

Conversely, cooperatives and MSEs receive much greater support from the government, as noted above. Because they are jointly established, they increase their capital and diversify available skills. For MSEs, extension workers from MoTI provide technical support in establishing and registering a business and help build capacity. The same office is responsible for granting licences, facilitating credit and securing land. In collaboration with other government offices, MoTI also awards contracts for producing office furniture. The FeMSEDA also supports MSEs with business planning and management as well specific production techniques. Similar support is provided to cooperatives by Cooperative Promotion Bureaus that exist at *wereda* level.

However, both cooperatives and MSEs continue to be plagued with numerous problems. They were initially required to form with at least 10 members, although this has changed in some instances. Each is expected to contribute an equal share and benefit equally from any profits made. This can be extremely difficult to maintain in practice, as members will almost inevitably have differing levels of skill. As a result, conflicts are commonplace and there is a general lack of trust and commitment between members. This has resulted in apprehension about beginning an enterprise.

Furthermore, while most informants identified the introduction of MSEs as an opportunity, many had failed to fulfil the criteria and benefit from the additional government support that is now available. In addition, although microfinance institutions have been widely established, it was reported that they have failed to instigate systems that allow MSEs to access credit. As a result, MSEs are chronically short-lived.

Box 4. SMFEs in Bale, Oromia Regional State

The Tired Woodwork Micro and Small Enterprise was established in 2006 by a group of unemployed youth and is registered with the Bale Zone Trade and Industry Bureau of Oromia Regional State. There are currently eight members who, as with all MSEs, are organised as a cooperative. Like many SMFEs, they produce a small range of office and household furniture including beds, tables, chairs, cupboards, etc. Timber is sourced from a number of illegal, unspecified sources.

The Trade and Industry Bureau supported them with registering as an MSE, with applying for credit from the Oromia Microfinance Agency and with securing a work space. They received an initial loan of 40,000 Birr (USD 4,211) with a fixed interest rate of 12 per cent, for which they are liable both as individuals and as a group. Subsequently, individual members are eligible for loans of up to 5,000 Birr (USD 526) each.

The enterprise faces many challenges. Members have not received any technical training and they are dependent on three hired carpenters, which considerably lowers profits. The application process for the Oromia Microfinance Agency is long and the amounts considered too small for effective business management. In addition, they have yet to receive land, despite filing an application over a year ago. For these reasons, commitment by members is limited and their lack of business acumen means that they wait for others to make decisions.

4.4 Government support

The Government of Ethiopia's *Plan for Accelerated and Sustained Development to End Poverty* (PASDEP) emphasises the role of alternative or supplementary incomes from non-agricultural activities. Credit services, microfinance institutions, marketing cooperatives and training programmes have all been proposed. As has already been mentioned, private sector development is also called for in the *Micro and Small Enterprises Development Strategy*, which is channelled predominantly through FeMSEDA, which was established in 1998 (FDRE, 1997b).

In recent years FeMSEDA has offered training in bamboo processing, although their interventions are not widely known and few people seem to have been trained. Disappointingly, the trainers themselves are only producing marginally better products than the trainees (Kassahun, 2006). However, the organisation recently acquired new machinery for processing timber from bamboo, which was donated by UNIDO through the East African Bamboo Project (EABP), implemented by MoARD at a cost of USD 134,000.

Both MoTI and MoARD are tasked with supporting SMFEs. As has been mentioned, MoTI bureaus provide support in business establishment and capacity building. However, the relationship between SMFEs and MoARD is much more problematic, as they see each other as having opposing agendas. Nonetheless, MoARD is responsible for providing technical assistance and training to SMFE owners. Regional bureaus also grant permits for trade in forest products based on the preparation of management plans. They are also required to provide information on forest product markets through the mass media. However, few of these responsibilities are performed with regard to SMFEs.

By far the most important development in the Government of Ethiopia's policy environment for SMFEs has been the establishment of eight forest enterprises and a supervising agency in Oromia Regional State. In pursuance of the *Forest Proclamation of Oromia* (Oromia Regional



Bale Forest Enterprise Sawmill at Dello Mena, Oromia Regional State

State, 2003), regulations were issued in 2007 that called for the establishment of institutions that can effectively manage and sustainably utilise state forests in order to realise economic development in the region.

The role of OSFESA is to support, supervise and coordinate its forest enterprises. It is tasked with approving forest management plans and monitoring their implementation. Uniquely in the Ethiopian governance sector, both the supervising agency and the forest enterprises are established with the same principles as profit making businesses, with finances largely drawn from a 'forest fund'. The fund is seeded with the proceeds from the sale of forest products, particularly value added products, and activities such as trophy hunting. A percentage of the proceeds from each forest enterprise is then contributed to OSFESA (Oromia Regional State, 2007b). In all likelihood this revenue base will need to be diversified to make the new structures fully sustainable.

Each of the forest enterprises are mandated to:

- 1. Protect and develop the forest resources in its concession in accordance with the pertinent laws and regulations.*
- 2. Ensure sustainable supply of different forest products such as logs, lumber, transmission poles, construction materials, fuel wood, etc. to contribute to fulfilment of growing demands for such products.*
- 3. Develop a sound forest management plan with support from the Agency and implement it upon approval by the Agency.*
- 4. Provide technical support to farmers around the forest in their effort to develop their private forests.*
- 5. Contribute to improvement of local community's livelihoods through creation of job opportunities and rational utilization of non-timber forest products such as eco-tourism, apiculture, forest coffee, medicinal herbs, etc.*
- 6. Develop wildlife resources occurring within its concession area on a sustainable basis.*
- 7. Generate revenue from wise utilization of wildlife through controlled hunting practices.*
- 8. Maximize the revenue that can be obtained from forest products by engaging in processing of value added products such as furniture, pulp, particle board, chip wood, and the like.*
- 9. Devote share of the revenue obtained from sales of forest products in social and economic development of local communities.*
- 10. Perform other relevant activities necessary for the attainment of its objectives.'*
(Oromia Regional State, 2007c)

These provisions provide much greater scope for SMFE involvement in state forests than the federal forest proclamation. Clauses five and eight in particular call for a supportive environment for small and medium business formation from timber and NTFPs. Clause four also indicates that support will be offered to private forest owners to develop revenues from forest products.

This all suggests that a forest enterprise could, in effect, become the private sector buyer of forest products but, unlike other private sector actors, reinvests in 'social and economic development'. While this is an enticing proposition, it threatens to undermine what must remain the primary objective: increasing access to markets. This, time and again, was the critical message from SMFE owners and, in the broader context of rural development in Ethiopia, must be seen as a more viable and sustainable vehicle to growth than simply providing 'handouts' that the community has not contributed to in kind.

4.5 Non-governmental support

Operating alongside and increasingly in tandem with government support mechanisms are a growing number of NGOs. A particular focus of non-governmental support in the Ethiopian forest sector is the implementation of Participatory Forest Management (PFM). To date, this has largely focused on a number of state managed forest priority areas, although the new legislation discussed at the beginning of this paper should facilitate the growth of PFM elsewhere. One of the more prominent NGO interventions to date has come in the form of the joint Participatory Forest Management Programme of FARM Africa and SOS Sahel Ethiopia, which was operational between 2002 and 2007 in the Bonga, Borana and Chilimo forests of Oromia Regional State. Prior to this, FARM Africa had established a PFM pilot as early as 1996 in Bonga. Currently, both FARM Africa and SOS Sahel Ethiopia are implementing BERSMP in collaboration with the Bale Forest Enterprise.

Elsewhere, Huddersfield University, the Ethio-Wetlands and Natural Resources Association (EWNRA) and Sustainable Livelihood Action are currently implementing the Non-Timber Forest Products Research and Development Project South West Ethiopia, in collaboration with SNNP Regional State. The project is operating in the Bench Maji, Kefa and Sheka Zones of the region. Recently, a number of local NGOs have also begun to experiment with PFM.

PFM has also been introduced through bilateral government support. The German Technical Cooperation (GTZ) established the Adaba-Dodola Integrated Forest Management Project in collaboration with the Oromia Bureau of Agriculture and Rural Development in 1995 and is currently preparing to roll out their PFM approach across the region. In addition, the Japanese International Cooperation Agency (JICA) established the Belete-Gera Regional Forest Priority Area Participatory Forest Management Project in 2003 and is currently midway through their second phase.

Although notable differences exist, PFM in Ethiopia essentially involves the return of management and user rights over forest resources to local communities. GTZ's Integrated Forest Management Project (IFMP) in Adaba-Dodola was one of the first of its kind when it commenced in 1995 and much of its approach can be seen in subsequent PFM interventions. The IFMP established forest dwellers associations known as *Waldayaa Jiraatoota Bosonaa* (WAJIB) with the aim of granting exclusive user rights to organised community groups. Forest blocks were established in participation with local stakeholders and legal agreements signed with the local government:

'Each user group signs a forest block allocation contract with the forest service, which gives them legal entitlement to use and manage the forest. The contract document clearly defines the rights and duties of the user groups and the Forest Service:

- ◆ *The rights of the user groups include settlement in the block, grazing, maintaining the already existing farm plots, and use of forest products both for consumption and sale,*
- ◆ *The duties are to restrict further settlement and agricultural expansion, maintain the initial forest cover and pay forest rent in exchange for the use rights they have been granted,*

- ◆ *The Forest Service is obliged to provide organisational and technical support, carry out annual and periodic forest cover assessments and settlement censuses. Moreover, the Forest Service is expected to respect the rights of the user groups on the one hand and safeguard against free riders on the other.*

There are sanctioning mechanisms in place in case of non-compliance with the terms of the contract.’ (Girma, 2005: 25)

A core component of PFM has been the promotion and diversification of livelihoods for forest dwelling and neighbouring communities, which has often lent itself to SMFE formation. For the IFMP, a community-based ecotourism venture was the main livelihood activity, which has now been handed over for local management. However, subsequent PFM projects have tended to target forest product promotion, which has almost exclusively focussed on NTFPs such as forest coffee, honey, bamboo, cardamom and so on. Having said this, some communities are now also benefiting from the timber trade. This is the case in Chilimo where the community has successfully negotiated a benefit-sharing agreement with the local Addis Ababa Forest Enterprise.

In most cases, communities have organised into cooperatives to produce, (semi-) process and trade products. This allows such groups to access many of the government support systems discussed above. An exception to this is the NTFP Project in SNNP Regional State. Here, communities have established seven PLCs that are currently engaged mainly in the trade of honey. The introduction of transitional hives as an alternative to the traditional log hive has increased yields by approximately 300 per cent. The formation of PLCs has allowed producers to bypass local middlemen and trade with national processing companies (see Box 5).

Box 5. Shatto NTFP Trading PLC

Shatto in Sheka Zone of SNNP Regional State was established alongside six other PLCs with the support of the NTFP Research and Development Project. Following training, 10 farmers formed the group and named it after a nearby forest to remind themselves of their link to the resource. After learning of the different options available, they registered their business with the local MoTI bureau. Premises were constructed comprising a store, office and honey collection room.

Shatto NTFP Trading PLC has Articles of Association and a Memorandum of Association approved by the registering body in accordance with the Commercial Code of 1960. The overall management of the organisation is guided by these two documents. A General Manager, a Deputy Manager and other support staff manage the PLC and undertake the overall management tasks including negotiating supplies, gathering market information and financial oversight. A General Assembly selects and hires the managers and determines their roles, responsibilities and salaries.

Members have taken training in leadership skills, business development, entrepreneurship, financial management, basic accounting, conflict resolution and management. The PLC has a bank account in the Commercial Bank of Ethiopia Masha Branch. Crucially, it has established a long term agreement to supply unprocessed honey to Beza Mar Agro Industry.

Credit of 20,000 Birr (USD 2,105) and various pieces of equipment were obtained from the NTFP Research and Development Project in 2005 and combined with contributions from members. The group has so far made 18,000 Birr (USD 1,895) although this does not take into account the labour provided by members. They are planning to request a bank loan, as the group now has enough resources to act as collateral.

Increasingly, non-governmental support has sought closer collaboration with government agencies than has been the case in the past. The presence of OSFESA in Oromia Regional State has allowed BERSMP to integrate the local Bale Forest Enterprise into the value chain of the forest products it is promoting. The forest enterprise is currently establishing itself as a collection and processing centre and it was recently able to purchase three tons of forest coffee from a community cooperative based in Dello Mena *wereda*. The introduction of post harvesting drying practices by the FARM Africa/SOS Sahel intervention allowed the cooperative to attain a price 25 per cent above the market average.

But despite the notable successes of the PFM approach in Ethiopia, many challenges remain to make interventions sustainable beyond the life of a project and its funding. Forest dwelling and neighbouring communities in Ethiopia undoubtedly recognise the value of conserving and sustainably utilising the natural resources around them. However, in the context of often extreme poverty, it is questionable whether it is currently economically viable for them to do so in many instances. Exploring additional financing mechanisms such as carbon financing and payment for environmental services is essential in this process and is being undertaken by a number of NGOs. However, the major and more immediate challenge that remains is to upgrade forest product value chains so that communities can increase the value they earn per unit of a given resource. This will in turn secure both livelihoods and forest resources.

This will in all likelihood represent a significant challenge to NGOs that have not traditionally responded fully to market forces and opportunities. The tendency to provide grants of money or materials, seldom requiring community contributions in kind and with little follow up, has stifled a great deal of entrepreneurial spirit among potential and actual enterprise owners. It is often easier to wait for the next NGO payout than to enter fully into the market and establish viable linkages. The importance of parallel and competitive markets needs to be understood by NGO field staff who often have little or no experience of business.

Marketing, particularly to reach niche markets, and greater coordination of the key players in the sector is needed. One recent success story in this regard has been the establishment of the Ethiopian Honey & Beeswax Producers and Exporters Association (EHBPEA), which has been supported by SNV, NTFP Research and Development Project and Holeta Beekeeping Research Centre.

Table 7. List of government and non-government actors

Name	Address	Telephone	Email
OSFESA	PO Box 6128, Addis Ababa	+251 (0)11 552 3451	ofesa@ethionet.et
FeMSEDA	PO Box 1463, Addis Ababa	+251 (0)11 551 1122	–
FARM-Africa	PO Box 5746, Addis Ababa	+251 (0)11 440 6514	bale2006@ethionet.et
SOS Sahel Ethiopia	PO Box 3262, Addis Ababa	+251 (0)11 416 0391	Sos.sahel@ethionet.et
NTFP Research & Development Project	PO Box 20724 Code 1000, Addis Ababa	+251 (0)47 553 8769	ntfp-rdp@ethionet.et
Eastern Africa Bamboo Project	C/o UNIDO, PO Box 14771, Addis Ababa	+251 (0)11 554 4587	Melaku.tadesse@ethionet.et
MELCA Mahiber	PO Box 1519 Code 1250, Addis Ababa	+251 (0)11 550 772	melca@ethionet.et
Sunarma	PO Box 6942, Addis Ababa	+251 (0)11 646 4213	sunarma@ethionet.et
GTZ	PO Box 12631, Addis Ababa	+251 (0)11 618 0200	gtz-aethiopien@gtz.de
JICA	PO Box 5384, Addis Ababa	+251 (0)11 550 0475	belete_gera@ethionet.et

Finance and market issues

5.1 Market information systems

The Ethiopian Commodities Exchange was established in 2007 and provides market prices for a limited number of staple crops. However, it did not include any forest products until the introduction of coffee in late 2008. As yet, there have been no attempts made to disseminate market information via the expanding telecommunications network. Consequently, forest product producers and harvesters often have extremely weak market leverage. In wholesale, prices are determined by the buyer who often has an effective monopoly. When direct retail occurs, as is the case with furniture, none of the SMFEs we interviewed conducted price assessments. Items were most often simply placed on the roadside and a price bartered for.

5.2 Tax regimes

For timber originating from state forests, taxes are levied for stumpage of standing trees or for cut trees transported to the roadside. These vary depending on species, diameter and the distance from the capital city. Stumpage is typically almost twice as much in Oromia Regional State (USD 60) than Gambella Regional State (USD 39), which is 700 km from Addis Ababa. Further, in Oromia Regional State *Chlorophora excelsa* currently fetches a dollar more than *Aningeria adolfi-fredericii*. Likewise, round wood is taxed between USD 39 and USD 59 per m³, which is very low compared to production, management and replanting costs, which are estimated at USD 77 per hectare (Million, 2001).

Checkpoints are found along the major roads where MoARD checks licences and imposes any charges required. However, charges only occur at the point of extraction and no specific taxes are imposed on processed forest products such as sawn wood or furniture, while imported timber is exempt from duty payments.

A royalty fee is also paid to MoARD for NTFPs although this is extremely inconsistent and difficult to estimate. For bamboo, it has been reported in SNNP Regional State that royalties are only paid if the resource is taken out of the *wereda*, in which case a permit is required from MoARD. This can apparently be a lengthy process that has discouraged many and promoted the role of middlemen (Statz, Dede and Berhanu, 2007). However, in Goba Town of Oromia Regional State, the buyer pays a fixed rate of one Birr (USD 0.1) per bundle. Due to the arbitrary measurement, bundles have duly increased from 12 to 24 culms to avoid tax (Arsema, 2008). Furthermore, gum resin collectors are required to obtain a one year lease from MoARD, which encourages maximum exploitation.

For the SMFEs themselves, those established as sole proprietorships often have their tax calculated by MoFED, as many are unable to keep their own accounts for auditing. As mentioned above, this creates a constant point of contention, as the findings are often highly subjective. These grievances are further aggravated by the large number of SMFEs operating outside of the tax system that obtain raw materials more cheaply, as well as the exemptions afforded to MSEs.

5.3 Access to credit

Finance is a perennial problem for small business development in Ethiopia. Formal credit is often inaccessible to SMFEs and informal lenders offer crippling interest rates. A growing number of microfinance institutions are emerging in the country, although they have offered little support to SMFEs. Generally, they are unfamiliar with the forestry sector and hesitant to lend to those that rely on natural resources. It was also reported that they have lengthy and cumbersome procedures, which act as a disincentive to small enterprises with limited capacity. As noted above, despite the government's focus on MSEs, they have been largely unsuccessful in securing credit.

Credit from formal lenders is only given to those SMFEs that have established collateral and support from government organisations. In Tigray Regional State, only those enterprises organised by MoTI are supported. In Amhara Regional State, the extent of credit commitments to the SMFE sector amounts to:

- ◆ 4,575,856 Birr (USD 481,669) to 1,240 micro enterprises engaged in wood and metalwork
- ◆ 1,274,890 Birr (USD 134,199) to 42 SMFEs retailing timber
- ◆ 1,029,219 Birr (USD 108,338) to 471 individual honey producers
- ◆ 77,000 Birr (USD 8,105) to three carpentry PLCs

5.4 Insurance

The insurance industry in Ethiopia remains in its infancy and the majority of SMFEs do not recognise the importance of guaranteeing an investment. Even the larger state-sponsored forest enterprises only insure their vehicles. In all likelihood, insurance would be seen as a further burden on registered SMFEs that would make competition with their unlicensed counterparts even more difficult. Furthermore, the state does not offer any export guarantees for those marketing forest products internationally.

Conclusions – Opportunities and threats in the SMFE sector

1. SMFEs are informal, unregulated and undocumented. There are few incentives to become formal businesses and even fewer deterrents to operating illegally. The Government of Ethiopia has a huge task ahead of it to limit illegal resource use and reduce informality in the SMFE sector. Despite being banned for many years, Ethiopia's native hardwoods are traded and sold quite openly by even the largest enterprises. Law enforcement has been ineffective and awareness among consumers is almost nonexistent.

By avoiding tax and other regulations, informal SMFEs can operate with lower costs and undercut formal enterprises. However, they are unable to access the support mechanisms that are available from government and non-government sources. Partly as a result of this, they are chronically short lived and have few incentives to secure the resource base. At present, one of the greatest constraints to SMFE development is a general lack of knowledge of the sector, which is reflected in this report.

2. The policy environment is increasingly supportive, at least on paper. By recognising the roles that forests play in livelihoods and focusing greater attention on small rural enterprises, the current policy environment in Ethiopia provides a greater number of opportunities for SMFEs than ever. The establishment of OSFESA in particular is an exciting development, although its potential is only now beginning to be fulfilled. These changes are being supported by a growing number of NGOs that have recognised the links between natural resources and livelihoods and are working to overcome the significant challenges of establishing sustainable resource use among a growing population.

However, the limited value placed on SMFEs in Ethiopia to date has led to a lack of agreement between regional governments as to how to deal with them and conflict between ministries as to their role. For example, in seeking to regulate natural resource use, MoARD places itself in opposition to MoTI and MoFED, which are attempting to promote enterprise development and collect revenue respectively. Nonetheless, OSFESA's mandate stands to bring many of these interests together.

3. Significant value addition has yet to be achieved. Domestic and international values for many NTFPs are growing and new markets are being explored. However, in general, only the most basic value addition is attempted by SMFEs before products and materials move up the marketing chain. SMFEs do not informally work together to source their raw materials or to advertise their products and they do not formally establish producer associations.

Operating individually, SMFEs lack capacity to analyse their profitability and keep records while their market leverage is held at a minimum. The quality and range of products produced is extremely low and they exhibit poor craftsmanship. Limited technical ability also leads to high levels of waste, particularly of cheap resources such as bamboo. Lack of capital means

investments cannot be made in machinery or training, with ramshackle roadside workshops/showrooms the result. Furthermore, business management is almost non-existent and it is not uncommon to find business expenses unrecorded or recorded alongside household expenses. There is also a serious deficit in marketing; the vast majority of SMFEs are entirely unaware of demand and do not attempt to advertise their products.

4. Progress will come if SMFEs are supported rather than ignored or shut down. A dearth of technical abilities along the whole forest product marketing chain is a limiting factor in all of the SMFEs included in this study. However, support from the government and NGOs has been limited both in scope and extent. FeMSEDA is barely known and NGO training opportunities are restricted to specific geographic areas. Where technical assistance has been offered, business skills often go unresolved.

In addition, despite microfinance institutions being established and promoted particularly through MSEs, few SMFEs have the capacity to carry out the application procedures and many feel that the effort is not commensurate to the amounts available. The lack of skills needed to prepare loan proposals means that chronic underfunding continues to be a major hindrance to development. This is not helped by inappropriate taxing systems that many see as unfair and open to corruption.

Recommendations

To the Government of Ethiopia

1. The legislative framework surrounding forests and forest product trade needs to be fully implemented by having guidelines and standards approved by the Environmental Council. The Council also needs to rectify the contradictions that exist between federal and regional forestry legislation as well as trade and investment policies.
2. The 15 year ban on timber trading needs to be re-evaluated in light of its clear failure to stem illegal forest clearance. A lucrative informal trade currently exists that would be undermined if fully regulated legal channels were reopened and made accessible to SMFEs. Identifying an existing timber value chain and implementing trial legislation could provide a useful entry point.
3. The recasting of government forest authorities as forest enterprises in Oromia Regional State should be seen as a potentially significant development in the Ethiopian forestry sector. However, their focus must be on facilitating market access and supporting value addition rather than 'rural development'. Profits from forest products would be better spent on new technology and training rather than community assistance in the broadest sense.
4. State forest enterprises can, if necessary, form crucial links in forest product value chains that can assist SMFEs to gain market leverage. However, they must not position themselves as the sole buyer of forest products. Existing value chains need to be restructured and actors more clearly defined, which can only result from parallel and competitive markets of engaged enterprise owners.
5. With recommendations 3 and 4 in mind, the forest enterprise structure should be explored by other regional states and experience sharing pursued by OSFESA at both the federal and regional level.
6. The successes of community management and the PFM approach needs to be recognised by all government actors and the definitions more clearly enshrined in federal legislation, as it has been in Oromia Regional State.
7. Credit services need to be reviewed in order for them to be accessible to small enterprises with limited capacity. This has yet to be achieved despite the proliferation of microfinance institutions alongside the MSE strategy. The procedures for securing loans must be simplified or greater support offered by the lenders to support SMFEs. Some microfinance institutions also need to be sensitised to the nature of SMFEs and the sustainability of their businesses.

8. The difficulties of operating as a cooperative should be recognised and much greater support systems offered to individual entrepreneurs. Those offered to enterprises that register as an MSE currently include tax exemptions, access to credit and technical assistance. By relaxing some of the prerequisites of MSE and cooperative formation, these benefits can be made even more attractive.
9. SMFE owners need to be supported to establish producer associations. This can be achieved by expanding the mandate of FeMSEDA and others to link SMFEs to each other. As an association of relatively large businesses, the EHBPEA can nonetheless provide a model for others.
10. The Commodities Exchange should review the potential of other NTFPs to be added alongside coffee. This could realistically be achieved for honey and gum resins in the medium term.

To Non-Governmental Organisations

11. NGOs should be extremely careful in their support of SMFEs in the future. It is clear that SMFEs want to fully access markets rather than receive a stream of 'support' services. This has served to stifle entrepreneurial spirit, which will be difficult to reinstate. Efficient outcomes for both livelihoods and natural resources can emerge from an efficient market. It is crucial in this regard that non-government actors recognise that to date their activities have sometimes served to restrict market freedoms and undermine the responsibilities of small and medium enterprise owners.
12. PFM is bringing about encouraging results in both forest management and forest product utilisation. However, NGOs must build their own capacity to facilitate entry into the market and to build market linkages for SMFEs. At present, many NGOs do not have the confidence to do this.
13. With an increasingly supportive and market driven government framework, non-government actors working within the PFM framework can offer more coordinated support if stronger relationships are developed with their government counterparts.
14. Furthermore, the PFM approach needs sustained advocacy among both government and non-government actors who continue to exclude local communities from the management of their natural resources.
15. At present, support needs to be provided to the Oromia Forest Enterprises in the form of cost sharing and capacity building programmes with a view to making the enterprises fully independent and sustainable.

Bibliography

Please note that as family names are not used in Ethiopia, Ethiopian authors are listed under their given name followed by the name of his or her father (and sometimes grandfather). Only these authors' given names are listed in parentheses in the text.

Abebe Haile Gebremariam (2005) 'Options for in situ conservation of forest coffee in Kontir Berhan Area, south west Ethiopia', paper presented at the workshop organised by the EU Delegation in Ethiopia and Ministry of Agriculture and Rural Development, Yirgalem (Sidama), Ethiopia, 22-24 June 2005.

ADB, EU and FAO (2003) *Forestry Outlook Study For Africa: Subregional Report East Africa*. Rome: FAO.

Adugna Nigatu (2004) 'Sawnwood market of Addis Ababa', MSc Thesis, Wondo Genet College of Forestry and the Swedish University of Agricultural Sciences.

App, B., Anderson, S. and Abebe Haile (2008) 'Ethiopia biodiversity and tropical forest 118/119 assessment', study prepared for the United States Agency for International Development

Aramde Fetene Mengistu (2006) 'Diversity and socio-economic importance of non-timber forest products of Menagesha Suba Forest Area, Central Ethiopia', MSc Thesis, Wondo Genet College of Forestry and the Swedish University of Agricultural Sciences.

Arsema Andargatchew (2008) 'Value chain analysis for bamboo originating from Shedem Kebele, Bale Zone', MBA Thesis, Addis Ababa University.

Berhanu Adenew and Statz, J. (2007) 'Bamboo market study in Ethiopia', technical report prepared for the United Nations Industrial Development Organisation (UNIDO) Acting as Project Executing Agency for the Common Fund for Commodities (CFC).

Berhanu Debela (2004) 'Contribution of non-timber forest products to the rural household economy: Gore District, southwestern Ethiopia', MSc Thesis, Wondo Genet College of Forestry and the Swedish University of Agricultural Sciences.

Boa, E. (2006) 'Bamboo policies and strategies', technical report prepared for the Governments of Ethiopia and Kenya by the United Nations Industrial Development Organisation (UNIDO) Acting as Project Executing Agency for the Common Fund for Commodities (CFC).

Bulti Terfassa (2008) 'Ethiopia's trade and investment policy', pp. 283-312. In: Taye Assefa (ed.) *Digest of Ethiopia's National Policies, Strategies and Programs*. Addis Ababa: Forum for Social Studies.

Chowdhury, Q., van de Graaf, R., Hazenberg, S., Erniwati, E., Maris, W. and Paulos Tesfaye (2005) *Poverty alleviation through NTFP development in S-W Ethiopia: options for certification of coffee and honey for poverty alleviation and forest conservation*. Student Research Series No. 2. Wageningen.

Debissa Lemessa Bayissa (2006) 'The roles of apiculture in vegetation characterization and household livelihoods in Walmara District, central Ethiopia', MSc Thesis, Wondo Genet College of Forestry and the Swedish University of Agricultural Sciences.

Ensermu Kelbessa, Tamrat Bekele, Alemayehu Gebrehiwot and Gebremedhin Hadera (2000) *A Socio-economic Case Study of the Bamboo Sector in Ethiopia: An Analysis of the Production-to-Consumption System*, International Network for Bamboo and Rattan (INBAR), Beijing.

Ermias Lulekal, Ensermu Kelbessa, Tamrat Bekele and Haile Yineger (2008) 'An ethnobotanical study of medicinal plants in Mana Angetu District, southeastern Ethiopia', *Journal of Ethnobiology and Ethnomedicine* 4:10.

FDRE (Transitional Government of Ethiopia) (1994a) *Ethiopian Forestry Action Program*. Addis Ababa: Ministry of Natural Resources Development and Environmental Protection.

FDRE (Transitional Government of Ethiopia) (1994b) *Forestry Conservation, Development and Utilization Proclamation No. 94/1994*. Addis Ababa.

FDRE (1997a) *Environmental Policy*. Addis Ababa: Environmental Protection Authority and Ministry of Economic Development and Cooperation.

FDRE (1997b) *Micro and Small Enterprises Development Strategy*. Addis Ababa: Ministry of Trade and Industry.

FDRE (1998) *Cooperative Societies Proclamation No. 147/1998*. Addis Ababa.

FDRE (2002a) *Environmental Protection Organs Establishment Proclamation No. 295/2002*. Addis Ababa.

FDRE (2002b) *Environmental Impact Assessment Proclamation No. 299/2002*. Addis Ababa.

FDRE (2002c) *Environmental Pollution Control Proclamation No. 300/2002*. Addis Ababa.

FDRE (2003) *Investment (Amendment) Proclamation No. 375/2003*. Addis Ababa.

FDRE (2005) *Rural Land Administration and Land Use Proclamation No. 456/2005*. Addis Ababa.

FDRE (2007a) *Development Conservation and Utilization of Wildlife Proclamation No. 541*. Addis Ababa.

FDRE (2007b) *Forest Development Conservation and Utilization Proclamation No. 542/2007*. Addis Ababa.

FDRE (2007c) *Policy and Strategy on Forest Development, Conservation and Utilization*. Addis Ababa.

Freeman, D. and Pankhurst, A. (eds.) (2003) *Peripheral People: The Excluded Minorities of Ethiopia*. London: Hurst.

Getachew Mamo, Sjaastad, E. and Vedeld, P. (2007) 'Economic dependence on forest resources: a case from Dendi District, Ethiopia', *Forest Policy and Economics* 9: 916-927.

Girma Amente (2005) 'Rehabilitation and sustainable use of degraded community forests in the Bale Mountains of Ethiopia', PhD Thesis, Albert Ludwigs University.

Haile Yineger, Delenasaw Yewhalaw and Demel Teketay (2008) 'Ethnomedicinal plant knowledge and practice of the Oromo ethnic group in southwestern Ethiopia', *Journal of Ethnobiology and Ethnomedicine* 4:11.

Imperial Ethiopian Government (1960) *Commercial Code*. Addis Ababa.

Kassahun Embaye (2000) 'The indigenous bamboo forests of Ethiopia: an overview', *Ambio* 29: 518-521.

Kassahun Embaye (2006) 'Legal environment assessment and policy strategy suggestions', technical report prepared for the Government of Ethiopia by the United Nations Industrial Development Organisation (UNIDO) Acting as Project Executing Agency for the Common Fund for Commodities (CFC).

Kebu Balemie and Fassil Kebebew (2006) 'Ethnobotanical study of wild edible plants in Derashe and Kucha Districts, south Ethiopia', *Journal of Ethnobiology and Ethnomedicine* 2: 53.

Matchmaker Associates (2006) 'Analysis of selected sub sector in Kafa Zone of Ethiopia: forest coffee, honey and cardamom', unpublished consultancy report for SOS Sahel Ethiopia.

Melaku Bekele (2003) 'Forest property rights, the role of the state, and institutional exigency: the Ethiopian experience', PhD Thesis, Swedish University of Agricultural Sciences.

Melaku Bekele (2008) 'Ethiopia's environmental policies, strategies and programs', pp. 337-69. In: Taye Assefa (ed.) *Digest of Ethiopia's National Policies, Strategies and Programs*. Addis Ababa: Forum for Social Studies.

MELCA Mahiber (2008) *Environmental Impact Assessment Implementation and Challenges: Proceedings of the National Workshop*. Addis Ababa: MELCA Mahiber in collaboration with Sheka Forest Alliance.

Mellose Damite and Mohammad Abdulahi (2007) 'Legal and institutional analysis for sustainable use of forest resources: the case of Sheka Forest in southwestern Ethiopia', pp. 137-182. In: Masresha Fetene (ed.) *Forests of Sheka: Multidisciplinary Case Studies on Impacts of Landuse/Landcover Changes, Southwest Ethiopia*. Addis Ababa: MELCA Mahiber.

Million Bekele (2001) 'The Forest Revenue System and Government Expenditure on Forestry in Ethiopia', paper prepared for the FAO Work-Programme Component on Financing Sustainable Forest Management.

Mirutse Giday, Tilahun Teklehaymanot, Abebe Animut and Yalemtehay Mekonnen (2007) 'Medicinal plants of the Shinasha, Agew-Awi and Amhara peoples in Northwest Ethiopia', *Journal of Ethnopharmacology* 110: 516-525.

Mulugeta Lemenih, Tarekegn Abebe and Olsson, M. (2003) 'Gum and resin resources from some *Acacia*, *Boswellia* and *Commiphora* species and their economic contributions in Liban, South-East Ethiopia', *Journal of Arid Environments* 55: 465-482.

Mulugeta Lemenih, Sisay Feleke and Wubalem Tadesse (2007) 'Constraints to smallholders production of frankincense in Metema District, North-Western Ethiopia', *Journal of Arid Environments* 71: 393-403.

Mulugeta Lemenih (2008) 'Current and prospective economic contributions of the forestry sector in Ethiopia', paper presented at the workshop 'Ethiopian Forestry at Crossroads: Proposal on New Direction for Sustainable Development', 24 March 2008.

Oromia Regional State (2002) *A strategic plan for the sustainable development, conservation, and management of the woody biomass resources*. Finfinnee (Addis Ababa).

Oromia Regional State (2003) *Forest Proclamation of Oromia No. 72/2003*. Finfinnee (Addis Ababa).

Oromia Regional State (2007a) *Oromia Rural Land Use and Administration Proclamation No. 130/2007*. Finfinnee (Addis Ababa).

Oromia Regional State (2007b) *Oromia Regional State Forest Enterprises Supervising Agency Establishment Regulation No. 84/2007*. Finfinnee (Addis Ababa).

Oromia Regional State (2007c) *Bale Forest Enterprise Establishment Regulation No. 88/2007*. Finfinnee (Addis Ababa).

SNNP Regional State (2004) *Forest Management, Development and Utilization Proclamation No. 77/2004*. Awassa.

Spong, B. D. (2007) 'A decision framework for the implementation of appropriate logging practices in developing countries: case study – Ethiopia.' PhD Thesis, Oregon State University.

Statz, J., Dede, P. and Berhanu Adenew Degefa (2007) 'Bamboo marketing for the Eastern Africa Bamboo Project Kenya and Ethiopia', technical report prepared for the Government of Kenya by the United Nations Industrial Development Organisation (UNIDO) Acting as Project Executing Agency for the Common Fund for Commodities (CFC).

Teferi Gedif and Hahn, H. J. (2003) 'The use of medicinal plants in self-care in rural central Ethiopia', *Journal of Ethnopharmacology* 87: 155-161.

Thomas, I. and Million Bekele (2003) 'Role of planted forests and trees outside forests in sustainable forest management'. Rome: FAO.

Tigest Wondimu, Zemed Asfaw and Ensermu Kelbessa (2007) 'Ethnobotanical study of medicinal plants around 'Dheeraa' Town, Arsi Zone, Ethiopia', *Journal of Ethnopharmacology* 112: 152-161.

Tilahun Teklehaymanot and Mirutse Giday (2007) 'Ethnobotanical study of medicinal plants used by people in Zegie Peninsula, Northwestern Ethiopia', *Journal of Ethnobiology and Ethnomedicine* 3: 12

Tilahun Teklehaymanot, Mirutse Giday, Girmay Medhin and Yalemtehay Mekonnen (2007) 'Knowledge and use of medicinal plants by people around Debre Libanos Monastery in Ethiopia', *Journal of Ethnopharmacology* 111: 271-283.

Wubalem Tadesse, Getachew Desalegn and Alia, R. (2007) 'Natural gum and resin bearing species of Ethiopia and their potential applications', *Investigación Agraria: Sistemas y Recursos Forestales* 16: 211-221.

World Bank (2006) *World Development Report 2007: Development and the Next Generation*. Washington, DC: The World Bank.

Yitebitu Moges (2004) 'Gum and incense: recommendations for improved production and income generation', unpublished consultancy report prepared for FARM Africa and SOS Sahel Ethiopia.

Small and medium forest enterprises for poverty reduction and sustainability

Most international attention in forestry has been given to improving the conditions for large-scale or micro-scale forestry, and much less to the 'messy middle', which produces a high proportion of forest products and involves huge numbers of people. Ways need to be found by which small and medium forest enterprises (SMFEs) can better contribute to sustainability and reduce poverty. IIED, with partners in Africa, Asia, Latin America and the Caribbean, has been investigating these issues. Country diagnostics show that the SMFE sector is of major significance for livelihoods; the net effect of myriad small players represents a substantial part of local economies. Yet these are largely invisible economies, and policy and programme developments almost completely ignore the SMFE sector. Raising the sector's visibility such that its impacts can be better assessed, and then going on to explore how the positive links to sustainability, livelihoods and poverty reduction can be enhanced, is a major challenge to which this initiative seeks to rise. The following reports in the *Small and medium forest enterprise* series are available from IIED on request, and downloadable from www.iied.org:

- No. 1 Exportando sem crises – A industria de Madeira tropical brasileira e os mercados internacionais. 2004. Macqueen, D.J., Grieg-Gran, M., Lima, E., MacGregor, J., Merry, F., Prochnik, V., Scotland, N., Smeraldi, R. and Young, C.E.F.
- No. 2 Making the most of market chains: Challenges for small-scale farmers and traders in upland Vietnam. 2004. Phi, L., Duong, N., Quang, N., Vang, P., Morrison, E. and Vermeulen, S.
- No. 3 Small and medium forest enterprise in Brazil. 2003. May, P., Da Vinha, V. and Macqueen, D.
- No. 4 Small and medium forest enterprise in China. 2003. Sun, C. and Chen, X.
- No. 5 Small and medium forest enterprise in Guyana. 2003. Thomas, R., Macqueen, D.J., Hawker, Y. and DeMendonca, T.
- No. 6 Small and medium forest enterprise in India. 2003. Saigal, S. and Bose, S.
- No. 7 Small and medium forest enterprise in South Africa. 2004. Lewis, F., Horn, J., Howard, M. and Ngubane, S.
- No. 8 Small and medium forest enterprise in Uganda. 2004. Auren, R. and Krassowska, K.
- No. 9 Small-scale timber production in South Africa: What role in reducing poverty? 2005. Howard, M., Matikinca, P., Mitchell, D., Brown, F., Lewis, F., Mahlangu, I., Msimang, A., Nixon, P. and Radebe, T.
- No. 10 Forestry contractors in South Africa: What role in reducing poverty? 2005. Clarke, J. and Isaacs, M.
- No. 11 Small-scale enterprise and sustainable development – key issues and policy opportunities to improve impact. 2005. Macqueen, D.J.
- No. 12 Raising forest revenues and employment: unlocking the potential of small and medium forest enterprises in Guyana. 2006. Mendes, A. and Macqueen, D.J.
- No. 13 Emerging forest associations in Yunnan, China. 2006. Weyerhaeuser, W., Wen, S. and Kahrl, F.
- No. 14 Associations in emergent communities at the Amazon forest frontier, Mato Grosso. 2006. Figueiredo, L.D., Porro, N. and Pereira, L.S.
- No. 15 Forest-based associations as drivers for sustainable development in Uganda. 2006. Kazoora, C., Acworth, J., Tondo, C. and Kazungu, B.
- No. 16 Development from diversity: Guyana's forest-based associations. 2006. Ousman, S., Macqueen, D.J. and Roberts, G.
- No. 17 Speaking with one voice: The role of small and medium growers' associations in driving change in the South African forest sector. 2006. Bukula, S. and Memani, M.
- No. 18 Forest-based associations in India: An overview. 2006. Bose, S., Lal, P., Pareek, P., Verma, M., Saigal, S.
- No. 19 Exploring fair trade timber – a review of issues in current practice, institutional structures and ways forward. 2006. Macqueen, D.J., Dufey, A. and Patel, B.
- No. 20 Governance towards responsible forest business: on different types of forest business and the ethics to which they gravitate. 2007. Macqueen, D.J.
- No. 21 Charcoal: the reality – A study of charcoal consumption, trade and production in Malawi. Kambewa, P.S., Mataya, B.F., Sichinga, W.K. and Johnson, T.R. 2007.
- No. 22 Distinguishing community forest products in the market: industrial demand for a mechanism that brings together forest certification and fair trade. 2008. Macqueen, D., Dufey, A., Gomes, A., Nouer, M., Suárez, L., Subendranathan, V., Trujillo, Z., Vermeulen, S., Voivodic, M. and Wilson, E.
- No. 23 Supporting small forest enterprises – A cross-sectoral review of best practice. 2008. Macqueen, D.
- No. 24 Malawi's green gold: Challenges and opportunities for small and medium forest enterprises in reducing poverty. 2008. Kambewa, P. and Utila, H.
- No. 25 Small and medium forest enterprises in Mozambique. 2009. Nhancale, B.A., Mananze, S.E., Dista, N.F., Nhantumbo, I. and Macqueen, D.J.

The annual value of small and medium forest enterprises (SMFEs) in Ethiopia amounts to hundreds of millions of dollars – dominated in rough order of value by fuelwood, herbal remedies, wild coffee, honey and beeswax and timber furniture. The majority of these enterprises are informal and remain largely unregulated and untaxed by any government authority. Nevertheless these enterprises appear to have significant social and economic benefits. The Government of Ethiopia has responded by providing support, particularly through the framework of Micro and Small Enterprises. The recent establishment of the Oromia State Forest Enterprises Supervising Agency and new policy declarations about the community's stated role in forest management are clear indications of the current interest in forest resources and the roles they play in rural livelihoods. Non-governmental organisations have also been experimenting with Participatory Forest Management and offered training to emerging enterprises, particularly those engaged in non-timber forest products. Yet few associations have yet been established to try and access the more lucrative markets beyond the local setting. SMFEs have great potential to reduce poverty in Ethiopia, but in their present unregulated state also represent a threat to the country's declining forest resources. This report consolidates information about them and suggests a practical way forward for those wishing to support them.



IIED Small and Medium Forest Enterprise Series No. 26

ISBN 978-1-84369-720-6

