FORESTRY, GOVERNANCE AND NATIONAL DEVELOPMENT:
LESSONS LEARNED FROM A LOGGING BOOM IN SOUTHERN TANZANIA

Simon A.H. Milledge
Ised K. Gelvas
Antje Ahrends

AN OVERVIEW
Published by TRAFFIC East/Southern Africa.  
© 2007 TRAFFIC East/Southern Africa.  
All rights reserved.  

All material appearing in this publication is copyrighted and may be reproduced with permission. Any reproduction in full or in part of this publication must credit TRAFFIC East/Southern Africa / Tanzania Development Partners Group / Ministry of Natural Resources of Tourism as the copyright owner.  

The views of the authors expressed in this publication do not necessarily reflect those of the TRAFFIC network, WWF, IUCN – The World Conservation Union, the members of the Tanzania Development Partners Group or the Government of the United Republic of Tanzania.  

The designations of geographical entities in this publication, and the presentation of material, do not imply the expression of any opinion whatsoever on the part of TRAFFIC or its supporting organizations concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.  

The TRAFFIC symbol copyright and Registered Trademark ownership is held by WWF. TRAFFIC is a joint programme of WWF and IUCN.  

Suggested citation:  

Key words: Hardwood, timber, exports, forestry, governance, livelihoods, Tanzania.  

ISBN: 0 9802542 1 3  

Printed by DeskTop Productions Limited  
Photograph credits and graphic design: Simon Milledge/TRAFFIC  
Front cover photo: Miombo woodland, southern Tanzania

In 2006, membership of the Tanzania Development Partners Group comprised Belgium (BTC), Canada (CIDA), Denmark, European Delegation, Finland, France, Germany, Ireland (DCI), Italy, Japan (Embassy and JICA), Netherlands, Norway, Spain, Sweden (SIDA), Switzerland (SDC), UK (DFID), US (USAID), UNDP, UNICEF, ILO, UNFPA, UNIDO, UNAIDS, UNCDF, WFP, UNHCR, FAO, UNESCO, WHO, UN-Habitat, IMF and the World Bank.  
The Critical Ecosystem Partnership Fund is a joint initiative of Conservation International, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank. A fundamental goal is to ensure civil society is engaged in biodiversity conservation.
Forestry, Governance and National Development:
Lessons Learned from a Logging Boom in Southern Tanzania

An Overview

Simon Milledge
Ized Gelvas
Antje Ahrends

2007

A study authorized by the Ministry of Natural Resources and Tourism,
supported by the Tanzania Development Partners Group,
and conducted by TRAFFIC East/Southern Africa

Full report available from TRAFFIC and Tanzania Development Partners Group – see back cover

*Note:* Most of the information contained within this report was collected before the end of 2005
ACKNOWLEDGEMENTS

This study was made possible through the firm backing of the Ministry of Natural Resources and Tourism, beginning on 3rd March 2005 when the need for this study was agreed at a meeting chaired by the Honourable Minister Mrs. Z. Meghji, MP. Since that time, many other individuals within the Ministry of Natural Resources and Tourism have provided professional expertise and institutional support to enable this study to be completed. In particular, the Forest and Beekeeping Division is thanked for the thoughtful process to draft the Terms of Reference for this independent case study.

This study, together with other initiatives agreed at the above-mentioned meeting, was supported by the Tanzania Development Partners Group. Financial support and institutional arrangements were organised by the Royal Norwegian Embassy in Dar es Salaam. The Critical Ecosystems Partnership Fund, Rufford Maurice Laing Foundation and WWF (East African Coastal Forests Ecoregion and Miombo Ecoregion Programmes) are also acknowledged for their support to previous work on timber trade in the same study area, which provided the foundation for some findings. During this time, special gratitude is shown for the assistance provided by the Directors (and Acting Directors) of Forestry and Beekeeping, including Prof. S. Iddi, Mr. G. Mbonde, Mr. D. Kihwele, Mr. I. Mnangwone and Dr. Tango.

During the course of conducting this work, hundreds of individuals have provided their input in one form or other. Both the sheer number of contributions and various requests for anonymity precludes their individual naming, but all are sincerely acknowledged for their collaboration. A special note of gratitude is extended to members of the private sector, including timber harvesters, processors, transporters, exporters and agents. Inputs were also received from various parts of government, including the Prime Minister’s Office – Regional Administration and Local Government, Ministry of Communications and Transport, Ministry of Works, Ministry of Energy and Minerals, Ministry of Land, Human Settlements and Development, Ministry of Water and Livestock Development and Ministry of Agriculture. Further collaboration was received from members of the Informal Discussion Group on the Environment (presentation given on the 6th December 2005), Tanzania Association of Foresters, Eastern Africa Coastal Forest Ecoregion Programme Tanzania National Task Force (presentation given on the 23rd November 2005) and Tanzania Natural Resource Forum (Forestry Working Group). Logistical assistance with the coastal forest disturbance surveys was gratefully received from WWF Tanzania Programme Office, Tanzania Forest Conservation Group, Wildlife Conservation Society of Tanzania and Frontier Tanzania.

The extensive peer review process for this report has benefited from representatives of government, private sector and civil society. Appreciation is extended to all members of the Forestry and Beekeeping Division technical committee who provided feedback following two presentations on the study findings, given on the 23rd September 2005 and 21st September 2006.

Further thanks are due to members of the Tanzania Development Partners Group, in particular specialists in governance and environment matters, who also provided feedback to a presentation made on the 8th February 2006. Detailed review comments were gratefully received from Dr. E. G. Jansen (Royal Norwegian Embassy), Dr. A. Böhringer (BMZ/GTZ), Mr. R. Latif and Mrs. C. Brokner (EC Delegation), Mr. J. Titsworth and DANIDA.

Civil society technical input into the report review was kindly received from Mr. Y. Mkwizu (IUCN Tanzania Country Office), Mr. S. Mariki (WWF Tanzania Programme Office) and Mr. C. Meshack (Tanzania Forest Conservation Group). Dr. N. Burgess is acknowledged for his supervision of, and assistance with, coastal forest survey work.

Following submission of a final draft report for review to Honourable Minister Mr. Diallo, MP, Ministry of Natural Resources and Tourism, on 25th September 2006, and further correspondence to Honourable Minister Prof. Maghembe on 15th November 2006, a chapter for inclusion in the report was gratefully received on 15th January 2007. Special thanks are extended to Mr. S. Pamba, Permanent Secretary, Ministry of Natural Resources and Tourism, Dr. Tango and Mr. A. Dallu for finalizing the review and report launch.

Lastly, but by no means least, this report has benefited from the external review of a number of TRAFFIC staff, including Mr. S. Broad (TRAFFIC International), Mr. T. Milliken (TRAFFIC East/Southern Africa) and Mrs. J. Gray (TRAFFIC International).
Governance, forestry and national development are interlinked, but their relationship has not been well documented. This report endeavours to set out the immense value of forest resources to the Tanzanian people. It describes how current policy, as set out in the formal laws and regulations governing the management of these resources, was systematically being manipulated by domestic and foreign private sector interests in concert with senior Tanzanian and foreign government officials. The report continues to portray how, consequently, the forests were being depleted current at a rate that meant that they would not be available to contribute significantly to the livelihoods of future generations. In addition, there were massive revenue-collection shortfalls at every level of government and significant, long-lasting negative effects on the environment. The report goes on to propose a series of measures that would help assure that Tanzania’s invaluable and irreplaceable forestry resources will be well managed for the benefit of present and future generations.

In terms of national policy, this study of contemporary timber trade has provided a revealing example of how governance shortfalls in the forestry sector can ultimately affect the prospects for achieving national economic growth and poverty reduction objectives. Whilst numerous opportunities and benefits of timber trade have been, and continue to be, realized, this report illustrates how poor forestry governance directly undermines two clusters of the 2005 National Strategy for Growth and Reduction of Poverty (NSGRP): Growth of the economy and reduction of income poverty; and, Governance and accountability.

It is important to note that governance shortfalls are not necessarily an accidental artefact of institutional arrangements or capacity constraints; there is increasing evidence for the more damaging forms of forestry-related corruption that selfishly exploit opportunities availed by decentralisation, globalisation and delayed completion of forest sector institutional reforms for the gain of both individuals and organised networks.
A variety of approaches were employed in the research and writing of this report to better understand changes in timber trade dynamics in southern Tanzania, governance challenges, driving forces and influencing factors. Methodologies included the review of official government statistics on forest status and trade, independent ‘counting’ assessments of timber trade from forest to port, forest disturbance transects, extensive stakeholder interviews and aerial observations.

Acceptance by policy makers of the need for longer lasting measures is steadily growing, although a greater realization of the number of people affected, the financial implications, the consequences for the environment and the geographical scope is perhaps needed to understand fully the magnitude of the problem.

Forests and woodlands cover around 40% of the total land area, yet support the livelihoods of 87% of the poor population who live in rural areas. Some 16% (and up to 60% seasonally) of households from villages located near forests in southern Tanzania benefited from logging and timber trade during 2005. Over 90% of the energy used in the country is wood fuel derived from the forests.

In economic terms, rural communities, traders and the government have lost massive potential revenues to wasteful harvesting and processing, non-collection of royalties and under-valuation of forest products. At village level, through mid-2004, local harvesters have chronically under-valued hardwood logs. Consequently, they have been receiving barely one hundredth of the export price despite the fact that no value-adding had taken place since the logs were obtained.

Revenue lost by central and district governments due to the under-collection of royalties reached up to 96% of the total amount of potential revenue due. At central government level, it was tentatively estimated that nationwide losses of revenue to the Forestry and Beekeeping Division amounted nationally up to USD 58 million annually due to the under-collection of natural forest product royalties in the districts. Some District Council budgets would have increased by several times over if potential timber revenues were actually collected.

Substantial revenue losses were also apparent prior to and during shipment. For example, the trade statistics show that China imported ten times more timber products from Tanzania than appear on Tanzania’s own export records. This suggests that Tanzania collected only 10% of the revenue due from these exports.

Further, this important social and economic resource has continued to degrade at an alarming rate. Around ten million hectares of forest land were lost between 1970 and 1998. At the harvest rates experienced during 2003 and 2004, and based on official forest inventories, it is apparent that all harvestable Class I and II trees in Rufiji and Kilwa Districts will have been felled within 20 years.

The deleterious effects of deforestation on water catchments, hydroelectricity, soil erosion, fire outbreaks and the status of biodiversity are now evident in many parts of the country.
Recognition of the importance of forestry governance

Governance has a pivotal role in determining the development outcome of forest product trade. This is especially true in less developed countries with a large natural resource base and a policy environment heavily influenced by the forces of administrative decentralisation, market globalisation, political democratisation, rural empowerment and infrastructure development. In an ideal scenario, good governance at all levels helps ensure forest product trade provides broad-based and equitable benefits in line with national and local development goals, without compromising forest integrity. Unfortunately, in Tanzania, a complex interplay of social, economic and political factors has tilted the ideal balance in an unfavourable direction in recent years.

Despite a well-developed institutional framework for forest management and numerous remedial measures since 2003 (including, at the extreme, national indigenous hardwood harvest and export bans), the forestry sector has continued to be plagued by poorly controlled, irregular and unsustainable activities. Amongst the most serious concerns are massive revenue losses, negative social impacts, forest degradation and weakened governance structures. In all cases, poorer people living in rural areas are disproportionately affected, despite ongoing decentralisation and a legal framework that promotes broad-based empowerment. Governance shortfalls have been identified by many stakeholders as a key limiting factor to addressing these concerns.

The current dire situation has attracted serious criticism from many quarters within and outside the Tanzanian government, but it can be overcome. Governance and the environment as both disparate and linked concerns are high on the current political and development agenda in Tanzania. In particular, the NSGRP includes ‘governance and accountability’ as one of three outcomes-based clusters, whilst environmental issues appear throughout the strategy. Further, the fourth phase government, inaugurated in late 2005, appears to have placed stronger emphasis on governance and environmental issues. As a further indication of commitment, this independent study was itself approved by the Minister of Natural Resources and Tourism, the Terms of Reference drafted by the Forest and Beekeeping Division, and were subsequently supported by development partners working within the forestry sector.

This report does not call for radical measures to stop timber harvesting, trade and exports. On the contrary, it strongly recognises the vital contributions of local and foreign trade and investment to the country, the longer-term, strategic opportunities of emerging global markets, and the clear national importance of priority sectors that may inadvertently influence forests, such as infrastructure. However, this report does call for reform in the approaches used to ensure good natural resource governance, including dedicated attention towards forestry governance.

Ongoing financial and technical assistance to the forestry sector will almost certainly be required. Thinking more broadly, the kind of measures recommended for the forestry sector in this report would also probably benefit the management of other natural resources, such as wildlife.
This study focussed on southern (mainland) Tanzania, one of the poorest parts of the country where rural livelihoods are heavily dependent upon forest resources. In addition to containing the highest overall densities of timber resources in the country (Tunduru, Kilwa, Liwale and Rufiji Districts), southern Tanzania is home to some of the nation’s largest areas of unprotected woodland on public land, and whose management is largely dependent upon surrounding rural communities. As such, this part of the country theoretically stands to benefit from current forest policies and enabling legislation that support wider stakeholder involvement, empowerment and ownership.

At the same time, experience in southern Tanzania has demonstrated how efforts to improve development prospects, such as infrastructure rehabilitation, have also led to serious environmental and socio-economic trade-offs. For example, improved accessibility following completion of the Mkapa Bridge and other road improvements has facilitated a surge in uncontrolled logging and timber trade activities in recent years. This part of the country has become increasingly important as a primary revenue source for central government, with Rufiji, Kilwa and Liwale Districts among the top four forest product revenue earners in the country during 2003/2004. However, 2005 forest inventories concluded that most forests in southern Tanzania “are degraded” or “heavily degraded”. 

**Contemporary timber trade dynamics**

High urban demand for timber within Dar es Salaam has depleted most nearby supplies of hardwood, with the number of valuable species and sizable specimens markedly increasing the further one moves southwards. Indeed, little harvesting of valuable timber trees occurs within 200 km south of Dar es Salaam, and during 2005 more than 80% of the trees harvested within 20 km of the city were used for non-timber purposes such as house construction or charcoal production. In 2003, Rufiji District accounted for around 70% of all timber harvests in the study area, followed by Kilwa District, with an ongoing and gradual southward shift in harvesting.

Timber trade volumes stayed high throughout 2003 and up until mid-2004 when enactment of new forest legislation banned the export of round wood from natural forests. During 2003, a year when trade was only marginally interrupted by logging and trade restrictions, it was estimated that over 500 000 m$^3$ of timber was harvested for commercial purposes from southern Tanzania (a figure which combined officially recorded harvests and estimates of unrecorded, illegal felling). This volume is equivalent to over 830 000 trees, with harvesting intensity reaching 91 m$^3$ of timber per km$^2$ of forest (mostly coastal forests and miombo woodland) in Rufiji and Kilwa Districts.
Numerous *quantitative measures of unsustainable harvest levels* (including evidence of widespread undersize cutting, scarcity of valuable and sizeable specimens, changing species composition and shifting harvest areas) provide testimony to how negative environmental impacts have progressively forced exploitation southwards. In addition to the obvious impact of undermining long-term prospects for sustainable hardwood trade, land degradation in some areas threatens agricultural prospects for rural communities, whilst coastal forests that are recognised globally for their biodiversity conservation values are under intense pressure.

At least 27 hardwood species with commercial timber qualities were harvested from miombo woodlands and coastal forests in southern Tanzania. Out of 13 species targeted for hardwood exports in mid-2004, *over 80% constituted just three species*, *Millettia stuhlmannii*, *Baphia kirkii* and *Swartzia madagascariensis*. However, *Combretum imberbe* appears to have replaced *Swartzia madagascariensis* since 2005 in terms of relative export volumes. In the case of sawn wood, *Pterocarpus angolensis* and *Afzelia quanzensis* were highly targeted in most of the study area, with the exception of Rufiji District where scarcity of these species led harvesters to target *Julbernardia globiflora* as an alternative.

Destinations in Asia and Middle East are currently the main importers of unprocessed and semi-processed timber products from Tanzania, with *China the fastest growing importer of indigenous hardwoods*. China accounted for all indigenous hardwood logs and three-quarters of processed hardwoods (sawn wood and billets) exported between July 2005 and January 2006. India is also emerging as a major importer of timber products, including all sandalwood exported in the last half of 2005.

The combination of several elements has led to a rapidly expanding timber export business from Tanzania during recent years. Firstly, *access to international markets* has grown with China’s emergence as a major player in global timber trade and their increasing interest in hardwood supplies from East Africa; Tanzania was the continent’s sixth largest timber exporter to China in 2005, increasing by almost 1400% in value since 1997.
The Ministry of Natural Resources and Tourism has taken a number of measures in recent years to better regulate timber trade, increase financial benefits and control corruption:

- Review of procedure for issuing licenses for harvesting and transporting forest products;
- Empowerment of villagers to manage forests through participatory forest management approaches;
- Ban of exportation of all types of logs since July 2004;
- National forestry inventory (2005) and ongoing development of district harvest plans;
- Guidelines on Harvesting of Forest Products and formation of District Forest Harvesting Committees gazetted in 2006;
- Establishment of Forest Surveillance Unit in 2005/2006;
- Strengthening of checkpoints and improved security of documents used for harvesting forest produce;
- Introduction of scanning of forest product exports;
- Countrywide assessment of sawmills in 2005;
- Establishment of a forest resource database; and
- Development and implementation of an improved forest revenue collection strategy.

Secondly, completion of the Mkapa Bridge across the Rufiji River in August 2003 has provided more reliable access to the forests of southern Tanzania throughout the year. Together with gradual road improvements, timber trade dynamics have changed in terms of increased volumes, changes in targeted species, greater private sector investment, and a higher proportion of illegal activities. Further, profit margins for trading logs and sawn wood have remained high in southern Tanzania due to various factors, including low awareness of the true market value amongst rural communities, low levels of enforcement, relatively high abundance of targeted hardwood species, and high export prices as compared to West African nations.

Trade opportunities abound following the increased overseas market demand, accessibility to the resource and favourable profit margins. One compounding factor in the face of increased globalisation has been an expanded opportunity for collusive and concealed transactions to arise, especially where management and law enforcement authorities remain undercapacitated and poorly supervised. As an example, reported timber exports from Tanzania to all destinations during a three-year period ending in 2005 totalled around 19,300 m³, whilst import statistics from one destination alone, China, showed a considerably higher value, exceeding 108,500 m³.

Management interventions

In general, Tanzania has a fairly advanced policy and institutional framework that, if implemented, would lead to far more sustainable and equitable forest management. Over the past ten years, there has been considerable development of key instruments and tools for forest governance, including revised forest and land policy and legislation, participatory land use planning initiatives and various decentralization reforms.

Currently, responsibilities for forest management lie within the Ministry of Natural Resources and Tourism, and the Prime Minister’s Office – Regional Administration and Local Government.

In response to growing concerns over levels of lost revenues, forest degradation, governance shortfalls and disenfranchised local communities, the government has implemented wide-ranging measures (see box left). Since 2003, there has almost been an annual cycle of introducing periodic bans on harvesting from natural forests – the first between 24th December 2003 and 31st January 2004, the second from 1st October 2004 to 1st September 2005, and the most recent starting on 24th January 2006.
Governance as a limiting factor

Whilst commendable, the majority of interventions have focussed on relatively ‘quick fixes’ such as regulatory controls and boosting management capacity. An impressive list of measures has unfortunately fallen short of the response required to fully address some root causes. In particular, governance shortfalls, including corruption, are a major limiting factor reducing the effectiveness of current measures.

Observations of timber transported from southern Tanzania since the most recent lifting of a nationwide harvest ban during the second half of 2006 again raised the unfortunate spectacle of irregular consignments (e.g. breaching authorization, especially the mixing of illegitimate logs) and collusion (e.g. preferential treatment, such as allowing nocturnal transport).

Responses need to address root causes and drivers in addition to the most observable symptoms

(a) Headache analogy

<table>
<thead>
<tr>
<th>Conclusions</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manifestations</td>
<td>Unhappiness</td>
</tr>
<tr>
<td>Observations</td>
<td>Headache</td>
</tr>
<tr>
<td>Immediate causes</td>
<td>Stress</td>
</tr>
<tr>
<td>Root causes</td>
<td>Overworked</td>
</tr>
<tr>
<td>Drivers</td>
<td>Excess deadlines</td>
</tr>
</tbody>
</table>

(b) Timber trade

<table>
<thead>
<tr>
<th>Conclusions</th>
<th>MKUKUTA undermined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manifestations</td>
<td>Lost revenues, environment impacts</td>
</tr>
<tr>
<td>Observations</td>
<td>Uncontrolled and illegal activities</td>
</tr>
<tr>
<td>Immediate causes</td>
<td>Rapid rise in trade</td>
</tr>
<tr>
<td>Root causes</td>
<td>Ineffective controls</td>
</tr>
<tr>
<td>Drivers</td>
<td>Governance shortfalls</td>
</tr>
<tr>
<td>Drivers</td>
<td>Rapidly increasing overseas demand</td>
</tr>
</tbody>
</table>

Examples of response

(a) Medicine
- Rest, recuperation
- Time management
- Management awareness

(b) Trade regulatory measures
- Strengthen mgmt capacity
- Accountability, rural empowerment, transparency
- Consumer awareness, chair of custody, certification
Understanding governance shortfalls

This study provides a conceptual understanding of governance in the forestry sector, including a theoretical framework for mapping players involved, different means to define and quantify governance shortfalls, and consideration of the important social, economic, political and bureaucratic factors influencing patterns of corruption.

In terms of private sector investment, a total of 15 permanent hardwood sawmills were present in southern Tanzania during late 2004. They had relatively low capacity to significantly add value to the high volumes of timber being harvested in the area. An increase in wood processing investment has occurred in recent years within the study area, with seven sawmills starting operations since 2002. Around 35 companies exported hardwood timber products sourced from local natural forests (not including sandalwood), with over 40% owned by East Asians, mostly Chinese. Of note, the majority of timber exporters have some form of institutional relationship (e.g. patronage, formal shareholding, board members) with senior public officials, both Tanzanian and foreign. Each exporter in turn normally relies on five or more middlemen, with each working through up to ten more middlemen at village level.

In reality, just a few companies maintained strong control over the timber trade, either by their sheer size of operation or through influence. For example, two exporting companies were observed to exert significant influence over the entire industry, whilst less than 40 companies dominated timber trade in the study area. At village level, a minimum of 16% of households in southern Tanzania benefited from logging and timber trade, rising up to 60% during peak logging activity.

Forest management is severely disadvantaged by deficiencies in public sector capacity. A mismatch between central/local government forestry staffing and forestry revenue targets is very evident in southern Tanzania. Further evidence is presented to illustrate the challenges and conflicts of interest as a result of multi-tasking, which may result in both sub-optimal performance and potential for large abuses of power.

Long-standing challenges of dual ministry mandates, including the interpretation of annual revenue targets and line management complexities, continue to plague effective governance, highlighting the importance of joint planning and a clear protocol for the sharing of roles and responsibilities.

Participatory forest management, one possible solution for enhancing...
limited public sector capacity, is relatively undeveloped in southern Tanzania, but holds strong potential given the large areas of unreserved forest and the range of possible economic incentives under different models of management.

Assessing legal compliance

A qualitative assessment of legal compliance revealed that infractions involving round wood tended to occur at the highest levels during harvesting and export. Of concern was the increasing trend in illegal activity affecting several serious types of infraction, such as logging without documentation, logging in unauthorised areas, and the use of invalid export documentation.

Other infractions perceived to be increasing in severity were the marking of logs using forged hammers, and nocturnal transport. Indeed, many traders claimed that the deliberate, deceitful alteration of timber goods was on the increase in response to the increased likelihood of detection of irregular, unaltered consignments and associated financial risks (e.g. fines, bribery payments). On the other hand, the illicit transport of timber using unauthorised routes was perceived to be declining, due to a combination of logistical and economic factors.

The scale of governance shortfalls was estimated quantitatively using two measures of legal compliance, concluding that the official timber harvest volumes during mid-2004 reached as low as four percent of the actual volumes (derived from independent physical counting of trade along different routes and involving different products).

Further, this not only represented a downward trend since 2001 when compliance was calculated at 22%, but was also considerably lower than official nationwide estimates.

These levels of legal compliance can also be interpreted in terms of tax compliance, with no revenue collected for up to 96% of timber harvesting in southern Tanzania during mid-2004. The economic implications of this revenue loss were significant at all levels of government. For example, it was estimated that Kilwa District Council would have increased its total annual budget by four-fold if all potential timber revenue was collected. Similarly, it was cautiously estimated that under-collection of natural forest product royalties at district level during 2003 and 2004 resulted in up to USD 58 million lost annually across the country.
Assessing corruption

Intentional causes for governance shortfalls – that is instances of corruption – were analyzed at two levels of severity: bribery and favoritism. A qualitative assessment of bribery resulted in the presentation of a ‘timber trade bribery index’, a combination of perceived relative frequency and scale at different stages of the timber trade chain.

‘Timber trade bribery index’ (ranging 0-100) at each stage of the timber trade chain for both legally and illegally sourced products

A serious concern was the apparent chronic nature of petty corruption whereby even timber trade activities involving legally-harvested timber products were affected by bribery. Further, the two stages showing the highest perceived levels of bribery – hammering and exporting – were ironically the most likely points of intervention when introducing trade restrictions. Without additional measures of scrutiny, corruption at these ‘trade bottlenecks’ can easily undermine the success of such interventions. Another worrying sign was that those stages of the trade chain that exhibited the highest relative frequency of bribery were also experiencing increasing trends in bribery.

From the perspective of good governance, of greater concern than bribery were the apparent high levels of direct senior government involvement in timber harvesting and trade from southern Tanzania. Whilst differentiating between formal patronage and informal ties involving senior public officials is challenging in practice, over half of 28 exporting companies studied had some form of institutional linkage with senior Tanzanian or foreign government officials.

At central and district government levels, many examples of self-dealing, nepotism and cronyism involving timber trade were evident. The presence of a direct interest in the timber trade by individuals within the Executive and line Ministry arguably presents the greatest concern with respect to ensuring integrity in decision-making, fairness, impartiality, transparency and justice.
At village level, the personal involvement of village leaders in timber trade has led to an unfair distribution of profits in many rural areas. Communication gaps between rural communities and government have resulted in less support from many communities, thereby increasing the opportunity for illegal activities.

At times, **high levels of collusion, organisation and protection** between different government institutions and the private sector has ensured the harnessing of not only critical positions of authority within the Ministry of Natural Resources and Tourism, but also within the main association for timber traders and exporters. Examples of where management decisions have been influenced in the interests of relatively few people include exceptions given to certain companies following nationwide harvest bans and other trade restrictions; reducing the effectiveness of enforcement; questionable expenditure priorities, wasteful disbursements and embezzlement; and disciplinary or legal action.

The worst forms of timber trade-related corruption found in southern Tanzania from a long-term development perspective were a combination of: senior public officials directly involved in trade that involved a large proportion of illegally-sourced timber; overwhelming (but not transparent) control by the private sector; and shortfalls in some management decision-making. All of these aspects were somehow inter-related. **Anti-corruption strategies in the field of timber trade therefore need to cover all forms of corruption in a holistic manner**, since strategies to counteract the most obvious form of corruption – bribery – will not only remain ineffective against other forms (such as favouritism), but may even stimulate growth in the more damaging forms of corruption. Examination of a range of **social, political and economic conditions** showed how important such factors are in understanding governance shortfalls.
Decentralisation and market-led development in Tanzania have been relatively recent events (since the mid-1980s), considering the required time normally needed to achieve accompanying institutional reforms. In addition, the globalisation of timber trade from Tanzania (in terms of expanding markets) has been even more recent (since the early 2000s). In reality, therefore, it was the combined effects of globalisation, decentralisation and market-based development – perhaps without the necessary attention given to forest-based industry development and governance issues – that led to the increase in poorly controlled timber exploitation from southern Tanzania.

Relevance to national development

Forest and natural resource management has clear relevance to all three major clusters of poverty reduction outcomes in the 2005 National Strategy for Growth and Reduction of Poverty (NSGRP), the foremost guiding document for promoting sustainable national development. For example, the strategy specifically outlines a number of forestry-related challenges with respect to the current poverty status in Tanzania. This study illustrates some of the main contributions and threats posed specifically by the timber trade to the NSGRP.

Perhaps the most pertinent conclusion is that whilst there have been wide-ranging contributions, especially in terms of economic growth and reduction of income poverty, contemporary timber trade dynamics are undermining NSGRP in a number of key areas. Further, since many of these threats are not only serious, but long-standing and, in some cases, growing in scale, they are acting as inhibitors towards reaching the goals of NSGRP. The following table summarises the key contributions and threats of timber trade to the NSGRP.
Summary of key contributions and threats of timber trade to the *National Strategy for Growth and Reduction of Poverty (2005)*, with selected examples

### Cluster 1: Growth of the economy and reduction of income poverty

#### Goal: Promoting sustainable and broad-based growth

<table>
<thead>
<tr>
<th>Contributions</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth in central government forestry revenues</strong> e.g. FBD revenue collection from the sale of forest products almost doubled in the three years from 2002/03 to 2004/05.</td>
<td><strong>Unrealized revenues a threat to sustainable and broad-based growth</strong> e.g. FBD revenue collected during 2002/03–2003/04 did not cover its budget, with estimated revenue losses including 10-30% from wasteful harvesting, 20-43% at sawmills, 72-96% from under-collection of royalties, and up to 75% from under-valuation.</td>
</tr>
<tr>
<td><strong>Contributions towards local government finances</strong> e.g. Over 50% of some District Council budgets in southern Tanzania comes from forest product revenue.</td>
<td><strong>Undervaluation of GDP contributions a threat to government investment</strong> e.g. Relatively low government commitments to forestry sector; official estimates of sector’s GDP contributions only 2-3% and do not take into account large-scale illegal trade, ecosystem functions and services that lack true market values.</td>
</tr>
<tr>
<td><strong>Increase in private investment</strong> e.g. Seven of the 15 permanent hardwood sawmills present in southern Tanzania during late 2004 started operations since 2002, increasing employment and government revenues.</td>
<td><strong>Unsustainable harvesting a threat to sustainable and broad-based growth</strong> e.g. 2005 FBD inventories concluded most forests in southern Tanzania “are degraded” or “heavily degraded”. Changes in species composition, harvest areas and timber product dimensions over time.</td>
</tr>
<tr>
<td><strong>Perverse financial incentives undermine long-term growth</strong> e.g. Minimum annual revenue targets have been traditionally set instead of upper limits based on maximum forest yield, with forestry revenue collections frequently exceeding projected targets.</td>
<td><strong>Deficiencies in financial capacity a threat to growth</strong> e.g. Reports of the Controller and Auditor-General on LGA accounts, 2000-03 showed seven out of 11 in southern Tanzania having an adverse opinion with not a single LGA assessed as “clean” since 2000.</td>
</tr>
</tbody>
</table>

#### Goal: Reducing income poverty of both men and women in rural areas

<table>
<thead>
<tr>
<th>Contributions</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increased rural incomes from timber trade</strong> e.g. At least 16% of households from villages located near forests in southern Tanzania benefit from logging and timber trade, increasing up to 60% during peak logging activity.</td>
<td><strong>‘Boom-bust’ cycles a threat to long-term reductions in rural income poverty</strong> e.g. An apparent lack of sustainable micro-enterprises two years after the timber trade boom, even in villages which made large, short-term revenues and lacked the kind of constraints affecting remote areas.</td>
</tr>
<tr>
<td><strong>Indirect improvements to market access for rural poor</strong> e.g. Many distant villages benefited from improved transport and market access, combined with business opportunities.</td>
<td><strong>Lack of SFM financial incentives a threat to reductions in rural income poverty</strong> e.g. Lack of clear ownership, tenure and user rights, low awareness regarding the true value of the resource and high transaction costs for setting up PFM.</td>
</tr>
</tbody>
</table>
### Cluster 3: Governance and accountability

#### Goal: Structures and systems of governance as well as the rule of law are democratic, participatory, representative, accountable and inclusive

<table>
<thead>
<tr>
<th>Contributions</th>
<th>Threats</th>
</tr>
</thead>
</table>
| Greater participation of rural communities in timber trade management  
 e.g. Progressive revisions to timber harvest/trade procedures have steadily given communities a stronger role in licence application procedures and supervision of the harvesting. | Inadequate enforcement of laws/disciplinary action  
 e.g. Larger and well-connected companies carried low risks by operating illegally, whilst smaller-scale traders disproportionately bore the brunt of targeted enforcement exercises. Relatively little action taken against officials implicated in irregular conduct. |
| Step-wise approach to improving regulation  
 e.g. MNRT introduced a range of incremental, regulatory interventions since 2003, including total harvest and export bans; species, product and area-specific harvest restrictions; limitations on ports of exit, banning debarking; and revised licensing procedures. Notable enforcement successes at Dar es Salaam port, landing yards and village landing sites. | Greater empowerment of rural communities needed  
 e.g. Some PFM villages ended up with a few powerful leaders getting personally involved with large-scale timber trade activities, resulting in not only unsustainable harvests but poorly distributed incomes. |
<p>| <strong>Goal: Equitable allocation of public resources with corruption effectively addressed</strong> | |</p>
<table>
<thead>
<tr>
<th>Contributions</th>
<th>Threats</th>
</tr>
</thead>
</table>
| Greater opportunities for rural communities to benefit from access and use of timber resources  
 e.g. Formal rights to use and access forest resources, as well as numerous economic incentives, have resulted in PFM arrangements creating over 1.7 million hectares of forest placed under local management in over 780 villages by June 2006. | Pervasive corruption undermining effectiveness of many interventions  
 e.g. Widespread petty corruption, highly organised patronage and personal involvement, collusive networks and an overwhelming private sector. Limited progress against corruption both in southern Tanzania and in the forestry sector. |
| Recent increase in public interest  
 e.g. Unprecedented coverage of log inspections in July 2004 including front page articles in mainstream newspapers lasting over a month. Logging and timber trade frequently hit the headlines during the first six months of 2006, as well as considerable discussion during parliamentary sessions. | Low transparency of information and decisions  
 e.g. Lack of public information regarding the creation of TFS, the cessation or relaxation of harvest/trade restrictions, forest-related budget allocations, disbursements of funds and revenues. |
<p>| <strong>Goal: Effective public service framework in place to provide foundation for service delivery improvements</strong> | |</p>
<table>
<thead>
<tr>
<th>Contributions</th>
<th>Threats</th>
</tr>
</thead>
</table>
| Increased capacity at various levels of government – staff, finances, equipment  
 e.g. Annual budgetary increases to the forestry sector since 2003, with FBD budget for 2004/2005 increased by almost TZS 100 million (around USD 95 000) to TZS 4.9 billion (USD 4.6 million). | Low participation of some stakeholders  
 e.g. Limited engagement of PCB in environment, whilst conflicts of interest, low capacity and other priorities affect other stakeholders. |


<table>
<thead>
<tr>
<th>Contributions</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater accountability being asked of public officials e.g. Presidential oversight of forestry sector issues throughout 2004 and 2005, with additional emphasis placed on the accountability of forestry staff since the beginning of 2006.</td>
<td>Insufficient capacity e.g. Low levels of staffing, with many nearing retirement and limited recruitment, is a critical factor affecting performance in the forestry sector at both central and local government levels.</td>
</tr>
<tr>
<td>Insufficient accountability mechanisms and integrity e.g. Timber harvesting has been driven and influenced almost exclusively by the private sector interests, due to a lack of standardised forest management plans, together with inadequate reporting on harvest levels and performance.</td>
<td></td>
</tr>
</tbody>
</table>

Key: FBD = Forest and Beekeeping Division; TFS = Tanzania Forest Service; GDP = Gross Domestic Product; LGA = Local Government Authority; MNRT = Ministry of Natural Resources and Tourism; PCB = Prevention of Corruption Bureau; PFM = Participatory Forest Management.

Way forward – recommendations

Experience in Tanzania over the past few years indicates how sustainable and equitable timber trade has yet to be realised in the southern part of the country, despite a relatively well-developed policy and legal framework for forest management and the implementation of numerous remedial measures. This review calls for a higher priority to be allocated to forestry governance and the implementation of a holistic approach, since corruption – the primary factor affecting governance shortfalls – is occurring in many forms and at many levels. A full set of recommendations are presented in the main report. Amongst the most urgent recommendations include the following:

- Implement standardised reporting and monitoring for timber harvest and trade information;
- Apply greater emphasis on forestry during public income and expenditure reviews;
- Ensure internal disclosure of forestry sector assets by public officials, and leadership messaging to denounce internal involvement and collusion in timber trade;
- Use public notice boards at village and district levels, and publicise clear investment and business guidelines, including criteria, timeframes and roles;
- Undertake targeted campaigns on anti-forest-corruption;
- Consider the outsourcing of forestry revenue collection in a step-wise manner;
- Introduce performance-based incentive schemes for forestry staff;
- Develop, sign and publicise a MoU or circular between Ministry of Natural Resources and Tourism and Prime Minister’s Office – Regional Administration and Local Government to clarify roles and responsibilities, including direct reporting of District Forest Officers to the Head of the Forestry and Beekeeping Division/Tanzania Forest Service;
- Reassess appropriate forest inventory methodologies;
- Initiate community awareness programmes covering options for community participation, timber values, potential benefits, responsibilities, and legal procedures;
- Review the application of national harvest bans to ensure there is no breach of Participatory Forest Management agreements; and
- Establish Tanzania Forest Service roles, responsibilities and lines of reporting in an expedient manner, incorporating inputs from different sectors.
TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. It has offices covering most parts of the world and works in close cooperation with the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The full report ‘Forestry, Governance and National Development: Lessons Learned from a Logging Boom in Southern Tanzania’ is available from TRAFFIC. For further information contact:

The Executive Director
TRAFFIC International
219a Huntingdon Road
Cambridge CB3 0DL, UK

Telephone: (44) 1223 277427
Fax: (44) 1223 277237
Email: traffic@trafficint.org

Regional Director
TRAFFIC East/Southern Africa
P.O. Box CY 1409
Causeway, Harare
Zimbabwe

Telephone: (263) 4 252533
Fax: (263) 4 703902
Email: traffic@wwfsarpo.org

TRAFFIC East/Southern Africa
P.O. Box 106060
Dar es Salaam
Tanzania

Telephone: (255) 22 2701676
Fax: (255) 22 2701676
Email: traffictz@bol.co.tz

www.traffic.org

The Tanzania Development Partners Group (DPG) recognises the crucial importance of collective action, whereby co-ordinated and harmonised efforts should result in significantly improved effectiveness and quality of development assistance while reducing transaction costs. Membership of the DPG is open to any bilateral or multilateral partner that provides development assistance to the United Republic of Tanzania.

www.tzdac.or.tz