



MALAWI GOVERNMENT

PERFORMANCE AUDIT REPORT

ON THE

ECONOMIC PERFORMANCE AND ENVIRONMENTAL

SUSTAINABILITY OF THE VIPHYA PLANTATIONS

IN THE

MINISTRY OF NATURAL RESOURCES, ENERGY AND

ENVIRONMENTAL AFFAIRS

(DEPARTMENT OF FORESTRY)

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National Audit Office
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19 October 2011

The Honorable Minister of Finance
Ministry of Finance
P.O Box 30049
Lilongwe 3
Malawi

Dear Sir,

Pursuant to the provision of Section 184(2) of the Constitution of the Republic of Malawi and the Public Audit Act, I have the honour to submit the Performance Audit Report on the economic performance and environmental sustainability of the Viphya Plantations in the Ministry of Natural Resources, Energy and Environmental Affairs (Department of Forestry) for tabling in the National Assembly. Performance audit has recently been introduced in my office in line with current international trends in the auditing profession.

A performance audit is an audit of the economy, efficiency and effectiveness with which the audited entity uses its resources to achieve its goals. The prime aim of a performance audit is to ensure better use of resources, improved operations and better decision making in reaching policy objectives set.

Yours faithfully,

R. A Kampanje

Auditor General

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ACRONYMS

BES	Birla Engineering Services
EIA	Environmental Impact Assessment
FD	Forestry Department
FRIM	Forestry Research Institute of Malawi
GDP	Growth Domestic Product
MGDS	Malawi Growth Development Strategy
MRA	Malawi Revenue Authority
VIPCOR	Viphya Corporation Ltd
VIPLY	Viphya Plywood and Allied Industries
VPD	Viphya Plantations Division
WICO	Wood Industries Corporation

EXECUTIVE SUMMARY

The Viphya plantations are one of the largest man-made forests in Africa, covering about 53,000 hectares. It was established in the late 1940s in order to provide timber for domestic market. The objective was however changed to provide raw material for paper manufacturing, which was later changed to production of timber for both domestic and export markets.

The Department of forestry, in the Ministry of Natural Resources and Environment is responsible for the general management of the plantations. Viphya Plantations Division (VPD) is responsible for all operational activities of the plantations. The average annual funding for the plantations from 2003/04 financial year to 2007/08 financial year has been around K11million.

A performance audit was conducted in order to evaluate the economic performance and environmental sustainability of the plantations. The audit covered a period of ten years, from 1999 to 2009. Interviews, documentary review and physical observations were carried out in order to collect data for the audit.

SOCIAL-ECONOMIC IMPACT

The Viphya plantation is one of the major forestry resources which contribute to the strategy of sustainable economic growth of the country while on the other hand improving the social status of local Malawians.

According to documents reviewed, between 2003 and 2009, the economy of Malawi registered an economic growth averaging about 6.5 percent. The forestry and logging activity contributed about 1.5 percent to the overall GDP, on average. The forestry and logging activity also registered growth averaging about 13.3 percent during this period. Most of the growth in forestry and logging activity emanated from the Viphya plantations and it is the significant source of timber and other wood products in Malawi.

During the period, 2007 to 2009, VPD failed to collect more than K160 million owing from operators. However, the Department of Forestry continued to renew licenses and award plots to the operators even if they did not comply with the logging agreements.

It is estimated that more than five thousand people are employed by private operators. Raiply alone employs about 1435 local staff and other operators employ about 3820. According to interviews with employees within the plantations, most companies do not have health and safety policies thereby risking the health and safety of workers in the plantation. Few operators provide protective clothing to their employees.¹

MANAGEMENT RESPONSE

- Management agrees to the observation about increase in debts. The division is in the process of collecting these debts, and so far most of this money has been collected.
- All operators are mandated to have health and safety policies, and provide protective clothing to their employees.

SUSTAINABILITY OF THE PLANTATIONS AND ENVIRONMENTAL MANAGEMENT

The VPD is responsible to ensure that replanting is carried out every year after trees have been harvested or in burnt areas. The VPD is also supposed to put in place various mechanisms to prevent and fight fires. The audit found that the rate of harvesting trees and destruction of forest by fire was higher than the rate of replanting. A total of 23,000 hectares were affected by fire, and a total of 3000 hectares were harvested, hence, 63% of the plantations remained for future utilization. The situation was worrisome especially in the area outside the Raiply concession, where over 14,000 hectares were harvested and affected by fire between 1999 and 2009

The audit also revealed that the structures and work plans in most of the companies operating in the plantations fall short of fulfilling the basic environmental requirements. Operators violated environmental laws and regulations. 75% of the operators did not have environmental management plans. It was also observed that all the companies except Raiply did not have reforestation programmes. This is contrary to the Environment Management Act No.23 of 1996 and Environmental Impact Assessment Guidelines of 1997.

¹ Source: Raiply and Vipha Division

To ensure the sustainability of the plantation, the Ministry of Natural Resources and Environment is urged to ensure that all areas harvested and destroyed by fire are replanted so that the rate of harvesting matches with that of replanting. The ministry should ensure that all operators adhere to environmental laws and minimize environmental threats.

MANAGEMENT RESPONSE

- Management has taken note of the observation and recommendation. There was shortage of seed to replant harvested areas, hence area harvested did not match with the area replanted.
- There are now improvements in replanting. Operators are required to replant all areas they harvest, and take care of the replanted areas.
- Initially Raiply was mandated to replant all areas inherited from the Government. This included bare areas and areas being harvested.
- The observation about fire outbreak is correct. There was an influx of people in the plantations as they were not repatriated after the retrenchment. This development caused a lot of fires in the plantations.
- Resource constraints in terms of human resources, finances and other material equipments make it difficult for the Division to monitor the plantations against fire outbreak.
- Management agrees to the observations raised by the auditors about environmental management of the plantations, and violation of environmental laws and regulations by operators.
- The Division has resource constraints which makes it difficult to reinforce the environmental laws and regulations. Initially, this plantation used to have over three thousand workers to manage the plantations. Currently, there are six hundred and twelve (612) workers.
- Other departments such as Environmental Affairs are required to assist on environmental management of the plantations

POLICY IMPLEMENTATION AND LAW ENFORCEMENT

An assessment of the effectiveness of the legal, policy and institutional framework with regard to sustainable forest management and harvesting of the Viphya plantations revealed that there is poor implementation and enforcement of forest policy, Forest Act and forest management agreements both at the departmental

level and VPD management level. Breaches of concession agreements largely go undetected and this defeats the purpose of the concessions. An analysis of all concession agreements revealed the extent of insufficient rights and obligations of the parties and lack of enforcement of agreements by the government. Poor policy implementation and inadequate law enforcement has resulted into illegal harvesting of trees, loss of trees through fires, and loss of government revenue, thereby threatening the future of the plantation.

It is recommended that the ministry should ensure effective implementation and enforcement of forestry policies, Forestry Act and concession agreements.

MANAGEMENT RESPONSE

- The observation and recommendation is noted. The National forestry policy and other strategic policies were not effectively implemented due to inadequate capacity in terms of number of staff and skills
- The other problem has always been lack of resources in order to effectively enforce the concession agreements.
- Government has now issued a directive that no concession will be issued to any other operator apart from Raiply Malawi Ltd.

1. INTRODUCTION

1.1. BACKGROUND

The Viphya plantation covers about 53,501 hectares and is one of the largest plantations in Africa. Apart from pine species, which cover over 90 % of the total area, there are Eucalyptus and other natural species growing in the plantations.

The Viphya plantations were established around 1949/50 with the objective of supplying timber for construction. In 1964/65 the objective was changed to make it a pulp plantation in order to supply raw materials for paper making. Later it was discovered that the paper project would not be feasible and the objective was again revised. A number of projects were tried, and in the early 1980s government reverted to the original objective of growing pine for timber for construction, and production of wood products for both domestic and export markets.

There are several companies plying their trade in the plantation. The operators are divided into three categories namely: large scale, medium scale and small scale. Most of the operators deal in timber and timber related products, except Raiply and Wood Industries Cooperation (WICO) which also deal in electric pole making.

The Forest Act, 1997 and the National Forestry Policy of 1996 provide a framework for the conservation, management, protection and utilization of forest resources in the country. The policy also aims at establishing appropriate incentives that will promote community based conservation and a sustainable utilization of the forest resources as a means of alleviating poverty.

The Viphya Plantations Division (VPD) is responsible for the daily management of the plantation. The division is under the Department of Forestry in the Ministry of Natural Resources Energy and Environment. Average annual funding for the plantation from 2003/04 financial year to 2007/08 financial year has been around MWK11 million. The division has 262 vacant posts of technical and support staff which represents 56% of the total staff establishment of the plantation.²

² VPD staff return

1.2. AUDIT ASSIGNMENT AND ITS OBJECTIVE

A performance audit was carried out in order to assess the social- economic performance and environmental sustainability of the Viphya plantations, and their management by the department of forestry and the Ministry of Natural resources, Energy and Environment.

1.3. AUDIT QUESTIONS AND SCOPE

The following audit questions were used in order to achieve the objective:

1. To what extent has the Viphya plantations had a positive social-economic contribution?
2. To what extent have the forestry resources of the Viphya plantations been utilized in a sustainable manner?
3. To what extent has the Ministry of Natural resources, Energy and Environment established proper management of the plantation?

The audit focused on the operations of the plantations for 10 years from 1999 to 2009. However, some data analysed date back to as early as 1950. The ten year period was selected in order to obtain a clear trend of the performance of the plantations.

2. METHODOLOGY

Data for the audit were collected through a combination of field visits, interviews and document review. All the forest blocks of Viphya were visited, except Champhoyo. National and international laws, such as the conventions on Biodiversity, the Forestry Act, model concessions, individual concessions and case law, were applied as audit criteria.

Operators in the visited blocks were interviewed to obtain data regarding harvesting, replanting, fire outbreaks and terms and conditions of the contracts. Consultants were hired to provide expert analysis in the following areas:

- The economic impact of the plantation
- The environmental sustainability
- The legal aspect of the contracts and the policies

2.1. SOCIAL-ECONOMIC CONTRIBUTION OF THE VIPHYA PLANTATIONS

Several documents were reviewed to obtain data regarding the operation of the plantations and their economic impact to the nation. The documents that were reviewed were as follows:

- The Pulp and paper project feasibility report
- VPD fire reports
- Budget documents 2006 to 2009
- Raiply assessment report
- Concession Area management report 2008

The Malawi Revenue Authority (MRA) headquarters, and MRA Mzimba, were visited to find out the extent of foreign earnings that the plantation brought to the country. The audit team also visited three border posts namely Mwanza, Dedza and Songwe to find out details of timber exported from the country. Contribution of the plantations to GDP was obtained from National Statistical Office (NSO).

Revenue from sales of trees was collected by the Department of Forestry. Comprehensive figures for revenues collected from rentals and issuance of permits could not be obtained due to poor record keeping at the Forestry Division.

Operators were interviewed in the forest blocks visited. The purpose of the interviews was to collect data on the social-economic contribution of the plantation.

2.2. THE ENVIRONMENTAL SUSTAINABILITY OF THE PLANTATIONS

Physical observations of a sample of 15 plots³ were carried out in order to obtain data on whether contracts of harvesting were complied with. Large plots from all blocks were sampled. Bidding and harvesting documents from the VPD planning section were used to assess the sustainability of the plantation. Fire reports were also collected from the stations to assist in sustainability analysis.

The net area of land remaining for future utilization was calculated by comparing total plantations area, against total area harvested and destroyed by fire taking into consideration total area replanted since the inception of harvesting.

2.3. MANAGEMENT BY THE MINISTRY OF NATURAL RESOURCES

Interviews were carried out with management at the Viphya Plantations division in order to obtain detailed understanding of the original purpose of creating the plantations and any changes in objectives as well as impact of such changes. The quality of the contracts was assessed by comparing the contracts to the relevant laws. The enforcement of the contracts was assessed by comparing the terms and conditions of the contract agreements and reports thereon.

The Department of Forestry and Raiply Malawi were interviewed about the general management of the plantation.

Based on functional needs of sustainable forest management the effectiveness of the legal, policy and institutional framework were assessed⁴. The data used for this assessment were contract agreements

³ Within a forest block there are compartments and plots. "Plots" are the area given to one concessionaire.

⁴ Functional needs for the development of sustainable forest management include: Clarifying stakeholder roles and procedures, securing property rights, building capacities within institutions, integrating multiple objectives, making choices between objectives, building and sharing forest knowledge, dealing with uncertainties, ensuring communication and participation.

3. PERFORMANCE ASSESSMENT CRITERIA

3.1. OVERALL OBJECTIVES OF THE PLANTATIONS

A major strategy to achieve sustainable economic growth in Malawi is conservation of the natural resource base and forests. The strategy is to ensure sustainable use and management of forestry resources by improving productivity and value addition by the industrial sector, increasing reforestation, improving enforcement of regulations for forestry management, as well as introducing incentives for private sector participation.⁵ The Viphya plantation is one of the major forestry resources which could contribute greatly to the strategy of sustainable economic growth of the country while on the other hand improving the social status of local Malawians.

The Forest Act, 1997 and the National Forest Policy of 1996 provide a framework for the conservation, management, protection and utilization of forest resources in the country. The goal of the policy is to sustain the contribution of forest resources for the upliftment of the quality of life of the people of Malawi.

3.2. REQUIREMENTS REGARDING THE ECONOMIC AND ENVIRONMENTAL MANAGEMENT OF THE PLANTATION

3.2.1. HARVESTING

At the age of 30 years the trees are fully matured and ready for harvesting. Harvesting is done by the operators. Before harvesting starts the Planning Section at the VPD are supposed to value the compartments/blocks to be harvested using their tarrifing system. Through tarrifing the volume of the plots to be harvested is supposed to be calculated in cubic meters. Each cubic meter is valued at K1100.00. These plots should then be sold through a bidding process to the operators. Trees are supposed to be sold on a cash basis.

⁵ (Malawi Growth and Development Strategy, 2006)

3.2.2. REVENUE COLLECTION

Revenue should be collected from sale of trees to operators including concessionaires, issue of licenses, export permit, phytosanitary⁶ certificates and rentals. The plots are supposed to be sold to operators on a cash basis according to the Logging agreements entered into between the department of forestry and operators.

3.2.3. WEEDING, PRUNING AND THINNING

In order to allow the trees to grow well, with enough space, the trees are supposed to be pruned and thinned in the fifth and sixth year respectively after planting/replanting. Weeding should be done throughout the life of the trees to prevent the spread of fire within a compartment and to ease access of the forestry workers.

3.2.4. REPLANTING

Replanting should be done based on the plantations work plan, and is supposed to be carried out after trees have been harvested and ferried. Severely burnt areas are also supposed to be replanted. The VPD is responsible to ensure that replanting is carried out every year, including the concession areas. Operators are required, by their agreement with the VPD to assist in the replanting of trees.⁷ The seeds are obtained from the Forest Research Institute of Malawi (FRIM).

3.2.5. FIRE FIGHTING, PREVENTION AND CONTROL

The VPD is supposed to put in place various mechanisms to prevent and fight bush fires. These include preparing fire fighting plans, installing and maintaining radio telecommunication systems, mounting public campaigns against fire, and monitoring the plantations against fire.

3.3. GENERAL MANAGEMENT OF THE PLANTATION

The VPD and Department of forestry are supposed to carry out the following general activities in the management of the plantations:

- Conduct surveys in the plantations

⁶ This is a document that is given to timber traders certifying that the timber is environmentally friendly. It is issued at the Vipha plantations division.

⁷ Source; logging agreement, and interview by management of VPD.

- Work out forestry statistics related to the plantations
- Prepare and submit reports to the department headquarters
- Maintain the plantations roads
- Monitor the plantations against fire outbreak and illegal practices
- Monitor the compliance to the terms of the contracts and take action if there are breaches to the contracts

4. HISTORY OF THE PLANTATION

The Viphya plantations started as early as 1949/50, with a saw timber plantation programme. Soon after independence in 1964, a timber demand assessment indicated a buoyant and potentially lucrative export market for long-fiber wood, pulp and paper. Therefore the government of Malawi decided to shift from small scale multipurpose forests investment to a large-scale pulp and paper investment which would be able to competitively supply export markets. Between 1965 and 1969, and again 1975 and 1980, with assistance from the Government of the United Kingdom, afforestation was rapidly expanded and this resulted in 53,000 hectares of plantations. Development of the plantations became a high priority for the Malawi Government.

The original aim of the project was to create 36,000 hectares of pulp plantations by 1975. This was to make available sufficient raw material to supply a pulp mill with an outturn capacity of 100,000 tons of air dry craft pulp per annum. However, following an advice from consultants in 1968, the softwood (long fiber pine) target was reduced to 22,000 hectares, and a hardwood (short fibered Eucalyptus) area of 6,000 ha was introduced in order that a blend of short and long fiber pulp is produced. Consultants further advised in 1978 that a much larger area of pine should be established than previously recommended, and that the aim should be to produce long fiber pine only with no further planting of Eucalyptus. The new target was to establish sufficient softwood plantation to sustain a bleach craft pulp and paper mill of 180,000 tons per year. So, afforestation forged ahead at the rapid rate of 6,000 hectares per annum mainly on the Viphya plateau grassland areas.

Several feasibility studies were carried out regarding the pulp and paper project, and the results revealed that the project would not be viable due to a number of factors like increases in oil prices, the disruption of the rail link through Mozambique to the coast and a glut of pulp on the international market. It was also foreseen that the project would pose an environmental threat to aquatic life since it was proposed that the mill would be planted at Chintheche, on the shores of Lake Malawi. As a result, in 1978, a decision was made by the Malawi and UK Government to reduce the rate of afforestation development from 6,000ha to 2,000hectares per annum. After a reassessment of the export potential for wood

pulp in 1981, the plans to establish a pulp mill were shelved and further afforestation of the area declined.

In 1981/82, when it was seen that the pulp and paper project would not be feasible, the operations on the Viphya Plantations, started to decline, and the plantations experienced a decline in funding. Protection of the plantation from fires, pruning, thinning, and maintenance of infrastructure and equipment ceased as well.

4.1. ESTABLISHMENT OF VIPHYA CORPORATION LIMITED - VIPCOR

In 1973, the Government of Malawi established the Viphya Pulp and Paper Corporation Limited, in order to prepare and co-ordinate the activities for the establishment of the Pulp Mill. Viphya pulp and Paper Corporation limited later changed its name to Viphya Cooperation limited, VIPCOR, in 1990. The objective of VIPCOR was to promote domestic and foreign investments for the commercial utilization of the Government forest resources on the Viphya Plateau and elsewhere in the country. Special attention was paid to activities which had import substitution and/or export potential.

After the original objective of a grand pulp and paper investment failed, VIPCOR continued with its efforts to investigate the sustainability and profitability of various investment proposals on the Viphya. Between 1984 and 1988, VIPCOR tried the following major investment proposals;

4.1.1. RESIN TAPPING/PRODUCTION

With assistance from Ruffdur International (PTY) Ltd of the Republic of South Africa, VIPCOR conducted trials in Gum Naval Stores business, (for a period of 5 years) which utilised the resin produced by certain species of living pine trees, especially *pinus elliottii*, and *pinus kesiya*. The tapped resin was subsequently processed into gum rosin, and gum turpentine. Gum rosin was an important ingredient in the manufacture of soaps and confectionaries.

Although the project seemed to be profitable in both social and economic aspects, it did not take off eventually due to lack of capital investment from the private sector.

4.1.2. PULP AND PAPER PROJECT

VIPCOR, in conjunction with Birla Engineering Services (BES) of India, conducted a feasibility study for establishment of a technical pulp and paper industry on the plantations. This second pulp and paper project did not require large quantities of water as did the original pulp and paper project. It was therefore recommended that the mill should be planted within the heart of Chikangawa, possibly at Elephant Rock near Zumwanda.

BES conducted a viability assessment of the project. The studies revealed a total domestic and export sales of 40,000 tons per year between the years 1996 and 2000, with an annual growth rate of 8%. The project was estimated to cost over US\$122 million, after providing for interest during construction of the mill, and working capital, but before making any provisions for construction of any dam. The project was estimated to yield an internal rate of return of 15%, against cost of borrowing estimated at 12%. Furthermore, the net present value for the project was estimated at US\$416 million.

As with the first project, this project failed because BES was asking for a lot of concessions from the Government of Malawi, and BES was expected to be the major subscriber of the investment.

4.1.3. CHARCOAL PROJECT

Between 1987, and 1989, trials were conducted to produce charcoal from waste conifer wood and thinning for use in the tobacco and tea industries. However, the furnaces which were used for curing tobacco were designed for solid fuel wood. The use of soft wood charcoal would require modifications to the furnaces, and the costs did not justify the means. Furthermore, the marketability of softwood charcoal for domestic use was poor because people preferred charcoal made from indigenous hard wood, to charcoal made from exotic wood. Due to the factors above, the charcoal project only succeeded for a very short time and later failed.

4.2. VIPHYA PLYWOOD AND ALLIED INDUSTRIES (VIPLY)

In the eighties, the government of Malawi secured a World Bank and other funding, to initiate a plywood factory and sawmill, which was called Viphya

Plywood and Allied Industries (VIPLY). VIPLY was expected to absorb 8% of the potential sustainable yield of the plantation, and was best suited to use the better-quality logs that were in short supply.

In 1986, an integrated plywood/block board mill with an attached sawmill commenced operations. During this period, the major shareholder was the Government of Malawi, through, Malawi Development Corporation (MDC). VIPLY was given a concession of 9, 000 hectares of the plantations. However, the operations of VIPLY failed miserably, and the government of Malawi privatised the mill in order to attract a competent investor to rescue and revitalise the company. So, the mill was finally sold off to Raiply Malawi Limited (RAIPLY) in 1999.

4.3. RAIPLY CONCESSION

In 1998, the Government of Malawi and Raiply signed a concession agreement in which Raiply was given a concession for 20, 000 hectares of the plantation for an initial period of 30 years, renewable by mutual agreement between the parties, for subsequent periods of 15 years.

According to the terms of the concession agreement, Raiply was granted the exclusive right to fell, extract, and convert within the concession area, standing trees for the purpose of conversion to sawn timber, block board, plywood, and any other wood products agreed upon between Government and Raiply. However, the concessionaire was obliged to replant, manage and protect the concession area, which is under the agreement and also the property of Malawi Government. On harvesting the trees, it was agreed that government would determine the compartments or areas from which wood should be harvested.

Apart from Raiply Malawi Limited, which is the major wood industry operating on the Viphya plantations, there are also medium-scale saw millers which include Wood Industries Corporation (WICO), Shire limited, Select Sawmill, Cianse International, Leopard Match Limited and Forestry Services and supplies. These companies work on an annual logging and log supply agreement.

In addition to the above medium saw millers, there are over 200 small scale operators, who are classified as either Pit sawyers or Mobile Saw millers. As is the case with medium saw millers, these operators are also granted annual cutting rights in the form of licenses.⁸

⁸ History obtained from National Archives, and Vipha Plantations Division

5. SOCIAL AND ECONOMIC IMPACT OF THE PLANTATION

5.1. CONTRIBUTION TO GDP

In the period under review, especially between 2003 and 2009, the economy of Malawi registered an economic growth averaging about 6.5 percent. The forestry and logging activity contributed about 1.5 percent to the overall GDP, on average. The forestry and logging activity also registered growth averaging about 13.3 percent annually during this period. Most of the growth in forestry and logging activity emanates from the Viphya plantations and it is the significant source of timber and other wood products in Malawi.⁹

Table 2 below shows statistics on the value of output from the forestry activity and also its growth rate and contribution to the overall GDP between the period 2003 and 2008.

Table 1: Real Value of Output, Growth Rate, and Contribution to GDP –forestry

Year/Description	2003	2004	2005	2006*	2007*	2008*	Averages
Value (MK' 000) 2005 Constant Prices	2,954	3,119	4,535	5,229	5,543	5,876	4542.7
Growth Rate (%)	1.6	5.6	45.4	15.3	6.0	6.0	13.3
Contribution to GDP (%)	1.7	1.7	1.4	1.5	1.5	1.4	1.5

* Indicative preliminary figure

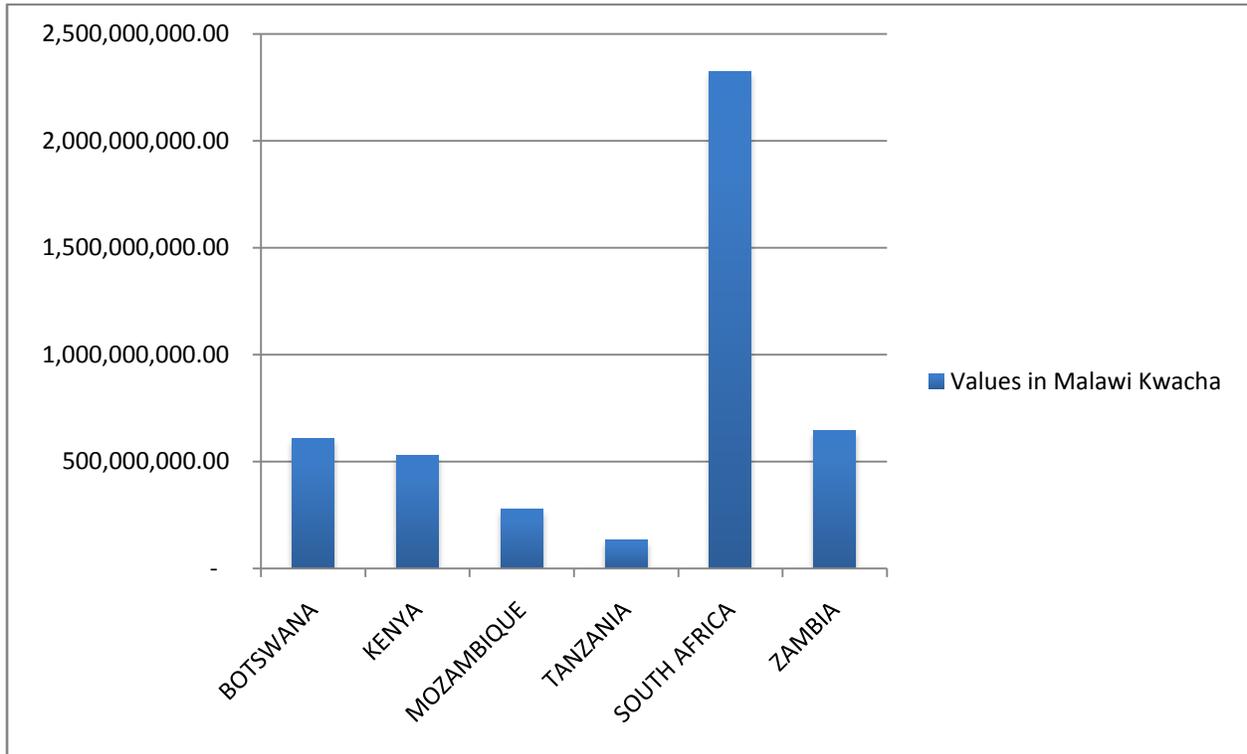
Source: NSO

This growth in the forestry and logging activity is attributed to the increase in demand for wood products as a result of the boom in the construction, accommodation, and real estate activities among others during the period. The growth is also attributed to the increase in supply of timber to export markets such as Zambia, Mozambique, Kenya, Tanzania, Botswana and South Africa. Figure 1

⁹ Source: National Statistical Office (NSO)

shows the value of timber and wood products exported to these markets between 2005 and 2009.

Figure 1 Exports of timber and timber related products to major markets in Africa (2005-2009)



Source: Malawi Revenue Authority (MRA)

Interviews conducted with exporters revealed that most of the timber and timber related products exported to these markets have little value addition, because they are not fully processed. They are exported to these countries for further processing en route to global markets such as Middle East and Asia. Figure 2 shows the exportation of timber from Viphya Plantations to global markets.¹⁰

¹⁰ Source: MRA

Figure 2 Exports of timber and timber related products to selected global markets (2005 - 2009)

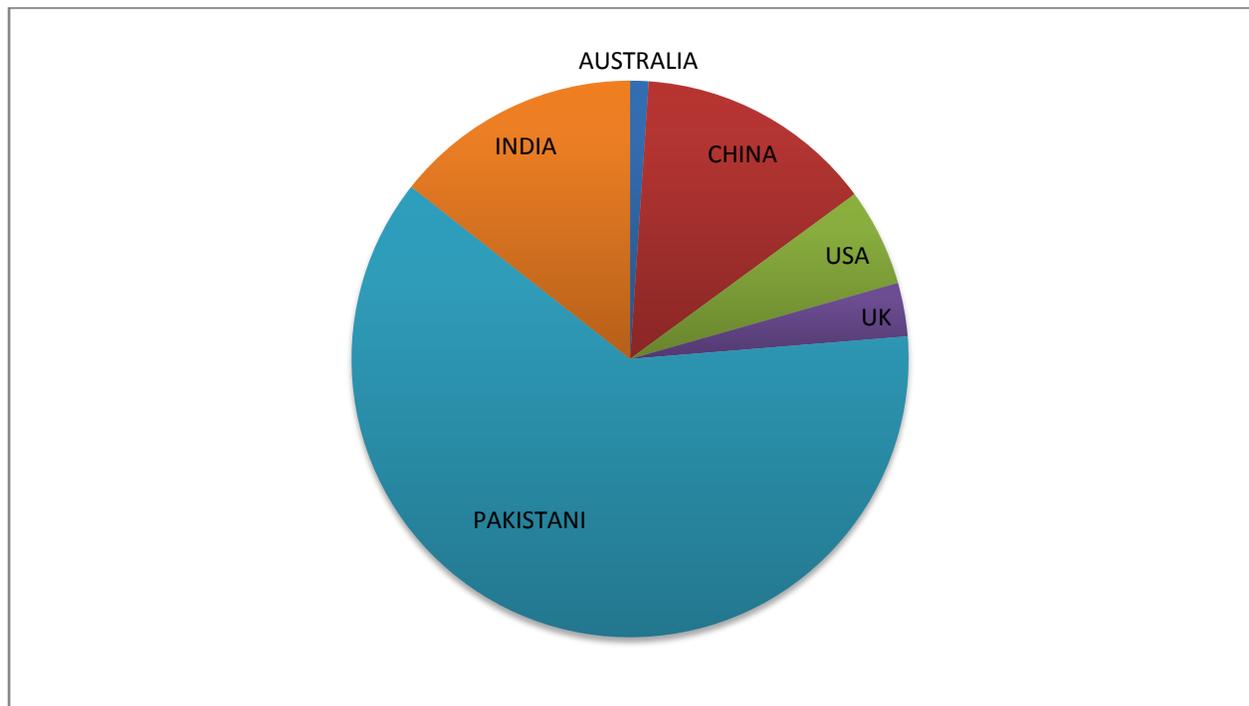


Table 1 shows the value of exports of timber and timber products to African countries and countries outside Africa.

Table 2-The value of exports of timber and timber products to selected African countries and countries outside Africa (2005 - 2009)

Region	Country	Value (MK in millions)
Africa	South Africa	2970
	Botswana	609
	Kenya	528
	Mozambique	276
	Tanzania	135
	Sum	4518
Outside Africa	Pakistan	63
	India	15

Region	Country	Value (MK in millions)
	China	14
	US	6
	UK	3
	Australia	1
	Sum	102
Total		4620

Source: Malawi Revenue Authority (MRA)

According to interviewed operators some mobile saw millers and pit sawyers sell directly to international buyers in the country, while others export the planks to other countries. Most of the mobile saw millers produce timber for export to markets in the southern and eastern Africa.

Foreign demand for timber and timber related products is high and it is only Raiply (Mw) Ltd that is able to get orders from abroad in excess of 40 metric tons per month. However, the company is not able to satisfy the demand

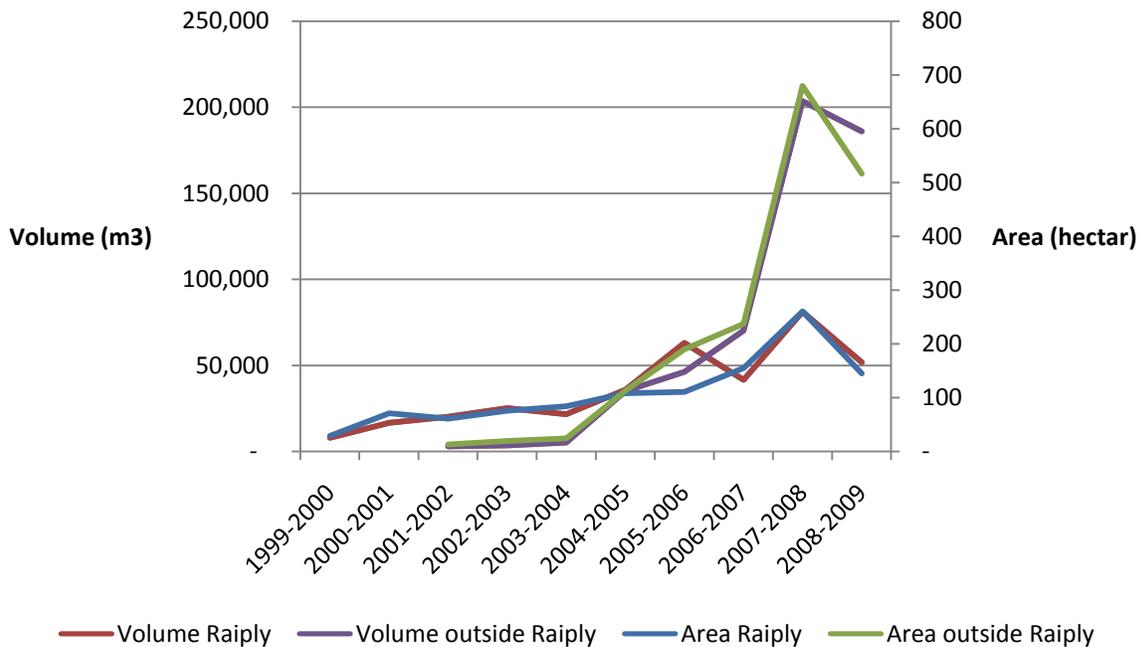
The timber local market is concentrated mainly in the urban centres where there is a growing demand from the industrial and housing development. Timber is sold among other areas in, the urban centres of Lilongwe, Blantyre and Mzuzu. Consumers can buy directly from the sawyers. Some of the more established mobile saw millers have points of sale in the urban areas from where consumers can buy. There are also some middlemen who buy from the sawyers to sell in the urban areas.

According to interviewed staff in VPD, most local timber merchants have not exploited the investment opportunity that follows a high foreign demand for timber. Furthermore, little has been done by government to promote Malawian companies to take part in the international timber trade.

5.2. HARVESTING AND CONTRIBUTION TO DOMESTIC REVENUE

Raiply has a concession area of 20,000 ha in three forest blocks.¹¹ The area outside Raiply concession has a total of 33,000ha. In this area, a total of 1,793ha (552,883.31cb) were harvested from 2001 to 2009. In the Raiply area, a total of 1,100 ha were harvested from 1999 to 2009. Figure 3 shows the area and volume of harvested trees for the period 1999 to 2009.

Figure 3 area and volume of harvested trees for the period 1999 to 2009¹²



Source; Vipha plantations division, planning section

Figure 3 shows that the volume and area harvested outside the Raiply area increased from 2001 to 2008, but declined in 2009. This was so because in the early years of harvesting (2001 to 2004), few people were interested in the timber

¹¹ Chikangawa (7,041.4 ha) Kalungulu (6,771.5 ha), and Champhoyo (6,315.9 ha). It has to be noted however that part of Kalungulu is outside the concession area.

¹² Data for 1999/2000 and 2000/2001 harvesting season were not found due to poor record keeping at the Vipha Plantations Division. Again, the figures for 2001/2002 to 2003/2004 are for Lusangazi forest block only, while the figures for 2004/2005 to 2005/2006 are for two blocks of Nthungwa and Lusangazi. The statistics for Luwawa forest block for 1999/2001 to 2005/2006 were not found.

business, so only small portions of land were harvested. There was no open bidding of plots because there were few operators in the forest. In 2005/2006 harvesting season, when the number of operators increased, the division decided to introduce an open bidding process. With the bidding system, the planning section at the division valued the total land to be harvested for that year, and approved operators were invited to participate in the bidding process. The successful bidders were then allocated the plots to harvest.

A visit to a sample of harvested areas revealed that the figures for area harvested as per records (especially outside Raiply concession) were lower than the actual area harvested since the inception of harvesting. This is due to illegal and corrupt practices taking place at the plantation. According to interviewed operators, some operators connived with forest officials responsible for allocating harvesting plots, to be allocated bigger plots than what was indicated on the tariff sheet.

After exhausting trees within their allocated plots, operators went beyond their boundaries and started harvesting trees in other plots. According to the interviewed operators and staff in the forest stations, this problem coupled with the problem of multiple operators using a single license to harvest trees happened because of little policing and monitoring activities by the Viphya division.

MANAGEMENT RESPONSE

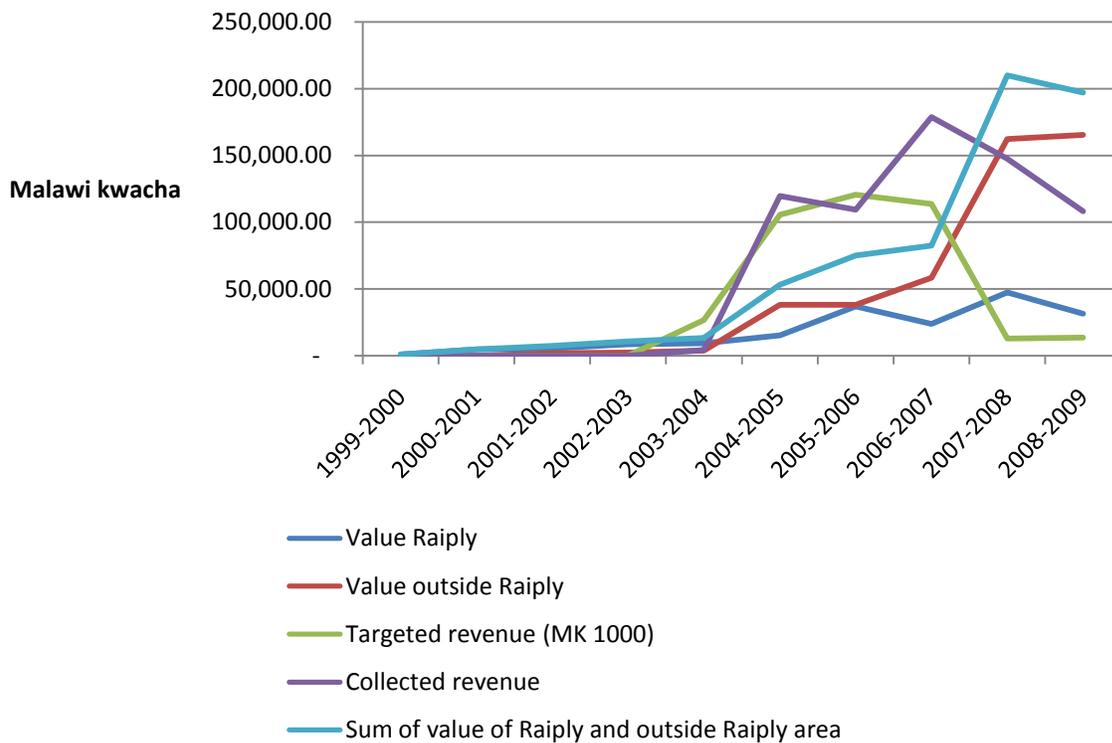
- The observation about poor record keeping is correct. The poor record keeping and plots assessment systems are some of the factors which caused the recorded figures for area harvested to be lower than actual area harvested. Management will ensure that improvement is made.
- The illegal and corruption cases are already in court.
- On encroachment and multiple use of license, it was like that due to lack of vehicles for supervision. In order to combat this problem, the department has started offering the whole compartment to cooperatives and not individual operators.

5.3. REVENUE

Viphya plantation collects revenue from sales of trees and fuel wood, rentals, and issuance of permits. The trees are sold to Raiply and other operators within the plantation.

The total value of trees sold in the period 2003-2009 amounted to over MK 432 million. Figure 4 shows revenue collected, budgeted revenue and values of trees harvested for the period 2003-2009.

Figure 4- Revenue collected, budgeted revenue and values of trees harvested for the period 2003-2009



Source: Viphya Plantations Division

Figure 4 shows that revenue from the plantations increased from 2004/2005 to 2006/2007. Increased revenue collection in this period was attributed to the increased production by Raiply, the introduction of medium-scale operators, mobile saw millers and pitsawyers.¹³

¹³ Source; VPD

Figure 4 shows further that the revenue collection decreased after 2006/2007, while the value of trees harvested increased. As at 31st December 2009, total revenue not collected for the year was MK128 million, of which 25 % represents balances from Raiply, and the rest by other operators. During this period, especially from 2007 to 2009, VPD failed to collect more than K160 million from operators but continued to renew licenses and award plots to the operators even if they did not comply with the logging agreement.

The terms and conditions of logging agreement stipulate that plots should be procured through an auction system and that trees should be sold on cash basis. All mobile operators and pit sawyers are required to bid at an auction to secure plots for harvesting trees. According to interviewed operators, over half of operators in the plantation procured plots without actually bidding for them and over half of the operators felled trees on credit such that during the period under review, there was under collection of revenue. Government lost revenue because many operators who had outstanding balances were reluctant to settle them.¹⁴

Figure 4 further shows that in 2003/2004 the targeted revenue was higher than both the value of trees sold and revenues collected. From 2007 to 2009, the value of trees sold was higher than the target, yet there was under-collection of revenues.

MANAGEMENT RESPONSE

- The observation about increase in debts is correct. This is so because a lot of money was owed by operators.
- A lot of operators were suspended.
- So far, the Division has managed to collect most of the money owed by operators.

5.4. EMPLOYMENT

The 1964 tree planting project in the Viphya Forest created jobs for many Malawians surrounding the Viphya plateau and other parts of the country. This project required labour to do activities such as land preparation, planting, weeding and pruning. Following change in government policies in mid 90's that resulted into privatization of industrial plantations, the staffing was reduced to a third. 2400 industrial workers were laid off, while 1200 retained.¹⁵

¹⁴ Source; VPD finance department

¹⁵ In 1995 there was one of the worst fires on the plantation caused by disgruntled, retrenched employees that could not be repatriated.

In the following years new jobs were created as concessions and licenses of logging in the plantation were issued to the private sector in 1998. In 2010, more than five thousand people were employed by private operators. Raiply alone employed about 1435 Malawians and other operators employed about 3820.

On average, workers employed directly in the plantation earn between K8, 500 and K10, 000 a month (2010). A few operators extend social support to the communities around the plantation. However, it was noted that most companies did not have health and safety policies thereby risking the health and safety of workers in the plantation. Few operators provide protective clothing to their employees.¹⁶

MANAGEMENT RESPONSE

- All operators are mandated to provide health and safety measures to their workers.

¹⁶ Source: Raiply and Viphya Division

6. SUSTAINABILITY OF THE PLANTATION AND ENVIRONMENTAL MANAGEMENT

6.1. FIRE OUTBREAKS

The VPD is supposed to put in place various mechanisms to prevent and fight fires. This include preparing fire fighting plans, installing and maintaining radio telecommunication systems, mounting campaigns against fire, and monitoring the plantations against fire. Table 5 shows fire statistics from 1999 to 2009 for both the Raiply area and the area outside the Raiply concession.

Table 3: Fire statistics from 1999 to 2009¹⁷

Year	AREA UNDER RAIPLY CONCESSION			AREA OUTSIDE RAIPLY CONCESSION			
	No. of fires	Area affected (ha)	Area damaged (ha)	No. of fires	Area affected (ha)	Area damaged (ha)	Estimated cost of damage (mk'000)
1999-2000	30	477.63	101.90	-	-	-	-
2000-2001	38	560.38	142.45	-	-	-	-
2001-2002	15	582.93	73.99	-	-	-	-
2002-2003	24	363.49	105.40	-	-	-	-
2003-2004	20	137.91	26.12	-	-	-	-
2004-2005	42	3,389.09	1,414.19	41	188.99	11.86	1,186
2005-2006	15	29.53	5.77	47	5,681.19	500.00	50,000
2006-2007	9	25.20	13.92	3	19.63	3.86	386
2007-2008	23	3,147.21	964.72	22	79.20	13.90	1,390

¹⁷Estimated cost of damage was not available for area under concession. Fire statistics from 1999 to 2003 was also not available for area not under concession.

Year	AREA UNDER RAIPLY CONCESSION			AREA OUTSIDE RAIPLY CONCESSION			
	No. of fires	Area affected (ha)	Area damaged (ha)	No. of fires	Area affected (ha)	Area damaged (ha)	Estimated cost of damage (mk'000)
2008-2009	20	1,293.54	399.43	24	6,087.41	1,305.60	130,560
Total	236	10,006.91	3,247.89	137	12,056.42	1,835.22	183,522

Source: Viphya Plantations Division

Table 3 shows that the Viphya plantations experienced a total of 373 fire outbreaks which affected a total area of 29,510HA of which 5,629HA were completely damaged. The total area affected by fire is over half (56%) of the plantations total area, while the area completely damaged is 11% of the plantations total area. Out of the total area affected and completely damaged by fire, 19,503HA and 2,381HA respectively, were outside the concession area. It was estimated that the total cost of the area damaged outside the concession area amounts to MK 184 million.

Interviews with residents around the plantations and document review of fire reports indicated that fires at the Viphya Plantations were mainly caused by controlled burning operations, wood vendors, honey seekers, poachers, and disgruntled people. According to records of fire outbreaks, most fires at the plantation were caused deliberately by disgruntled people either working within or living around the plantation area.

According to interviews with the staff at the plantations headquarters and RaiPLY, fire outbreaks is a critical problem that is retarding the sustainability of the plantations. Interviews with several informants revealed that there were no fire-control equipments to protect the plantations from fire outbreaks, especially in the area outside the RaiPLY concession. The fire control equipments that were being used were those bought during the time when the plantations were being funded by the British government in the 1980s. However, almost all of the fire equipments were not operational.

MANAGEMENT RESPONSE

- The observation is correct. There was an influx of people in the plantations as they were not repatriated after the retrenchment. This caused a lot of fires in the plantations.
- Resource constraints in terms of human resources, finances and other material equipments make it difficult for the Division to monitor the plantations against fire outbreak.

6.2. REPLANTING

Replanting should be done based on the plantations work plan, and is supposed to be carried out after trees have been harvested and ferried. Severely burnt areas are also supposed to be replanted. The VPD is responsible to ensure that replanting is carried out every year, including the concession area. Operators are required, by their agreement with the VPD to assist in the replanting of trees.¹⁸

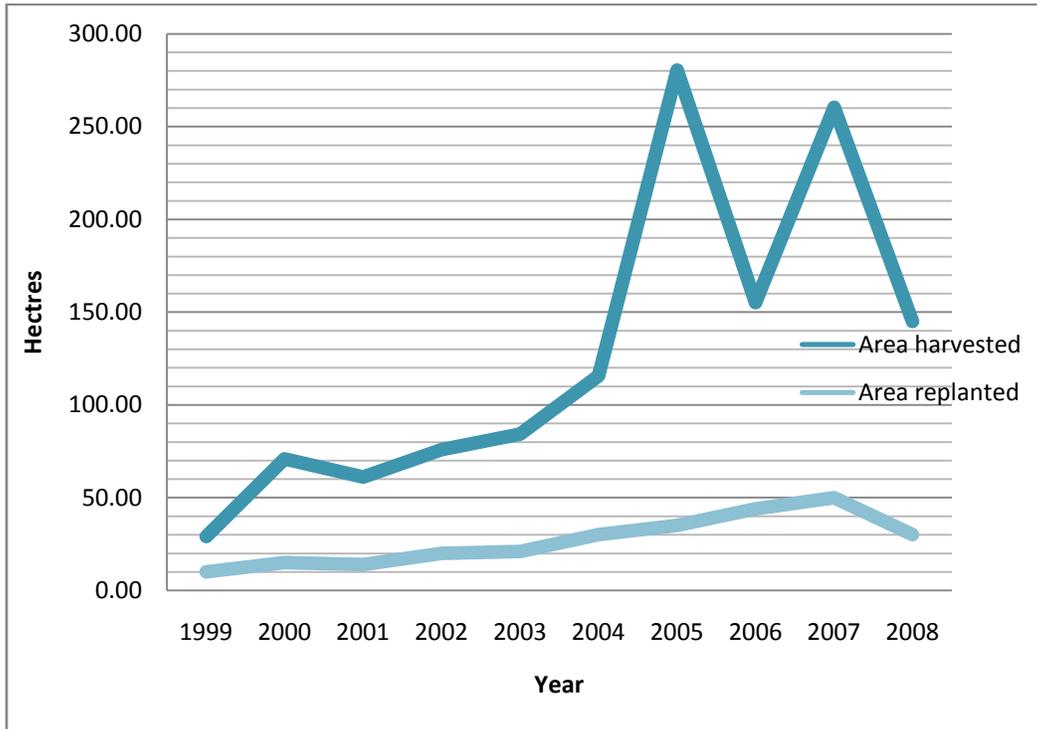
Out of the total area harvested and affected by fire, 21% was replanted. Most of the replanting was done in the areas under Raiply concession and not other areas that were harvested by mobile saw millers and pit sawyers.¹⁹

¹⁸ Source; logging agreement, and interview by management of VPD

¹⁹ Figures for replanting in area outside the concession were not provided

Raiply Malawi Ltd started replanting in 1999/2000. The graph shows that total area replanted by Raiply increased till 2007, and decreased in 2008. A total area of 3,901ha was replanted. Figure 4 compares harvested and replanted area by Raiply.

Figure 5-area harvested and replanted by Raiply



Source: Vipha Plantations Division

Figure 5 shows that the rate of replanting did not match with the rate of harvesting. Trees were being harvested at a faster rate as compared to replanting. The figure shows that more trees were replanted in 2007 than the other years.²⁰

MANAGEMENT RESPONSE

- The observation is correct. There was shortage of seed to replant harvested areas.
- There are now improvements in replanting. Operators are required to replant all areas they harvest, and take care of the replanted areas.
- Initially Raiply was mandated to replant all areas inherited from the Government. This included bare areas and areas being harvested.

²⁰ Source; raiply harvesting and replanting statistics

6.3. AREA REMAINING FOR FUTURE UTILIZATION

Table 4: Net area remaining for future utilization

	Total land	Total area harvested	Total area affected by fire	Total area replanted	Net land	Net land as % of total land
Outside Raiply	33,000	1792	12,056	1330	20482	39%
Raiply	20,000	1100	10007	3901	12794	24%
Total	53,000	2892	22063	5231	33274	63%
						100%

Source: Vipha Plantations Division

Table 4 shows that 63% of total area remains for future utilization.

6.4. ENVIRONMENTAL MANAGEMENT BY THE OPERATORS

Operators in the plantation are required to have environmental management plans.²¹ Developments of some magnitude and sensitivity are supposed to undergo an environmental review by the Environmental Affairs Department where the Director determines whether the project developer should conduct a fully fledged Environmental Impact Assessment (EIA) or just an environmental management plan.

A review of the management of the environment within and around the plantation revealed that the structures and work plans in most of the companies operating in the plantation fall short of fulfilling the basic environmental requirements. It was observed that most of the operators' did not have environmental management plans. Implementing a project without any environmental considerations may defeat the idea of sustainable development of the plantation.

²¹ The Environmental Management Act No.23 of 1996 and Environmental Impact Assessment Guidelines of 1997

It was also observed that all the companies except Raiply did not have comprehensive reforestation programmes. Raiply is replanting the harvested areas at a relatively better rate than other operators and the Forestry Department. The replanted areas are not properly taken care of. For instance weeding, pruning, thinning are not being done. This defeats the whole purpose of reforestation as the young trees are not provided with the necessary conditions to survive. Failure to replant the harvested areas may result in loss of vegetation and massive encroachment by surrounding villagers.

Site inspections revealed that all medium scale operators did not manage their waste properly. Waste oil and other effluent are not disposed of in an environmentally sound manner. This has a potential of polluting both surface and groundwater. Bearing in mind that many people in the plantations don't use treated water, this therefore endangers both human health and the ecosystems.

The Forestry Department (Viphya Plantations Division) is responsible for ensuring that the harvested areas by mobile saw millers are replanted. However, little is being done and a threat for massive loss of vegetation is imminent. Where small scale operators are doing pit sawing, the department is not reforestating the harvested areas.

The Forestry Department is also responsible to monitor the environmental management by the operators. Several of the operators have failed to establish proper environmental management. Table 8 shows environmental management by the operators.

Table 5- Environmental management by the operators.

Operator	Status of environmental management
Raiply Malawi Ltd	<ul style="list-style-type: none"> • The company intends to conduct an Environmental Impact Assessment for its expansion. The company already submitted a project brief to Environmental Affairs Department. • The company has a good program of reforestation; it has planted a considerable area it has harvested. However, the company needs to do more if the harvesting rate is to match with reforestation. The company is taking good care of the

Operator	Status of environmental management
	<p>planted trees.</p> <ul style="list-style-type: none"> • The company has no comprehensive Environmental Management System and a specialized officer for environmental issues. An environmental committee is in place but concentrates much on health and safety issues. • Some effluent from the factory is not properly disposed of due to improper discharge. Some effluent of unacceptable colour was found flowing in storm water drains.
Wood Industry Cooperation	<ul style="list-style-type: none"> • The company operates its saw mill without any environment management plan. • No EIA was conducted.
Shire Limited	<ul style="list-style-type: none"> • The company uses borehole water. The borehole is constructed closer a diesel pump. This is contrary to a 50m distance required hence poses a risk of groundwater pollution. In addition, the borehole has no abstraction right from Water Resources Board. • The company operates its saw mill without any environmental management plan; • No EIA was conducted.
Cianse International	<ul style="list-style-type: none"> • The company operates its saw mill without any environmental management plan • No EIA was conducted
Sayidireni Timbers	<ul style="list-style-type: none"> • The company operates its saw mill without any environmental management plan; • No EIA was conducted.
Select and Save Saw Mill	<ul style="list-style-type: none"> • The company operates its saw mill without any environmental management plan. • No EIA was conducted.
Small Scale Operators (Mobile Saw millers and Pit	<ul style="list-style-type: none"> • Solid waste including saw dust is not properly disposed of. This has a potential of polluting the environment and may also be a source of forest fire if not properly monitored; • General sanitation is not good.

Operator	Status of environmental management
sawyers)	<ul style="list-style-type: none"> • The operators ply their trade without an environmental management plan.

MANAGEMENT RESPONSE

- Management agrees to the observations raised by the auditors about environmental management of the plantations.
- It was difficult to reafforest the plantations due to shortage of seed, and limited financial and human resources. Initially, this plantation used to have over three thousand workers to manage the plantations. Currently, there are six hundred and twelve (612) workers.
- Other departments such as Environmental Affairs are required to assist on environmental management.

7. GENERAL MANAGEMENT OF THE PLANTATION

7.1. IMPLEMENTATION OF NATIONAL FOREST POLICY AND OTHER GOVERNMENT POLICIES

The Forest Act, 1997 and the National Forest Policy of 1996 provide a framework for the conservation, management, protection and utilization of forest resources in the country. It was observed that, the policy is to a limited extent implemented and enforced in several areas. The forest policy provides for afforestation by non-governmental organizations and the communities in forest reserves, public land, customary land and private land according to a Forest Plantation Agreement.²² The Forest Policy also suggests separating commercially productive industrial plantations from Forestry Department protection and extension functions. It also recommends the subsequent setting up of a Treasury Fund for Industrial Plantations with a view to subsequent privatization of these industrial plantations. Although these policy guidelines were in place, they have not been implemented.

Apart from the National Forest Policy, other policies on timber trade affected the Viphya Plantations. Between 1994 and 1995, the Malawi Government pursued public sector reforms and one of the objectives of the reform process was to reduce the role of government in the domestic market economy and instill fiscal discipline in public sector spending. In 1995 government carried out a strategic review of the ministry responsible for forestry matters. The review decided that increased production of wood for industrial use was not its strategic objective. Instead it deemed that this role could best be performed by the private sector.

The analysis showed that government would have saved up to MK27.4 million, using the 1996 salary and wage scale, had the Department of Forestry privatized the industrial plantations. The strategic review recommended that efforts be made to privatize all industrial forest plantations, but that the land be leased to private investors rather than sold outright, reflecting its socio-economic importance to the nation. It was further planned that the ministry responsible for forestry should be responsible for issuing contracts, enforcing the requirements of agreed management plans and monitoring the operations of the private sector. However, these strategic policies were not implemented.

²² National Forest Policy (1996) and Forestry Act (1997), Part VI, Sections 35 to 36.

MANAGEMENT RESPONSE

- The National forestry policy and other strategic policies were not effectively implemented due to inadequate capacity in terms of number of staff and skills.
- Separation of commercially productive industrial plantations from forestry protection and extension functions was effected. Extension functions are now under the Local Authorities.
- Government did not approve privatization process of industrial forest plantations hence the privatization strategy was stopped. However, the framework was not updated to reflect this development.

7.2. MONITORING AND SUPERVISION OF FOREST ACTIVITIES

The Viphya Plantations Division is responsible to monitor the activities of the Viphya plantations. According to interviews with forestry officers and some operators in all the stations visited, between 1999, and 2009, the division rarely visited the stations to monitor forest activities. According to the informants, this contributed to encroachment and arbitrary allocation of plots especially in Nthungwa and Lusangazi blocks.

MANAGEMENT RESPONSE

- Management agrees to the observation. Lack of vehicles and personnel makes it difficult to monitor and supervise forest activities.

7.3. COMPLIANCE AND ENFORCEMENT OF CONCESSION AGREEMENTS

There are a number of laws relevant for the concession agreements in the Viphya plantations. The current legal framework includes the following:

- The Constitution of Malawi (1994) as amended
- The Forestry Act 1997
- The Forestry Rules 2001
- The Forestry (Amendment) Rules, 2003
- The Forestry Act 1997 Regulations of 2004
- The Environment Management Act 1996
- The Public Enterprises (Privatisation) Act 1996
- The Land Act (Cap 57: 01)
- The National Parks and Wildlife Act 1992

- The Employment Act 2000
- The Labour Relations Act
- The Occupational Health, Safety and Welfare Act, 1997
- The Reserve Bank Act 2009
- The Exchange Control Act
- The Custom and Excise Act
- The Companies Act (Cap: 46:03)
- The Arbitration Act (Cap: 6: 03)

Document review showed that the agreements between the Department of Forestry and the operators in the Viphya plantation do not sufficiently incorporate these laws. The contracts do not clearly lay the obligations of the parties. This relates to both logging and mushroom harvesting concessions. Interviews with management in the Viphya Division showed that the division is not systematically enforcing the agreements. Breaches of the agreements largely go undetected and this defeats the purpose of the concessions. An analysis of some concession agreements revealed the extent of insufficient rights and obligations of the parties and lack of enforcement of agreements by the government. The analysis of these concession agreements is presented in chapter 7.3.1 to 7.3.4.

7.3.1. THE VIPHYA LOGGING CONCESSION AGREEMENT 1999-2009

This was a logging concession agreement of 1999 between the government of Malawi of the one hand and Viphya (1997) Limited. This agreement is a prelude to the Raiply logging concession agreement (see chap. 7.3.2). The concession was over an area of 20,000 hectares of soft plantations established since 1950. It covers Chikangawa, Champhoyo, Kalungulu and Luwawa forest blocks. Under clause 3 of the agreement these areas were to be known as Raiply Concession Areas. This concession was initially for 30 years.

The agreement defines the rights and obligations of parties but not in sufficient detail and this can be explained by its lack of clarity on regulatory framework. It appears from this agreement that parties were only obliged to comply with the Forestry Act and the Arbitration Act. This approach is a cause of concern, if one takes into account the fact that the agreement was signed on 25th February, 1999, five years after coming into effect of the Constitution. Other pieces of legislation applicable would include, the Occupational Health, Safety and Welfare Act, the

Labour Relations Act just to name a few. This partly explains some issues such as labour relations issues that are in an appalling state across the plantations.

In terms of sustainability of the plantations, though there is a requirement for harvesting and agreement for replanting, these do not come out clear in the concession agreements.

The legal framework of the agreement is stated in clauses 19 and 20 of the Agreement. Clause 19 only makes references to the Forestry Act and Rules or Regulations made under it. Clause 20 provides a mechanism for dispute settlement by referring to the Arbitration Act. This is contradicting the good practice of spelling out the governing law right at the outset and not towards the end of agreement.

7.3.2. THE RAIPLY LOGGING CONCESSION 2009-

The Viphya logging Concession of 1999 was amended and replaced with the Raiply Logging Concession on 29th January 2009. The substance is the same except for duration and parties. Whereas under the Viphya Agreement the duration of the concession was 30 years, that period under clause 3 of the Raiply Concession is 60 years. Review of both the Viphya and Raiply Logging agreements disclosed that the weaknesses in the former concession agreement were included in the latter concession agreement.

7.3.3. THE EDULIS PROCESSORS LIMITED AND WILD EDIBLE MUSHROOM HARVESTING AND PROCESSING AGREEMENT

This is a wild edible mushroom and fruit harvesting and processing concession agreement between the Government of Malawi and Edulis Food Processing limited for an initial period of thirty years. There are two mushroom and fruit harvesting and processing concessions over the Chikangawa plantation that were investigated in this exercise. One was between the government of Malawi and Edulis Food Processing Limited signed and entered into on 28th June 2001. The other was between the government of Malawi and Chanterella Limited of 10th November, 2006.

In the Edulis Concession (herein after referred to as ‘the concession’), the concession area is defined under clause I of the agreement as encompassing an

area of one million hectares, alternatively, all of the State Forest Reserves under government control demarcated as such under the agreement. Like the Logging Concessions, the legal or regulatory framework is the Forestry Act and the Arbitration Act. The weaknesses inherent in logging concessions are present in equal measure in this concession.

The Concession defines rights and obligations for the parties with sufficient detail for the performance of the concessions. However its lack of clarity on governing law limits a full observance of the agreement. For instance, the concession area being a work place is also governed by the Occupational Health, safety and Welfare Act and regulations there under. The Concession also affects third party rights, in terms of access to concession areas, which invoke constitutional rights over and above land law rights. Silence of the concession on an indicative legal framework is a setback that needs remedying in future agreements.

The concession agreement spells out rights and obligations aimed at sustainable utilization of the plantation. It was found during the exercise that Edulis had ceased operation for a period of over one year, but government did not notice and never exercised its right under the agreement. The explanation given was that the parent Company in South Africa had gone into liquidation and there was a re-organization of its subsidiaries. Edulis is now fully operational. Clearly there had been a breach of the contract and under normal contract law which also governs this concessions agreement, government was entitled to exercise its rights. There is need for effective monitoring and enforcement of the concession which currently is lacking as contractual breaches were not pursued.

7.3.4. CHANTERELLA WILD MUSHROOM HARVESTING AND FRUIT PROCESSING CONCESSION

This is a Wild Edible Mushroom and Fruit processing concession agreement between the Malawi government and Chanterella Limited, of P.O Box 21 Chikangawa, entered into and signed on 10th November 2006. The Concession is for an initial period of 10 years and thereafter subject to renewal.

The Concession area according to Clause II of the agreement is over areas demarcated from the following areas:

1. South Viphya Forest Reserve
2. Mchinji Forest Reserve
3. Ntchisi Forest Reserve
4. Such other forest reserves as could be discussed and agreed upon between the parties.

At the time of conducting this exercise, there was no information suggesting that other areas were agreed upon subsequent to the coming into force of this agreement. A clear definition of concession area is crucial as deviation from agreed areas amounts to breach of the agreement, giving rise to the innocent party to either determine the agreement or seek damages for breach. During the exercise two things were observed over this concession. The first was that it was doubtful if there was any activity going on; effectively this agreement was not being performed. The second thing we observed was that Company was engaged in eco-tourism and fruit processing in Nkhota-kota, areas outside clause II of the agreement. Efforts to contact the company were fruitless as there was no officer or workers on the premises. The Chikangawa Forestry office said in interview that they had no knowledge of what was going on there, though they knew the man behind the company and that he was around. Clearly this state of affairs does not reflect and further the express wishes and intentions of the parties. However, this is so because of lack of effective enforcement mechanism under the agreement.

In terms of legal framework the agreement is in no material difference from logging agreements. It however lists the Environmental Management Act in addition to the Forestry Act. Clause II of the agreement requires the Company to take out public liability insurance to cover for the degradation of the forest areas under the concession and matters incidental and consequent thereto. Clause X provides for the protection of endangered species whilst Clause XII d deals with environmental protection. The parties' obligations are clearly spelt out. Clause XVIII provides tripartite monitoring of the concession by government, the company and surrounding communities of the concession. From data collected we wonder whether this has been followed through. According to Clause XVII the

first such exercise was to be undertaken by 2008. We did not find information on this from the sources we dealt with.

Overall the agreements do clearly define the rights and obligations of the parties in terms of sustainable exploitation of the forests. However the weakness is lack of clarity on governing, law and effective enforcement mechanism.

MANAGEMENT RESPONSE

- The problem has always been lack of resources and inadequate capacity in order to effectively enforce the policies and concession agreements.
- Government has now issued a directive that no concession will be issued to any other operator apart from Raiply Malawi ltd.

8. CONCLUSION

The Viphya plantation is one of the major forestry resources which could contribute greatly to sustainable economic growth in Malawi and improved social status of local residents.

The audit shows that there are several challenges related to the sustainability and socio-economic contribution of the Viphya plantation. A major problem is that the plantation is exploited unsustainably. The rate of replanting is much lower than the rate of harvesting. Several companies do not have proper environmental plans for their operations. Overharvesting and improper environmental management by the companies are occurring because of insufficient monitoring of forest activities by the Forestry Department.

Clear and legally based contracts with the concessionaires are important to ensure environmentally sustainable utilization of the plantation. A review of the concession agreements between the Government of Malawi and operators in the Viphya Plantations showed that many contracts are not specific on the environmental obligations of the parties.

Wild fires are also contributing to a deterioration of the forest as many premature trees are being destroyed. Most operators in the plantation, including the Department of Forestry are not well equipped with fire fighting mechanisms such as water bowsers and fire beaters hence are unable to control fire outbreaks. However, it is still alleged that most of the bush fires in the plantation are started by members of the community within and around the Viphya plantation hence there is need for civic education and also provision of fire fighting mechanisms.

The socio-economic contribution of the plantation is limited as most companies are felling trees only for timber production with very little value addition. Only Raiply adds much value by making other wood products which it sells to both local and international markets. The nation, therefore, loses some potential income, which could be realised if companies engaged in this value addition.

The audit also showed that there is a gross under-collection of revenues in the plantation. By the end of 2009 there were outstanding balances amounting to MK 128million.

The Viphya Plantation makes a significant contribution to the socio-economy of Malawi, but there is a potential for much higher collection of revenues. Poor monitoring and supervision and failure to adhere to sustainable forest management practices by the Forestry Department, endangers the future economic value of the Viphya plantations.

9. RECOMMENDATIONS

- A. To ensure the sustainability of the plantation, the Ministry of Natural Resources and the Environment is recommended to:
1. Ensure licenses issued to all operators have conditions that promote environmental conservation and rehabilitation.
 2. Strengthen the monitoring to ensure the operators replant trees in area they have harvested.
 3. Develop ways of preventing fires, for instance, by civic education of local residents.
 4. Establish sufficient capacity to minimize the damage by fires, for instance, by improved monitoring, more fire gates, and acquisition of necessary fire - fighting equipment.
- B To ensure a greater socio-economic contribution of the plantation, the Ministry of Natural Resources and the Environment is further recommended to:
1. Establish a much tougher regime of revenue collection from operators, for instance by issuing penalties and expulsion of operators who do not pay on time.
 2. Consult other Ministries on how Malawian companies can, to a greater extent take part in the timber trade and create jobs.
- C To improve the general management of the plantation, the Ministry of Natural Resources and the Environment is recommended to:
1. Establish key performance indicators for the Forestry Department, for instance in the areas of harvesting, replanting, revenue-collection and fires.
 2. Require regular reporting on these key performance indicators and ensure sufficient corrective action is taken if performance is slackening.

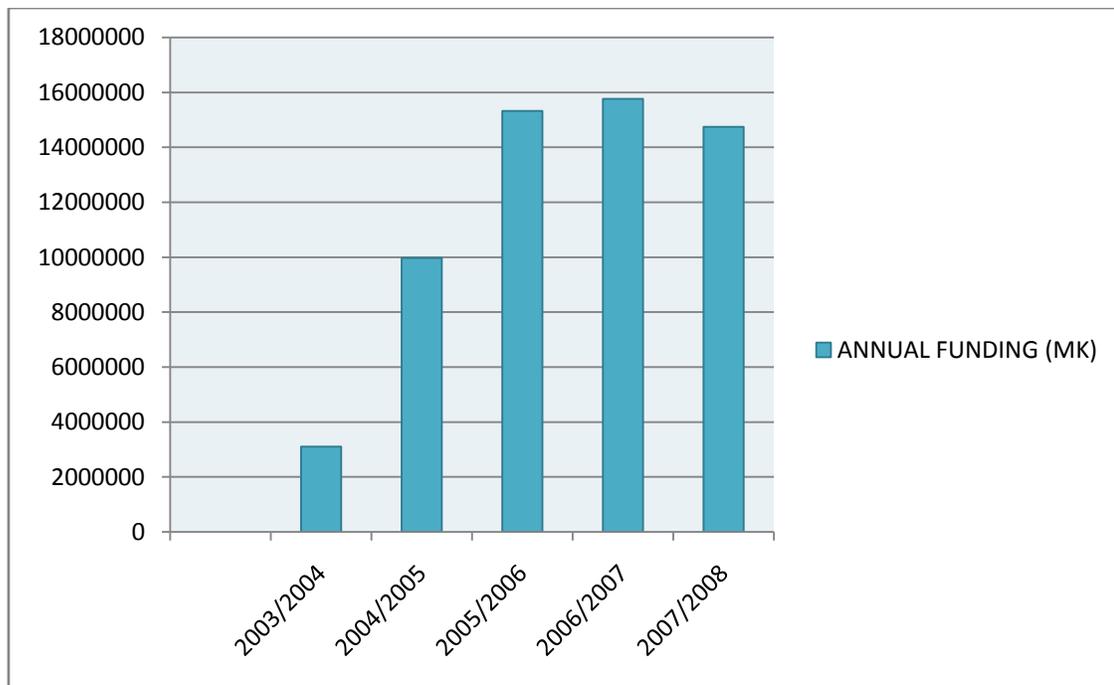
MANAGEMENT RESPONSE

- Management has taken note of the recommendations raised by the auditors.
- Management has already started implementing some of the recommendations.
- Management will ensure that the recommendations are implemented.

APPENDIX 1: ANNUAL FUNDING FROM 2003/04 – 2007/08

Financial year	Annual funding (Mk)	Increase /(decrease)	
		Mk	%
2003/2004	3,108,572.00	-	-
2004/2005	9,975,957.00	6,867,385.00	221%
2005/2006	15,327,418.00	5,351,461.00	54%
2006/2007	15,764,477.00	437,059.00	3%
2007/2008	14,750,961.00	(1,013,516.00)	-6%
5 year average	11,785,477.00	2,910,597.25	68%

ANNUAL FUNDING TREND 2003 TO 2008



APPENDIX 2: ROYALTY RATES FOR HARVESTING OF TREES

EUCALYPTUS AND EXOTIC SPECIES

BUTT DIA BARK (CM)	Rate/pole
Less than 6cm	40.00
6 but less than 8	50.00
8 but less than 10	80.00
10 but less than 12	100.00
12 but less than 14	120.00
14 but less than 16	150.00
16 but less than 18	160.00
18 but less than 20	170.00
20 and over	by volume

EXOTIC TREES

Cypress species	2000.00
Eucalyptus	1000.00
Gmelina arborea	1000.00
Pinus species	1100.00

FUELWOOD

Per cubic metre	500.00
Headload	10.00
Bicycle load	70.00

BUSINESS OPERATIONS

PITSAWING

Application fee	1,000.00
Operation fee per sawing season	7,500.00
Residential fee per 6 m2 hut per season	800.00

MOBILE SAW MILLING

Application fee	2,000.00
Operation fee per sawing season	12,000.00
Yard site fee	2,000.00
Residential fee per 6 m2 hut per season	1,000.00

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