



Zimbabwe

REPORT

Of the

Comptroller and Auditor-General

On

DEFORESTATION IN PERI-URBAN AND RESETTLEMENT AREAS

As coordinated by

THE FORESTRY COMMISSION
and
ENVIRONMENTAL MANAGEMENT AGENCY

Presented to Parliament of Zimbabwe
2011

VFM 2011:02

nahiri



ZIMBABWE

Office of the Comptroller and
Auditor-General of Zimbabwe
48 George Silundika Avenue
Cnr. Fourth Street,
Harare, Zimbabwe

The Hon.T Biti
Minister of Finance
New Government Complex
Samora Machel Avenue
Harare

Dear Sir

I hereby submit my Value for Money Report on Deforestation in Peri-Urban and Resettlement Areas in terms of Section 11 of the Audit Office Act (Chapter 22:18).

Yours Faithfully

nahiri

M. Chiri (Mrs)

COMPTROLLER AND AUDITOR-GENERAL

Harare
July 12, 2011



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EXECUTIVE SUMMARY

Forestry Commission is a parastatal under the Ministry of Environment and Natural Resources Management established under the Forest Act (Chapter 19:05) of 1948. Environmental Management Agency (EMA) is also a parastatal under the same Ministry and it was established under the EMA Act (Chapter 20:27) in 2002 and became operational in 2004. Forestry Commission then ceded its function of management of veld fires to EMA through Statutory Instrument 7 of 2007. EMA was formed through the merging of 3 different departments namely Department of Natural Resources, Ministry of Health & Child Welfare's hazardous substances and atmospheric pollution section and the ZINWA Water Quality Section.

My audit was motivated by the public outcry on the degradation of the environment by people through deforestation in peri-urban and resettlement areas. This is evidenced by clearance of vast pieces of land by people in peri-urban areas like Cleveland Dam near Mabvuku and resettlement areas in Goromonzi and Nyabira which have all been cleared of vegetation. There is fear that desert like conditions like those already existing in the Seke-Chihota communal area may be experienced in more areas if the problem of deforestation is not seriously addressed. Cases of veld fires have also raised eyebrows on service delivery by responsible authorities that is Forestry Commission and Environmental Management Agency. My audit covered the period from 2005 to December 2009.

The purpose of my audit is to report on the extent of efficiency and effectiveness by which Forestry Commission and EMA are operating in curbing deforestation in peri urban and resettlement areas and to suggest ways of improving their operations.

Summary of Findings

My audit revealed shortcomings in the operations of both Forestry Commission and EMA in curbing deforestation and controlling veld fires. This related to issues of failure to effectively control veld fires, inadequate awareness programmes, failure to monitor indigenous tree harvesting for commercial purposes (by wood carvers, brick moulders, earthenware producers and tobacco growers), poor record keeping and failure by Forestry Commission to meet its targets in terms of seedlings production and tree planting. The results of the audit which are detailed in Chapter 3 of the report are summarised below.

1. EMA and Forestry Commission were failing to effectively control veld fires as evidenced by the prevalent occurrence of veld fires in all the 4 provinces visited. For example in 2004 over 2,8 million hectares were burnt across the country and this rose to over 7 million hectares in 2005. National veld fire statistics for 2006 to 2008 were not availed for audit. I attributed this to inadequate awareness programmes by EMA. Reports revealed that lives were lost and property destroyed. The major causes of veld fires were hunting, arson, leaving unattended fires at bus stops, clearing land for cultivation through burning and throwing of cigarettes stubs by passers by.

2. I established that Forestry Commission transferred seedling nurseries to schools, communities and individuals to manage them on a commercial basis. This decision has impacted negatively on efforts to plant more trees as the targeted groups lack the technical knowledge and financial resources to effectively manage the seedling nurseries. I also noted with great concern that annual tree growing targets were rarely met in all the four provinces I audited. For example in 2007, 1 650 000 seedlings were targeted for production but only 778 974 seedlings were actually produced. This translated to only 47.2% achievement (refer to tables 2.1 and 2.2 below).

Table 2.1 Seedlings produced from 2004-2009

Year	Target Seedlings Production	Actual Seedlings Production	% of actual production
2004	3 215 000	1 013 387	31.5
2005	3 041 000	1 303 283	42.8
2006	3 150 000	1 386 124	44.0
2007	1 650 000	778 974	47.2
2008	1 293 500	1 114 582	86.2
2009	1 230 200	977 300	79.4

Source: Provincial monthly, annual reports and RBM documents.

Table 2.2 Trees planted from 2004-2009

Year	Target Tree Planting	Actual Trees Planted	% of actual Tree planting
2004	3 020 000	434 164	14.4
2005	2 825 000	827 286	29.2
2006	2 636 000	684 578	26.0
2007	1 380 000	335 401	24.3
2008	1 041 000	443 280	42.6
2009	960 149	268 705	28.0

Source: Provincial monthly, annual reports and RBM documents.

3. I observed that Forestry Commission failed to fully implement the Tobacco Wood Energy Programme (TWEP) by tobacco growers in resettlement areas which was meant to encourage tobacco growers to plant woodlots at their farms for curing of tobacco. As a result resettled farmers were cutting down indigenous trees for curing tobacco as they did not have any gum plantations on their farms. I noted that Forestry Commission was not monitoring the activities of the tobacco farmers.
4. I observed that there was lack of monitoring which led to massive illegal cutting down of indigenous trees for wood carving, production of ceramics and bricks. I also noted with concern that some companies and individuals were operating their

commercial businesses on free wood obtained illegally. This was due to lack of Forestry Extension Officers (FEOs) whose duties were to monitor and report on all forestry activities in their districts. In all the four provinces audited there were vacant posts of FEOs with some dating as far back as the year 2000. Manicaland had 2, Masvingo, had 2, Mashonaland West had 2 and Matabeleland North had 11 vacant posts.

4.1 It was also noted that of the four provinces none had adequate vehicles. Out of a fleet of twenty seven vehicles for the four provinces only twelve were runners. The available vehicles were aged hence failing to access some terrain. Despite the shortage of vehicles I also noted with concern that some FEO had no drivers' licences as their duties require extensive traveling. This contributed to inadequate monitoring of illegal activities such as commercial manufacture of pottery using indigenous trees.

5. My review of monthly reports throughout the provinces visited showed that Forestry Commission and EMA provincial offices did not properly file and store all monthly reports. Matabeleland provincial office only managed to provide 45% of their monthly progress reports and Mashonaland West province managed to provide 43% of their monthly progress reports. The Forestry Commission provincial offices were using the reverse side of the monthly reports as bond paper for printing thereby destroying some monthly reports and in some cases there was superimposition of monthly reports by way of overwriting on previous monthly reports.

Recommendations

My recommendations on how Forestry Commission and EMA could improve on curbing deforestation are contained in Chapter 4 of this report and are summarized below:

4.1 Failure to effectively control veld fires

EMA should intensify anti fire campaigns towards and during the fire season and also develop a data bank on the causes of fire and areas prone to veld fires in order to prioritise fire protection activities. EMA should effectively enforce environmental laws to curb veld fires. Deterrent measures should be put in place to all would be offenders. Therefore EMA should liaise with Zimbabwe Republic Police (ZRP) to help them in apprehending offenders and make sure that they are brought to book.

4.2 Failure by Forestry Commission to maintain nurseries

The Commission should resuscitate nurseries so that they can control quality and quantity of seedlings produced and trees planted. They should also encourage farmers to grow indigenous trees because they face extinction.

4.3 Tobacco Wood Energy Programme (TWEP)

Forestry Commission should intensify training and encourage tobacco farmers in peri-urban and resettlement areas to have wood lots for fuel wood for curing their tobacco and minimise the indiscriminate cutting down of indigenous trees.

4.4 Monitoring and Evaluation

Forestry Commission and EMA should do routine field or forest inspections restricting cutting or removal of indigenous trees as the activities are injurious to the sustainability of forests. All woodcarvers and commercial manufacturers of bricks and ceramics in the country should be accredited to facilitate the control of cutting down of indigenous trees. This will enhance sustainable harvesting of indigenous trees. Deterrent measures should be put in place to force people to desist from illegally cutting down trees. Therefore Forestry Commission and EMA should liaise with Zimbabwe Republic Police (ZRP) to help them in apprehending offenders.

Law enforcement agents must also prioritise environmental laws by apprehending the offenders.

4.4.1 Staff Shortage

Forestry Commission should advocate for an increase in staff establishment from one officer to at least two officers per district. This will help to reduce the work load of FEOs.

4.4.2 Shortage of vehicles

Forestry Commission and EMA should ensure that all districts are adequately equipped in terms of vehicles. There is need for prioritisation of vehicle allocation to critical areas like forestry extension work. Forestry Commission should make sure that they employ FEOs with drivers' licences and if not they should be encouraged to acquire them.

4.5 Record Keeping

I recommend Forestry Commission and EMA provincial offices to have all records of all forestry activities taking place within their provinces. The provincial reports will feed into the national report which needs to be reliable and up to date. This will make national planning easier for policy makers. The records should be properly filed and kept in a safe place. The provincial offices need to be adequately supplied with stationery to avoid superimposition of documents and reusing of bond paper thereby destroying some reports.

CHAPTER 1

1. INTRODUCTION

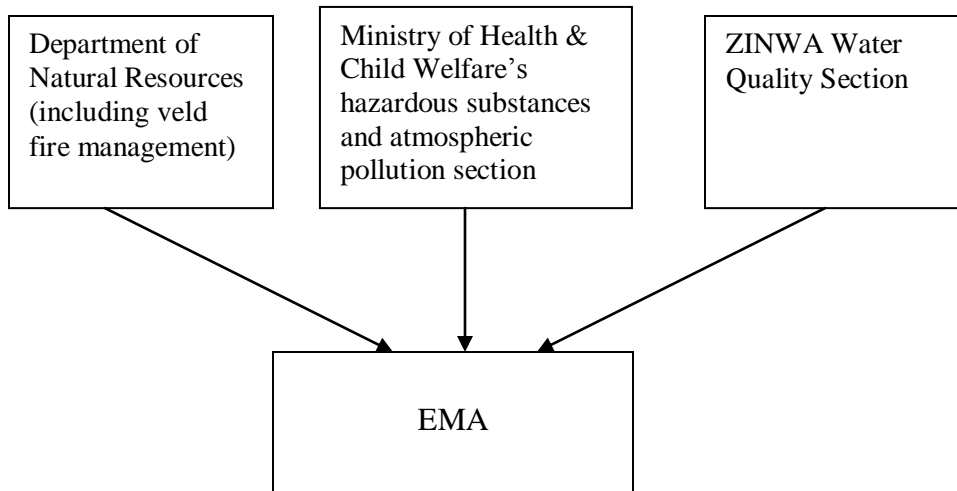
In this audit I examined the effectiveness with which Forestry Commission and Environmental Management Agency (EMA) controls deforestation in peri-urban and resettlement areas. The objective of the audit was to evaluate how Forestry Commission and EMA were executing their duties in trying to curb deforestation.

1.1 Motivation

The audit was motivated by the public outcry on the degradation of the environment by people through deforestation. This was evidenced by clearance of vast pieces of land in peri-urban areas like Cleveland Dam near Mabvuku and resettlement areas in Goromonzi and Nyabira which have all been cleared of vegetation by the people. There is fear that desert like conditions in the Seke–Chihota communal area may be experienced in more areas if the problem of deforestation is not seriously addressed. The increase in cases of veld fires has also raised questions on the quality of service delivered by responsible authorities i.e. Forestry Commission and EMA.

1.2 Background

The Forestry Commission is a parastatal under the Ministry of Environment and Natural Resources Management established under the Forest Act (Chapter 19:05) of 1948. Environmental Management Agency is also a parastatal under the Ministry of Environment and Natural Resources Management and was established under the EMA Act (Chapter 20:27) in 2002 and became operational in 2004. Forestry Commission ceded its function of management of veld fires to EMA in 2004 through Statutory Instrument 7 of 2007. EMA was formed through the merging of 3 different departments as shown in the diagram below:



1.2.1 Statutory Mandates

1.2.1.1 Forestry Commission

Forestry Commission was established as a statutory body in 1948 under the Forest Act (Chapter 19:05). It is also guided by the Communal Land Forest Produce Act (Chapter 19:04). Its functions include the regulation of the forestry sector, forestry extension, gazetted forest management, training and capacity enhancement, production of timber products and trading in timber and its products.

1.2.1.2 Environmental Management Agency (EMA)

EMA was established as a statutory body in 2002 under the EMA Act (Chapter 20:27) and became operational in 2004. Its functions include developing and implementing incentives for the protection of the environment, undertaking any works deemed necessary for the protection of the environment where it appears to be in the public interest or where in its opinion an appropriate authority has neglected to do so and to serve written orders on any persons requiring them to undertake or adopt such measures as are specified in the orders to protect the environment.

1.3 Mission Statements

1.3.1 Forestry Commission

“To contribute to national socio-economic development through effective regulation and capacity enhancement in the sustainable utilisation and management of forest resources.”

1.3.2 Environmental Management Agency

“To promote the sustainable management of natural resources and the protection of the environment with stakeholder participation.”

1.4 Objectives

Forestry Commission

The Forestry Commission is the government’s principal advisor on all forestry and forestry related matters. Its objectives are to:

- Facilitate improved supply and management of tree and forestry resources through equipping communities with knowledge and skills on tree planting and management,
- Increase income from sustainable utilisation of tree and forest products or services by communities in communal and resettlement areas,
- Regulate trade in wood related forest products,
- Develop appropriate technologies for the improved and sustainable management of indigenous and exotic plantation forest and to produce superior seed and other plant materials,
- Train personnel up to diploma level in wood technology, forestry and saw doctoring and
- Provide employee satisfaction and skills development and empowerment of managers.

Environmental Management Agency

EMA is a statutory body responsible for ensuring the sustainable utilisation and protection of Zimbabwe's environmental goods and services. Its goals are:

- To create an enabling legal framework for the improved environmental management,
- To ensure a clean and healthy environment through sustainable use of natural resources and
- To promote environmental stewardship at all levels.

1.5 Organisational Structure

1.5.1 Forestry Commission

At the apex of the organizational structure of Forestry Commission is the General Manager. To effectively carry out its mandate, Forestry Commission has been organized into two technical divisions namely the Conservation & Extension Division (CONEX) and the Research & Training Division (R & T). The two heads of these two technical divisions are the deputy General Managers. The third division, Ngamo Safaris, is a hunting and photographic division. Annexure 'A' attached shows Forestry Commission's organisational structure.

1.5.1.2 Environmental Management Agency

At the apex of the organizational structure of EMA is the Director General. To effectively carry out its mandate, EMA has been organized into three departments namely Environmental Protection Department (EPD), the Environmental Management Services Department (EMSD) and the Finance & Administration department. Refer to Annexure 'B' attached.

1.6 Funding

1.6.1 Forestry Commission

The Forestry Commission and EMA are funded by the government through the Ministry of Environment and Natural Resources Vote. It also has some income generating projects like the Ngamo Safaris Unit. The Budget Estimates and other income for the years ended 31 December 2004 to 31 December 2009 are as detailed in table 1 and table 2 below.

Table 1: Forestry Commission budget for the period Jan 2004- Dec 2009

Financial Year	Voted Funds (Z\$ Billion)	Other income (Z\$ Billion)	Total (Z\$ Billion)	RBZ USD to Z\$1 exchange rates as at 31 December	Voted Funds in US\$	Equivalent (US\$)
2004	19.966	7.421	27.387	569.60		48 076 802
2005	40.549	29.368	69.917	77964.60		896 779
2006	0.192	2.33	2.522	250		12 968 000
2007	6.637	1.98	8.617	30000		297 233
2008	4055	-	4055	1075948.24		3 769
2009	-	-	-	-	6000	6 000

Source: Forestry Commission Annual reports for 2004-2005 and Budgets and work plans for 2006-2009.

Table 2: EMA budget for the period Jan 2004-Dec 2009

Financial Year	Voted Funds (ZW\$)	RBZ USD to Z\$1 exchange rates as at 31 December	Voted funds in US\$	Equivalent (US \$)
2004	176 000	569.60		30 898
2005	1 500 000	77 964.60		19 239
2006	1 500 000 000	250		6 000 000
2007	400 000 000	30000		13 333
2008	300 000 000 000	1 075 948.24		278 823
2009	-	-	18400	18 400

Source: Conservation Budget allocations

The conversion rates from (ZW\$) to (US\$) were obtained from the Reserve Bank of Zimbabwe

1.7 Scope of Audit

I carried out the audit in terms of Section 7.1 (b) of the Audit and Exchequer Act (Chapter 22:03). My audit covered the period from 2004 to 2009. My audit covered Matebeleland North, Mashonaland West, Masvingo and Manicaland provinces. In Matebeleland North and Masvingo there is a flourishing wood carving industry and the manufacture of pottery using indigenous firewood for burning. Mashonaland West is where there are many tobacco growers who use fire wood for curing their tobacco. In Manicaland there are plantations and I wanted to ascertain what Forestry Commission was doing in preserving the existing plantations and curbing the illegal cutting down of trees.

1.8 Methodology of the Audit

I conducted the audit in accordance with International Organisation of Supreme Audit Institutions' guidelines. The audit was also conducted in line with the Generally Accepted Government Auditing Standards, as well as the internal guidelines for planning, execution, reporting and follow up procedures of the Value for Money audits.

I carried out interviews, farm inspections, reviewed and analysed documents as methods of data collection.

Documentary Review

I reviewed documents to obtain information on the operations of Forestry Commission and EMA. These included:

- Forest Act (Chapter 19:05),
- Communal Land Forestry Produce Act (Chapter 19:04),
- Environment Management Act (Chapter 20:27),
- Annual Reports 2004-2008,
- Monthly Progress Reports 2004-2009,
- Forestry Commission Strategic Plan Document 2006-2010,
- Traditional Leaders Act (Chapter 29:17),
- Statutory Instrument 7 of 2007 (Environmental Management Regulations),
- Statutory Instrument 112 of 2001 (Forest Regulations) and
- Forest Based Land Reform Programme.

Interviews

I interviewed key personnel so as to get information on the operations of each section. These were:

Forestry Commission

- Acting deputy General Manager, Conservation & Extension,
- Deputy General Manager Research & Training,
- General Manager,
- Operations Manager, Conservation and Extension,
- Human Resources Manager,
- Regulations Officer and
- 4 Provincial Extension Managers and 7 Forestry Extension Officers of provinces and districts visited respectively.

Ministry of Environment and Natural Resources

- The Director of Environment and Natural Resources.

Environment Management Agency

- The Ecosystems Protection Manager at Head Office.
- 4 Provincial Environmental Managers and 6 District Environmental Officers of provinces and districts visited.

I also interviewed villagers and resettled farmers.

CHAPTER 2

2 SYSTEMS DESCRIPTION

2.1 Functions and Roles

Forestry Commission

The functions of the Forestry Commission include the regulation of the forestry sector, forestry extension, management of the gazetted indigenous forests, forestry research and training and providing tourist services through hunting and photographic safaris. Forestry Commission is divided into sub divisions as follows;

- a) The Conservation and Extension (CONEX) division is responsible for regulating the trade and export in wood related products. It is also involved in management of forests through equipping communities with practical skills in tree planting and management. The skills acquired help to mitigate the causes of degradation and the depletion of the nation's woodland and forest resources.
- b) The Research and Training division is responsible for training of forestry manpower both for the local and regional forestry industry. The division also undertakes cost effective forestry research for the Zimbabwean forestry sector. It also has the responsibility to carry out research on tree breeds that are genetically superior and of high quality suitable for different environments.
- c) The Ngamo Safaris Division is responsible for the sustainable utilisation of the rich biodiversity found in the gazetted indigenous forests through hunting and photographic safaris. It has access to the gazetted forests which have varied scenery and climatic conditions which make them ideal for tourism. The gazetted forests are also home to prime game. In Matebeleland North the division operates four camps namely Mubiya, Intundla, Kazuma and Amandundumela and two photographic lodges Ganda and Jafuta. Ngamo's objective is to generate funds to support the developmental activities of the Forest Commission.

Environmental Management Agency (EMA)

Subject to the EMA Act, the functions of EMA include:

To assist and participate in any matters pertaining to the management of the environment in particular;

- To develop and implement incentives for the protection of the environment,
- To undertake any works deemed necessary for the protection of the environment where it appears to be in the public interest or where in its opinion an appropriate authority has neglected to do so,
- To keep records in the form of registers of all licences and permits issued under the EMA Act,
- To regulate, monitor, review and approve environmental impact assessment,

- To serve written orders on any persons requiring them to undertake or adopt such measures as are specified in the orders to protect the environment.

2.2 Systems Description

2.2.1 Fire Management System

Forest Commission and EMA are implementing Agencies of veld and forest fires in Zimbabwe. They have the key personnel, expertise and knowledge required to coordinate all fire management projects.

The Forestry Commission draws its mandate from the Forest Act Chapter 19:05 of 1949 as amended, in terms of how to deal with veld fires in gazetted forests which are mainly concentrated in Matabeleland Province. On the other hand it is the mandate of EMA to monitor and manage veld fires outside the gazetted forests i.e. in all other areas which include communal, resettlement areas (which include A1 and A2 farms), commercial farms and peri-urban areas.

Statutory Instrument No. 7 of 2007 on Environmental Management Regulations states that any land user, owner, or designated authority shall put in place appropriate fire prevention measures on their land. These prevention measures are:

2.2.1.1 Pre-suppression

According to Section 68 of the Forest Act, fireguards for common boundaries are supposed to be 18 meters wide with either member preparing 9 meters. The fire guard is 3 meters wide if it is between compartments. Sometimes farmers use fire to prepare fire guards whereby they prepare two meters on either side of the fire guard using hoes and then burn the remaining 14 meters which will be in between.

These fire guards are supposed to be prepared before the onset of the fire season. The fire season starts in April and stretches up to October 31. Based on general fire behavior and effects, the extent and occurrence of fires are categorized as follows:

Table 2: Phases of the Fire Season

Timing	Fire Season	Nature of Fire
April, May & June	Early dry season	Controlled burns
July	Mid dry season	Controlled burns
August, September & October	Late dry season	Unplanned veld fires

Source: Integrated Fire Management Strategy 2009-2011

According to Section 67 of the Forest Act if a person wants to start a fire he first informs or notifies his neighbours, police and all other stakeholders 2-8 weeks in advance. When the day finally approaches he reminds the people again within a period of 6-24 hours before the actual burning begins.

In plantations and forests there must be fire towers where fire fighters are supposed to watch for any veld fires from the top. If a fire starts the manager gets his team together and stops the fire. These people are supposed to work 24 hours a day.

Statutory Instrument 7 of 2007 has the following provisions:

- No person shall light a fire outside residential or commercial premises during the period from 31 July to 31 October of each year
- No person shall deliberately cause fire that he/she cannot extinguish which causes damage to the environment, property or life.
- Any person who contravenes the above shall be guilty of an offence and liable to a fine not exceeding level eight (US\$500) or to imprisonment for a period not exceeding one year or to both such fine and such imprisonment.

2.2.1.2 Suppression measures

- The land user, owner, farmer, lessee, designated authority shall be responsible for extinguishing all fires on their property regardless of origin of the fire.
- In case of a fire outbreak any person within the vicinity of the fire other than the user or owner of that land shall carefully and properly extinguish the fire.

2.2.1.3 Post Suppression measures

- After a fire outbreak, an investigation and documentation of the cause of fire and the extent of the damage to the environment, property or loss of life shall be undertaken within a period of 7 days from the day of occurrence of that fire.
- An investigation shall be carried out by:
 - the land user or owner in the case of a farm or private property,
 - the designated authority in the case of state land,
 - the village head in the case of a village,
 - the chief, ward councilor or the chairperson of the environment subcommittee in the case of a district,
 - the rural district council chairperson or the chairperson of the environment committee in the case of a district and
 - the mayor or chairperson of a commission in the case of an urban local authority area.
- Upon completion of the investigation the investigator shall report to the nearest EMA office and the nearest ZRP within a period of 7 days stating the date of the fire, cause of fire and extent of damage in terms of hectares, property and injury or loss of life
- Any person who on any land -
 - Leaves unattended a fire which he has started with or without authority before such fire is extinguished or
 - Deliberately fails to extinguish a fire on his property,

Shall be guilty of an offence and liable to a fine not exceeding level 14 (US\$5 000) per hectare or part thereof or to imprisonment for a period not exceeding one year or to both such fine and imprisonment.

2.2.2 Issuing of permits

There are four types of permits to be issued by Forestry Commission with the concurrence of the local authority when dealing in indigenous trees. These are:

- tree harvesting permit (issued by the local authority with the concurrence of Forestry Commission),
- timber movement (issued by Forestry Commission),
- domestic trading permit (issued by the local authority with the concurrence of Forestry Commission) and
- export permit (issued by Forestry Commission).

According to Section 55(1) of the Forest Act any occupier of private land who desires to cut or remove indigenous timber from that land for sale or manufacture of any product shall give written notice to Forestry Commission of his intention not less than 14 days before any such timber is cut or removed. The Commission then inspects the area and after they are satisfied that the area can be cleared they may grant the permission and a tree harvesting permit is issued in conjunction with the local authority.

The Commission issues timber movement permits to deserving cases only. The permit normally expires after 2-3 days. If a permit is not produced on road blocks the timber is supposed to be impounded by the police, Forestry Commission or EMA.

Domestic trading permits are issued to wood carvers and traders and are valid for one calendar year. Prior to the issuance of this permit the Commission must be furnished with a harvesting (cutting) permit and timber movement permit. These permits must be produced whenever there are inspections by either the police or officers from Forestry Commission. Forestry Commission is empowered to impound all artefacts¹ from traders operating without valid permits.

In addition to the above permits, Forestry Commission also issues export permits to exporting companies and individuals. Forestry Commission inspects the artifacts to be exported and charge US\$100 or 1 % (whichever is greater) of total client's invoice before they issue the permit. The permits expire at the port of exit (border post or airport). Failure to produce the permit will result in the impounding of the artifacts.

2.2.3 Awareness Programmes

It is the responsibility of Forestry Commission and EMA [Forest Act Chapter 19:05 section 8 (e) and EMA Act Chapter 20:27 Section 10 (1) (b)] to inform the public and educate traditional leaders on the formal procedures to follow when cutting down trees and starting fires. According to Section 5(1) of the Traditional Leaders Act (Chapter 29:17) it is the duty of the chief to ensure that land and its natural resources are used and exploited in terms of the law, in particular controlling over-cultivation, over-grazing, the indiscriminate destruction of flora and fauna and generally preventing the degradation, abuse or misuse of land and natural resources in his area. Section 10 (1) (b) of the EMA Act states that EMA should develop and implement incentives for the protection of the environment. It is supposed to educate communities on veld fire management through

Artefacts¹-wood carvings

pre-suppression, suppression, and post suppression measures. Intensive fire awareness campaigns are to be done just before the onset of the fire season.

Forestry Commission carries out awareness programmes through the Conservation and Extension division. The division carries out awareness workshops in rural communities on tree planting and conservation of already existing trees. They also train what they call “innovators” who are equipped to train others in the community on tree planting and conservation.

Forestry Commission is supposed to sponsor radio and television programmes on environmental management issues. The Commission also commemorates the traditional national tree planting day which is held on the first Saturday of December each year. On this day forestry officers facilitate and coordinate tree planting activities in various communities.

2.2.4 Monitoring and Evaluation

According to Section 55(1) of the Forest Act any occupier of private land who desires to cut or remove indigenous timber on that land for sale or manufacture of any product shall give written notice of his intention not less than 14 days before any such timber is cut or removed. The Commission then inspects the area and after they are satisfied that the area can be cleared they may grant the permission. Section 56 (1) empowers the Minister through Forestry Commission to give orders restricting cutting or removal of indigenous timber for sale or manufacturing of any other product if this activity will be injurious to the sustained yield of timber on that land. However according to Section 56(2) of the Forest Act (Chapter 19:06) if this clearing of land is for cultivation or tree planting there is no need to notify or seek permission from Forestry Commission to cut down the trees.

Forestry Extension Officers (FEOs) are supposed to carry out training programmes with the communities on seedling production, tree planting, tree harvesting, woodlot management and preservation of natural resources to ensure a balanced environmental ecosystem. The FEOs are supposed to do follow ups (evaluation) to check whether the farmers are implementing the techniques taught.

Section 8 (d) of the Forest Act (Chapter 19:05) states that Forestry Commission must carry out surveys of the forestry resources of Zimbabwe. Forestry Commission is supposed to carry out farm inspections for tree harvesting upon request by farmers. The request must be responded to within 14 days upon which a recommendation is made on whether to proceed with harvesting or not. The inspection fee is USD20 for commercial farmers and USD10 for communal and A1 resettled farmers.

EMA officers are supposed to do farm inspections and issue fireguard orders on properties found without fireguards. A follow up should be made within 30 days from the issue date to ensure compliance. Failure to comply will result in the issue of a ticket detailing the nature of offence and the amount to be paid.

2.2.5 Seedling Production

According to Second Schedule Section 11 (23) of the Forest Act (Chapter 19:05), Forestry Commission is supposed to establish and maintain nurseries as well as to promote or embark upon research in connection with, and to investigate problems affecting forestry. Section 8 paragraphs (b) and (c) of the same Act, also requires Forestry Commission to carry out the following duties among others:

- the control, management and exploitation of State forests, plantations and forest nurseries belonging to the State and such other land as may be acquired by the State for forestry purposes and
- the establishment, maintenance, improvement, renewal and exploitation of plantations and forest nurseries.

2.2.6 Record Keeping

Forestry Commission and EMA are supposed to produce and maintain weekly, monthly and annual reports on activities concerning forestry matters. The progress reports are prepared in accordance with the directors' instructions and best practice. These must be properly stored in files and must be easily accessible.

CHAPTER 3

3. FINDINGS

This chapter details my findings relating to the effectiveness in curbing deforestation and controlling veld fires by Forestry Commission and EMA.

3.1 Failure to effectively control veld fires

According to Statutory Instrument No. 7 of 2007 it is the responsibility of EMA to control and manage veld fires. This Statutory Instrument states that all land users, owners or designated authorities are supposed to put in place appropriate fire prevention measures (pre suppression measures) on their land. Section 68 of the Forest Act stipulates that land users must construct standard fireguards on boundaries in order to control veld fires.

Forestry Commission and EMA were failing to effectively control veld fires as evidenced by the prevalent occurrence of veld fires. For example in 2004 over 2, 8 million hectares were burnt across the country and this rose to over 7 million hectares in 2005. National veld fire statistics from 2006 to 2008 were not availed for audit.

In response the Forestry Commission stated that it manages and fights veld fires in gazetted forests while EMA deals with fires outside protected forests. EMA stated that according to the Forestry Act, the main responsibility for fire control rested with Forestry Commission. Further, it was stated that EMA's responsibility for veld fires was prescribed in Statutory Instrument 7 of 2007 which states that it only supports the Forestry Commission in this role.

From the two responses, it was clear that Forestry Commission and EMA are not in agreement as to their roles in the responsibility of managing forest fires. Therefore the two entities should clarify the matter to ensure that the management of fire is effectively addressed.

My visit to 4 provinces revealed that EMA was failing to adequately enforce fire guard laws. This was evidenced by failure to issue tickets for contravening the Forest Act despite that a massive destruction of vegetation occurred throughout the provinces during the period under review. It was established that the problem of veld fires had become an annual event in all provinces continuing to destroy large tracts of land, human life, property, animals and other natural resources thereby disturbing the ecosystem.

EMA attributed their failure to enforce fireguards laws to lack of vehicles to enable them to offer adequate extension services to resettled farmers including monitoring and enforcement when fires occur. It was however pointed out that the Agency had since purchased twenty one vehicles which were to be allocated to each province. In addition EMA stated that the resettled farmers lacked resources and equipment to construct fire guards.

From documentary review and interviews, I established that causes of veld fires were all from anthropogenic² activities which included;

- deliberate lighting of fires by arsonists (arson related fires were a result of the struggle for land),
- careless throwing away of lit cigarettes stubs by the public,
- burning to clear vegetation so as to expose game and make it easy to catch when hunting, and
- burning to clear land for cultivation.

The effects of veld fires include forest degradation, reduction in economic value of timber with fire scars, soil erosion, loss of property and lives. It also contributes to the depletion of the ozone layer.

Manicaland Province

In Manicaland province veld fires continued to destroy large tracts of land throughout the province. A total of 136 702, 45 hectares were extensively destroyed by fire during the period under review. Despite fires being a major environmental challenge, only 25 tickets were issued for contravening Section 68 of the Forest Act in 2007 and 2008 and those that were issued with tickets did not pay their fines. An amount of Z\$26 101 740 (US\$870.06) was still outstanding at the time of audit. Indications were that EMA failed to recover these outstanding amounts. No record of tickets issued to those who contravened Section 68 of the Forestry Act for the period 2004 to 2006 and 2009 were availed for audit.

From documentary review I discovered that 23 farmers were issued with orders by EMA for failing to construct fireguards in June 2009 in Mutasa district. No further follow up was done by the district officer to see if the orders were obeyed. No prosecutions were made for the period 2004 to 2008 although cumulatively Mutasa district lost about 6 443.2 hectares of vegetation through veld fires. EMA was not getting veld fire statistics from the villagers therefore the figures were sometimes not accurate as they relied much on veld fire reports by resettled farmers. Proper reporting procedures were not being followed as most fires were not being reported since farmers complained that they were not being reimbursed their bus fare when they traveled to make fire reports to EMA and the police. Section 10 (1) (b) of the EMA Act states that EMA should develop and implement incentives for the protection of the environment. The incentives might come in the form of bus fare refunds to people who would have reported fire incidences.

Nyanga district officer failed to produce monthly progress reports on veld fires for the period 2004 to 2005. However, from 2006 to 2009 the district lost about 13 463 hectares of vegetation. From interviews and physical farm inspections, I established that resettled farmers were not aware of the requirements to have fireguards around their properties. For example in Nyashitu resettlement area, Fairview and Green valley farms, the resettled farmers failed to construct fireguards around their properties.

Anthropogenic² - human induced activities

Resettled farmers from Ziwa resettlement area in the same district did not construct fireguards. Farmers were not aware of the standard width of the fireguard. I also visited Ziwa monuments which is an archaeological storage site surrounded by resettlements. The area witnessed three veld fires in 2009 resulting in 2 500 hectares being burnt threatening the survival of flora and fauna. The natural beauty of the landscape was destroyed on this tourist site. The site officer blamed EMA on the failure to prevent or control veld fires as no awareness programmes were being done to the surrounding communities.

Despite two huge fire outbreaks at Britannia farm in Nyanga district in 2009, EMA did not visit the farm to ascertain the extent of damage in terms of hectareage burnt. The nearby Tsvingwe mountain was all burnt of its vegetation. In 2007 two huts were burnt and other two huts were also burnt in 2006 at the same farm. Farmers were not sure of the size of a standard fireguard as evidenced by one farmer who prepared a fireguard which was only two meters wide, hence fire could easily cross over.

Masvingo Province

In Masvingo Province EMA failed to issue tickets to offenders for causing veld fires for the period 2004 to 2005 and 2009. My review of Masvingo's seven districts revealed that for the period 2004 to 2009 a total of 111 438 hectares were destroyed by fire. This led to loss of vegetation, pastures, huts and animals. The causes of fires were attributed to throwing of cigarette stubs, uncontrolled burning, poaching, clearing land for cultivation, unattended fires and for most fires in 2009 the causes were not stated. Of major concern was the lack of action by the provincial EMA office to address the situation for the period under review. Only one awareness meeting was held in Bikita in 2008 after 49 000 hectares had been destroyed by hunters.

No prosecutions were made during 2006 to 2009 despite that 111 438 hectares of grazing land were destroyed by veld fires. A total of forty four tickets for causing veld fires were issued in 2007 and eleven tickets totaling Z\$73 500 000 (US\$2 450) had still not been paid for by the time of the audit.

I noted that EMA was reactive rather than proactive in terms of fire management. For instance at Belinahorne farm the farmers interviewed revealed that EMA officers only issue tickets to the villagers after a fire outbreak without having done any awareness programmes pertaining to fire management. This was corroborated by the documents availed for audit which showed that no awareness programmes were done at that particular farm.

Reports availed for audit revealed that Gutu district lost 6 180 hectares of arable land during 2004 to 31 October 2009. A total of 37 tickets were issued to offenders for causing fires in 2006, 2007 and 2008 while no tickets were issued for 2004, 2005 and 2009. For 2009 four (4) tickets were issued for non construction of fireguards. Tickets were also not issued for non-construction of fireguards from 2004 to 2008. At Chomfuli, Witland, Belinahorne, Dromore, Kepure and Chidza farms farmers did not construct fireguards.

EMA acknowledged the above findings.

Mashonaland West Province

From my audit I established that the problem of veld fires was rampant in Makonde, Zvimba and Chegutu districts. Tickets for causing fires were only issued in 2007 and 2009 and these totaled to eighty eight (88) in 2007 and thirty seven (37) in 2009. The total value of tickets issued in 2009 amounted to US\$3 062 but only US\$512 was paid and US\$2 550 was still outstanding at the time of audit (15 December 2009). This translated to only 17% payment rate. There was no satisfactory reason provided as to why EMA failed to recover the outstanding amount.

EMA in their response conceded that there was no follow up for tickets issued due to mobility challenges.

EMA failed to produce district files containing weekly and monthly progress reports which serve as source documents for statistics on the incidence of veld fires. For instance provincial statistics for veld fires for 2009 could not be traced back to source documents. A total of 338 541 hectares were burnt in 2009 as compared to 16 593 hectares in 2007. Between May and July 2009 a total of 71 orders were issued and no follow-ups were made to ensure compliance. Fireguard orders were only issued in 2009. In 2007 a total of 327 veld fire incidences were recorded (of which 244 were investigated) and 88 spot fine tickets were issued. This translates to 26.9% prosecution rate as the offenders of the other 239 incidences were not brought to book. The following property was destroyed; 5 houses, 1 chicken run, 2 gum plantations, 21 huts, 5 people were injured, 8 roomed house, 9 lodges, 7 hectares mining claims, 182 hectares of crops in the field, 5 tonnes of maize grain, 2 sheds, a store room, an undisclosed number of electricity cables and 3 human lives were lost. This loss of precious lives and valuable property brought misery to people.

At Zebra, Hillrise and St Brendants farms I established that farmers were not constructing standard fireguards and were not aware of their standard width. The farmers said they did not receive any education from EMA concerning pre-suppression measures. More than 80 hectares of grazing land and maize which was still in the field was burnt at Zebra farm.

In 2009 a total of 108 tickets were issued totaling US\$6 588. US\$2 447 was paid leaving a balance of US\$4 141 unpaid by the time of the audit. This translates to 37 % payment rate by the offenders.

Matabeleland North Province

The availed monthly reports from EMA showed that 16 653 hectares were burnt in 2009 and 17 401 in 2007. No fires were recorded in 2004, 2005, 2006 and 2008 and no tickets were issued for starting veld fires during these years. I also noted with concern that Lupane, Bubi, Nkayi and Binga districts were operating without EMA field extension officers. The Lupane post fell vacant in January 2008 and the officer was recruited in

October 2009 and had not yet visited the district at the time of audit in December 2009. This resulted in veld fires for 2008 and 2009 not being monitored.

Commenting on the above, EMA pointed out that they had since recruited Environmental Officers for Matabeleland North Districts.

During interviews with farmers at Gwayi Valley Ranch and Mazwa farms, farmers revealed that they did not construct fireguards around their properties although they knew that it was a statutory requirement. For example in 2007 two lives were lost in Lupane district. In Binga district two lives were also lost, twenty seven goats were burnt to death and an undisclosed number of electrical poles were destroyed.

Harare Peri urban

I visited Beatrice in Seke Rural District and inspected Datmore, Chisandtsa, Unadale and Cholo farms.

At Datmore farm (A1 resettlement scheme) I visited plots number 11, 19 and 22. All the three properties had no fireguards. Due to the absence of fireguards, most of the grazing land was burnt and the prevalence of veld fires was very apparent as there was no grass and undergrowth. As a result of these veld fires the last one having occurred early in September 2009, the whole community was slapped with a US\$600 ticket by EMA and they were expected to pay this amount by 25 September 2009.

At Chisandtsa which is an A2 commercial farm there was a fireguard but it was below standard. It was only 3 metres wide against a standard of 9 metres. As a result the farm was affected by the veld fire which occurred at Datmore farm as the fire escaped the narrow fire guard and crossed over.

In Mt Hampden I visited Derry farm and interviewed resettled farmers who confirmed that their properties did not have fireguards, consequently their farm and other nearby farms were not spared from veld fires. In Christonbank I visited Mugutu farm and observed that there were no fireguards and the area was also affected by the veld fire which claimed one life and injured two people in 2009.

Commenting on Harare peri urban, EMA attributed lack of adequate fire guards to lack of resources to put up a standard fire guard.

Bulawayo Peri-Urban

At Bienville farm along Plumtree road, residents have been practicing urban cultivation since 2006. Stumps of big trees with an average diameter of one meter could be seen from the highway. Along Khami road on the peripherals of Nkulumane Surburb, there was rampant illegal cutting down of trees and large tracts of cleared land could be seen refer to picture 1 and 2 below.

Picture 1



Picture2



Bulawayo peri-urban

I attributed the problem of veld fires **to inadequate awareness programmes.**

3.1.1 Inadequate Awareness Programmes

Interviews showed that people were not well educated on the importance of a well balanced ecosystem as evidenced by the rampant cutting down of trees without replacement (aforestation) and an increase in cases of uncontrolled veld fires.

Some traditional leaders were either not aware or failing to enforce some provisions of the Traditional Leaders Act. For instance in Mushandike ward 9 and 10, the headman was among the illegal wood carvers whom I interviewed. In Hurungwe another headman interviewed confirmed that he was involved in the illegal cutting down of trees for tobacco curing.

From interviews I established that 80% of the farmers were not aware of the standard width of the fireguard. Some farmers in Mt Hampden, Christonbank, Kepure, Chidza, Brendants and Britannia expressed ignorance on the existence of EMA and Forestry Commission.

Forestry Commission and EMA participate at the Zimbabwe International Trade Fair and Harare Agricultural Show. However as highlighted in an interview with a senior officer since the year 2007 the Commission has stopped sponsoring awareness programmes on electronic media (radio and TV) which was a way of educating the public on conservation of the environment. The 2007 Forestry Commission Annual Report revealed the following statistics;

- 156 workshops on various forest disciplines were achieved against a target of 435 and subsequently 6 348 farmers were trained against a target of 14 230.
- 11 field days were organized against a target of 132.
- 12 study tours were conducted against a target of 71.

The above statistics reveal a decline in public awareness activities on environmental issues and hence unnecessary destruction of vegetation by an uninformed public.

EMA attributed non construction of fireguards to inadequate resources on the part of the resettled farmers.

Responding to the same issues, Forestry Commission pointed out that the decrease in workshops, field days and study tours were due to shortage of personnel, funding constraints and the difficult micro economic environment that was faced by the country.

3.2 Reduction in seedling production and trees planted

According to Section 11 of the Forest Act (Chapter 19:05), as read with subsection 23 of the Second Schedule, Forestry Commission is supposed to establish and maintain nurseries as well as to promote or embark upon research in connection with, and to investigate problems affecting forestry. Section 8 paragraphs (b) and (c) of the same Act, also requires Forestry Commission to carry out the following duties among others:

- the control, management and exploitation of State forests, plantations and forest nurseries belonging to the State and such other land as may be acquired by the State for forestry purposes and
- the establishment, maintenance, improvement, renewal and exploitation of plantations and forest nurseries.

From my documentary review and interviews conducted with Forestry Commission's personnel at provincial offices I established that seedling nurseries were transferred to schools, communities and individuals who in turn were running them on a commercial basis. The transfer was meant to empower the communities and to make them value the seedlings through payment of a small fee rather than getting them for free from Forestry Commission. However Forestry Commission was not doing enough in assisting them with the much needed expertise on seedling production and tree planting. This decision has impacted negatively on efforts to plant more trees as the general public did not have easy access to seedlings due to affordability and mobility challenges. In the process Forestry Commission lost control over quantity and quality of seedlings produced as they heavily relied on third parties for production thereby jeopardising concerted efforts for reforestation.

In response Forestry Commission indicated that they are always training people on seedling production, although they stopped issuing out free nursery materials. They further pointed out that they did not fail to maintain nurseries but discontinued the practice after recommendations were made to that effect. Forestry Commission further highlighted that it was a policy issue meant to empower farmers through nursery business.

3.2.1 Failure by Forestry Commission to verify the authenticity of statistics provided
Forestry Commission was not verifying the authenticity of statistics supplied to them for seedlings produced and trees planted. These statistics were supplied to provincial offices

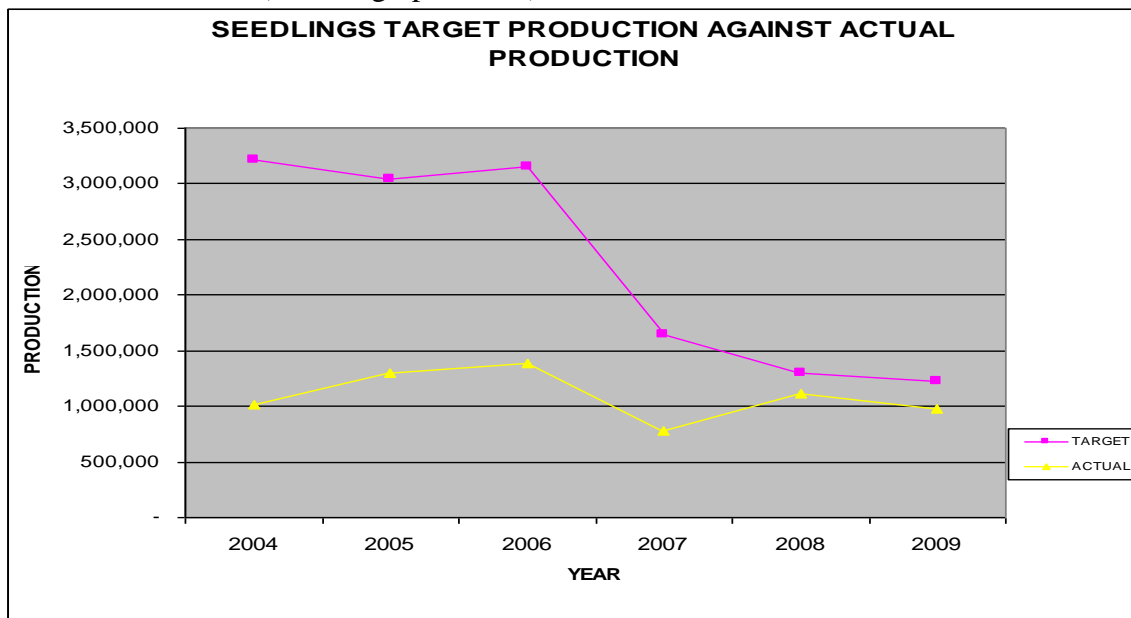
through telephone and in some rare cases through fax while some were collated by the Forestry Extension Officers who apparently did not adequately cover their districts.

In response the Commission acknowledged the incomplete nature of statistics which was said to be due to challenges of mobility.

I noted with great concern during document review that some monthly reports on seedlings produced and trees planted were not supported by district reports which were supposed to work as source documents. Some reports recorded nothing as far as seedlings produced and trees planted were concerned. In all cases figures for seedlings produced and trees planted were not updated accordingly as some failed to grow as a result of moisture stress, after succumbing to pests, diseases and fire outbreaks. All these anomalies compromised the correctness of national statistics.

The auditee acknowledged the above finding and also pointed out that figures which were not supported by district reports could have been those from which records were destroyed. They further indicated that their officers also recorded lower figures due to inability to visit production sites.

For the four provinces audited the total annual targets for seedlings production were never met. For example in 2007 a total of 1 650 000 seedlings were targeted for production but only 778 974 seedlings were actually produced. This translated to only 47.2% achievement (refer to graph below).



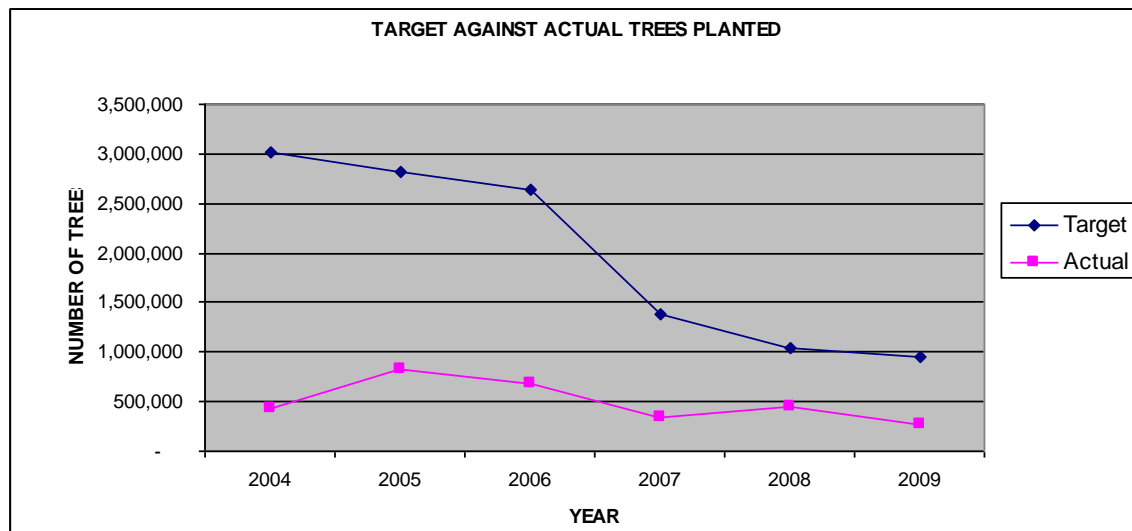
Source: Manicaland, Mash West, Masvingo and Mat North, Provincial monthly and annual reports

In addition December targets for the period under review were rarely surpassed or achieved despite the fact that Forestry Commission commemorates the National Tree Planting Day during this month (refer to Annexures C and D). I attribute this under achievement to the unavailability or inadequate production of seedlings and the fact that

Forestry Commission is no longer in full control in seedling production which eventually translated to fewer venues for this national annual event.

Forestry Commission pointed out that there are several reasons to account for the downward trend in seedling production and trees planted other than the issue of under recording. The venues for tree planting were affected by resource constraints especially funding.

During my documentary review I further noted with concern that of the seedlings produced that eventually translated into trees planted, about 75% of them comprised of exotic as compared to the indigenous trees. On the contrary indigenous trees were the most sought after for various domestic and commercial purposes. I noted with concern that tree production targets have been declining since 2004. The annual targets were being reviewed downwards from 2004 to 2009 as they discovered that they could not achieve them. Be that as it may, the revised annual targets were not met in the 4 provinces I audited as evidenced in the graph below. For example in 2006 a target of 2 636 000 trees was set but only 684 578 trees were planted and in 2007 a total of 335 401 trees were planted against a target of 1 380 000 (Refer to graph below).



Source: Provincial monthly and annual reports

The non achievement of set targets meant that trees planted over the years under review have been declining.

The Commission accepted that it is planting more of exotic than indigenous trees because they grow faster and have considerable knowledge on their propagation and management. However, the Commission stated that the number of indigenous seedlings being planted is now increasing on a year to year basis and they were also working on developing information on indigenous trees.

3.3 Failure to fully implement the Tobacco Wood Energy Programme (TWEP)

Forestry Commission launched the Tobacco Wood Energy Programme (TWEP) in tobacco growing regions meant to curb wanton cutting down of trees by tobacco growers. This programme was meant to encourage tobacco growers to plant woodlots at their farms for the curing of tobacco.

Since the onset of the Land Resettlement Programme (LRP) there has been pressure on indigenous forests as farmers resorted to firewood as a source of energy for tobacco curing in communal and resettlement areas. A tobacco farmer requires about 15 codes (one code being equivalent to 1m³ or 1 tonne) of firewood to cure one tonne of tobacco. As a result farmers resorted to firewood which was easily accessible.

However documents revealed that the programme has not been given the attention it deserves for the period under review. This was evidenced by the non-reporting of the programme (TWEP) in Mashonaland West provincial monthly reports, where tobacco growers had increased in number from the previous agricultural season (2008/09) as a result of incentives offered. Mashonaland West is one of the major tobacco growing provinces in the country. During interviews I established that some farmers were willing to have woodlots but indicated that they lacked the pre-requisite knowledge of how to plant trees while some revealed that they wanted seeds availed to them by Forestry Commission in order for them to embark on this programme. At Demovent farm in Hurungwe, Forestry Commission with the help of the farm owner planted 10 hectares of eucalyptus trees for TWEP in 2007 and the whole plantation was destroyed by veld fire in the same year. Ever since then nothing has been done by Forestry Commission to resuscitate the TWEP in the areas in and around Hurungwe where there are a large number of tobacco growers. This has led to the illegal cutting down of indigenous trees in and around Demovent farm causing massive deforestation.

Responding to the above issue the management attributed its failure to implement TWEP to the pending Statutory Instrument that would empower them.

3.4 Monitoring and Evaluation

Section 8 of the Forest Act (Chapter 19:05) states that Forestry Commission must carry out surveys of the forestry resources of Zimbabwe. However Forestry Commission only does farm inspections on request. If a farmer wants his/her farm to be inspected he makes a requisition to Forestry Commission which must be responded to within 14 days and pay a fee of USD20 for commercial farmers and USD10 for communal and A1 resettled farmers. However if there are no requests from farmers and reports of illegal activities, then Forestry Commission does not do any farm inspections. This was a serious weakness on operations because farmers rarely make requests and by the time Forestry Commission goes for inspection harm would have been extensively done.

In response the Commission argued that they carry out general farm inspections. However no evidence was provided to that effect.

According to Section 55(1) of the Forest Act any occupier of private land who desires to cut or remove indigenous timber on that land for sale or manufacture of any product shall give written notice of his intention not less than 14 days before any such timber is cut or removed. The Commission then inspects the area and after they are satisfied that the area can be cleared they may grant the permission. Section 56 (1) empowers the Minister through Forestry Commission to give orders restricting cutting or removal of indigenous timber for sale or manufacturing of any other product if this activity will be injurious to the sustained yield of timber on that land. Section 56(2) of the same Act states that if the clearing of land is for cultivation or tree planting there is no need to notify or seek permission from Forestry Commission to cut down the trees.

There was concern that some farmers were taking this section for granted as they cleared land on the pretext of cultivation when in actual fact they wanted only to sell fire wood. This was the case in Lupane district at Mazwa farm and in Gutu district at Witland farm. As a result land was cleared haphazardly and left void of vegetation thereby promoting desertification. When veld fires occur, the remaining small bushes, trees and grass are burnt and destroyed.

Forestry Commission in their response, mentioned that they were worried about the devious behavior of farmers who pretended to clear land for agriculture when their intentions were to trade in firewood. To mitigate the problem they were working on draft legislation together with the Attorney General's Office.

I attributed the problem of inadequate field monitoring to the following:

- **Shortage of staff (FEOs and guards)**
- **Shortage of vehicles**

3.4.1 Shortage of staff

(a) Forestry Extension Officers (FEOs)

Regardless of the nature and size of a district, each district was supposed to have one FEO responsible for extension work and one forester for each gazetted forest. FEOs play a pivotal role in coordinating forestry activities such as seedling production, tree planting, tree harvesting, farmer training and ensuring the sustainable use of natural resources.

Traditionally FEOs were only providing extension work to communal areas. This changed in the early 1990s after the resettlement programmes when they began to cover resettlement and commercial farms as well.

From the four provinces visited I noted that Forestry Commission was understaffed in the grade of FEOs. Some positions have been vacant since 2000 with Forestry Commission failing to attract the right candidates. The non-appointment of forestry officers had a negative impact on deforestation (awareness programmes and tree harvesting) as some districts like Zaka, Lupane, Hurungwe and Kariba went for more than 2 years without forestry officers. At the time of audit in December 2009, Kariba district had no FEO and the post fell vacant in January 2007. I observed that there was no plan in place to replace forestry officers who would have gone on leave. For instance the FEO for Mutasa district

went for maternity leave plus two months vacation leave from October 2006 to February 2007 and there was no one appointed during her absence. The same FEO spent 7 months in 2007 working at the provincial office and there was no one monitoring the district in her absence hence no records were compiled during that period. This non-replacement of FEOs when on leave was noticed in all the 4 provinces visited and this had a bearing on deforestation as communities were left without FEOs thus no awareness programmes and farm inspections are done during the period when one is on leave.

On the other hand each gazetted forest is supposed to have one forester but this was not the case as one forester ended up manning two forests. This was regardless of the size of the forests which ranged from 24 000 to 144 000 hectares. For example one forester was manning two gazetted forests namely Gwayi and Mbembesi during the time of audit and this was confirmed by the District Coordinator. Below is the staff establishment for FEOs as at 30 November 2009.

Table 3.4.1 Forestry Commission staff establishment for FEOs as at 30/11/09

Province	Authorised Establishment	Filled Posts	Vacancies
Manicaland	7	5	2
Masvingo	7	5	2
Matabeleland North	18(including gazetted forests)	7	11
Mashonaland West	7	5	2

Source: Provincial staff establishment records

Matabeleland North was the most affected province as it had 11 vacancies at the time of audit. The province has demarcated forests in Lupane and Hwange districts. Some farmers were resettled within the forests (for example Fuller Forest) while others shared common boundaries with demarcated forests. These farmers needed massive awareness programmes to enable them to conserve their environment. The shortage of extension officers resulted in District Coordinators devoting most of their time to demarcated forests neglecting extension work in communities where deforestation was rife.

Forestry Commission acknowledged the above finding but disagreed with the figures for the vacant posts. They went on to say that the Commission could not attract and retain qualified staff during the period under review. However enough information about vacant posts could not be availed to substantiate their argument.

(b) Shortage of guards and fire fighters

Under normal circumstances Hwange district employs about 42 contract fire fighters and guards during the fire season. However the district employed only 20 fire fighters in 2009. This resulted in failure to manage fire outbreaks causing further damage to the environment.

In Lupane district only ten guards were employed instead of twenty. This led to massive deforestation of indigenous trees by poachers as they were aware that forest guards were very few and ill equipped. It was sad to note that in worst cases forest guards went for camping without bullets despite the fact that poachers fire live bullets at them.

In response, the Forestry Commission management noted that it could not attract and retain firefighters. Furthermore, in 2009 the dollarised economy presented major challenges as there were inadequate resources to remunerate the firefighters.

3.4.2 Shortage of Vehicles

Forestry Commission is empowered by the Forest Act (Second Schedule – Section 11) part 7 to: buy, take in exchange, hire, or otherwise acquire movable property including vehicles, machinery or apparatus necessary or convenient for its operations.

FEOs were expected to cover districts with an average of 30 wards. I noted that it was very difficult for them to effectively execute their duties due to inadequate vehicles. Of the four provinces visited none had adequate vehicles (one vehicle per district) dedicated for extension work (Refer to table 3.4.2). For example, Masvingo province had one vehicle which was being shared by all the seven districts instead of a vehicle per district. This vehicle was allocated on a rotational basis meaning that officers were spending a lot of time without conducting visits hence confined to their offices. Other officers in the province resorted to public transport and concentrated on areas along the highway leaving other areas within their jurisdiction. In particular Masvingo district officer had visited seven out of thirty two wards in his district since he assumed duty in 2007 and this impacted negatively on deforestation as the other 25 wards were not monitored. In some cases the officers relied on vehicles provided by other stakeholders. This arrangement disrupted the officers’ itinerary as they were forced to adhere to their (stakeholders) programmes.

The auditee’s response was that their officers need to be mobile and they are working towards this.

Of the few vehicles on the road, I noted that they were aged and had exceeded their useful life (Refer to Annexure E) hence persistently breaking down. As a result the vehicles could not access some roads due to their condition hence officers failed to visit some areas in their districts. On the other hand Forestry Commission failed to repair vehicles on time when they broke down. There were more non runner vehicles (55.56%) than runners (refer to table 3.4.2 below). The unavailability of adequate and reliable vehicles impacted negatively on extension work as officers failed to execute their duties.

Table 3.4.2 Fleet record for the 4 provinces as at 30/11/09

Province	Runner	Non Runner	Total	% Non runners
Mash West	3	4	7	57.14
Mat North	3	7	10	70.00
Masvingo	2	1	3	33.33
Manicaland	4	3	7	42.86
Total	12	15	27	55.56

Source: Provincial records

I also noted with concern that in Mashonaland West only one FEO had a drivers' licence and the rest did not have. This was an undesirable situation as the job requires extensive traveling and for the whole province to rely on one driver made the situation worse. The Second Schedule (Section 11) of the Forest Act sub-section (22) (a) gives the Commission powers to do anything for the purpose of improving the skill, knowledge or usefulness of persons employed in connection with forestry. This is not being done.

The auditee acknowledged the above finding and went on to say that the Commission would prefer to employ officers who have drivers' licences but these were not available. However the situation was said to be improving as some employees were being assisted in acquiring drivers' licences where it was justifiable.

Inadequate monitoring and evaluation by Forestry Commission has resulted in the:

- **Indiscriminate cutting down of trees by wood carvers**
- **Illegal cutting down of trees for commercial manufacture of bricks and ceramics.**

3.4.3 Inadequate Monitoring of Wood Carvers

Statutory Instrument 112 of 2001 prohibits exportation of raw and primarily processed products of selected indigenous hardwood species. Before operating, every carver is supposed to have an operating license from local authorities. The wood carver also needs a tree harvesting permit accompanied by a timber movement permit issued by Forestry Commission. Failure to produce these documents will result in the artifacts being impounded by the police and Forestry Commission officers.

The inadequate monitoring of wood carvers being caused by shortage of extension staff and vehicles is leading to an increase in illegal wood carvers in the country's major tourist towns like Victoria Falls, Masvingo and Mutare. These towns and cities offer a ready market for the artefacts. Little was being done by Forestry Commission to suppress the effects of wood carvers on the environment as evidenced by their failure to regularise the industry in Victoria Falls. At the beginning of 2009, Forestry Commission had planned to accredit all wood carvers in Victoria Falls as a pilot project but failed. This resulted in the continual cutting down of trees especially the hard wood Mukwa, Mahogany and Teak in areas surrounding the town. These trees take an average of one hundred years to mature so if they are cut down it takes time to replace them.

Responding to the above, the Commission argued that massive cutting down of trees was not being caused by inadequate monitoring. They attributed this to shortage of electricity and liquid fuel. They further pointed out that harvesting of wood carving in rural areas is done under the tripartite arrangement between Forestry Commission, rural District Councils and carvers. Unfortunately councils are in some instances giving out permits without consulting FC. However it was pointed out that the matter was being followed up through the Association of RDCs and concerned authorities.

Matabeleland North

It was observed that curio traders outside Bulawayo townhouse were operating without relevant permits from both Forestry Commission and Bulawayo City Council. There were 60 stands measuring 1x2 metres where the artefacts were displayed. 99% of artefacts were made from indigenous trees except a few which were made from Jacaranda.

In their response the Commission said that the issue of curios is politically sensitive since it impinges on livelihoods and household incomes. They said they also carry out sporadic raids from time to time. In order to control the movement of curios, the Commission proposes to eco-label all curios produced.

All twelve of the interviewed traders were aware of the need to have relevant trading permits but cited high costs for acquiring them. No confiscations were done in 2009 despite the fact that the stands were located a stone throw away from both the Forestry Commission and Bulawayo City Council offices.

Victoria Falls was reported as having the largest number of wood carvers in the country. In June 2009 Forestry Commission and Police carried out a joint operation blitz on three trading sites along the Bulawayo/Victoria Falls highway and confiscated more than ten thousand (+10 000) artefacts. These were being kept at Forestry Commission Hwange district offices. All the curios were piled in four offices from ground up to roof level (Refer pictures 3-6). I noted that some of the artefacts were deteriorating in condition (broken or destroyed by termites) due to poor storage. There was a ragging debate on what should be done to the curios. The affected traders filed a lawsuit to repossess their artefacts claiming that they bought the curios from wood carvers who were supposed to be holders of timber harvesting and movement permits.

Picture 3



Picture 4



Picture 5



Picture 6



Source: Curios confiscated from illegal wood traders in Victoria Falls and stored at Hwange district office

Forestry Commission was given the go ahead by the magistrate to auction the curios and this was done on 26 February 2010.

After the blitz, the traders tried to regularise their operations by forming associations to effectively communicate with Forestry Commission and Victoria Falls City Council. I interviewed two associations namely Turnoff Chisumba and Airport Curios Association. All artefacts were made from indigenous trees which were mainly Olive, Teak, Mukwa, Mahogany and Rosewood. Curios were mainly sold to exporters in transit to South Africa, Botswana and Namibia. Another curio market not visited by Forestry Commission during the June 2009 raid was the Victoria Falls CBD traders. All the seventeen interviewed Central Business District (CBD) traders had no trading permits. Their displayed artefacts which were on 104 stands were estimated to be more than twenty thousand (20 000). Along the Victoria Falls highway the following curios were on display. About 10% of the artefacts which were considered big that is more than 1 metre in volume.

Table 3.7.1 Artefacts on display at the highway curios Associations stands

Type of curio	Airport Curios	Turnoff Chisumba
Hippo (big and small)	200	234
Elephant (big and small)	150	179
Rhino (big and small)	204	196
Giraffe (big and small)	55	59
Total	609	768

Source: Artefacts on display along Bulawayo / Vic-Falls highway

*Key: Small- one metre or less
Big - more than one metre*

However I observed that the displayed items were just a few and larger quantities were stored at a distant as they were afraid of police and Forestry Commission blitz. A decline in operations was noticed after the blitz as the number of traders dwindled to 34 in

December 2009 down from 156 in June 2009 at Chisumba stand. Traders confirmed that it was then difficult to find Mukwa tree for their artefacts. This corroborated with the Hwange District Coordinator's concern that Mukwa tree was completely depleted in Fuller Forest 3 kms from the highway into the forest. This was also confirmed by the Hwange district's reports on the depletion of the Mukwa tree in the area. This was alleged to be the result of illegal wood poachers for the wood carving industry. Traders and carvers were mainly resettled and communal farmers surrounding the gazzeted forests.

Victoria Falls Airport association had a total of twenty four traders. However the total number of traders whose curios were confiscated could not be ascertained as Forestry Commission failed to produce their confiscation register.

At a roadblock along the Bulawayo-Victoria Falls highway I stopped and interviewed the driver of a Datsun sedan registration number AAJ-5704 whose vehicle was overloaded with curios (Refer to picture 7 and 8). The driver had no permits from neither Forestry Commission nor the local authority and he passed through the roadblock. He was supposed to have a timber movement permit and domestic trading permit. There were 126 carvings which mainly included the big five made out of indigenous trees.

Picture 7



Picture 8



Datsun overloaded with curios at the roadblock.

Masvingo

I visited three sites along the Masvingo – Beitbridge highway in Masvingo province on 12 December 2009 and interviewed a total of twelve wood curio traders under Mushandike wards 9 and 10. On the first two sites which were 6-8 km from the CBD carvers revealed that they had been operating since 1996. They revealed that they seek only verbal permission from the village head of the area to harvest trees. No permission was being sought from Forestry Commission and the Masvingo District Council.

All the seven carvers on the first two sites were operating without licenses/permits. Their permits expired in December 2008 and were not renewed. They even failed to produce the expired permits though law requires them to do so. It costs US\$9 to get the quarterly trading license from the District Council.

During the audit I established that on average one carver required to harvest five big trees to get wood that would enable him to operate for the whole year. The trees cut were mainly Mahogany (Mukamba), 'Munyera', 'Mubvumira', 'Murungu', 'Mupumbu/Munanga' and Iron wood (Mutsviru). 'Mubvumira' tree matures after 10 to 15 years while a 'Mukamba' tree matures after 100-150 years. Only one carver said he planted a Mukamba tree in 1998, and the remaining carvers never attempted to plant any.

On the third site about 10 kms from Masvingo CBD along Masvingo-Beitbridge highway five carvers interviewed also said they seek verbal permission from the headman to harvest trees. The headman was actually on site and was amongst the carvers. He agreed to the fact that he gave verbal permission to the wood carvers to cut trees. The following expired documents (refer to table 3.4.3 below) were produced by the carvers. All documents produced had expired and were issued by Forestry Commission and the Rural District Council.

Table 3.4.3 Documents produced by Masvingo curio traders

Issuer	Type of permit	Permit / Receipt no	Date issued
Forestry Commission	Inspection fee	5350	02.10.07
Rural District Council	Licence to exploit forest produce	0032	02.10.07
Rural District Council	Harvest of timber permit		Oct-Dec 07
Rural District Council	Licence to exploit forest Produce	0050	15.01.08

Source: Documents availed by carvers

All the traders were operating without permits since January 2009 and they were aware that there was need to legalise their operations. I noted with concern that no confiscations were made by Forestry Commission to force wood carvers to follow proper procedures since January 2009 to December 2009. The artefacts mainly included animals and human carvings.

3.4.4 Illegal cutting down of trees for commercial manufacture of bricks and ceramics

According to the Forestry Act (Chapter 19:05) Section 56, it is the responsibility of the Forestry Commission to monitor and regulate the commercial exploitation of forestry products. Forestry Commission in concurrence with the local authorities regulates commercial users of wood through assessment of sustainable exploitation of indigenous trees and subsequent issuance of harvesting and timber movement permits. However,

Forestry Commission is not empowered by the Forest Act to issue tickets for the illegal cutting down of trees as this task was being done by EMA which has not been efficient in this regard.

My visit to the four provinces namely Manicaland, Matabeleland North, Masvingo and Mashonaland West clearly showed that the Forestry Commission was failing to enforce the Forestry Act as evidenced by the unsustainable and illegal harvesting of trees for the commercial manufacturing of farm bricks and ceramics.

The management of Forestry Commission responded saying that accreditation has always been a requirement for certain categories of wood consumers. However the Commission acknowledged that not all users were covered.

Manicaland

My inspections in Manicaland on 1 November 2009 revealed that brick moulders have been operating in Zimunya area since 2005 and have been moving from place to place in search of both indigenous and exotic trees to fire their brick kilns. The moulders required two codes of wet wood to fire ten thousand bricks (1 kiln). The wood was being acquired without the permission of either Forestry Commission or Mutare Rural District Council. The brick moulders were violating the Forest Act (Chapter 19:05) as they were operating without harvesting permits, timber movement permits and operating licences. The brick moulders confessed that they were poaching wood from nearby Nyamarebvu and Muzanga farms as trees nearer their operation had been exhausted.

Mashonaland West

At Olympus farm on the peripherals of Chinhoyi town I counted up to one hundred and five kilns spread around the farm. I observed that there was massive illegal cutting down of indigenous trees to burn farm bricks. During interviews I established that some firewood was obtained from adjacent farms namely Swanaepol and Citrus estates. Forestry Commission Provincial Manager admitted not issuing harvesting permits and timber movement permits to the people involved in the brick moulding business. Chinhoyi City Council regularised the use of farm bricks for urban construction and this has resulted in the increase of brick moulders in direct reaction to increased demand.

Matabeleland North

At Gwayi Ranch Valley farm in Lupane District, companies were making pottery using large volumes of indigenous trees for firing their kilns. I first interviewed the manager of Deep Down Investment who failed to produce any harvesting permits from Forestry Commission and professed ignorance on the need to acquire one but however produced a valid operating license issued by the local authority. The pots were big with volumes ranging from 10 to 50 litres. Each load of kiln carried forty pots and the firing process took sixteen continuous hours (Refer to pictures 11 and 12). At the time of my audit there were 12 scotch carts full of fire wood comprising mainly of indigenous Mopane trees on site (Refer to picture 9). The manager indicated that the company needed 16 codes of firewood per month.

Picture 9



Codes of indigenous firewood at Keramos Earthenware (Lupane district)

Picture 10



Part of pottery displayed along the Bulawayo-Vic Falls highway

Picture 11



Picture 12



Source: Firing process for pottery at Deep Down Investments in Gwayi Ranch farm.

At Keramos Earthenware Services next to Deep Down Investment six ovens were functional producing ceramics including bricks, window sills and floor tiles in addition to the traditional big clay pots (Refer to picture 10). Approximately five codes of fire wood were on site (Refer to pictures 13 and 14). The manager of the project revealed that between 2003 and 2005 the company was using coal but has since resorted to firewood which was easily accessible and for free. This company also did not have any harvesting permits. The company was poaching fire wood from nearby resettlement areas. The companies and individuals sold their wares along the Bulawayo-Victoria Falls Highway

and exported to Zambia, South Africa, Namibia and Botswana. I was concerned that this illegal activity was not reported upon in the Lupane district in the monthly progress reports of 2004 to 2009.

Picture 13



Picture 14



Source: ceramics production at Keramos Earthenware Services Private limited

From interviews I established that brick moulders were not aware of the need for the sustainable use of trees. This was supported by the fact that no form of awareness from Forestry Commission had been targeted at these moulders to ensure that they follow laid down procedures in harvesting and transporting the timber. There were no plans produced showing that they intended to grow trees or to regularise the booming business.

If the brick moulding business is not monitored and regularised, it will continue to cause massive destruction of the environment. Massive land degradation was looming as evidenced by the open pits left by brick moulders. The uncovered open pits are death traps to both animals and human beings.

3.5 Record Keeping

It is the duty of Provincial Heads to file and maintain official documents including all monthly progress reports.

My review of monthly records from 2004-2009 in all the provinces visited revealed that Forestry Commission provincial offices did not properly file and store all monthly progress reports. Matabeleland provincial office only managed to provide 45 % of the monthly reports. I also observed that the province had poor storage facilities as some of the records were piled outside the store room. These documents were soaked in rain on the day of audit. Mashonaland West province only managed to provide 43 % of the monthly progress report and had to request monthly progress reports from Head Office in Harare for my review. Districts reports for Makonde, Hurungwe and Zvimba for 2004 to 2009 were not available for the audit. In addition weekly highlights reports were not available for the audit.

The Forestry Commission provinces were using the reverse side of monthly reports as bond paper thereby destroying original monthly progress reports and in some cases there was superimposition of data. This resulted in the non availability of some statistics thereby compromising the correctness of the national statistics.

The management of Forestry Commission confirmed and agreed with the above finding and attributed the practice of recycling bond paper to resource constraints during the period under review. They further stated that it was not an organisational policy to recycle papers containing important reference materials such as reports. However the management reported that recycling of paper has now been stopped and they communicated to all staff discouraging the practice.

EMA provincial offices failed to produce meaningful statistics on veld fires for the whole period under review. The Agency was not reporting adequately on fire management as it was treating this function as a secondary issue. Statistics would enable EMA to see the extent of the problem and strategise on taking corrective action.

In response EMA conceded with the above finding and went on to say that they had problems with the provision of stationery during the period under review due to budgetary constraints. They also stated that they kept a record of all fire incidences at Provincial and District level and would continue to improve their databank. However our visit to Matebeleland North, Masvingo, Manicaland and Mashonaland West provinces revealed incomplete records.

Conclusion

Veld fires have become a perennial problem and over the years they have caused damage to the environment destroying vegetation, property, animals and precious human lives. In addition the survival of indigenous trees has also been threatened as they require an undisturbed natural ecosystem to grow effectively.

The transfer of nurseries to communities and schools resulted in Forestry Commission losing control over quality and quantity of seedlings produced and this ultimately impacted negatively on aforestation efforts. Of major concern is the shortage of seedlings for woodlots production for tobacco growers. If this problem is not addressed the tobacco growers will continue with the indiscriminate cutting down of trees.

Concerted efforts to curb deforestation need to be continuously improved so as to safe guard the country's natural resources. The general public needs to be made aware of the importance of keeping a well balanced ecosystem. In addition proper procedures must be followed when harvesting trees and the general public must develop a culture of growing trees and preserving the existing ones.

CHAPTER 4

RECOMMENDATIONS

The following chapter presents recommendations that are aimed at addressing challenges that are being experienced by Forestry Commission and EMA in curbing deforestation. It is hoped that these recommendations will result in improving service delivery.

4.1 Failure to effectively control veld fires

EMA should intensify anti fire campaigns towards and during the fire season and also develop a data bank on the causes of fire and areas prone to veld fires in order to prioritise fire protection activities. Provisions of Section 10 (1) (b) of the EMA Act states that EMA should develop and implement incentives for the protection of the environment. These incentives must be implemented.

It is recommended that EMA should effectively enforce environmental laws to curb veld fires. All offenders must be brought to book and deterrent measures should be put in place to all would be offenders.

There is need for institutional strengthening, that is, government should strengthen institutions responsible for fire management by outlining clear definition of responsibilities of each institution. Forestry Commission and EMA should consider increasing the proportion of financial and other resources allocated to the prevention and management of fires.

4.1.1 Inadequate Awareness Programmes

Forestry Commission and EMA should increase awareness programmes at district, provincial and national levels. These should be centered on;

- fire management,
- general conservation of vegetation and
- ecosystem management.

4.2 Failure by Forestry Commission to maintain nurseries

The Commission should resuscitate nurseries so that they can control quality and quantity of seedlings produced and trees planted. Forestry Commission should develop appropriate technologies for the improved and sustainable management of indigenous and exotic plantation forest and to produce superior seed and other plant materials. They should also encourage communities to grow indigenous trees because they face extinction. Communities in peri-urban and resettlement areas should be encouraged to have wood lots for fuel wood for both domestic and commercial purposes so as to minimise the indiscriminate cutting down of indigenous trees.

4.3 Tobacco Wood Energy Programme (TWEP)

Forestry Commission should train and encourage tobacco farmers in peri-urban and resettlement areas to have wood lots for fuel in curing tobacco so as to minimise the indiscriminate cutting down of indigenous trees.

4.4 Monitoring and Evaluation

In addition to requested farm inspections, Forestry Commission and EMA should also do routine field or forest inspections. I recommend the accreditation of all woodcarvers and commercial manufacturers of bricks and ceramics in the country. This will enhance sustainable harvesting of indigenous trees. Deterrent measures should be put in place to force people to desist from illegally cutting down trees. Law enforcement agents must also priorities environmental laws by apprehending the offenders.

4.4.1 Staff Shortage

Forestry Commission and EMA should advocate for an increase in staff establishment from one officer to at least two officers per district. This will help in enabling the FEO to cover their areas of responsibilities.

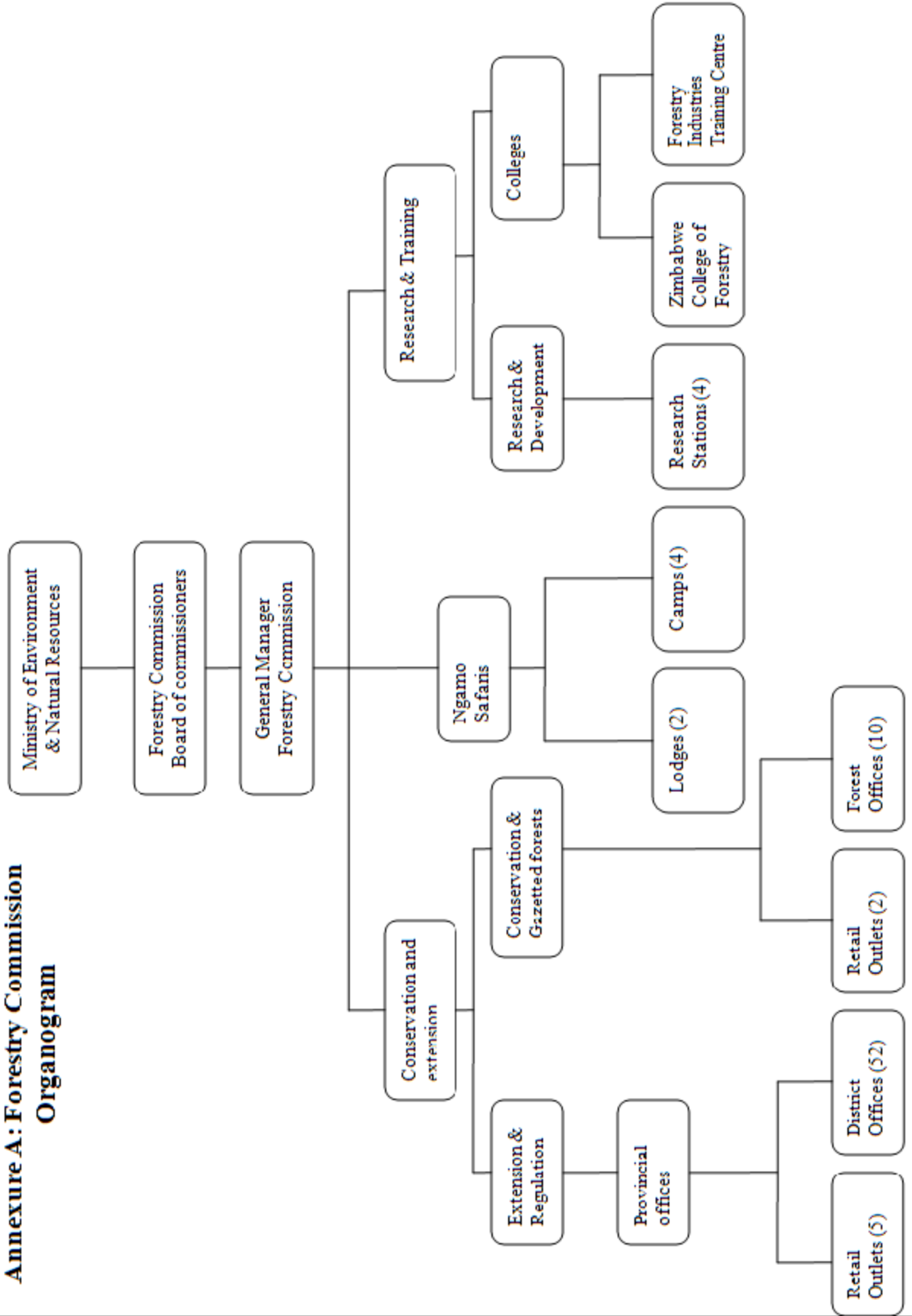
4.4.2 Shortage of vehicles

Forestry Commission and EMA should ensure that all districts are adequately equipped in terms of vehicles. There is need for prioritisation of vehicle allocation to critical areas like forestry extension work. This will enable officers to do awareness programmes in all the wards within their districts. Forestry Commission should make sure that they employ FEOs with drivers' licences and for those employed without, they must be encouraged to acquire the licences.

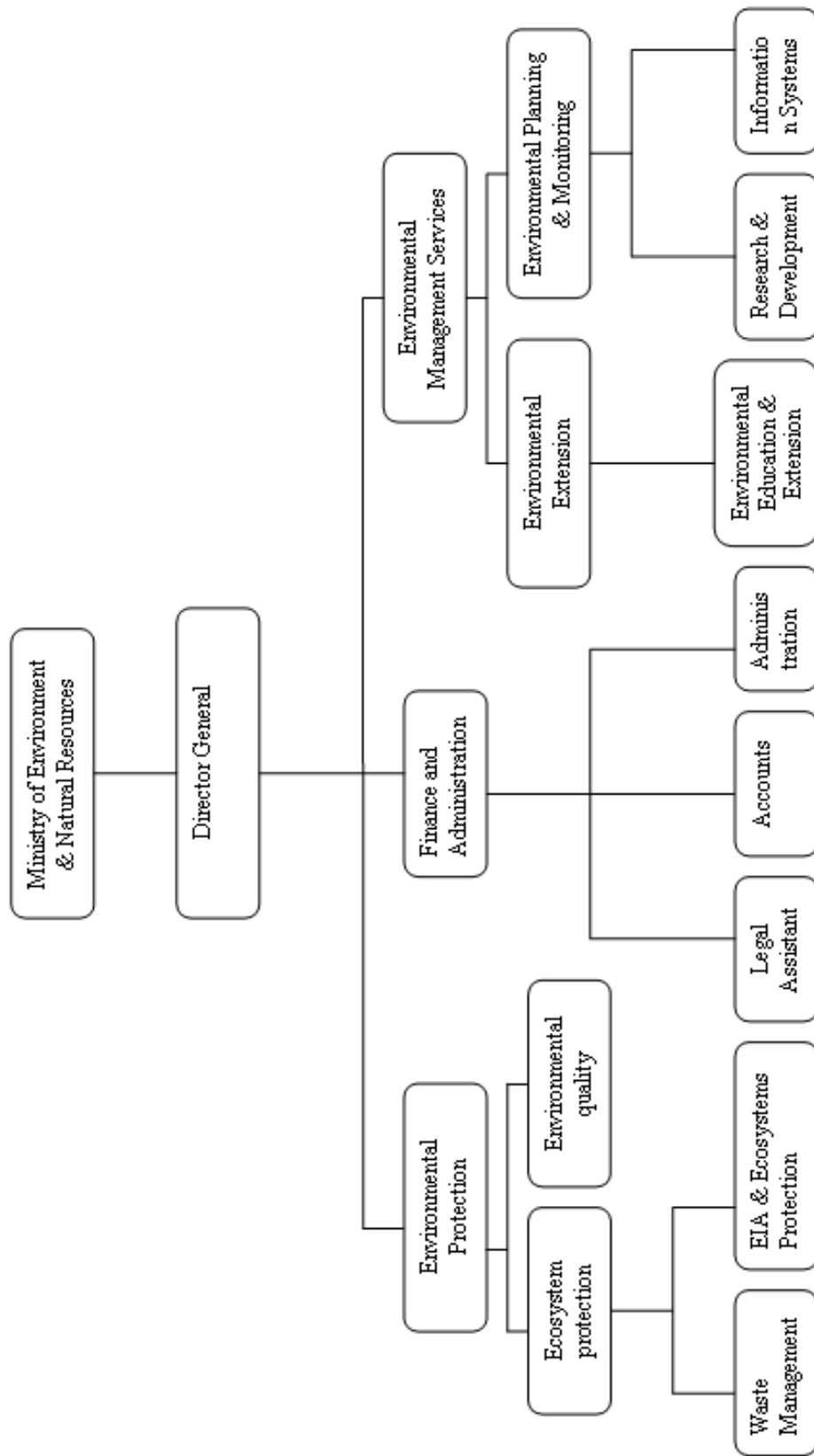
4.5 Record Keeping

I recommend that Forestry Commission and EMA provincial offices maintain up to date records of all forestry activities taking place within their provinces. The provincial reports will feed into the national report which needs to be reliable and up to date. This will make national planning easier for policy makers. The records should be properly filed and kept in a safe place. The provincial offices need to be adequately supplied with stationery to avoid superimposition of documents and reusing of bond paper thereby destroying some reports.

Annexure A: Forestry Commission Organogram



Annexure B: EMA Organogram



Annexure C: Seedlings produced from 2004-2009

Year	Province	Target Seedlings Production	Actual Seedlings Production	% of actual production
2004	Manicaland	1 900 000	328 859	17.3
	Masvingo	730 000	350 006	47.9
	Mat North	145 000	61 686	42.5
	Mash West	440 000	272 836	62.0
	Total	3 215 000	1 013 387	31.5
2005	Manicaland	1 900 000	725 821	38.2
	Masvingo	585 000	251 264	42.9
	Mat North	92 000	5 780	6.3
	Mash West	464 000	320 418	69.1
	Total	3 041 000	1 303 283	42.8
2006	Manicaland	1 620 000	770 628	47.6
	Masvingo	500 000	330 486	66.1
	Mat North	80 000	50 471	63.1
	Mash West	950 000	234 539	24.7
	Total	3 150 000	1 386 124	44.0
2007	Manicaland	700 000	322 053	46.0
	Masvingo	300 000	159 765	53.2
	Mat North	50 000	38 301	76.6
	Mash West	600 000	258 855	43.1
	Total	1 650 000	778 974	47.2
2008	Manicaland	640 000	841 020	131.4
	Masvingo	331 000	169 799	51.3
	Mat North	55 000	4 543	8.3
	Mash West	267 500	99 220	37.1
	Total	1 293 500	1 114 582	86.2
2009	Manicaland	740 700	596 732	80.6
	Masvingo	300 000	376 021	125.3
	Mat North	10 500	-	-
	Mash West	179 000	4 547	2.5
	Total	1 230 200	977 300	79.4

Source: Provincial monthly, annual reports and RBM documents.

Annexure D: Trees planted from 2004-2009

Year	Province	Target Tree Planting	Actual Trees Planted	% of actual Tree Planting
2004	Manicaland	1 900 000	330 656	17.4
	Masvingo	700 000	-	
	Mat North	50 000	26 324	52.6
	Mash West	370 000	77 184	20.9
	Total	3 020 000	434 164	14.4
2005	Manicaland	1 900 000	651 776	34.3
	Masvingo	465 000	73 347	15.8
	Mat North	60 000	871	1.4
	Mash West	400 000	101 292	25.3
	Total	2 825 000	827 286	29.2
2006	Manicaland	1 580 000	507 171	32.1
	Masvingo	400 000	94 117	23.5
	Mat North	56 000	13 246	23.6
	Mash West	600 000	70 044	11.7
	Total	2 636 000	684 578	26.0
2007	Manicaland	560 000	207 876	37.1
	Masvingo	300 000	53 543	17.8
	Mat North	40 000	9 315	23.3
	Mash West	480 000	64 667	13.5
	Total	1 380 000	335 401	24.3
2008	Manicaland	480 000	341 182	71.1
	Masvingo	319 000	79 900	25.0
	Mat North	36 000	3 972	11.0
	Mash West	206 000	18 226	8.8
	Total	1 041 000	443 280	42.6
2009	Manicaland	497 149	30 382	6.2
	Masvingo	250 000	229 287	91.7
	Mat North	55 000	5 361	9.7
	Mash West	158 000	3 675	2.3
	Total	960 149	268 705	28.0

Source: Provincial monthly, annual reports and RBM documents.

Annexure E: Fleet register for the provinces

Province	Vehicle Model	Year of Purchase	Condition	No of Years In Use	Expected Life Span
Mash	Toyota Hilux	2007	Runner	3	5
West	Peugeot 504	1997	Limited runner	13	5
	Isuzu KB250	2000	Runner	9	5
	Isuzu KB250	2000	Runner	9	5
	Mazda B2500	1997	Non runner	13	5
	Mazda B2200	1995	Non runner	15	5
	Toyota L/cruiser	1993	Non runner	17	5
Mat	Toyota L/ cruiser	1993	Non runner	17	5
North	Toyota L/cruiser	1994	Limited runner	16	5
	Toyota L/ cruiser	1989	Limited runner	20	5
	Toyota L/ cruiser	1989	Limited runner	20	5
	Toyota Hilux	1999	Runner	10	5
	Isuzu KB250	2001	Non runner	8	5
	Isuzu KB250	2000	Runner	9	5
	Mazda B2200	1994	Non runner	16	5
	L/rover -Defender	1996	Non runner	14	5
	Toyota L/cruiser	1996	Runner	14	5
Masvingo	Toyota Hilux	2007	Runner	3	5
	Isuzu KB250	2000	Runner	9	5
	Toyota Hilux	1999	Non runner	10	5
Manicaland	Toyota Hilux	1999	Runner	10	5
	Isuzu KB250	2001	Runner	8	5
	Toyota Hilux	1999	Runner	10	5
	Mazda B2500	1997	Runner	13	5
	Mazda B1800	2000	Non runner	9	5
	Peugeot 504	1994	Non runner	16	5
	Honda M/bike	1989	Non runner	20	5