

UNIVERSITY OF NAIROBI

DEPARTMENT OF ECONOMICS

MASTER OF ARTS PROJECT PAPER

THE IMPACT OF THE PRIVATIZATION PROGRAMME ON THE COMPANY'S
PERFORMANCE: A CASE STUDY OF SOPYRWA IN RWANDA //

By: Justin NSENGIYUMVA

UNIVERSITY OF NAIROBI
EAST AFRICANA COLLECTION

A PROJECT PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN
ECONOMIC POLICY AND MANAGEMENT OF THE UNIVERSITY OF
NAIROBI


JOMO KENYATTA MEMORIAL
2005 LIBRARY

University of NAIROBI Library



0479041 6

This project Paper is my original work and has not been presented for a degree in any University

 25/10/05 Date

Justin NSENGIYUMVA

This project paper has been submitted for examination with our approval as University supervisors

P. c. Samanta Date 25/10/2025

Dr. Purna SAMANTA

Supervisor

Awiti Date

Mr. Maurice Awiti

Supervisor

DEDICATION

To my dearest sons Victor, Blaise and Felix, my cherished wife Victoria and to all the poor people in the world

ACKNOWLEDGEMENTS

This project is a product of a wide range of inputs from a number of people whose assistance and encouragement have helped me a great deal while writing.

Special thanks go to the family of Joe and Rosemary BAMBER, the family of JILL and the Government of Rwanda who provided me with financial assistance as well as other needs throughout my studies. Without their family care, love, and sympathy, I would not have finished my studies.

My sincere gratitude goes to my Uncle and Friend Venant NKUNDA and his wife Mary whose care and commitment to the welfare of my family surpassed the natural and human limits.

I am deeply grateful to my two supervisors; Dr. Purna SAMANTA and Mr. Maurice AWITI for their invaluable guidance and close supervision of this work. Their close attention and encouragement made me feel at home while I was in a foreign land.

I am indebted to my dearest wife Victoria MUHAWENIMANA and my sons, Victor, Blaise and Felix for the company they provided me with. Their presence always made my mind generate very good ideas that very much contributed to the quality of this work.

My heart tells me that my thanks would be incomplete without mentioning the most valuable contribution from Prof. NSHUTI P. Manasseh and Fr. Dr. Luc Martel whose parental advices and very useful ideas made me feel supported, and encouraged to go for the perfect. Their material and moral advices convinced me that wishing is nothing without willing and that God acts through men.

Importantly, special recognition to Mr. Hermogene HABUMUGISHA, my brother in law Augustin UWIMANA and Janvier. Evariste GASIRABO, Evariste HABIYAMBERE, Ms MAKOMA. Mr. KINOTI, Mr. ATHERU, and Fr Valens SIBOMANA for their ideas, suggestions, and warm friendship they extended to me.

TABLE OF CONTENTS

TOPIC	PAGE
DECLARATION.....	2
DEDICATION.....	4
ACKNOWLEDGEMENTS.....	5
TABLE OF CONTENTS.....	6
ABSTRACT.....	8
ACRONYMS.....	10
CHAPTER ONE: INTRODUCTION BACKGROUND....	11
1.1 The general understanding of privatisation.....	11
1.2 The Rwandan Privatisation program.....	21
1.3 The economic indicators of Rwanda.....	24
1.4 The history of pyrethrum in Rwanda.....	26
1.5 The problem statement.....	33
1.6 Objectives of the study.....	35
1.7 Rational and significance of the study.....	36
1.8 Limitations of the study.....	37
CHAPTER II: LITERATURE REVIEW.....	38
2.1 Introduction.....	38
2.2 Social benefits and social costs of privatisation....	38
2.3 Privatisation and employment.....	50
2.4 Privatisation and its distributional effects.....	54
2.5 Study hypotheses.....	58

CHAPTER THREE: METHODOLOGY.....	59
3.1 Introduction.....	59
3.2 Population sampling techniques.....	59
3.3 Data collection procedure.....	61
3.4 Data analysis techniques.....	62
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION...	64
4.1 Introduction.....	64
4.2 Technical data.....	66
4.3 Data on workers and Planters perceptions.....	75
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS.....	79
5.1 Case Study.....	79
5.2 General recommendations.....	82
BIBLIOGRAPHY.....	90
QUESTIONNAIRE.....	96
APPENDICES.....	100

ABSTRACT

After independence, especially in Africa, Public enterprises were considered as one of the surest ways the Government could use to ensure fair and equitable distribution of National resources. However in the past twenty years, the World experienced a major shift in thinking about the appropriate role of the Government in the economy. It emerged that most of Public enterprises were inefficient, and caused a locative inefficiency.

Thus economists started advocating for privatisation as a necessary policy, capable of raising living standards by introducing competition, which will bring about efficiency, lower cost and lead to better levels of service. The UK set the tone and many countries followed in privatising the SOES. Rwanda joined the club in 1997, and so far 23 companies have been privatised, out of 75 that are concerned. So far, only public services have made an evaluation of the Rwandan privatisation program and they all claim that it is leading to the ultimate aim of raising living standards.

The main objective of this study was to make a private, non-biased evaluation, and initiate a debate on the topic, because so far no private evaluation was done.

The researcher used a case study methodology where by the SOPYRWA; a company dealing in pyrethrum was evaluated. It was chosen because it is one of the companies that were privatised at the beginning of the program and especially because of the immediate link between its operations and the welfare of the populations living in the areas where it operates. Thus performances in terms of profitability and outputs leading to improved living standards for the pre-and the post- privatisation periods were compared. Graphs and percentage tables were used to depict that comparison.

The pre- privatisation period data are from 1986 to 1990, a period that is thought to be the most prosperous for OPYRWA (former SOPYRWA), while the post- privatisation period data are from 2001 to 2003. The period in between was not considered due to the insignificant performance of the Rwanda economy during that period largely marked by civil war that culminated in genocide.

The main conclusion of this case study was that so far, the privatisation of OPYRWA has not yet triggered any significant better performance in terms of profitability and outputs that could lead to better living standards of both the workers, the pyrethrum growers as well as the owners. Some of the reasons have been found to be: the non regulated monopolistic position of SOPYRWA, the uncertainty in the domestic labour market, the lack of consultation of all the stakeholders before the privatisation of OPYRWA among others.

The study recommends that for a privatisation program to be successful, especially in the third world where markets are imperfect, some measures must accompany it. These include the establishment of an effective and reliable regulatory institution to ensure that the interests of both the consumers and producers are achieved in a win-win situation, the establishment of a competition policy, the rational choice of an effective method of divestiture as well accountability in using the proceeds realised from selling the SOEs.

The researcher calls upon other researchers to undertake more comprehensive studies on the privatisation program in Rwanda and in other developing countries and to avail their conclusions to decision makers who are urged to positively take these conclusions into account and make necessary corrections before it is too late, for this policy to truly lead to a fair, equitable and all inclusive economic development of our countries.

ACRONYMS

ASPY= Pyrethrum Planters' Association
CCO= Centrale Comptable Association (Central Accounting Association)
CFC= Chlorinated Fluorocarbon
CIK= Crawling Insect Killer
DDT= Dichloro Diphenyl Trichloroethane
ELECTROGAZ= Electricity and Gaz distribution Company
EPA= Environmental Protection Agency
FIK= Flying Insects Killer
FF= Fresh Flowers
GDP= Gross Domestic Product
ILO= International Labor Organization
IMF= International Monetary Fund
ISHYABIKI= Ishyirahamwe ry' Abahinzi b' Ikireti i.e. Pyrethrum Planters' Association (different from ASPY)
LDC= Less Developed Country
LTD= Limited
MINECOFIN=Ministry of Finance and Economic Planning
NBC= National Commercial Bank
OCIR= Office des Cultures Industriel du Rwanda (Cash Crops Board of Rwanda)
OPROVIA=Office de Promotion des Produits Vivriers et Industriels au Rwanda
OPYRWA= Office du Pyrethre au Rwanda (Rwanda Pyrethrum Board)
PE= Public Enterprise
PETRORWANDA= Former public utility dealing in petroleum products
RPI=Retail Price Index
SOE= State Owned Enterprise
SOPYRWA= Societe du Pyrethre au Rwanda (Rwanda Pyrethrum Society)
SORWATHE=Societeé Rwandaise des Théiculteurs
STIR= Société de Transport International du Rwanda (Rwanda International Transport Company)
TRAPAK=Societe de Transport des Produits Agricoles au Kivu (Company for the Transportation of Agricultural Products in Kivu)
UK= United Kingdom
ULV= Ultra-Low Volume
UNDP= United Nations Development Programme
UNIDO= United Nations Industrial Development Programme
US= United States (of America)
USD= United States Dollar
USINEX=Usine d'Extraction du Pyrthre (Pyrethrum Processing Factory)

CHAPTER ONE: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1. THE GENERAL UNDERSTANDING OF PRIVATIZATION

Public enterprises have been central to the development strategies in African states. From the colonial era, public enterprises (PEs) have been found in key sectors including mineral and agricultural exports, transport and communication, manufacturing, and much agricultural trade. However beginning the late 1970s and the 1980s when the whole Africa was experiencing economic crisis, analysts started realizing that most PEs were inefficient, lost huge amounts of money and caused allocative inefficiency by distorting prices and access to domestic and external credit. Thus "The Public Enterprise Problem" was discovered and solutions were proposed. Some parties advocated for a wholesale privatization (especially donors agencies) while others (especially bureaucrats in African Governments) proposed measures to bring PEs "under control" shifting more and more decision making authority from parastatals to government ministries (Grosch 1991). This study focuses on the first solution of privatization with special concern to the SOPYRWA case and its impact on the company's performance in terms of profitability, outputs and improved living standards.

Privatization is a term used to convey the general idea of transferring publicly owned assets into the ownership of the private sector (Hardwick, 1994). The main idea here being "denationalization". However an in depth analysis of the use of this term reveals that the word "Privatization" is employed to convey a variety of ideas. According to V.V Ramanadham (1989), the following 15 connotations were found to be conveyed by the term 'privatization' :

1. Transfer (sale) of public assets (firms, parts of firms 'partial privatization') or individual assets to private persons
2. Transition to private law legal forms
3. Transfer of individual public supply tasks to private persons (e.g. contracting out); also functional privatization.
4. Transition to private business management in the sense of profit - oriented management.
5. Extension of the margin of autonomy for the management of public enterprises
6. De-bureaucritization, in the sense of freeing from formal provisions and administrative instructions
7. Decentralization, in the sense of delegation of authority to decide, to plan and to act
8. Aligning the conditions under which public enterprises act on those which apply to private firms.
9. Promotion of competition by market processes (or market-like systems of incentives)
10. Dismantling of such state monopolies as are justified by referring to the traditional argument of 'natural monopoly'.
11. Adaptation of wages and working and employment conditions to those applicable to the private sector: privatization of jobs.
12. Unilateral reduction of the nature and scope of public services
13. Privatization of public resources
14. Privatization of public revenue: conversion of revenues from public investments into private profits or private access to public capital and its revenues.
15. Denationalization: pressures of international competition; increasing activity in foreign markets; take-over of capital shares and rights of disposal by foreigners.

Thus privatization should not merely be understood in the structural sense of who owns an enterprise, but in the substantive sense of how far the operations of an enterprise are brought within the discipline of market forces (Ibid.).

As mentioned above, privatization got considerable momentum in developing world in 1980s. Before this time, the only known cases of privatization were the liquidations of the US federal government's enterprises created during the Second World War (Dinavo, 1995). However Privatization did not gain unprecedented popularity only in developing world. Beginning in the 1980s the then British Government headed by Margaret Thatcher undertook a successful large-scale privatization of major nationalized industries and other public sector activities. The British extensive and highly influential program of public enterprise divestiture saw the major British state-owned enterprises (SOEs) privatized. These included British Airways (1987), British Gas (1984), British Petroleum (1984), and British Telecom (1984) among others (Hardwick, 1994) By 1990, over thirty major enterprises valued at over £ 27 billion and employing about 800,000 people, had been privatized in the UK (Parker and Hartley, 1991).

France's National Assembly and Senate promulgated a law in August 1986 that permitted the denationalization of 65 state-owned companies and banking groups over a five- year period to raise \$ 50,000 million. The government came to regard its version of "popular capitalism" as a way of giving French companies more freedom to compete in international market (Randall 1993).

In Austria, the ruling socialists decided to rescue the state holding company -comprising 198 enterprises that together had lost \$1,400 million in the three year period through 1985- by selling off chunks to private investors (Ibid.).

On the other hand, by the end of 1987, 571 SOEs had been privatized in 57 developing countries and other 500 transactions were planned for execution in the future (Ramamurti 1991). In 1980s, most of the firms privatized were small and the following eight countries were found to be "Active Privatizers" because they accounted for more than half of the 571 above mentioned transactions. These countries are Côte d'Ivoire, Guinea, Niger and Togo in Sub-Saharan Africa; Singapore in Asia; and Brazil, Chile and Jamaica in Latin America and the Caribbean (Parker and Hartley, 1991).

Talking of the extent of privatization in African countries, Sarbib (1997) presents the findings below:

Privatization in Africa: Percentage of change in SOEs (1990-1996):

Country	Estimated number of SOEs at start 1990	Estimated number of SOEs at end 1996	% Reduction in SOEs 1990-1996
Chad	43	9	79%
Gambia	39	9	77%
Guinea	166	51	69%
Benin	60	21	65%
Angola	545	212	61%
Cape Verde	35	14	60%

Mali	77	31	60%
Congo	120	53	56%
Niger	64	33	48%
Togo	50	26	48%
All Other Countries	5,397	3,729	31%
Total	6,596	4,188	37%

Source: Sarbid, J. -L (1997) "Privatization in Africa: Present and Future Trends. Paper presented at the African Development Bank Group 1997 Annual Meeting Symposium of "Private Sector Development In Africa", Abidjan, May 21, page 8.

The popularity of privatization has different origins, reflecting different hopes that its proponents have for it. Many people see privatization as a means to increase output, improve quality, and reduce unit costs. Others see in it not only a way of curbing the growth of public spending but also a way of raising cash to reduce government debt. Others admire how it emphasizes on private initiatives and private market and attach to this the merit of helping achieve economic growth and human development. Last but not least, many people consider privatization as a way of broadening the base of ownership and participation in a society (Hanke, 1987).

Basic Techniques of Privatization

The privatization process has taken various forms in various countries. For one to choose the most appropriate technique, it is imperative for him to thoroughly understand the existing constraints, obstacles, the industry as well as the prevailing market characteristics. Each privatization transaction should be considered unique and be designed to meet the specific characteristics and objectives of a country, an enterprise and time; taking into account local administrative, political, economic, social and legal conditions of both the country, the enterprise(s) and assets targeted.

Vuylsteke (1988) identified the most frequently used forms of privatization as follows:

- Public offering of shares,
- Private sale of shares,
- New private investment in an SOE,
- Sale of government or SOE assets,
- Reorganization (or break-up) into component parts,
- Management/employee buyout, and
- Lease and management contracts.

He summarized the different features of the above basic methods as under:

<u>Method</u>	<u>Characteristics</u>	<u>Procedures</u>
Public offering of shares	Distribution to the general public of all or part of shares in public limited company (as a going concern)	If SOE is in required condition, standard processing of public offering on the basis of prospectus. If not in required form or condition, then readying process necessary. Offer can be on fixed price or tender basis.
Private sale of shares	Sale of all or part of government Shareholding in a stock corporation (as a going concern) to a single entity or group. Can take various forms such as a direct acquisition by an other corporate entity or a private placement targeting institutional investors. Can be full or partial privatization (i.e. transformation into joint venture)	Sale may result from negotiation or competitive bidding process. May be done ad hoc or may be subject to mandatory country procedures or guidelines on valuation, prequalification, evaluation of proposals, terms of payment, etc. In some cases, prior restructuring necessary. Involves investor search.
Sale of government or enterprises assets	Sale of assets (instead of shares). Private sale	Alternatives: sale of assets by government disposal of some assets by SOE; dissolution of SOE and sale of all assets. Procedures for private sale of shares generally apply.
Fragmentation.	Reorganization of a SOE into several entities (or one holding company and several subsidiaries). Each entity will then be privatized separately.	Depends on structure of SOE
New private investment	Primary share issue subscribed by the private sector (dilution of government's equity position instead of disposing of shares)	Public offering or private issue of new shares on basis of standard procedures for new issues, possibly in conjunction with disposal of government equity. New private investment may be for capitalization of new company embodying assets transfer by government.
Management / Employee Buy-out	Acquisition by management and/workforce of controlling interest in SOE. leveraged management/employee buy-out (LMBO) consists of purchase of shares on credit extended either by seller (government) or by financial institutions.	Negotiations by government, management, employees and lenders to cover wide range of issue.
Lease and Management Contracts	No ownership transfer. Under lease, fee is payable to owner of productive facilities; lessee assumes full commercial risk. Under management contract, owner pays for management skills, while manager has full management and operational control. Many variations exist	No standard method.

Preferred Applications and Special Features	Implementation Issues
<ul style="list-style-type: none"> -SOE sound going concern with reasonable earning potential or can be readied to become so. -Objective is widespread ownership. -Existence of equity market or feasibility of structured offering. -Generally more appropriate for larger offerings than direct sale. -Often more acceptable politically. 	<ul style="list-style-type: none"> -Structure or condition of SOE may not permit public offering; feasibility of restructuring to be assessed. -Mechanisms necessary to achieve and maintain wide-spread ownership and possibly limit foreign holdings. -Pricing mechanisms to be defined. -Distribution mechanisms may need to be introduced to compensate for weakness of equity markets
<ul style="list-style-type: none"> -Because of flexibility preferred method for weak performing enterprises. -In absence of equity market, may be only alternative for sale as going concern. -Size of enterprise may not justify public offering. -Preliminary step to public offering when presence of leveraged party necessary to turn enterprise around. -New owner known and can be evaluated. Offers flexibility in negotiation, such as obtaining specific commitment from purchaser. Purchaser may bring benefits (management skills, technology, market access, etc.) -Implies SOE is sold with assets and liabilities (there are exceptions). 	<ul style="list-style-type: none"> -SOE may need prior financial restructuring; Difficult decision on whether to rehabilitate prior to sale -Employment. -Need for mandatory procedures.
<ul style="list-style-type: none"> -Where sale of shares not feasible or objective is sale of individual assets. -Permits privatization of SOEs not salable as going concern. -Often results in separation of assets and liabilities. 	<ul style="list-style-type: none"> - If assets are sold as a result of liquidation or major restructuring, related issues arise. -Relating debt liabilities often not assumed by purchaser.
<ul style="list-style-type: none"> -Where objective to privatize only certain components; where SOE is a monopoly, and break-up will improve Competition; or where market will not absorb whole SOE. -Permits privatization of component parts when no taker for the whole. -Permits application of different methods to different parts. 	<ul style="list-style-type: none"> -Depends on privatization method applied to individual entities.
<ul style="list-style-type: none"> -Applicable where primary objective not divestiture but provision of new equity by private sector. -Address funding problems of undercapitalized enterprises. Offers flexibility: used as first step to, and in conjunction with, sale of government-held equity. 	<ul style="list-style-type: none"> -Implementation issues related to public offering private sale of shares or transfer of assets may arise.
<ul style="list-style-type: none"> -SOE must have component, professional management and skilled, stable workforce. -Leveraged buy-out a means of transfer to management and employees even with limited wealth; incentive to productivity. -May be solution for SOE not salable otherwise. -May be solution to employment problems. 	<ul style="list-style-type: none"> -Cash flow or other security required as under lying element of LMBO.
<ul style="list-style-type: none"> -May be preferred where privatization of ownership of government or SOE assets not appropriate. May be intermediate solutions rendering subsequent sale possible. -State unable or unwilling to transfer ownership to private sector but wants private sector management. -May also be planned as an intermediate step to full privatization 	<ul style="list-style-type: none"> -Continued financial liabilities of state with respect to ownership of assets. -Under management contract, owner may still need to inject funds to support operations. Maintenance/ renewal obligations

Like in many other economies, the Rwandan state-owned enterprises continued to under perform. Generally managed by non-qualified managers, recruited with little merit consideration, these enterprises continued to be overstaffed and to accumulate a lot of debts and losses. Over the years the manufacturing sector supposed to play a leading role in development has been poorly performing and it is suspected that the levels of capital utilization, labor productivity and profitability have kept decreasing or at best stagnated at low levels. A study conducted in 1986 by the "Centrale Comptable et Organisation"(CCO) on the profitability of the Rwandan PEs confirmed this. The study shows that out of the 5 biggest export promotion industries (OPYRWA, OCIR CAFE, OCIR THE, RWANDEX and SORWATHE) only one, the RWANDEX, could make profits. Others were found to be inefficient. For example, OCIR-The was found to work with low productivity, high operating costs and poor marketing practices. In the imports substitution industry, only two (i.e. beer and tobacco) out of 9 firms were profitable. On the other hand, the study noted that though most of the public utilities such as ELECTROGAZ, STIR, AIR RWANDA and OPROVIA were making profits, this was found to be the result of subsidies and other protective measures that the government had adopted towards them. For instance, on 30th June 1985, the arrears of taxes owed to the government by the PEs were evaluated at Rwandan Franc 200 millions (US\$ 1= Frw 89.9). In addition, the fact that those PEs were unable to pay their debts to their suppliers forced the government to cater for 40 % of the debts re-payment in its annual budget of 1986 (World Bank, 1986).

This trend continued and worsened in some cases until recently. The outputs also went decreasing or stagnated at lower levels. As a way of example, let us consider a more recent case of the production trends in the tea and the coffee industries:

Production of Coffee in Tones:

1995	1996	1997	1998	1999	2000
21,952	15,285	14,830	14,268	18,817	16,098

Production of dried tea in Kg

1990	1996	1997	1998	1999	2000
12,854,627	9,057,579	13,239,399	14,874,619	12,669,163	14,481,248

Source: Rwanda: Privatization No 5

According to “Rwanda: Privatization No 11” pp2, the tea plantations managed by the state in 2001 only produced 841 kg/ha of black tea. This was very low as compared to 1,248 kg/ha produced in the plantations managed by cooperatives, 1,125kg/ha in the plantations managed by private farmers, and far lower as compared to 3,487 kg/ha produced in the plantations managed by the only private tea company, the SORWATHE.

After the new government took power in 1994, the continued deteriorating performance of the PEs and the growing burdens of public sector subventions and subsidies arose much concern with regard to the state sector role in the Rwandan economy.

This led the Rwandan government to embark on an extensive privatization program. This program was considered a strategy that will enable the government achieve its "Vision 2020" which seeks to achieve an average GDP growth rate of 8.5% per annum, and thus increasing the per capita GDP from the current USD 250 to USD 960 in 2020. The privatization program was institutionalized by the Law Number 2, dated 11th March 1996, on Privatization and Public Investment. The law gives the government powers to liquidate, hire out, restructure and divest partially or wholly any public enterprise, depending on its legal structure. It was publicly explained by the former President Pasteur BIZIMUNGU in his declaration on April 11th 1996, and the Presidential Decree number 84/14 dated 3rd May, 1996 put in place the institutions to implement this program. On August 25th 1996, the government directed that 46 PEs be privatized as soon as possible and government shares in additional 18 enterprises be ceded to the private sector. The implementation of the Rwandan Privatization Program started in October 1997 when the Privatization Secretariat was inaugurated (Privatization in Rwanda, 2002)

At the moment, a total of 72 companies are concerned in different sectors: agriculture, the hotel business, mines, banks, telecommunications etc. and 23 companies have already been privatized, the privatization of other 17 companies is in progress, while 32 others are being evaluated (Rwanda: Privatization, 2002).

1.2. THE RWANDAN PRIVATIZATION PROGRAM

1.1.2.1. THE OBJECTIVES

According to the Privatization Secretariat Brochure namely Privatization in Rwanda (2002) the following have been identified as the main objective of the Rwandan Privatization Program:

- To reduce the shares held by government in public companies, thus alleviating the financial burden on its resources and at the same time reducing its administrative obligations in these enterprises.
- To generate revenues to the government through the transfer, liquidation or dismantling of unprofitable companies and also through the promotion, development and reinforcement of the private sector.
- To ensure a better management and a discipline in financing and accounting in these companies.
- To separate the functions of owner and management.
- To ensure a bigger financial responsibility.
- To restructure and rehabilitate public companies.
- To encourage Rwandan citizens to invest in the private sector and to contribute to its development, and at the same time to stimulate the entrepreneurial spirit.

1.1.2.2. THE INSTITUTIONAL FRAMEWORK.

The Presidential Decree number 08/14 dated May 3rd 1996 established three institutions in charge of carrying out the Privatization Program. These are: the National Privatization Commission, the Technical Privatization Committee and the Privatization Secretariat. Together with the Cabinet of Ministers, they form the institutional framework for the privatization program (Privatization in Rwanda, 2002).

a) The Cabinet of Ministers, which is the final decision-maker as far as the sale of public enterprises is concerned.

b) The National Privatization Commission which, chaired by the Minister of Finance and Economic Planning, is in charge of the following:

- to submit to the government priorities and timetable for the privatization of PEs.
- to direct the work of privatization.
- to analyze any technical proposal for privatization and proposing drafts of decisions to the government.
- to follow-up the implementation of government decisions on privatization and public investment.
- to explain to the public the benefits of the privatization and public investment program and its progress.

c) The Technical Privatization Committee in charge of the privatization policy implementation and the strategic management of the program. This involves the following:

- Adopting the annual work plan of the secretariat.
- Evaluating the tender bids and negotiating with the bidders in order to obtain the best order possible.
- Recommending to the commission the terms and conditions of the sales transactions, and ensuring that post-privatization monitoring is done.
- Making recommendations to the Cabinet.

d) The Privatization Secretariat in charge of the day to day management, the coordination of the activities of the commission as well as the implementation of the Privatization Program

1.3. THE ECONOMIC INDICATORS OF RWANDA

Rwanda is a small country with 26,340 square kilometers, situated in the Great Lakes Region of the Central Africa. Rwanda shares borders with 4 countries namely: The Democratic Republic of Congo in the West, Burundi in the South, Uganda in the North and Tanzania in the East. The recent census held in the night of 15th-16th August 2002 showed that Rwanda has 8,162,715 inhabitants whose more than 50% are under eighteen. 52.3 % of them are women while men are 47.7%. It is worth noting that the 1978 census showed that the Rwandan population was 4,831,527 people, while the one held in 1991 evaluated the Rwandan population up to 7,157,551. Comparing the two latest censuses we find that in 11 years the population increased only of 1,005,164 people i.e. only 12%. Of course this has much to do with the bloody war that the country experienced for four years through 1994. Urban and town population was found to represent 16.7% and more than 90% of the population live on agriculture and more than 60% live below the poverty line (Kaberuka, 2002).

According to the "Fiche de synthèse" edited by the French Economic Commission in Nairobi on 30 May 2002, the GDP of Rwanda was Euro 2366million, that is Euro 296 per ^{capita} in 2000. The trade deficit in 2000 was 5.8% of GDP while the deficit in the balance of payments was 11.8% of GDP. Inflation rate was 6% (2% in 1999) while the exchange rate lost 24% as compared to the US dollar in 2000. The budget deficit was 9.3 % of GDP.

Generally, the Bretton Woods Institutions are satisfied with the above macro-economic indicators. However, the continually rising money supply (7.5% in 1999 and 15.6% in 2000) on

the one hand and the internal debt of the government (4% of GDP in 2000) on the other hand are still a source of worry.

After the 1990-1994 tragedy, this relatively good performance of the Rwandan economy was largely stimulated by a massive foreign aid (more than US \$ 2 billion between 1995 and 1999) (Ibid.). In terms of multilateral assistance, for the years 2000 and 2001, the World Bank emerged the biggest donor with Euro 115.6 million out of a total of Euro 342 million. The African Development Bank came second with Euro 61.5 million followed by the European Union (Euro 40 million) and the UNDP (Euro 37.6 million). Out of the total of Euro 294 million of bilateral aid, for the budget year 2000/2001 Anglo-Saxon countries contributed up to 48% with Euro 93 million by the UK and Euro 49 million by the USA (Ibid.).

Fiche de Synthèse (January 2001) indicates that the Primary sector contributed 40.7 % to GDP, the secondary sector which employs 2% of the population contributed 20.3% of GDP .The manufacturing industry whose 80% accounts for the brewing industry constitutes 12.6% of the secondary sector, followed by construction (6.5 %). The tertiary sector contributed 39.0% of GDP.

The main problem of the Rwandan economy lies in its quasi-exclusive dependence on a subsistence -oriented agriculture, which continues to utilize the primitive methods of farming with very poor infrastructure. Furthermore, Rwanda still lacks of qualified manpower after the 1990-1994 war where thousands and thousands of lives perished while others fled the country. This retards the take-off of both the secondary and the tertiary sectors.

1.4. THE HISTORY OF PYRETHRUM IN RWANDA

Pyrethrum is probably one of the oldest crops with insecticide properties. It is already mentioned in the famous Chinese book "Chou Li" (containing the information about the rituals and practices of the Chou dynasty), in the first century of the Christian era (Sugavaram, 1995).

Known by scientists as *Chrysanthemum Cinerariaefolium* Vis, pyrethrum was first discovered and grown in Iran, then developed in Dalmatia and then in Japan since 1881. It was successfully introduced and grown by the British in Kenya and Tanganyika since 1928. The first harvest in Kenya was in 1933. Kenyan production averaged 6,000 tones per annum from 1940 to 1946 but the end of the war and the advent of DDT led to a sudden collapse in the market and production in Kenya was cut dramatically. Crop of high altitude (1100-1800m), Pyrethrum was introduced in Rwanda in 1936 by Americans who wanted to produce a powder to fight the insects known as "Antestropsis" that were destroying the coffee plantations. Rapidly, it became a lucrative business in the hands of the settlers with for instance a production of 135 tones in 1948 (Rwanda: Privatization No 9).

According to Sugavaram (1995), a kind of Pyrethrum Board, called "Régie-Pyrèthre au Rwanda" was created in Kinigi (Ruhengeri Province) in 1943, with the primary objective of promoting the growing of Pyrethrum. In 1960, another board called "Régie-Pyrèthre de Bugoyi (Gisenyi Province) was created to reinforce the one in Kinigi. At the same time, the "Paysannat-Pyrèthre" (a land reserved only for the Pyrethrum Plantations) was created, with the following main objectives:

- To promote and expand Pyrethrum plantations.

- To increase the revenues of local Pyrethrum growers.
- To improve the exploitation of the local Land

In 1960, the Rwandan government succeeded in reducing the transportation costs of dry flowers to the US and Britain . From then, the flowers were to be exported to Kenya (Kenya Pyrethrum Board in Nakuru) and to Zaire (Société pour le Traitement des Produits Agricoles au Kivu- TRAPAK in Goma). Unfortunately, three years later, Kenya and Zaire started rejecting the flowers from Rwanda. The government began its negotiations with the UNIDO for the construction of a factory for extraction.

In March 1969, the Association of Pyrethrum Planters (Association de Planteurs de Pyrèthre- ASPY) was created to improve the production.

In 1971, the USINEX (Usine d'Extraction du Pyrèthre) i.e. The Factory for processing Pyrethrum in order to produce crude pyrethrum extract was installed in Ruhengeri with the following objectives:

To increase the profit margins from Pyrethrum.

To improve the quality of the exportable intermediate product (crude extract).

To reduce the exportation expenses.

In 1977 the above mentioned two “boards” were unified under the name of “Plantations usinex” and later on in 1978, under the name of “ Blocs Industriels Kinigi-Bonde” i.e. Kinigi-Bonde Industrial Blocks. At the same time, OPYRWA (Office du Pyrèthre au Rwanda that is The Rwanda Pyrethrum Board), the true Rwanda Pyrethrum Board was created as a unique entity dealing in Pyrethrum and it included the former Industrial blocks, the “paysannat ” and the USINEX. OPYRWA continued to act as a parastatal until 1st December 2000 when it was sold to

private economic operators at a price of Frw.550, 000,000 (\pm USD 1.2m), becoming SOPYRWA (Société de Pyrèthre au Rwanda) i.e. Rwanda Pyrethrum Company (Ibid.). This new company undertook to develop the growing and the exploitation of pyrethrum in collaboration with almost 12,000 peasants, grouped in a cooperative called " ISHYABIKI" which was founded on the 10th September 1989 to replace the former ASPY. These peasants produce the fresh flowers of pyrethrum that they dry before selling it to SOPYRWA at a price jointly fixed (currently at Frw 400 i.e.USD 0.67 per Kg of dry flowers). SOPYRWA is a company with an equity capital of Frw 150million divided into 300 shares of Frw 500,000 each. 5 shareholders, all Rwandans, own it.

Its specific objectives are:

To revive the growing of pyrethrum.

To export the crude and later on the refined extracts.

To import fertilizers

With the current Government efforts to promote exports, pyrethrum growing is considered one of the most potential areas where Rwanda can excel. The future of SOPYRWA lies in the management's ability to maximally exploit this opportunity.

Uses of Pyrethrum:

According to Winney (1990), Pyrethrum was first marketed as an insecticidal powder and commercial imports of flowers into the USA around 1860.

In 1919 importers began extracting flowers with kerosene, having found that the resulting liquid sprays were more effective than powders.

The biggest break through for pyrethrum, however, was the invention of the insecticidal aerosol using chlorinated fluorocarbon (CFC) gases to pressurize and disperse the insecticide in fine droplets. This technique gave very efficient dispersal of insecticide but required a quick-acting insecticide for visible success. The first aerosol "bombs" were high pressure and awkward to use but in 1948/49 several developments combined to enable mass production of low-pressure insecticidal aerosols. These formed the mainstay of pyrethrum usage for many years.

With the current concern over the potential destruction of the ozone layer by CFCs, amongst other factors, manufacturers have largely changed over to liquefied petroleum gases (propane/butane – hydrocarbon gases) as propellants. These have the major disadvantage that they are highly flammable. Attempts were made to minimize this risk by introducing water based formulations, but these are inherently more difficult to make and tend to suffer from instability problems. As an alternative several non flammable chlorinated solvents have been used to reduce the flammability (eg. dichloromethane) but these have been criticized on toxicological grounds and dichloromethane is that all forms of the aerosol will be discontinued and a considerable amount of research is now being put into alternative forms of dispenser that will emit aerosol-sized droplets.

Aerosol insecticides were first produced to control flying insects. (Flying Insect Killer aerosols or FIKs). To be effective these need to contain at least 0.2% of an active "knockdown" agent such as pyrethrins synergised with 1.0% PBO. Next, slightly "wetter" sprays emitting coarser drops were used against crawling insects (Crawling Insect Killer aerosols or CIKs). Here the "flushing" action

of pyrethrins has been found to be helpful to drive roaches and similar insects out of there with a killing agent.

The CIK aerosols were then made to include a residual insecticide to give continuous protection against insects.

Pyrethrum has generally not been used in this kind of aerosol and propoxur ("Baygon") is one of the most popular residuals.

Worldwide, aerosols remain the most important use for natural pyrethrum.

In the USA the food processing industry is the most important preserve of natural pyrethrum because it is the only insecticide, which has been allowed by the Regulatory Authorities. (Previously the Food and Drug Administration, now the Environmental Protection Agency – EPA) to be used near food.

Pyrethrum is also important in general house and garden used and here its "natural" image is important. Pyrethrum dusts are still quite significant in this context (flea powders, insecticide dusts for household plants etc.) but now these tend to contain 0.1 – 0.2% pyrethrums synergies with 0.8 – 1.0% PBO rather than the 1.3% unsynergised pyrethrums of ground flowers.

Pet flea champoos and rinses and human soaps and champoos to control lice are specialized, but significant areas in the market where pyrethrum continue to sell.

Pyrethrum is also popular in vegetable gardens and usage is likely to increase with the “green” revolution.

From time to time pyrethrum has been used to protect stored products, both as a space, or surface spray against grain moths in warehouses and tobacco beetle in tobacco stores, but also sprayed onto or mixed with grain. In these circumstances, used in the dark, it is remarkably persistent and its repellency makes it very effective. The main problem is cost, but as insecticide resistance is showing up around the world, pyrethrum has considerable potential for inclusion in a rotating cycle of pesticide usage to prevent the build up of resistance to any one-pesticide group.

In agriculture and horticulture pyrethrum can be used as a close-to harvest spray to eliminate living insects from the harvested crop and it can be used as an activator to improve the efficacy of other insecticides. It is almost the only insecticide that can be used on “organic” crops.

The repellent and anti-feeding activities of pyrethrum enable pyrethrum to be used in mosquito coils. These are spiral ribbons made by extruding pyrethrum powder blended with sawdust or coconut shell flour and starch. When dry, the coils can be ignited and allowed to smolder slowly. They will “burn” for up to eight hours. Pyrethrins are distilled off behind the glowing tip and dispersed in the air. These are a relatively cheap form of long term protection from mosquitoes and are particularly relevant in developing countries. In countries where electricity is universally available mosquito coils have largely been replaced by electrically heated mosquito mats (“vape” mats, mosquito pads etc.) which now mainly contain allethrin, Pynamin Forte or bioallethrin. Unfortunately pyrethrum has not been successfully employed in these electrical mats

Over the years pyrethrum has been tried against a range of other pests and one area, which has been important, was street fogging/ULV (ultra-low volume) spraying against flies and mosquitoes in the Middle East. A small amount of pyrethrum is still used for this purpose, but most of this market has now gone to the synthetic parathyroid, especially pyrethrum.

Other work which has been successful but not resulted in lasting major use includes ULV aerosol spraying of mosquitoes and tsetse flies, dipping of dried fish to prevent blowfly "strike", spraying of cattle and horses to repel horn flies and stable flies and many other diverse areas.

Although they would vigorously deny it, scientists follow "fashions" in research. Pyrethrum was fashionable in the "thirties and just post-war. Pyrethroids were fashionable in the sixties to eighties. Now alternatives to "hard" chemical pesticides and genetic engineering are in fashion. Alternatives include insect hormones and diseases of insects as well as totally non-pesticide methods of control. If research into novel uses for pyrethrum is to occur the producers and their main distributors must encourage it. Much of the emphasis for the immediate future should go towards winning acceptance of the "greenness" of pyrethrum.

I. 2. PROBLEM STATEMENT

In Rwanda, like in many developing countries, the financial statistics extracted from the cross-section of PEs show that their financial performance as reflected in net profit is usually disconcerting. Thus many policy makers on the one hand, and the international financial institutions (such as the World Bank and the IMF) as well as major aid-givers like the US and the European Union on the other hand, consider privatization as an urgent policy option for developing countries. This could enable them experience real and sustainable economic growth. Privatization is believed to “offer the promise of raising living standards by introducing competition, which will bring about efficiency, lower costs, and better service.” (Randall, 1993).

However, even the proponents of privatization as an economy relieving policy recognize that it is not always a success and when it fails, it can prove very disastrous (Ramamurti 1997). In fact, without good accompanying economic policies, privatization is unlikely to translate into the expected results

After realizing the under performance of its public sector, Rwanda joined the club of privatizing countries in 1997 and by now, more than 23 companies have been sold out of 75 companies of concern. The basic question now is to know whether the living standard or better the welfare of Rwandan nationals has improved or worsened after six years of their government’s divestiture from public enterprises. That is there is a need to investigate whether they won or lost and how much. There is also a need to know whether the privatized companies have improved their efficiency by increasing their profitability and offering better services.

Until now, no reliable private study has been conducted to answer those questions. All the information available is provided by government's services.

Thus, the purpose of this study is to investigate the above question with special reference to enterprises' employees on the one hand, and other local input suppliers (in our case the pyrethrum growers) on the other. This will enable us to draw conclusions on whether the privatization policy has improved the welfare of the Rwandan nationals in general or not.

In addition, this study will make available the information that is useful to many African countries that have embarked or are about to embark on a divestiture program, as privatization is currently a fact of life almost in every corner of the world.

I.6.THE OBJECTIVES OF THE STUDY

The general objective of this study is to investigate the impact of privatization policy adopted by the Rwandan government on the welfare of the Rwandan local input suppliers (employees and pyrethrum growers) and to make necessary policy recommendations for possible improvements.

The following specific objectives are subsumed in the above mentioned general objective:

- 1.To find out the impact of privaization on workers' welfare.
- 2.To find out the impact of privatization on the welfare of other local input suppliers (in our case the pyrethrum planters).
3. To investigate the impact of privatization on company's profitability
- 4.To serve as a basis and a reference to other researchers who would like, in the future, to conduct studies on the Rwandan privatization program.
- 5.To contribute to the debate on policy recommendations for a successful divestiture program not only to the Rwandan government but also to other developing countries.

JOMO KENYATTA MEMORIAL
LIBRARY

UNIVERSITY OF NAIROBI
EAST AFRICANA COLLECTION

1.7. RATIONALE AND SIGNIFICANCE OF THE STUDY

It is now six years that the Rwandan government has started to implement the privatization program. When it is a success, this policy is believed to lead to the raising of the living standards of the population by introducing competition, which will bring about efficiency, lower costs, and better service.” (Randall, 1993).

Until now, only the government reports show that this program is a success in Rwanda but no private study has been conducted to investigate the true impact of such a policy on the welfare of the Rwandans. This study is an attempt to fill this gap.

In addition, the results of this study will enable us make policy recommendations that are useful to the Rwandan government in its endeavor to improve the welfare of the Rwandans through a successful privatization program. For this to be achieved a private and objective evaluation of what has been done so far and how this has improved the Rwandans' welfare becomes imperative.

Furthermore, this study's results will serve as a database for other scholars who would like to conduct the same study either on Rwanda or any other developing country engaged in privatization. Indeed, the Rwandan case can serve as an example to other countries in Africa which would like to engage in privatization, especially where the conditions are similar like countries in Eastern and Central Africa. The recommendations that will be drawn here will be useful to them for the success of their own programs.

1.8.LIMITATIONS OF THE STUDY

The main limitation on the generalizability of our study's results lies in the comparability between the pre- and the post- privatization performance of the Rwandan enterprises in general. However, the Rwandan economic performance was undermined by the civil war since 1990 to 1998. During this period, all the economic activities in Rwanda knew a decline with a complete paralysis between April and August 1994.

This is a serious limitation to our study because the field of exploitation of our case study is almost 100% in the provinces of Ruhengeri and Gisenyi, which were affected by that war throughout.

In addition, the financial and time constraints could not enable us work on more than one company. One case out of 23 enterprises that have been privatized so far may not give the real picture of the impact of privatization on the Rwandans' welfare.

CHAPTER II: LITERATURE REVIEW

2.1 Introduction

Privatization is currently a fact of life almost in every corner of the world. It is the supply-side economics, which hinges on the neo-classical hypothesis that private ownership brings greater efficiency and economic growth (Todaro, 1994). The opinions about the relevance of privatization are varied. In this chapter, we are going to have an overview of the wide literature on privatization and its various economic and social welfare impacts. This will enable us understand what other scholars think of privatization.

2.2. SOCIAL BENEFITS AND SOCIAL COSTS OF PRIVATIZATION

Privatization is a very sensitive concept due to its technical, financial, economic, social and most importantly its political ramifications. It is mainly politics that determines what and how to privatize (Dinavo, 1995). This politicization of the privatization policy on the one hand and the ideological factors on the other hand made the case for the opponents to privatization.

For instance, President Robert Mugabe of Zimbabwe has always advocated for maintaining the state economic control as a way of "mitigating capitalism's 'venomous head' deriving from its tendency towards profiteering and speculation". He warned, "this we must guard against" advocating for a continued "socialism" in key economic sectors (Tangri, 1999).

Else where, privatization arose vocal nationalist sentiments accusing it of being a way of selling the economy to foreigners. In Zambia, opposition politicians accused the government of "selling the country to South Africans" (Ibid.).

Faced with such critiques, some countries have limited foreign participation as a general policy. For example, Brazil's mandatory privatization rules exclude foreign participation if voting control is to be transferred. (Vuylsteke, 1988). France's privatization law of August 1986 limits foreign participation to 20% "for reasons of national interest" (Ibid.). Senegal's law No 87.23 of August 18, 1987 on Privatization, provides for general priorities to local investors but permits, within controllable limits, foreign participation. Nigeria has issued a list of industries in which foreigners may participate and to what extent, which varies according to the capital and technological requirements (Ibid.).

All these measures are meant to improve the welfare of the citizens, through ownership acquisition. In our study, we shall investigate in which proportions the ownership was transferred between foreigners and nationals. This will serve as an indicator of the impact of the privatization process on the Rwandans' welfare.

2.2.1. Social Benefits of Privatization

A) Increased Efficiency: The argument of Hardwick is that since a privatized enterprise becomes accountable to private shareholders, this increases the pressure to not only reduce costs and achieve higher profits but also to efficiently use the available resources due to the increased competition in the capital and product markets (Hardwick, 1994).

To support this view, Boardman and Vining (1989) say: "there is robust evidence that state enterprises and mixed enterprises are less profitable and less efficient than private corporations".

Bennett and Johnson (1979) in their work argue that their empirical findings indicate that the same level of output could be provided at “substantially lower costs if output were produced by the private rather than the public sector”. This seems to be true because the state-owned enterprise is under no pressure either to minimize the cost or to meet the customers’ needs effectively.

Ott (1991) undertook a study on UK efficiency gains through privatization between 1970-1986. The study made use of Ordinary Least Square methods of estimation to estimate the growth rate of labor productivity (TL) and profitability (PC). The models specified were as follows:

$$TL = a_1 + a_2 \text{Lag TL} + a_3 D_3 + a_4 D_3 \text{Lag TL} + a_5 D_4 + a_6 D_4 \text{Lag TL} + e_1 \quad (1)$$

$$PC = b_1 + b_2 \text{Lag PC} + b_3 D_3 + b_4 D_3 \text{Lag PC} + b_5 D_4 + b_6 D_4 \text{Lag PC} + e_2 \quad (2)$$

D_3 = dummy for year after change from private to public ownership

$D_3 \text{Lag TL}$ captures the change in slope of the labor productivity trend associated with the change from private to public ownership.

D_4 = dummy for year after change from public to private ownership.

$D_4 \text{Lag TL}$ captures the change in the slope of the labor productivity trend associated with the change from public to private ownership.

$D_3 \text{Lag PC}$ captures the change in the slope of the profitability trend associated with the change from private to public ownership.

$D_4 \text{Lag PC}$ captures the change in the slope of the profitability trend associated with the change from public to private ownership.

The results showed that D_4 was positive and D_3 was negative. The positive sign of D_4 suggests that the change to private ownership had the effect of raising the intercept, while the negative sign of D_3 suggests that the change from public ownership had the opposite effect on the intercept.

However, there is another body of literature that draws quite different conclusions:

Caves and Christensen (1980) conducted a study on two railroad companies operating in a relatively deregulated environment. The model used was:

$$P = \partial_0 + \partial_1 D + \partial_2 X + e$$

P = a measure of performance

D = the ownership variable

X = a vector of relevant characteristics.

The focus of the work was essentially to estimate the size and sign of the coefficient ∂_1 . They concluded that: "contrary to what is predicted in the property rights literature, we find no evidence of inferior efficiency performance by the government owned railroad...public ownership is not inherently less efficient than private ownership". These differences in unit cost were found to be caused by the lack of competition in public firms and not by ownership itself

This may be evidenced by the case of NCB (National Commercial Bank) in Jamaica. One year after privatization, the bank's competitive position remained the same, no major changes in management had occurred, staff reductions were not found to be necessary, and no financial restructuring that would affect earnings had taken place. Though its profits had increased substantially, the same was true for most of NCB's competitors (Ramamurti, 1995).

In a moderate way, Aharoni (1986) says "the empirical evidence ... lends only limited support to the hypothesis that SOEs are less efficient than private firms. The financial results of SOEs certainly show a dismal of losses. However, these losses may be a result of social and political demands on the enterprises. In terms of efficiency, these enterprises' performance is much less bleak. As efficient users of resources, they may have done as well as private firms producing the same product in the same country".

Samanta's study(1981) revealed two important policy guidelines for parastatal performance. One, that firms with private participation were found to be more profitable and two, that social objectives can be successfully separated from commercial objectives for the government to outright subsidize operations on account of social objectives .

According to Kikeri et All. (1994), a study comparing the performance of fifty-three public and twenty-four private Tunisian enterprises (in similar sectors) found that the productive efficiency of public enterprises was not significantly different from that of private firms.

On the same matter, Millward (1988) said to have found "no evidence of a statistically satisfactory kind to suggest that public enterprises in LDCs have a lower level of technical efficiency than private firms operating at the same scale of operations. [But] on a less formal level the tendency... seems to be pointing in that direction".

In South Korea for instance, out of 15 firms privatized in 1980s, six firms showed an increase in efficiency, two declined in efficiency after privatization. The effect on the other 7 firms' efficiency was not significant. Out of 5 companies privatized in 1980s, productivity increased only in two, while it remained unchanged in the others (Van der Hoeven and Sziraczki, 1997).

Though this difference of opinion among economists might look confusing, we believe that a careful analysis and interpretation of each case can help get a way through. In addition, the results of a privatization program very much depends on how efficient the environment in which the privatized firm will work as well as on how efficiently the individual firm can operate.

Furthermore, the way the comparison is made may also look questionable. If the enterprises are to be compared in terms of efficiency, they should be allowed to operate under the same market structure. Estimating the cost efficiency for a sample of 30 public and 123 private fossil-fueled electricity generating monopolists, Atkinson and Halvorsen (1986) concluded that public and private enterprises did not significantly differ in costs, but that both had higher costs than necessary.

On the other hand we should remember that private and public enterprises do not pursue the same objectives and constraints. While private enterprises are profit-maximizing concerns, the public enterprises have both social and commercial objectives and have to do what the government wants and is able to finance. Thus, the public enterprise may be required to improve welfare by not exploiting its monopoly power or simply it may be required to hire a large number of redundant workers to promote the interests of politicians. Some times, the public enterprises are forced to operate with insufficient autonomy for example which cannot pay enough to attract skilled professionals, or cannot fire unskilled workers, must use the marginal cost pricing system. etc.

Though past studies largely attributed superior efficiency in private over public firms to market structure rather than to ownership. more recent evidence, which compares SOE performance

before and after privatization, shows considerable economic benefits resulting from properly structured privatization, even when the privatized firm was a monopoly.

Thus, a recent study conducted on behalf of the World Bank by Galal et al. (1994) used a basic divestiture equation that involved calculating the difference between the social value of the enterprise under private operation (i.e. post divestiture) and its social value under continued government operation. They considered that the social value of an enterprise is the sum of the welfare levels of each of the groups affected by divestiture i.e. consumers, the government, any other existing shareholders, the buyers, the employees, the competitors and the public at large. The net welfare effect of divestiture was then calculated by taking the difference between the two social values of the enterprise, which is the sum of the net changes in the welfare levels of the individual groups. Their basic equation was as follows: $\Delta W = \Delta S + \Delta \pi + \Delta L + \Delta C$ where:

ΔW = Change in welfare

ΔS = Effect on consumer surplus

$\Delta \pi$ = Effect on enterprise profits (which include effects on the buyers, the government and any other shareholders).

ΔL = Effects on providers of inputs (which include credits, permits, intermediate goods, etc.).

ΔC = Effect on competitors.

The study found that privatization significantly improved domestic and international welfare in eleven of twelve divestitures analyzed, where nine of the twelve were noncompetitive. Productivity rose in nine cases and stayed the same in the other three. In most cases, relaxation of

the investment constraint and diversification into previously forbidden products and markets resulted in massive expansion.

In Bangladesh, privatized textile companies were more profitable than public textile mills. This was partly a result of debt write-off, but greater attention to cost containment and more aggressive marketing also played an important role (Lorch, 1988).

In Niger, a near-dead textile company was revived by privatization. It now operates profitably at close to full capacity with a larger work force, exports much of its production and has won a large domestic market share against imports (Kikeri et al., 2002). In Swaziland a development finance corporation, which had been closed before sale, became profitable in its second year of private ownership; a privatized agro-industrial SOE in Mozambique diversified its products, began servicing its debts, and increased production five fold (Ibid.)

b) A reduction in the public sector budget deficit

Hardwick (1994) argues that the sale of public assets raises revenue for the government in the year of the sale thus contributing to that year's budget deficit reduction. Furthermore, the sale of unprofitable public enterprises that require the government intervention to finance their investment projects will also reduce the government spending in the future.

In many cases, privatization has reduced the overall financial burden of SOEs and has at the same time increased government income, because taxes paid by privatized firms have sometimes exceeded those taxes or dividends previously paid by SOEs. In Mexico, government transfers and

subsidies to SOEs declined by 50% between 1982 and 1988. Privatization played an important role for this to happen. (Kikeri et al., 2002). Elsewhere, Malaysia sold a sports lottery in 1985. By 1989, revenues from levies on the privatized lottery were three times greater (in real terms) than revenue from the former SOE (Ibid.).

However, some economists think that privatization is not a pre-requisite for the government to be able to raise revenue. Hemming and Mansoor (1988), in a study conducted on behalf of the IMF concluded that the fiscal advantages are the same over the long run, under private or public ownership.

In addition, some PEs are profitable and as such, they contribute to the government revenues. The privatization of such companies will obviously lead to an increase in the budget deficit of the public sector in the future (Hardwick, 1994).

Studying the effects of privatization on government revenues and wealth in Chile, Hachette and Lüders (1993) drew mixed conclusions. Their model distinguished between the ~~short~~ and the long term. The "short term" refers to the year of the transfer of the public firm equity to the private sector, while the "long term" refers to an indefinite time frame. According to them, when there is a transfer of the public sector firm to the private sector, the public sector receives:

The value of the stock at the time of divestiture **Plus** A flow of expected taxes on the actual income generated by the divested firm **Minus** The expected forgone gross earnings that would have accrued had the firm remained public.

Their short-term model was specified as follows:

$$R_0 = \partial_0 K^g P^p_0 - \partial_0 r^g P^g K^g$$

Where R_0 represents the proceeds obtained from the share ∂_0 of the public capital sold to the private sector in year zero, net of forgone income during that same year as a consequence of the divested portion. P_0 is the price paid by the private sector. $r^g P^g K^g$ is the return of the firm divested if it had remained in the public sector. $P^g K^g$

is the book value of public firm shares in the public sector's hands.

They found that in the short run $\partial_0 K P_0 > \partial_0 r P K$. Thus, the government revenues were significantly increased in the short run. However, the government lost tax revenues and dividends on the divested shares. This is captured by their long run model specified as:

$$R_0 = \partial_0 K^g P^g_0 + \sum_{i=1}^{\infty} \frac{t_i r^p_i \partial_0 P^p_0 K^g}{(1+r^{dg})^i} - \sum_{i=1}^{\infty} \frac{r^g_i \partial_0 P^g_0 K^g}{(1+r^{dg})^i}$$

In the equation, the first term of the right-hand side represents the proceeds from the transfer to the private sector; the second, the present value of taxes paid by that sector on benefits obtained from privatized enterprises; and the third, the present value of the forgone income.

The results obtained from a sample of 10 firms out of 27 privatized during the period from 1985-1989 showed that the net fiscal impact of privatization was negative until 1988 and positive only in 1989.

c) Less bureaucratic interference

Hardwick (1994) explains that privatization prevents the governments from using the public enterprises to influence the level of demand in the economy by bringing forward or postponing investment programs, or by interfering with their pricing policies. These and other government practices of using the PEs only to achieve political objectives lead to less efficient resource allocation. In SOEs, the managers usually enjoy all kind of security especially as regards the ultimate financial responsibility. However, this also reduces their thrive to innovation and their companies lag behind as technology and innovation are concerned.

Privatization brings autonomy and accountability in management, leading to more efficient resource utilization. The managers of privatized firms have market insecurity in their minds and they know that the security of their jobs very much depends on their performance. Thus they behave responsibly and become as innovative as they can.

II.2.2. The social costs of Privatization

Privatization is also accompanied with social costs.

a) Threat to the 'public interest'

As we know, PEs are both socially and commercially oriented. According to Hardwick (1994), making them directly accountable to private shareholders may lead to less regard to their "public interest" responsibility. This may be true because for instance as a profit maximizing concern, an airline company will be reluctant to serve the lines where there are few passengers. Or a Telecommunication company will not be enthusiastic in investing in rural telephone network

because they know the demand is low in such an area. This may lead to unbalanced regional development.

However, rejecting these critics, Randall (1993) says that privatization does diminish neither the concept of community for society nor the sense of public purpose of a program. In his opinion, pursuing rational self-interest is not synonymous with greed. According to him, "It is precisely those most obvious yet subtle forms of self-interest that often advance the greatest civic virtues".

b) Creation of private monopolies

The opponents to privatization see in it a replacement of public monopolies with private monopolies. The argument here is that industry such as gas, electricity and telecommunications are close to being natural monopolies. Thus, it is argued that such industries should remain under some government control even after their privatization. In line with this critique, the British government maintains the control of prices and business operations of British Telecom through the office of telecommunications, which must limit any potential abuse of the market power. Furthermore similar regulatory agencies have been put in place to monitor the operations of the gas, water and electricity industries (Hardwick, 1994.).

c) Valuation Problems

In most developing countries, Rwanda included, there is a serious lack of sufficiently developed capital market. This constraint leads to difficulties in determining the appropriate issue price for the shares. very often, this results in over- or under-subscription.

Commenting on this issue, Seiji (1990) says that: “ the administrative tasks of valuing and selling an enterprise are made more complex by a general lack of capital markets, investment bankers, and valuation experts”. According to him, the small number of competitive bidders and a failure to price the assets properly can lead to accusations of corruption and favoritism. This is the case in many African countries.

In addition, potential buyers may not have enough cash to buy the assets on offer. They may not be able to borrow the required funds because of the underdeveloped nature of the local capital market (Ibid.).

However, if there is commitment to privatization, these problems can be overcome by choosing an appropriate method of selling. For example, if there are no channels for share distribution and, if the investing public is small in size, private sales to local and foreign investors should be used instead of the traditional public offering of shares (Vuylsteke, 1988). Furthermore, experts from other countries can be hired to help overcome the difficulties encountered in valuation and flotation of shares.

2.3. PRIVATIZATION AND EMPLOYMENT

The opinions about the impact of privatization on employment differ. Some argue that privatization will increase the capacity of the economy to create employment by generating more resources for investment and growth (Vuylsteke, 1988).

Others disagree, saying that though private industry has demonstrated a higher capacity for generating productive employment through a more efficient use of both capital and labor, "this does not mean that privatizing existing PEs will generate more employment in the long run" (Edgren, 1990).

Privatization is generally accompanied with increased foreign ownership. According to Seiji (1990), foreign ownership or capitalization is of concern because "many studies show a correlation between foreign ownership and certain modes of production and levels of wages and working conditions". This is true because for example investors from labor-short countries tend to opt for capital-intensive methods of production, thereby reducing the demand for labor, which leads to low wages.

In many cases, privatization leads to lay-offs. For instance, Vuylsteke (1988) tells us that the privatization of the Japanese National Railways involved the gradual laying-off of 92,000 employees (almost 1/3 of the work force). In Kenya, the privatization program started in 1991 and was planned to be completed by 1997. The Kenyan Economic Survey (1995) says: "After declining by 7.2% in 1993, employment in the parastatals declined slightly by 0.7% to 106,900 persons in 1994. Also, employment in those institutions with a majority control by the public

sector declined by 0.2% to 48,800 persons after declining by 3.0% in the previous year. These developments are ascribed to privatization and restructuring programs being undertaken by the government".

However, the magnitude of the employment effect of privatization is determined by the relative share of public enterprises employment in total employment, the number of lay-offs expected just before or after privatization, and the potential of the economy to generate employment for those who have been laid-off, both immediately and in the longer run. Many of these factors depend on general economic and social policies rather than on the privatization process per se (Van der Hoeven and Sziraczki, 1997). In other words, the long-term effects of privatization on employment depend on whether the enabling environment exists in which they can operate efficiently and, even if it does exist, how efficiently individual firms actually operate (Ibid.).

Thus, if we compare the job losses in manufacturing in 1979-1981 and employment reduction in still-nationalized steel and coal enterprises, the privatization in the U.K was not accompanied with heavy job losses. The same applies for France's sales of SOEs (Vuylsteke, 1988).

In fact, privatization may enhance employment especially if the SOE to be privatized is in a growing industry. As a way of example, Jaguar in the U.K created 2000 additional jobs after its privatization (Ibid.).

On the other hand, even in the case of retained SOEs, the concern for efficiency in many countries does no longer support the chronic overstaffing or guaranteed employment.

However, according to Hoeven and Sziraczki (1997), the fear of privatization among workers is justified especially in Central and Eastern Europe as well as in developing countries, with far-reaching privatization programs. There, workers face a great risk of being marginalized, either through worsening employment conditions or through being made redundant and having to accept more vulnerable employment conditions in other enterprises or no job at all, particularly in the immediate future.

Thus the worries of workers cannot be neglected if we are to have a successful privatization program. A symposium jointly organized by the ILO, UNDP and ASEAN in 1987 identified several options open to governments to avoid a privatization program that harms the interests of workers. These include the following:

- To encourage employees participation in ownership.
- To establish an ad-hoc privatization arbitration board where the peculiar employer-employee difficulties of transitional companies may be brought for final decision- making.
- To encourage workers' associations (if unions are not allowed) to ensure workers protection and bargaining leverage in the event of privatization.
- To provide formal transitional arrangements for employees in a buy-out by private parties, including payments of benefits, rights to rehire, etc.
- To provide the government initiated training or retraining activities to allow employees to assume new positions in the bigger labor market (ILO/UNDP/ASEAN, 1987).

Thus, the employee concern should be addressed at the earliest time of initiating and implementing a privatization program for it to be successful. Sometimes the government should be ready to accept a reduced price for its assets if the purchaser undertakes to handle the

employees' problems in an acceptable manner. As long as this solves certain critical problems, the forgone proceeds may be seen as sound investment by the government (Vuylsteke, 1988).

2.4. PRIVATIZATION AND ITS DISTRIBUTIONAL EFFECTS.

The welfare effects of privatization can only be evaluated if the distribution of property rights and privatization revenues is also taken into account. According to Brucker (1977), the goal of allocative efficiency is reached in the privatization of the SOEs only if the property rights are assigned to those individuals and institutions that have the most productive use for them. However, if economic competence is a scarce factor and financial endowments are unequally distributed, an efficient privatization will only result in an enforcement and reproduction of existing inequalities.

In the same line of ideas, Ramamurti (1995) argues that, when domestic savings rates are low, as it is in the case of LCD's, privatization will entail the transfer of assets from one privileged group (The government) to an other (either local big business interests or foreign investors). And the Overseas Development Institute to add, "if ownership remains in national hands, it will pass to an already wealthy elite, thus tending to perpetuate inequalities" (Commander and Killick, 1986).

The most important reason for the establishment of SOEs was to achieve a fair and equitable distribution of income and wealth through the elimination of poverty and unemployment. Both direct measures such as price controls, land reforms, and income transfers; and indirect measures such as taxes and subsidies were utilized. This was necessary to eliminate the problems of unbalanced regional and racial development that many developing countries inherited from the colonization.

Thus, now that the privatization of those SOEs is thought of as the pre-requisite for economic development, it is very interesting to investigate how this policy cares about the fair and equitable distribution of income and wealth.

Commenting on the merits of the market economy supposed to go with privatization, Kornai (1991) says: "although the market and capitalist property have many useful qualities, above all the stimulation to efficient economic activity, fairness and equality are not among their virtues. They reward not only good work but also good fortune, and they penalize not just bad work but ill fortune. While they are useful to society as a whole by encouraging exploitation of good fortune and resistance to ill fortune, they are not 'just'. I think it is ethically paradoxical to mix slogans of fairness and equality into a program of capitalist privatization".

Thus according to him, there exist a trade-off between efficient allocation and a just distribution of property rights.

Aware of this possible negative distributional impact, some privatizing governments such as the Chilean adopted some measures such as: to utilize the revenue of SOEs sales to finance a budget that included an important component of social expenditures on the one hand, and to spread ownership by allowing workers and taxpayers to buy shares in SOEs at subsidized prices (Hachette and Luders, 1993). In the U.K, employees (and occasionally customers) received free or matching shares as well as subsidized credits to pay for those shares (Ramamurti, 1995). In Sri

Lanka, a large part of the proceeds the government received from privatization of Noorani Tiles went toward severance pay for laid off workers (Nankani, 1988).

As proponents of privatization, Galal and Shirley (1994) exhibit a rather different opinion expressed by Lawrence H. Summers in his article "A changing course Toward Privatization" as follows: "My prediction is that the case against privatization on income distribution grounds will turn out to be very weak. If one's views on distribution are driven by concern for the poor, it will be a rare privatization in which the poor are found to be significant losers. There will probably still be some privatizations that will make some people very rich, and the ethical defense of that wealth will be difficult to achieve. But if, as I believe, issues of income distribution are best approached through concern for the poor rather than envy of the wealthy, these results will not prove to be such a serious problem."

According to their studies, quite apart from any benefits from improved service, consumers for the most part gained or remained unaffected by privatization. For instance in Chile, consumers were found unaffected by the divestiture of ENERSIS. In the UK, telecommunications consumers were made better off.

In summary, our literature shows that in many countries, privatization programs implemented thus far have been economically successive and have led to improved welfare. Four recent empirical studies together examining over 200 companies privatized by over 40 countries, clearly document significant improvements in the operating performance and financial strength of newly

privatized firms. The key results from one of the studies, written by Narjess Boubakri and Jean-Claude Cosset and quoted by Megginson (1998) are presented in the table below:

Table 2 : Performance of Newly Privatized Companies					
Variable measures	Number of Observations	Mean Value before Privatization	Mean Value After Privatization	Mean Change due to Privatization	% of Firms with Performance Improvement
PROFITABILITY Return on sales	78	4.9% ^c	11.0%	6.05% ^a	62.8%
EFFICIENCY Real Sales per Employee	56	0.922	1.17	24.79 ^a	80.4%
INVESTMENT Capital Expend. ÷ Sales	48	10.52%	23.75	13.22% ^b	62.5%
OUTPUT Real Sales (Adjusted By CPI)	78	0.969	1.22	25.30 ^a	75.6%
TOTAL EMPLOYMENT	57	10,672	10,811	139	57.8%
LEVERAGE Debt ÷ Total Assets	65	54.95%	49.86%	-2.48% ^b	63.1%
DIVIDENDS Dividends ÷ Sales	67	2.84%	5.28%	-2.44% ^a	76.1%

Source: William L. Megginson, *The Impact of Privatization*, Economic Reform Today: The Lessons of Privatization. Number 1, 1998

The above table summarizes the results of a comparison of the three-year average operating and financial performance of a large sample of newly privatized firms with their average performance during their last three years as SOEs. Efficiency and output measures are index values, where the value during the year of privatization is defined as 100.

Employment is in absolute numbers.

A indicate significance at 1% level; b Indicates significance at the 5% level; and c Indicates significance at the 10% level.

2.5 STUDY HYPOTHESES

The general hypothesis of this study is that the success of a privatization program is judged by its positive effects on profitability of the company and on the welfare of the citizens. This is because we consider that no public policy is directed to diswelfare.

The study therefore will specifically test the following hypotheses:

1. Privatization leads to higher profitability and productivity
2. Privatization leads to better working conditions and improved welfare of the inputs suppliers.

CHAPTER III: METHODOLOGY

3.1. Introduction

In many studies, the success of privatization programs was made by comparing the performance of the newly privatized firms with that of the ones still under government control. However, the shortcomings of this method lie in the fact that the observed changes may actually be attributable to other factors than the transfer of ownership itself. In order to isolate the impact of privatization from that of other factors on the profitability of the firm and the welfare of workers and other local input suppliers, our approach to this study consists of comparing the relative performance of the privatized firm before and after its privatization.

For the purpose of this study, levels of profitability, levels of productivity as well as the conditions of employment were used to measure the impact of privatization on firm's performance and local input suppliers' living standards. This chapter is designed to show how these measurements were done. After discussing the population and our sampling techniques, this chapter discusses our data collection procedures and finally the data analysis techniques.

3.2. Population and Sampling Technique

First of all, the research is a case study. Some of the main reasons why the researcher chose SOPYRWA among all the 23 companies that have so far been privatized are:

- SOPYRWA is one of the companies that have been privatized at the beginning of the Rwandan privatization program. Thus it is possible to judge its performance after its privatization.

- OPYRWA is a company that sources its main inputs locally thus, its operations directly affect the welfare of the population. The pyrethrum is planted by farmers, labor is 100% local.
- OPYRWA was one of the oldest public enterprises and among those parastatal companies that operated under loss for a long time before privatization. Thus it is a good case if one is to investigate whether privatization can lead to better performance.

According to SOPYRWA officials, currently SOPYRWA has 85 permanently employed workers. Among them, 75 are the former employees of OPYRWA. A number of 16,560 pyrethrum planters who are guided by six technician agronomists are involved in the activities of SOPYRWA grouped in a union called ISHYABIKI. The pyrethrum plantations cover two provinces in the North of the country, namely Gisenyi with four zones and Ruhengeri with two zones. All these people constitute our study population.

Given that the area covering pyrethrum plantations is already divided into six zones, the study considered those zones as clusters. According to Singleton et al (1988), “the clusters generally consist of natural groupings, such as college dormitories, or geographic units such as counties, census, trucks and blocks. Cluster sampling draws cases only from those clusters selected from the sample.”

As far as the pyrethrum planters are concerned, given the constraints in terms of money, personnel and time, there was need to select two zones out of the six. Since there was no equal number of zones in each province the criterion of size was adopted to select the two zones, i.e. one from each

province. By adopting the simple random sampling technique the above zones were selected manually from the list of zones in the respective provinces.

The third stage of sampling was done within the two zones that involved selecting respondent planters using simple random sampling technique. According to Singleton et al (1988), "At the local level, many organizations (unions, schools, churches, professional associations) have membership directories which constitute excellent sampling frames when appropriate." A list of the planters in each of the selected zones was obtained from SOPYRWA headquarters in Ruhengeri. This list helped the researcher to assign the numbers to each household planter. Considering household planters from every zone separately, papers were put in a box, mixed and each number was given a chance to be selected as part of the sample. The researcher then selected 120 planters i.e. 80 from Gisenyi and 40 from Ruhengeri.

Using the same procedure, a sample of 20 employees who are also former OPYRWA employees was selected.

3.3. Data Collection Procedure

To achieve the objectives of our study, data on company's profitability and productivity on the one hand and employment conditions together with the conditions of pyrethrum planters on the other were collected. The data collected covered the periods 1975-1993 for the pre-privatization period and 2001-2003 for the post-privatization period. This is because the period between 1994 and 1998 was a period of intensive civil war so that we believe that we cannot adequately conclude from the data on the Rwandan economic performance during the period 1994-1998. The period 1999-2000

was not considered also because we believe that OPYRWA was still recovering from the war damages and was preparing for privatization so that some activities may have been hampered. The period 2001-2003 is interesting because SOPYRWA started its activities in December 2000.

Thus, both primary and secondary data were used. Primary data were collected using a questionnaire with both structured and unstructured questions. It was administered to the sample randomly selected from workers and pyrethrum planters. Secondary data was collected from the annual reports of both SOPYRWA and OPYRWA, the annual reports of The Ministry of Finance and Economic Planning (MINECOFIN), the international sources such as the IMF and The World Bank reports, as well as any other available source. Data was collected on profits, wages, prices of fresh or dry pyrethrum flowers, output levels in terms of fresh or dry flowers and in terms of crude extract, management style, social benefits given to workers and pyrethrum planters and any other factors that influence profitability and welfare.

3.4. Data Analysis Techniques

In order to isolate the impact of privatization on company's profitability and productivity, data on the above mentioned performance indicators for the period 1975-1993 was gathered from annual reports and other useful documents. By comparing this data with the performance for the years 2001-2003 which are the period after privatization, the researcher was able to conclude on the impact of privatization on the company's performance. The graphs were used to illustrate those trends.

On the other hand, as the impact of privatization on the working conditions and living standards is concerned, the data collected on workers' and pyrethrum planters' attitudes towards their working conditions and the management style before and after privatization was coded and then summarized using descriptive statistics. According to Mugenda and Mugenda (1999), the purpose of this kind of statistics is to help the researcher meaningfully describe a distribution of scores or measurement using a few indices or statistics. Thus, frequencies and percentage were used. This method was also used by Galal et al (1994) in their study: "The welfare Consequences of Selling Public Enterprises", done on behalf of the World Bank. Thus they analyzed the actual scenario in which they looked at the actual enterprise performance before and after privatization to answer their primary question of "what happened?"

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

After secondary data collection, this chapter is aimed at presenting, analyzing and interpreting them. The chapter starts by presenting data about the company's performance by comparing the pre- and the post- privatization periods. Tables and then graphs are used to present the data and an analysis and interpretation follow for each indicator.

In addition, primary data that was obtained from the field by administering a questionnaire to respondents are presented analyzed using percentage tables and thereafter interpreted.

All this is aimed at testing our two hypotheses namely:

H1: Privatization leads to higher profitability and productivity

H2: Privatization leads to better working conditions and improved welfare of the inputs suppliers.

4.2 Technical Data

4.2.1. Size of land used

Though Rwanda was classified 3rd world producer until 1990 after Kenya and Tanzania, with between 5 and 10% of the world output (Sugavaram, 1995), OPYRWA never attained even half of its full capacity utilization.

To begin with, the production was done by two groups of peasants (in all 8,000 in 1994):

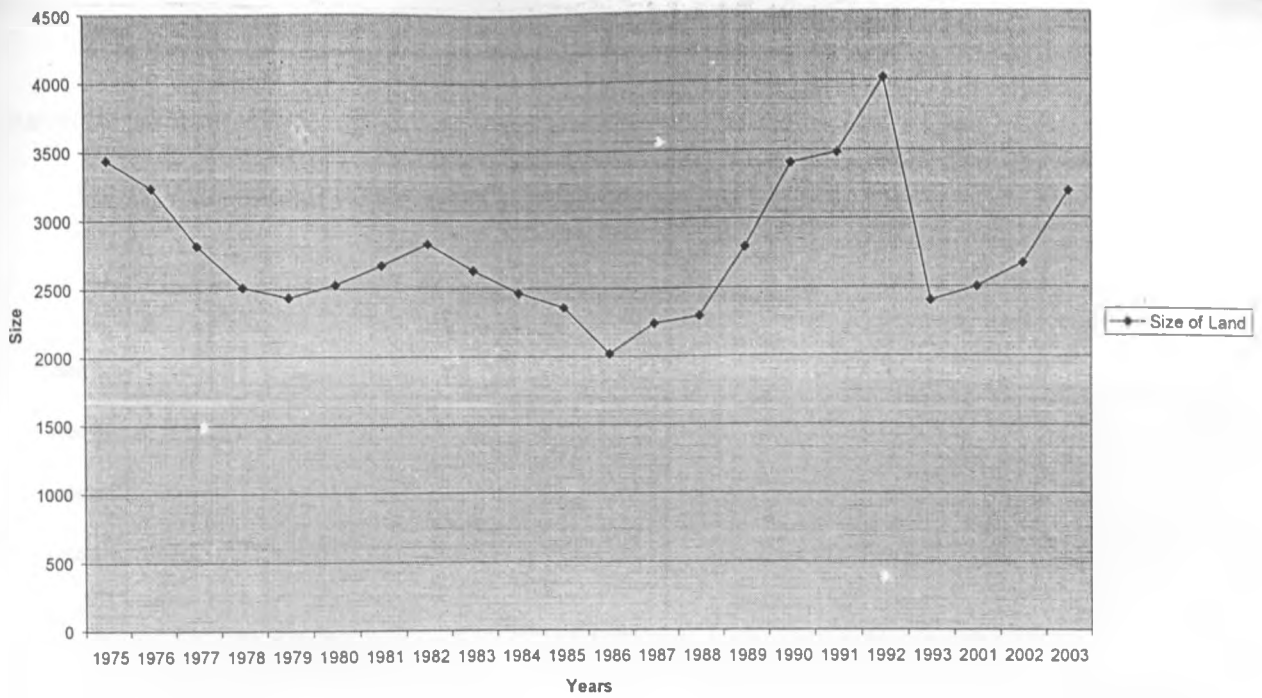
-Independent peasants growing pyrethrum on the land that was given by the state to OPYRWA.

In 1990 they exploited 760ha.

-The second group (the largest) is composed of peasants associated in "paysannats" (i.e. 1.80ha given by the state to each family, with a contractual agreement of growing pyrethrum on 72 acres i.e.40%of the land). However, this contract was not fully enforced both by OPYRWA and SOPYRWA and only an average of 42 acres i.e. 60% of the contractual size of land is still used for pyrethrum. This is due to many problems such as low prices given to the growers coupled with late payments, stiff competition by foodstuffs such as potatoes which is said to be 4 times more profitable (Annual Report, 1986). This led to the continued decrease of to stagnation at lower levels of the size of the land used for pyrethrum, as shown by the table below:

Table 3:

SIZE OF THE LAND USED FOR PYRETHRUM										
1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
3437ha	3234ha	2816ha	2512ha	2435ha	2529ha	2669ha	2828ha	2631ha	2468ha	2360ha
1986	1987	1988	1989	1990	1991	1992	1993	2001	2002	2003
2,019ha	2244ha	2295ha	2797ha	3405ha	3478ha	4018ha	2398ha	2500ha	2665ha	3190ha



Source: Sugavaram, 1995

The above graph shows that by comparing OPYRWA and SOPYRWA in terms of land used for pyrethrum, SOPYRWA's performance is still below the one of OPYRWA.

4.2.2 Total Production

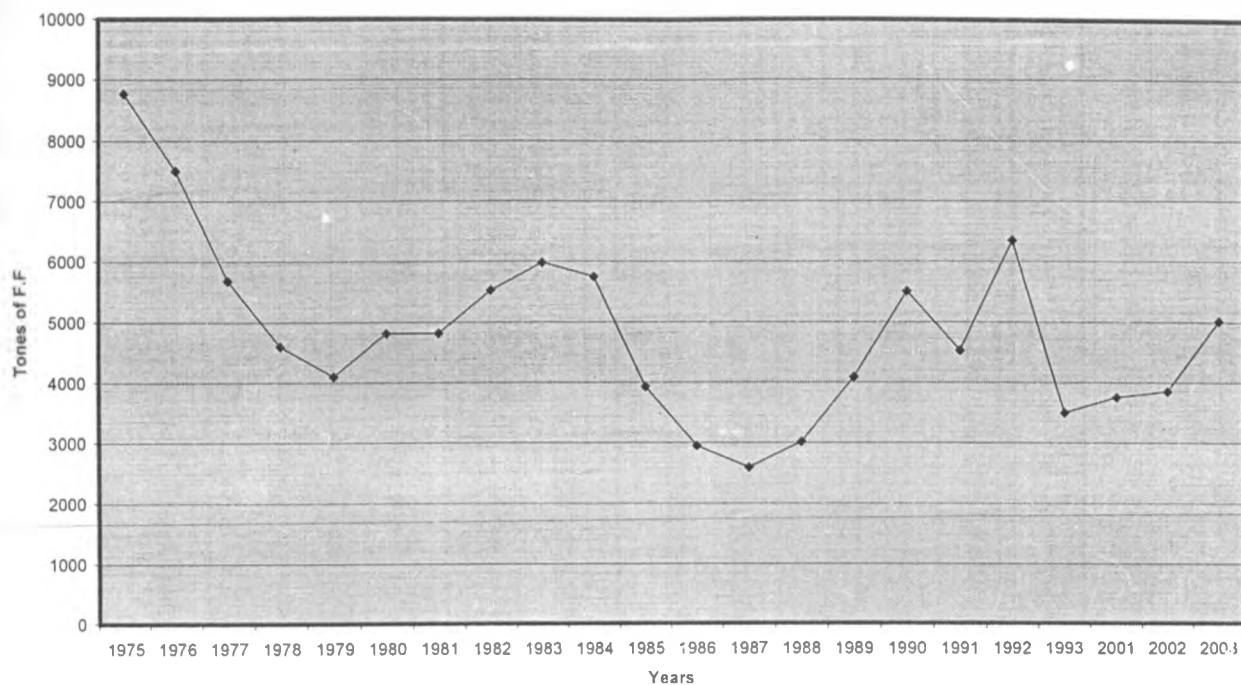
Total production also continues to stagnate at lower levels as shown by the table and the graph below:

TOTAL PRODUCTION OF FRESH FLOWERS IN TONES										
1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
8765	7500	5680	4598	4098	4808	4814	5526	5979	5745	3928
1986	1987	1988	1989	1990	1991	1992	1993	2001	2002	2003
2954	2593	3012	4086	5503	4527	6350	3500	3750	3850	5010

Source: Sugavaram, 1995

OPYRWA, Annual Reports, 1991-2001

Total Production of Fresh Flowers



The table and the graph above show that SOPYRWA still has a lot to do to reach the output levels that were attained in the 70's and 80's by OPYRWA. The privatization has not yet led to significant move to the achievement of that target.

4.2.3. Productivity

At the same time, the productivity as being the amount of Kilogrammes of fresh flowers per hectare of land continued to decrease due to many factors such as the soil degradation combined with the lack of care for the crop by the growers who diverted their efforts towards other more profitable crops, lack of new and more adapted plants, lack of fertilizers among others. According

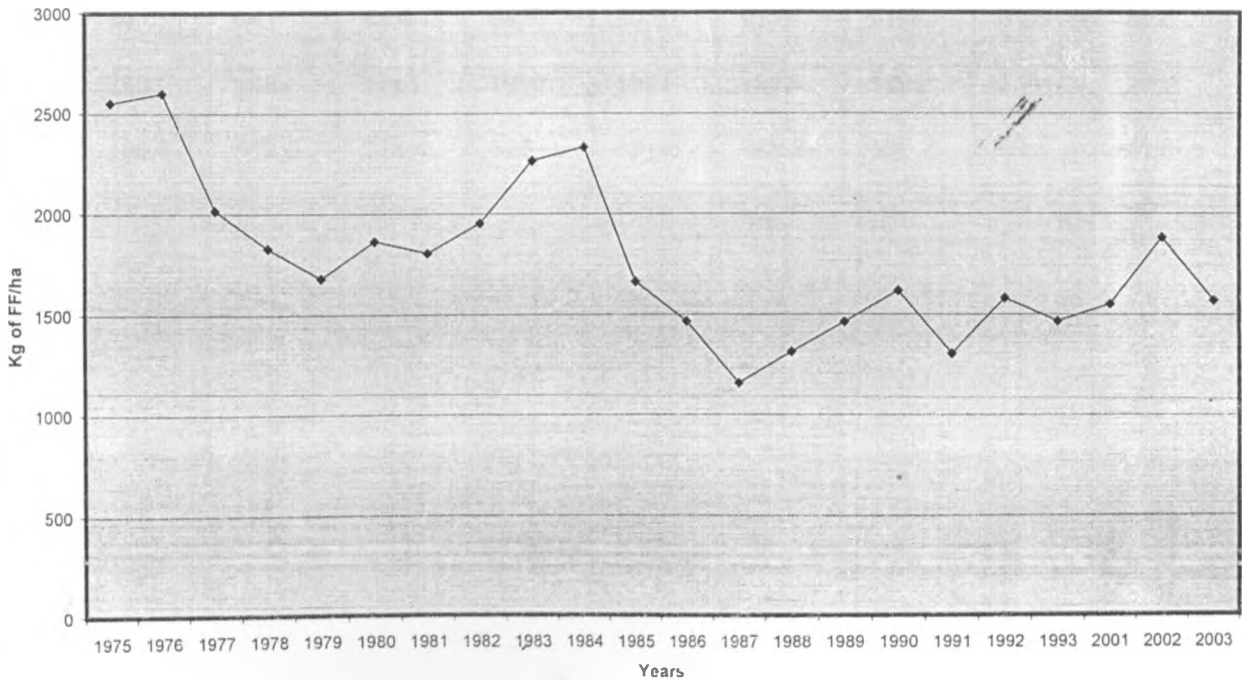
to Sugavaram (1995), the productivity should be at least between 1,750 and 2,500 kg of fresh flowers per hectare. However, the experiences done in 1991 showed that productivity could attain even 7,000kg of fresh flowers per hectare (Le Mouel 1991). The table below shows the evolution of this productivity:

PRODUCTIVITY (Kg/ha)										
1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
2550	2600	2017	1830	1680	1864	1804	1954	2263	2330	1664
1986	1987	1988	1989	1990	1991	1992	1993	2001	2002	2003
1464	1155	1312	1461	1617	1302	1580	1465	1550	18880	1570

Source: Sugavaram, 1995

OPYRWA, Annual Reports, 1991-2001

Productivity



The above table and graph show that the privatization of OPYRWA has not yet triggered required results as far as output per hectare of land used is concerned.

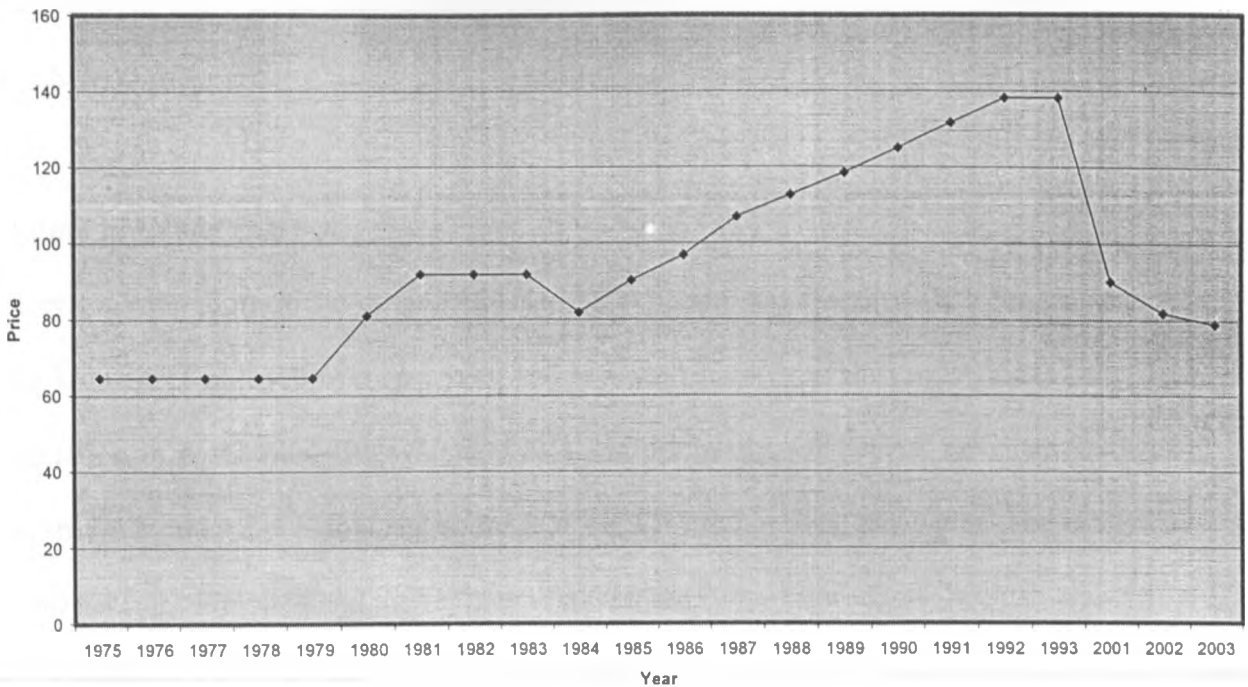
4.2.4. Purchase Price

As far as the purchase price for dry flowers is concerned, though even the one that was given by OPYRWA was not enough to trigger a desired level of motivation among pyrethrum growers, by rewarding efforts made, the situation deteriorated with SOPYRWA as shown in the table and the graph below:

Purchase Price for Dry Flowers (in US \$cents/kg)

1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
64.6	64.6	64.6	64.6	64.6	80.8	91.6	91.6	91.6	81.8	90.2
1986	1987	1988	1989	1990	1991	1992	1993	2001	2002	2003
96.8	106.8	112.6	118.4	125	131.6	138.2	138.2	90	81.8	78.9

Purchase Prices for Dry flowers in US Dollar Cents



With OPYRWA, the producer prices of the fresh flowers experienced an increase but this was not enough to motivate the growers. The situation became even worse with SOPYRWA as shown above.

This situation is deplorable given that the peasants now are selling dry flowers, an operation that requires extra efforts and care. This becomes true when we remember that the region in which pyrethrum is grown has rain continuously almost through out the year making the drying operation more demanding. By the time of OPYRWA drying was done through its own "sechoirs" whose operations were stopped by SOPYRWA.

Thus, given all these efforts and the continuously decreasing purchase price accompanied by the unstoppable inflation that the economy is experiencing as well as the deterioration of the local

currency, the welfare of pyrethrum growers is becoming worse and worse. All this makes the competition from other crops such as Irish potatoes stiffer. This can only be detrimental to the future of SOPYRWA.

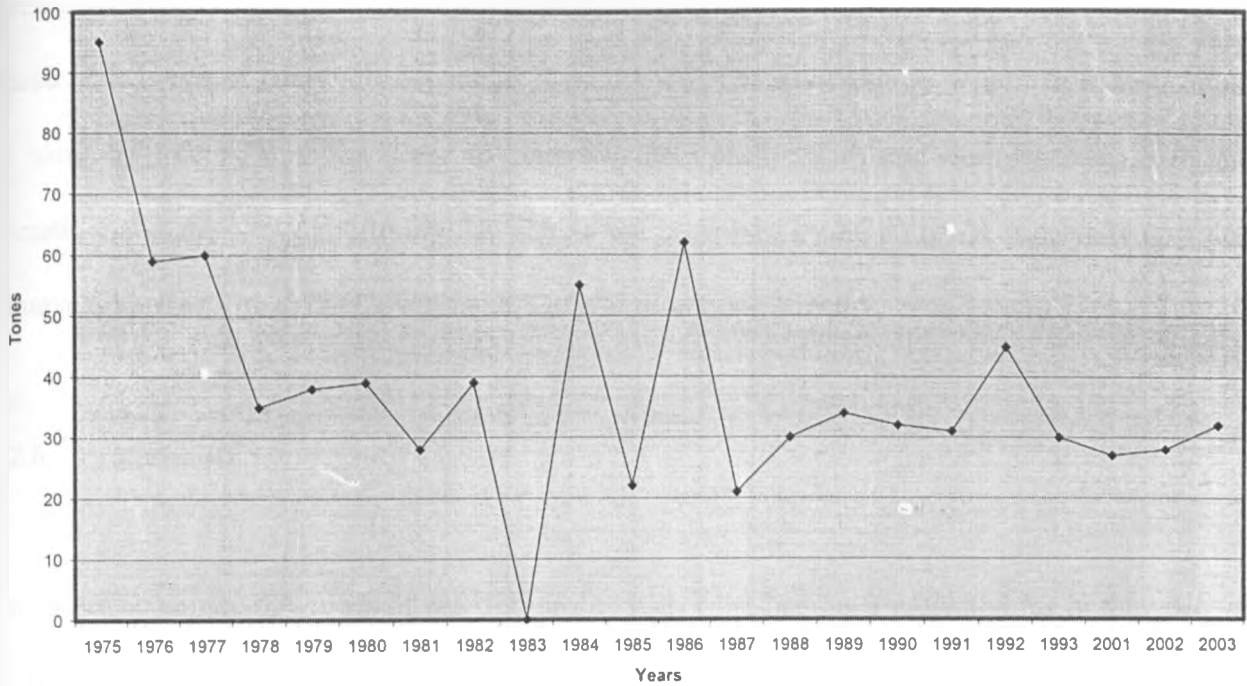
4.2.5. Output of Crude Extract

The factory for extraction of the crude extract to be exported was installed with the capacity of absorbing 3,000 tones of dry flowers per year; and produce 130 tones of the crude extract with 31% of concentration in pyrethrina (Sugavaram, 1995). Unfortunately, OPYRWA never attained this output as shown by the table below and so far SOPYRWA has not done any better. The extraction plant is still not fully exploited and the refinery is still closed.

OUTPUT OF THE CRUDE EXTRACT FROM 1975-1993 IN TONES							
1975	1976	1977	1978	1979	1980	1981	
95T	59T	60T	35T	38T	39T	28T	
1982	1983	1984	1985	1986	1987	1988	
39T	0	55T	22T	62T	21T	30T	
1989	1990	1991	1992	1993	2001	2002	2003
34T	32T	31T	45T	30T	27T	28T	32T

Source: Sugavaram, 1995 and SOPYRWA Annual Report: 2003

Production of Crude Extract



This poor performance was as a result of many factors such as unqualified personnel, insufficient input in terms of the quantity of dry flowers among others. In addition, internal inefficiencies were also experienced. For instance the 1986 annual report says that the factory consumed 36.81 liters of solvent per tone of dry flowers while the quantity of 35 liters per tone is economically recommended. However the table and the graph above show that SOPYRWA's performance is even worse than the one of OPYRWA.

In the market, the refined extract is more appreciated and sells better than the crude extract. Aware of this problem, the Rwandan government together with the UNIDO financed the construction of a refinery in Ruhengeri. The contract was given to the British company called Mitchell Cotts Chemicals LTD at a cost of USD 2,100,000. The fully installed refinery was handed over to the Rwandan Government on 17th March, 1986 with the capacity of producing 501 Kg of the refined

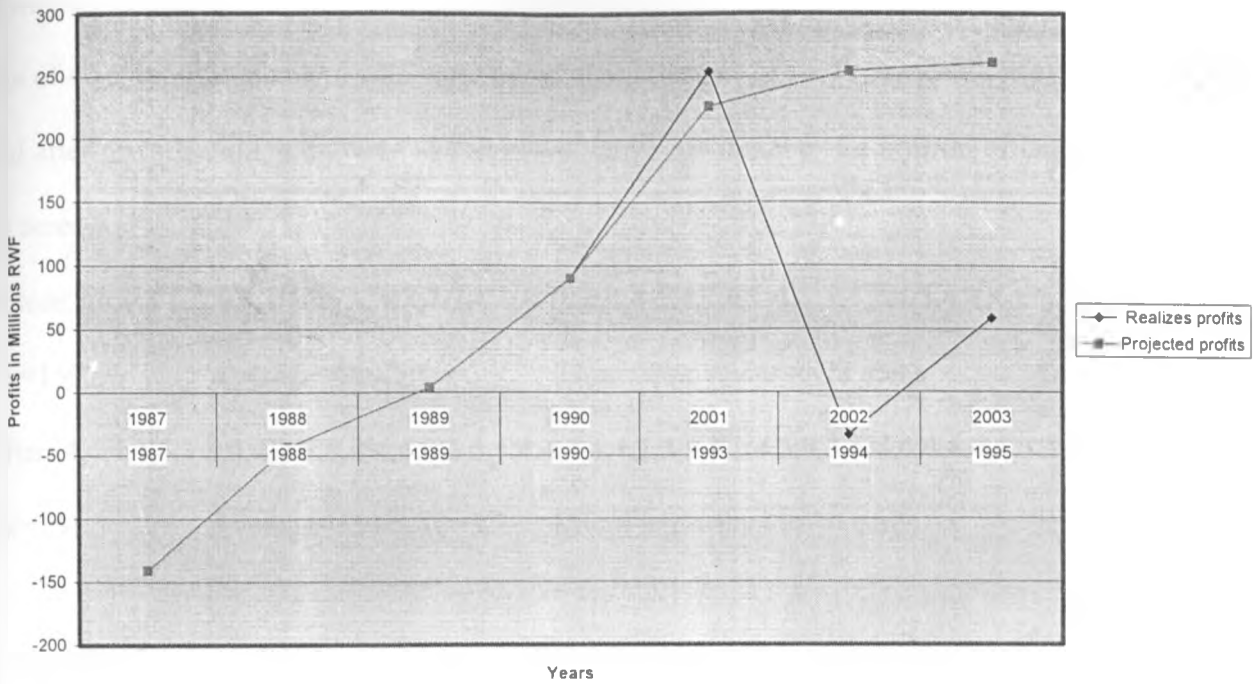
extract per day (Annual Report, 1986). Unfortunately, this refinery was never operated until today, forcing OPYRWA then, and SOPYRWA today to continue to export the crude extract at lower prices. This is one of many idle capacities that OPYRWA was not able to benefit from that should be used by SOPYRWA for them to improve their profitability and competitiveness in the international market, an opportunity that should not be missed by SOPYRWA especially now that value addition is a key in the Government's export promotion strategy.

4.2.6 Profitability

Let us now compare the levels of realized profits with what had been projected for in the years of 1993-1995.

	Years	Profits realized	Projections
1987	1987	-141	-141
1988	1988	-44	-44
1989	1989	4	4
1990	1990	90	90
1993	2001	254	226
1994	2002	-34	254
1995	2003	59	261

Comparison between Projected and actual profits



It is clear that the level of profitability realized by SOPYRWA is far from the target. One might think that in 2001 the company had huge amount of profits, but this is not true when you consider the level of activity and other factors as demonstrated above. The foreign exchange rates are deemed to have played a major role in favor of SOPYRWA. The next two years show the gap between the ideal and the actual situation.

4.3. Data on workers and Planters' perceptions

4.3.1 Size of Land

Out of 40 pyrethrum planters who were asked about the size of land they used for pyrethrum before and after privatization, data were as follows in terms of "ibikebo" i.e portion of land equivalent to 20 acres:

Before: 3,4,4,3.5,4,4,4,10,3.5,4,4,3,4,2,4,1,4,10,3,4,4.5,4,2,4,1,4,3.5,4,2,4,3,4,4,4,0.5,3,4,4,10,3.

$\sum x = 159.5$ Average = $159.5/40 = 3.9$ This is equivalent to 78 acres

After : 4,4,4,4,4,3.5,4,4,4.5,4,4,4,0.5,5,1,4,4,4,4,2,4,3,4,2,4,5,4,3.5,4,4,4,4,4,1,3.5,4,4,10,3

$\sum x = 151.5$ Average = $151.5/40 = 3.7$ This is equivalent to 74 acres

This data shows that the size of land that peasant devoted to pyrethrum was reduced after privatization from 78 acres to 74 acres. Here more efforts are needed from SOPYRWA to sensitize planters to use a bigger size of land for pyrethrum if it needs to increase the quantity of fresh flowers.

4.3.2 Management style:

4.3.2.1 Care to planters

Asked about the frequency at which they meet the authorities, and how their problems are catered for, 40% said that OPYRWA authorities were closer and paid more attention to the planters. 60% said that SOPYRWA is better.

Asked about the use of fertilizers provided by the company, the answers were as follows:

Pre privatization		Post privatization
Yes	50%	25%
No	50%	75%

This shows that before privatization, 50% of planters used fertilizers that were distributed by OPYRWA while after privatization this was stopped by SOPYRWA and only 25% of planters use natural fertilizers that they make themselves. This can be one of the sources of low levels of productivity experienced by SOPYRWA.

Asked about credits given to planters, the responses were as follows:

Only before privatization	Before and after	Only after
38%	20%	42%

This shows that SOPYRWA is doing well given its period of operations. The management should keep this up so as to have a real impact on the planters' welfare.

4.3.2.2 Care for workers

All the workers were happy that their salaries were increased generally by 25% when SOPYRWA took over. However, they unanimously complained that the increase was not sufficient given the inflation that the economy has experienced. In addition, they talked about the lack of transparency that characterized this action where some workers got an increment of more than 25% on dubious basis. In this regard, some respondents suspected the management of using this as a "divide and rule" strategy arguing that this discourages any attempt to build a workers' union.

Asked about the hours spent on work, 90% of workers said that they used to work 9 hours per day with OPYRWA but there was not much pressure. On the other hand 95% said that they currently spend 10 hours per day at work with a very big pressure and sometimes they voluntarily work on Saturdays and Sundays to finish their assignments. This seems normal for a private company but management should keep in mind that this pressure must be accompanied by significant incentives for the workers to be more motivated and more productive.

About the management style, 95% of workers said that in terms of caring for workers and their problems, the management under SOPYRWA matches the one under OPYRWA. The same kind of answer was given when asked about how frequently they meet the management. Thus, since the current management is decided to exploit the workers more profitably, it is very crucial that they make more efforts to inspire confidence and trust in workers for their maximum motivation.

In summary, OPYRWA continued to work below its full capacity. As shown above it never attained the 1975 performance again in all respects. The major problems encountered were:

- The population abandoning the pyrethrum growing in favor of other foodstuffs due to the lower prices given to growers in addition to the population pressure in the region resulting in the families generally reducing the areas reserved for pyrethrum. Though the producer prices went on increasing, this was not adjusted to other key factors such as the inflation rate, the prices of other crops, and the currency depreciation rate so that farmers, discouraged by this

low prices of Pyrethrum which could not really reward their efforts, switched to other crops.

This also led to the continuously decreasing productivity/ha.

- The animals in the Birunga National Park (bordering the pyrethrum Plantations) cause a lot of damages to the plantations, which discourages the farmers and reduces productivity.
- The soil degradation which was not accompanied by modernization of the farming methods.
- Of course we can not forget the problem of price fluctuations and unpredictability in the international market. This often led to late payments of the farmers, which also discouraged them.
- Furthermore, all these problems were exacerbated by the irresponsible behavior of the management, who never cared about the interests of the farmers and who continued to employ unqualified and non motivated personnel (Sugavaram, 1995). They always ignored these very important partners and this was only detrimental to the company's performance.

However, the data analysis above shows that SOPYRWA has not yet initiated any tangible actions to tackle these problems which if not solved, will always hamper its operations and its profitability will always be jeopardized. The earlier these problems are tackled, the better.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 CASE STUDY

After the data analysis tackled in the previous chapter, the current chapter focuses on conclusions and recommendations of our study. Recalling that the objective of this study was to evaluate the impact of privatization on company's performance in terms of profitability and outputs that result on improved living standards, the main conclusion from this case study is contrary to a wide literature, that the transfer of ownership of OPYRWA from state to private owners has not so far triggered any better performance as far as profitability, output and living standards are concerned.

Of course divestiture has reduced political and bureaucratic intervention, enhanced managerial autonomy and increased Rwandan citizens' participation in shaping the destiny of this nation since all the new shareholders are Rwandans, but the promotion of profit maximizing behavior and improved motivation through incentives it was expected to trigger are still in thoughts of managers/owners who, four years later, have not initiated any tangible and concrete actions to achieve this.

Many factors are at the origin of this behavior, but the following four are the main causes:

1. **The non-regulated monopolistic position of SOPYRWA** is a real case of transformation of a public monopoly into a private monopoly. For peasants in Gisenyi and Ruhengeri, SOPYRWA is the only company on earth that can buy pyrethrum. In addition, the land on which the peasants leave belongs to SOPYRWA that requires them to cultivate pyrethrum on at least 40% of the land. It is with this sentiment of resignation that the peasants represented by their so-called cooperative

ISHYABIKI that is also mainly sponsored by SOPYRWA, helplessly negotiate the price for dry flowers with the same SOPYRWA.

The fact that currently SOPYRWA pays US\$ 0.79 par kilo of dry flowers while in 1990, OPYRWA paid US\$ 1.25 (Winney, 1990) par same kilo of dry flowers and given the currency depreciation of more than 60% that has occurred, in addition to a very high inflation experienced by the national economy, illustrates how the living standards of pyrethrum growers are far from being improved.

This situation must stop if SOPYRWA does not want to face a massive up-rooting of pyrethrum given the pressure on land due to growing population and the high competition for land that pyrethrum faces from other crops such as Irish potatoes. An attractive price should be given to planters and this price should be annually reviewed instead of keeping it constant while the price at the international market, as well as other economic indicators that affect living conditions keep changing. Sensitization should be made for the planters to understand that this price depends on the price at the international market. However, SOPYRWA should design a method of subsidizing this price in case where the international prices would be too low. This is because the current price does not really compensate the work done by planters and their decision to abandon pyrethrum would sentence SOPYRWA to death. A large campaign aimed at increasing the areas used for pyrethrum as well as spreading better seeds and better drying methods should be undertaken as soon as possible.

2. Uncertainty in the Rwandan labor market

Though salaries were increased by almost 20% in 2001, the inflation that Rwanda has experienced has annihilated any impact of this salary increase on the workers' welfare. However given that even

the Government has embarked on a plan to downsizing the public sector by retrenching 40% of its workers, every body in the country is worried and fears an imminent loss of Job. Thus workers, without any strong vision, accept these low salaries and poor working conditions because they have got no alternative. It is a common saying by workers in Rwanda (and the same applies in SOPYRWA), that “Batubeshya ko baduhemba, tukababeshya ko tubakorera” i.e. They cheat us that they pay us and we cheat them that we work for them.

This means that labor productivity has dramatically worsened because even when a low-paid worker is physically in office, his/her mind is elsewhere, trying to figure out how he/she can earn some additional income to satisfy his/her numerous unsatisfied basic needs.

Even with this labor market uncertainty, SOPYRWA management has not laid down any strategy to capture and retain capable and qualified workers. For instance it has only one Agronomist Engineer (Bachelor's Degree) whose role is vaguely determined and whose laboratory is poorly equipped. SOPYRWA should change its policy and remember that profit can not be maximized if all the resources are not fully tapped. its payment schemes should be made more attractive to qualified skilled and non skilled labor.

Management should continue its efforts to approach the pyrethrum planters and employees in order to know their problems and solve them before it is too late, in the interest of all the parties. This is the only way motivation will be achieved which is the pre-requisite condition for the win-win situation, where the company will maximize profit while contributing to better living conditions for its local input suppliers.

In addition, the way OPYRWA was privatized without any share being given to either workers or pyrethrum growers is not of the nature to improve either their welfare or at least their motivation to produce more.

3. Lack of differentiation between ownership and Management.

Sound business management requires that management be different from ownership and that there exist agent-principal relationship between them. In SOPYRWA, the situation is that all the management positions (i.e. Director General, Production manager, Marketing manager, until recently personnel manager etc) are held by the owners. This hinders the activities of control, monitoring and evaluation that are to be undertaken by the principal (owner) on the agent's (management) performance.

Thus, we recommend that this role differentiation be undertaken as soon as possible if the company wants to improve its performance. Professionals should be recruited and given the responsibility to revive this company of course under the close control of the owners. For instance an experienced agronomist should be employed and his/her responsibilities to supervise all aspects of agronomic and drying research should be made clear. In addition, more laboratory equipment for grinding, extraction, shaking and accurate dilution of samples is essential for improved SOPYRWA's performance.

The above conclusions and recommendations have been arrived at in consideration of SOPYRWA, one out of 23 companies already privatized. The research did not consider many cases due to time

and financial constraints. In this case, the expected improvement of living standards and company's performance has so far not been realized, four years after divestiture. However, as already mentioned this study was meant to initiate a constructive debate aimed at checking widespread belief that privatization is leading to planned end results and propose some useful actions that need to be undertaken. Some people might say that it is too early to judge the impact of the Rwandan privatization programme, but we strongly believe that decision-makers need early feed backs to allow them make corrections if need be, before it is too late. We say in Kinyarwanda, "Umwana apfa mu iterura" i.e. approximately "the Newly born child dies during the first handlings".

Thus I call upon other researchers to undertake more comprehensive researches on this matter and avail their conclusions to our decision makers.

5.2 GENERAL RECOMMENDATIONS

Given the heavy burden that under performing PEs put on the Government budget, and given the aspirations of the Government of Rwanda as set out in the Vision 2020 to fully utilize national resources by involving all the Rwandans in the management and development of Rwanda, the decision taken of divesting state-owned enterprises to improve their performance is unequivocally laudable.

Enhanced domestic economic welfare being the leitmotiv of the privatisation programme, many pressing economic goals such as responding to a fiscal crisis are subsumed here, but the achievement of one target must be balanced against costs imposed elsewhere.

As mentioned by Galal et All (1994) Political consideration not being researchers specialty, but convinced that economic gains, if dramatic, will enhance political gains; in the following paragraphs we are going to suggest some actions that we believe, could contribute to the achievement of the privatisation program's ultimate goal in Rwanda and in any other country especially in the third world that wants to embark on an extensive privatisation programme:

1. A strong regulatory institution should be put in place to protect consumers / customers against the abuse of strong market power held by privatised monopolies / enterprises. In other words the regulation could prevent prices being raised above costs to monopoly levels ; sub-standard service levels being provided ; and inefficient cost performance.

Thus the regulatory institution would make sure that given costs, process is set at a level that is low enough to preclude exploitation of consumers yet high enough to permit a fair return on capital. This allocative efficiency could have a large distributional impact. At the same time, the institution will be in charge of motivating producers to keep the costs at lower levels. Failure to achieve this means exploitation of everybody because, as mentioned by Galal at all (1994), "there is a large negative welfare impact of costs stemming from x-inefficiencies".

The policy should follow the example of Britain ; where newly privatised utilities are subject to a similar regulatory framework centered on the "RPI - x formula". This formula was developed by Professor Stephen Littlechild in the regulation of British Telecom. It places a ceiling on prices charged by the utility over a period of 5 years, during which the prices of the bundle of products can be increased by an amount that is not greater than the increase in Retail Price Inflation / Index (RPI) minus x percent where x is a value determined in consideration of different impact of technological change in each sector as well as perceptions on the scope for productivity improvements (Ramanadhan, 1989). This could also motivate companies to continuously improve the technology they use.

Now that the Government of Rwanda has started the privatisation of public utilities such as Electrogaz (Water and Electricity), Rwandatel (telecommunications) among others the establishment of a regulatory institution is more than ever justified. In addition to the RPI- x formula, statutory provisions that prohibit the charging of excessive or predatory prices for individual products within the overall RPI - x ceiling should be established in each industry.

2. Competition Policy

Associated to the above, is the need for Rwanda or any other country with a plan to sell public enterprises to have an effective competition policy. This is because the Government can not pretend aiming at welfare improvement without putting in place a regulatory framework that protects consumers from abusive actions of the business community whose primary objective is profit – maximisation to be achieved through any means.

We fully subscribe to Galal's proposal of ways of unstarving competition in the market at a low cost for the economy as summarized below:

- For tradable goods, simply announce a strict time table for phased reduction and eventual elimination of imports restrictions on competing goods. This worked well in many countries including Mexico. The efforts of the Rwandan Government towards this through firm commitment to regional integration should be continued.
- For Non tradable products such as telecommunications and electricity, the following actions can improve the situation :
 - Granting unnatural monopolies in ancillary goods and services to many natural monopolies. For example allowing many players in the telecommunications industry or simply introducing new services such as cellular phones.
 - In the case of electric power, the model of Chile is useful. There, prior to divestiture, the electricity monopoly was broken into a core grid plus a number of independent generating and distribution units. The generating units were then made to engage in

price competition for supplying power to larger customers. The separate distribution units, although non competitive, at least gave regulators a competitive basis for regulating prices and costs.

The efforts so far made by the Government of Rwanda to liberalise its economy are laudable but liberalisation should be interpreted carefully in order to avoid chaos in the future. Thus, consumers' rights protection and consumer satisfaction should be seen as a sine qua non condition to the betterment of living standards and to the success of any privatisation programme. When the Government privatises and does not have a regulatory mechanism to control prices in the privatised monopolies or oligopolies, that operate in non competitive markets, the aftermaths become unmanageable. The case of privatisation of PETRORWANDA is more eloquent. Here after the sale off of this petroleum state monopoly, small dealers developed around the buyer (Shell-Rwanda) and currently they have apparently formed a cartel. The Government has very little to do when they decide to increase pump prices even when the situation at the international market does not justify it, leaving helpless consumers at the mercy of these private operators in the name of liberalisation.

3. The method of divestiture

If privatisation is to lead to the welfare and performance improvement, special care must be paid to the method of divestiture. There is no simple, one-size fits all method of divestiture. Each privatisation transaction should be considered unique and be designed to meet the specific characteristics and objectives of a country, taking into account local administrative, political, economic, social and legal conditions.

For instance in the case of SOPYRWA, performance could be better now if ISHYABIKI, the cooperative of pyrethrum growers had been consulted before privatisation, encouraged and strengthened to be enabled to buy some shares. This could motivate them to work hard instead of having a feeling of resignation as expressed in the words of one respondent who sought anonymity 'I have to work for him [Muvunyi, the main shareholder of SOPYRWA] because he bought me, my wife, my children and all my belongings".

4. Use of divestiture proceeds

For privatisation to result in improved living standards, special care must be taken when deciding on how to use the proceeds from it. In many developing countries privatisation did not lead to welfare improvements due to corruption. When PEs were not deliberately under priced, a large share of the proceeds went to the pockets of the officials involved in the privatisation process. Thanks God, Rwanda is ranked among the less corrupt countries in Africa and the Government aim is "zero corruption tolerance". The understanding is that a PE is sold because the owner (public) wants to utilise the proceeds for the next best alternative use. If the total opportunity cost is not realized, then it will be wrong to say that the public fully benefited from selling off its company.

In short privatisation is a very good policy, capable of leading to improved performance and better services. However it should be considered rather as a means than an end in itself. Alone, it should not be considered as a panacea that will cure all the problems that poor countries face. It should be accompanied and complemented by other policies and measures that ensure an environment that is conducive for a fair play, where each economic agent gets a deal that fairly rewards the efforts done.

BIBLIOGRAPHY

Aharoni, Yair, 1986. "The Evolution and Management of State Owned Enterprises". Cambridge, Mass: Ballinger

Atkinson, S.E., and R. Halvorsen , 1986. "The Relative Efficiency of Public and Private Firms in a Regulated Environment." *Journal of Public Economics* 29:281-94

Banque Mondiale, 1986. "Rwanda: Evolution Récente de l'Economie et Problèmes Actuels". Rapport No 6191- RW.du 31 Octobre 1986. Bureau Régional Afrique Australe et Orientale. Département des Programmes II: Washington

Bennett, James T., and Manuel H. Johnson, 1979. "Public versus Private Provision of Collective Goods and Services: Garbage Collection Revised". *Public Choice* 34:55-64

Boardman, Anthony E, and Aidan R.Vining, 1989. "Ownership and Performance in Competitive Environment: A Comparison of the Performance of Private, Mixed, and State-Owned Enterprises." *Journal of Law and Economics* 32 (April): 1-36

Brücker, H., 1997. "Privatization in Eastern Germany: A Neo- Institutional Analysis". Frank Cass: London.

Caves, D.W., and L.R Christensen, 1980. "The Relative Efficiency of Public and Private Firms in a Competitive Environment: The Case of The Canadian Railroads." *Journal of Public Economy* 88:958-76

Commander, S., and Killick, T., 1986. "Privatization in Developing Countries: A Survey of the Issues." Paper Presented at the Conference on Privatization in Developing Countries, University of Manchester, U.K., December.

Dinavo, J., 1995. "Privatization in Developing Countries: Its Impact on Economic Development and Democracy". Westport, Connecticut: London.

Edgren, G., 1990. "Privatization, Efficiency and Employment". ILS, ILO Discussion Paper No23: Geneva.

Galal, A., Jones, L., Tandon, P., and Vogelstang, I., 1994. "Welfare Consequences of Selling Public Enterprises: An Empirical Analysis". World Bank. Oxford University Press: New York.

Galal, A., Shirley, M., 1994. "Does Privatization Deliver? Highlights from a World Bank Conference". Economic Development Institute of The World Bank: Washington, D.C.

Grosh, B., 1991. "Public Enterprises in Kenya: What works, What doesn't and Why". Boulders: Lynne Rienner.

Hachette, D., Lüders, R., 1993. "Privatization in Chile: An Economic Appraisal". An International Center for Economic Growth Publication. ICS Press: San Francisco.

Hanke, H.S., 1987. "Privatization and Development". An International Center for Economic Growth Publication. ICS Press: San Francisco.

Hardwick, P., 1994 "An Introduction to Modern Economics". Longman Group. 4th Edition: Harlow.

Hemming, R., Mansoor, A.M., 1988. "Privatization and Public Enterprises". IMF Occasional Paper No 56. IMF. Washington, D.C.

Kornai, J., 1991. "The Principles of Privatization in Eastern Europe". Discussion Paper No 1567. Cambridge/ Mass. Harvard University, September.

Le Mouel, G., 1991. "Rapport de la Mission effectuee a l' Office du Pyrethre du Rwanda Ruhengeri".

Maubert, P.E., 2002. " Situation Economique du Rwanda". Fiche de Synthèse. French Economic Mission: Nairobi.

Meggison, W.L., "The Impact of Privatization", *Economic Reform Today: The Lessons of Privatization*. Number 1, 1998

Millward, R., and D.M. Parker, 1983. "Public and Private Enterprise: Comparative Behavior and Relative Efficiency." Longman: New York

Mugenda, O., and A.Mugenda, 1999. Research Methods: Quantitative and Qualitative Approaches. Acts Press. Kenya.

Nankani, H., 1988. Techniques of Privatization of State owned Enterprises, Vol.II, Selected Case Studies . Technical Paper No.89. World Bank: Washington,D.C

OPYRWA, 1986. Annual Report: Kigali

Ott .A., Hartley,K.,1991. "Privatization and Economic Efficiency, Elgar Edward Publishing Ltd: England.

Parker. D., and K.Hartley. 1991. "Status Change and Performance: Economic Policy and Evidence." In A.F. Ott and K.Hartley, eds. *Privatization and Economic Efficiency*. Hants, England : Edward Elgar.

Ramamurti, R.,Vernon,R.,1991."Privatization and Control of State-Owned Enterprises". Economic Development Institute of The World Bank: Washington, D.C.

Ramanadham, V.V., 1989. "Privatization in Developing Countries". United Nations Development Program: Routledge: London.

Randall, F., 1993. "The Privatization Revolution". United States Information Services: Maoni ya Amerika. No 69 (2-7).

Samanta,P.,1981. "Business Performance, Profitability and Government Control: A Study of the Workings of selected state Enterprises in Zambia, INDECO,ZNEC and NTC",Lusaka.

Sarbid, J.-L., 1997. "Privatization in Africa: Present and Future Trends. Paper presented at The African Development Bank Group 1997 Annual Meeting Symposium on "Private Sector Development in Africa"", Abidjan, May 21, Page 8.

Seiji, N., 1990. "Private Sector and Enterprise Reforms in Growing Asian Economies". International Center for Economic Growth Publication: San Francisco.

Singleton, Jr., Royce; Bruce Straits; Margaret M. Straits and Ronald J Mc Allister. 1988. "Approaches to Social Research" Oxford University Press: Oxford New York

Sugavaram,M.B., 1995. "Examen du Marché Mondial du Pyréthre et de ses Tendances à Moyen Terme: UNIDO Technical Report prepared for The Rwandan Government: Kigali.

Tangri, R.,1999. "The Politics of Patronage in Africa: Parastatals, Privatization and Private Enterprises." James Currey, Oxford

Todaro, M., 1995. "Economic Development". Longman Group Ltd., New York.

Van der Hoeven,R., Sziraczki. G., 1997. "Lessons from Privatization, Labor Issues in Developing and Transitional Countries". ILO: Geneva.

Vuysteke, C., 1988. "Techniques of Privatization of State-Owned Enterprises: Methods and Implementation". World Bank Technical Paper 88 . World Bank: Washington, D.C.

Winney,R.,1990. "Natural Pyrethrum Market Developments: Report on a Survey Carried out in January 1990". Crown Agents, St Nicholas Road, Sutton.

QUESTIONNAIRE

My name is Justin NSENGIYUMVA. I am a Rwandan Postgraduate student at the University of Nairobi in Kenya, pursuing a Master's Degree in Economics (Economic Policy and Management). I am conducting a Research Project on the "Impact of the Privatization Program on company's performance in Rwanda: A Case Study of SOPYRWA" as a requirement for the fulfillment of the Degree mentioned above.

Your contribution to this study by answering to this questionnaire will be highly appreciated. I promise you that the information you will give will be used only for the purpose of this study and with total confidentiality.

QUESTIONNAIRE A FOR PYRETHRUM PLANTERS

A. Assistance to planters

1. What size of the land do you allocate for Pyrethrum?

Before Privatization

After Privatization

2. Have you ever used fertilizers availed by OPYRWA? Yes No

3. Does SOPYRWA provide you with fertilizers now? Yes No

4. Did you ever get any credit from OPYRWA? Yes No

B. Management style

1. How many times did you meet the authorities of OPYRWA?

Very frequently Frequently Rarely

2. How quickly were your problems solved by the management?

Very quickly Quickly Slowly

Thanks.

QUESTIONNAIRE FOR WORKERS

1. How is your current salary now as compared to your salary before privatization?

Higher Same Smaller

2. How many hours per day do you spend at work place?

Before privatization

After privatization

Management style

1. How friendly is the current top management as compared to before privatization?

More Friendly Friendly Less Friendly

3. How many times do you meet the management?

More frequently Frequently Rarely

4. How quickly are your complaints understood and solved as compared to the situation before privatization?

More quickly Equally quickly Less quickly

Thanks.



PRIVATISATION STATUS – APRIL 2005

PRIVATISED COMPANIES

Company name	Sector of Activity	New Owner	Date of Privatisation	Sale Price (Frw)
AGRICULTURE & AGRO-INDUSTRY				
Tea factories				
Pfunda tea factory	Tea	LAB International	03/2004	1,060,000 USD
SORWATHE (23,5%)*	Tea	Assopthé (10%) Sorwathé (13,5%)	02/2003	345,500,000
Coffee factories (washing stations)				
Gikondo coffee factory	Coffee	RWACOF	11/1998	190,500,000
Nkora coffee factory	Coffee	Cooperative UPROCA	01/1999	108,862,000
Masaka coffee factory	Coffee	Seven Lakes Trading	02/2002	40,115,000
Fisheries				
Lac Ihema fishery	Fishery	SOPEM	12/2001	62,000,000
Lac Kivu fishery – Cyangugu	Fishery	Mr. Nassor Mselem	02/2000	20,000,000
Lac Kivu fishery – Gisenyi	Fishery	cooperative COOPILAK	09/1998	29,400,000
National Centre for Small Livestock (Centre National de Petit Elevage – CNPE)				
CNPE Butare	Livestock	« Street children » Project – Rwandan Red Cross	12/2003	17,000,000
CNPE Cyangugu	Livestock	Cyangugu Province	03/2004	Transfer
CNPE Kabuye – poultry section	Livestock	M. Oleg Stenbock	09/1998	35,000,000
CNPE Kabuye – rabbit section	Livestock	M. Oleg Stenbock	09/1998	10,000,000
CNPE Ruhengeri	Livestock	COODAF	12/2001	15,587,838
Other companies				
ETIRU	Flour mill	-	11/2000	Auction
Nyagatare dairy	Dairy	Cooperative KOABOMU	09/1998	20,400,000
Mukamira Maize Mill	Flour mill	Ruhengeri Catholic Diocese + Association for Rural Development (Mutara)	09/2002	20,000,000
Gatare Flour mill	Flour mill	Kabandana Venant	12/2001	35,000,000
OPYRWA	Pyrethrum	Société de Pyrèthre du Rwanda (SOPYRWA)	12/2000	550,000,000
Kabuye Sugar Office	Sugar	Kabuye Sugar Works (Madhvani Group)	1997	448,175,200
Kamatsira sawmill	Sawmill	ASCOB & D	07/2003	5,000,000
SONAFRUIT (88,4%)*	Drinks	Ecomeki	04/2001	16,500,000

* Joint venture - the percentage indicates the State's shares in the company.

HOTELS & TOURISM				
Guest House Kibuye	Hotel	M. Pascal Munyampirwa	1998	75,000,000
Kinigi Tourist Village	Hotel	ASUPERWA	01/2000	10,200,000
Akagera Hotel	Hotel	Akagera Game Lodge	06/2003	Lease contract
Diplomates Hotel	Hotel	Southern Sun (Intercontinental Hotels)	08/2003	Management contract
Izuba/Méridien Hotel	Hotel			
Kiyovu Hotel	Hotel	Group Miko Rwayitare	08/2001	80,000,000
Régina Hotel	Hotel	Mad. Caritas Murashi	02/1998	50,000,000
INDUSTRY				
Ruliba brickworks	Brickworks	M. Jean Murenzi	09/2002	122,000,000
Rwanda National Printing Company (INR)	Printing	Intersec Security Company	11/1998	420,000,000
OVIBAR	Drinks	Rwanda Investment Company (RICO)	05/1998	200,000,000
SORWAL (29,5%)*	Matches	Development & Business Prospects (DEBUPRO)	12/2000	33,628,280
TABARWANDA (30,7%)*	Cigarettes	Tabacofina-VanderElst	09/2001	1,500,000 USD
MINING				
Karuruma Smelting Factory (Redemi)	Mining	Niobium Mining Company	12/2001	132,351,660
Ruhengeri Lime Project	Lime	Projet de Valorisation des Calcaires (PVC)	05/1998	110,000,000
ENERGIE				
Electrogaz	Energy & water	Lahmeyer International	08/2003	Management contract
SERVICES				
Boucherie/Charcuterie de Kigali - BCK (29%)*	Food stuff	M. Otmar Oberlander	05/1999	38,000,000
FINANCIAL SECTOR (BANKING & INSURANCE)				
RACAR (80%)	Banking	Consortium Fina Bank Ltd + Enterprise Holdings Ltd	August 2004	US \$ 3,76 millions
BCR (80%)	Banking	CDC Group	August 2004	US \$ 6,05 millions

COMPANIES IN LIQUIDATION

Company name	Sector of Activity			
Air Rwanda	Airline company			
BUNEP	Consultancy	Company dissolved		
Caisse d'Epargne du Rwanda ((Rwandan Savings Fund)	Banking			
OPROVIA	Food stuff			
<i>Assets sold in the liquidation of OPROVIA</i>				
Butare branch	Alimentation	Mr. Vincent Semuhungu	11/1998	23,500,000
Byumba branch	-	EER-Byumba Diocese	12/2001	15,350,000
Cyangugu branch	-	Mr. Sylvestre Sinyayobye	12/2001	21,720,000
Gikongoro branch	-	EER-Kigeme Diocese	09/2002	12,500,000
Gisenyi branch	-	Termirwa	12/2001	35,000,000
Gitarama branch	-	Gitarama Municipality	12/2001	22,807,889
Kibungo branch	-	Kibungo Diocese	09/2002	10,000,000
Kibuye branch	-	Ets. Kanock	09/2002	15,000,000
Kimihurura branch	Supermarket	Mr. Sam Rubagumya	12/2001	16,500,000
Nyamata branch	-	Mr. Emmanuel Ndahiro	09/2002	4,200,000
Ruhango branch	-	Presbyterian Church of Rwanda	11/2003	13,000,000
Rwamagana branch	-	Kibungo Diocese	01/2004	23,000,000
Nyabugogo slaughterhouse	Meat	Société d'Abattoir de Nyagatare	09/1998	200,000,000

*Dans le cas des entreprises suivies d'un pourcentage, il s'agit d'entreprises mixtes dans lesquelles l'Etat a vendu ses actions. Le pourcentage indique la participation de l'Etat dans l'entreprise

Garage Nyarugenge	Garage	Mr. John Ndengeye	11/1998	10,000,000
PETROWANDA	Petroleum			
<i>Assets sold in the liquidation of PETROWANDA</i>				
10 service stations + lease of Gatsata depot	Petroleum	Shell Rwanda	08/1998	672,000,000
SODEPARAL	Foodstuff			
<i>Assets sold in the liquidation of SODEPARAL</i>				
Nyabugogo tannery	Tannery	Société d'Abattoir de Nyagatare	-	160,000,000
Rubirizi Dairy	Dairy	Mr. Polycarpe Gatete	-	35,000,000
Rubirizi Pastures	Livestock	Cooperative INYAMIBWA	1999	20-year lease in 25m Frw
SOPAB	Animal Feed			
SOPRORIZ	Rice			
STIR	Transport			

COMPANIES IN ADVANCED PHASE OF PRIVATISATION

Company name	Sector of Activity	Status
Ituze Tourist Village	Hotel	Negotiations
RWANDEX (51%)*	Import/export	Invitation to bids scheduled for 2005
Wisumo sawmill	Sawmill	Invitation to bids scheduled in 2005
Mulindi tea factory	Tea	Invitation to bids scheduled for 2005
TELECOMMUNICATION		
RWANDATEL	Telecommunications	Negotiations

COMPANIES IN PREPARATORY PHASE FOR PRIVATISATION

Company name	Sector of Activity	Status
AGRICULTURE & AGRO-INDUSTRY		
Tea factories		
Gisakura tea factory	Tea	Invitation to bids scheduled for 2005
Gisovu tea factory	Tea	Date not yet set
Kitabi tea factory	Tea	Invitation to bids scheduled for 2005
Mata tea factory	Tea	Invitation to bids scheduled for 2005
Nyabihu tea factory	Tea	Date not yet set
Rubaya tea factory	Tea	Date not yet set
Shagasha tea factory	Tea	Invitation to bids scheduled for 2005
Fisheries		
Lac Kivu Fishery – Kibuye	Fishery	Invitation to bids scheduled for 2005
National Centre for Small Livestock (Centre National de Petit Elevage – CNPE)		
CNPE Kabuye – pig breeding	Livestock	Invitation to bids scheduled for 2005
Rice mills		
Bugarama rice mill	Rice	Date not yet set
Gikonko rice mill	Rice	Date not yet set
Rwamagana rice mill	Rice	Date not yet set
Other companies		
Rubirizi National Hatchery	Livestock	Date not yet set
Gishwati dairy	Dairy	Invitation to bids scheduled for 2005

* Dans le cas des entreprises suivies d'un pourcentage il s'agit d'entreprises mixtes dans lesquelles l'Etat a vendu ses actions. Le pourcentage indique la participation de l'Etat dans l'entreprise.

INDUSTRY		
BRALIRWA (30%)*	Drinks	Date not yet set
IMPRISCO (Public Office for School Printing)	Printing	Invitation to bids scheduled for 2005
Rwanda Paper Mills (Zaza)	Paper Mill	invitation to bids scheduled for 2005
MINES		
Public Office for the Exploitation and Development of Mines (REDEMI)	Mining	Invitation to bids scheduled for 2005
TRANSPORT		
ONATRACOM	Public transport	Date not yet set
SERVICES		
Labophar	Drugs	Invitation to bids scheduled for 2005
MAGERWA (6,25%)	Warehousing	Date not yet set
FINANCIAL SECTOR (BANKING & INSURANCE)		
Banque de Kigali (BK) (23%)*	Banking	Date not yet set
Banque Rwandaise de Développement (BRD) (48,12%)*	Banking	Date not yet set
SONARWA (10%)*	Insurance	Date not yet set

UNIVERSITY OF NAIROBI
EAST AFRICANA COLLECTION

JOMO KENYATTA MEMORIAL
LIBRARY

SECRETARIAT DE PRIVATISATION

B.P. 4731 Kigali – E-mail: pvs@rwandatel1.rwanda1.com

Tél. : (250) 57.53 83 • 57 09 91 • 57 09 92 • 57 09 89 – Fax : (250) 57 53 84

Site Internet : www.privatisation.gov.rw

*Dans le cas des entreprises suivies d'un pourcentage, il s'agit d'entreprises mixtes dans lesquelles l'Etat a vendu ses actions. Le pourcentage indique la participation de l'Etat dans l'entreprise.