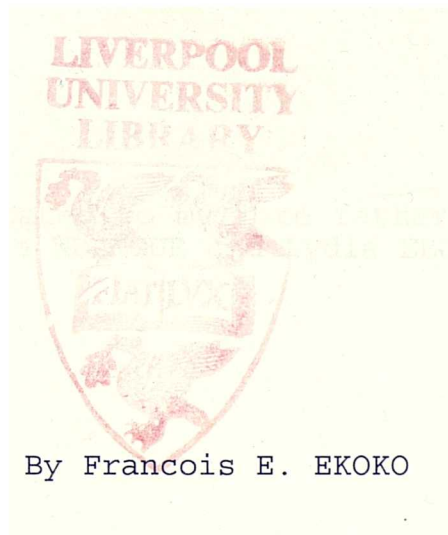


THE POLITICAL ECONOMY OF FOREST PROTECTION AND SUSTAINABLE
DEVELOPMENT: THE CASE OF CAMEROON.



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This thesis is dedicated to my late father Francois EKOKO
and my mothers Cecile NDENGUE and Lydia EBONGUE

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ACRONYMS

ACTIM:	Agency for Technical, Industrial and Economic Cooperation (Agence pour la Cooperation Technique Industrielle et Economique)
ADB :	African Development Bank
AN:	National Assembly (Assemblee Nationale)
CBA:	Cost-Benefit Analysis
CCCE:	Central Agency for Economic Cooperation (Caisse Centrale de la Cooperation Economique)
CCFOM:	French Central Agency for Overseas (Caisse Centrale de la France d'Outre-Mer)
CDC:	Cameroon Development Corporation
CENADEFOR:	National Centre for Forest Development (Centre National pour le Developpement des Forets)
CFD:	French Development Agency (Caisse Francaise de Developpement)
CITES:	Convention on International Trade of Endangered Species
CRTV:	Cameroon Radio and Television
EAOD:	Environmental Assessment Operational Directive
EC :	European Community
ECOCAS:	Economic Community for Central African States
EIA:	Environmental Impact Assessment
EU :	European Union
FAC :	Fund for Aid and Cooperation (Fonds d'Aide et de Cooperation)
FAO :	Food and Agricultural Organisation
FIDES:	Investment Fund for Social and Economic Development (Fonds d'Investissement pour le

Developpement Economique et Social)

GATT: General Agreement on tariffs and Trade

GDP: Gross Domestic Product

GEF: Global Environment Facility

GNP: Gross National Product

IBRD: International Bank for Reconstruction and Development

IDA: International Development Association

IFAD: International Fund for Agricultural Development

IFC: International Financial Corporation

IMF: International Monetary Fund

IPI: Integrated Poverty Index

ITTO: International Tropical Timber Trade Organisation

IUCN: World Conservation Union

JO: Official Gazette (Journal Officiel)

MFC : French Ministry of Cooperation

MINAGRI: Ministry of Agriculture (Ministere de l'Agriculture)

MINASCOF: Ministry of Women and Social Affairs (Ministere des Affaires Sociales et de la Condition Feminine)

MINDIC: Ministry of Trade and Industrial Development (Ministere du Developpement Industriel et Commercial)

MINECOP: Ministry of Economy and Planning(Ministere de l'Economie et du Plan)

MINEDUC: Ministry of National Education (Ministere de L'Education Nationale)

MINEF: Ministry of Environment and Forest (Ministere de l'Environnement et des Forets)

MINFI: Ministry of Finances (Ministere des Finances)

MINPAT: Ministry of Planning and Rural Development (Ministere

du Plan et de l'Amenagement du Territoire)

MINSANTE: Ministry of Health (Ministere de la Sante)
MINTOUR: Ministry of Tourism (Ministere du Tourisme)
NFAP: National Forest Action Plan
OAU: Organisation of African Unity
OCAW: Organisation for the Conservation of African Wildlife
ONADEF: National Office for Forest Development (Office National pour le Developpement des Forets)
ONAREF: National Office for Forest regeneration (Office National pour la regeneration des Forets)
PQLI: Physical Quality of Life Index
PRC: Presidency of the Republic of Cameroon (Presidence de la Republique du Cameroun)
RC: Republic of Cameroon (Republique du Cameroun)
RF: Federal Republic of Cameroon (Republique Federale du Cameroun)
RUC: United Republic of Cameroon (Republique Unie du Cameroun)
SAILD: Grassroots Initiatives for Development (Service d'Appui aux Initiatives Locales de Developpement)
SAP: Structural Adjustment Programme
SILMIC: Severely Indebted Low Middle Income Country
SIMIC: Severely Indebted Middle Income Country
SNV: Netherlands Development Organisation (Association Neerlandaise d'Assistance au Developpement)
SSA: Sub Saharan Africa
TFAP: Tropical Forest Action Plan
TFAP2: Tropical Forest Action Programme

UDEAC: Central African Customs and Economic Union (Union
Douaniere et economique de l'Afrique Centrale)

UNCED: United Nations Conference on Environment and
Development

UNCHE: United Nations Conference on Human and Environment

UNDP: United Nations Development Programme

UNECA: United Nations Economic Commission for Africa

UNEP: United Nations Environment Programme

UNICEF: United Nations Children's Fund

WB : World Bank

WCED: World Commission on Environment and Development

WDR : World Development Report

WDT : World Debt Tables

WTO: World Trade Organisation

ABSTRACT

Forest depletion, poverty and development problems occurring in Cameroon need to be analyzed within a political economy perspective.

In spite of the various technical solutions employed including agroforestry, biotechnology, improving management in all sectors and better conservation strategies, forest protection, poverty and development are still not being tackled on a sustainable basis.

Five arguments underpin our thesis:

1. Misidentification of the driving force of deforestation which leads to propose solutions only addressing the symptoms.
2. Technical solutions are undermined by financial problems, technical difficulties, and cultural misunderstandings.
3. The inability of the international community to address the roots of the problem. Three main obstacles exist:
 - The principle of the sovereignty of states.
 - The interests of the states.
 - The perception of these issues by the main actors in the international system.
4. Internal and international economic strategies characterised by:
 - the influence of neo-liberal thinking
 - a resource-centred view of the environment.
5. Politics in Cameroon, mainly:
 - the interests of influential individuals and groups
 - the link between political forces and the geographical

location of forests

- the balance of power between:
 - * people and logging companies
 - * people and the state
 - * logging companies and the state.

Bringing about sustainable development by balancing environment protection and people centred-development depends on an ability to address:

- a. the issue of people's, individuals', and states' interests;
- b. the awkward question of the balance of power both within the Cameroon state, and at the international level.

Appropriate technical solutions can certainly alleviate people's poverty or slow down the depletion of the forests in the medium term; they must however be accompanied by political and economic changes.

CHAPTER I

GENERAL INTRODUCTION

I.1 The Problem

Out of the total forested area of 20,000,000 ha, an astonishing 200,000 ha is cleared every year in Cameroon, of which 100,000 ha is cleared for agricultural activities (WB 1989 and FAO 1988). From 1979 to 1986, Cameroon experienced an economic growth rate of 6% per year (RC, 1992). Yet, in 1987, the Cameroon economy was officially declared to be in economic crisis, and since 1988 has been under a structural adjustment programme (SAP) 1988. In the early 1970s the external debt represented 15% of GDP rising to 37% in the early 1980s (MFC, 1995). In 1982 the external debt was US \$2.180 billions (WB, WDR 1992). In 1995 it is estimated to be US\$ 7.000 billions (WB, WDT 1995). In 1985 the GNP per capita was US\$ 950 (WB, WDR 1992). UNDP (Yaounde office) estimated GNP per capita at US\$ 750 in 1991 (UNDP 1993). By 1995 it had fallen to half of the 1985 level if one takes into account the overall decline in economic production and the recent devaluation of the local currency. Every year since 1987 the deficit in public finances represents 7.5% of the GDP (MFC, 1995). Public investment decreased for about 45% in 1989 and losses in export earnings were estimated at 25% in 1991. Between 1985 and 1988, the balance of trade moved from a position of US\$ 160 million surplus to a deficit of US\$ 89 million (MFC, 1995). Cameroon used to have the lowest inflation rate in sub-Saharan Africa, 5.6% per year, up to 1992 (RC, 1992). Until 1994 Cameroon was considered to be a low-middle-income country (WB, WDR 1994) although UNDP considers it as a low human development

country (UNDP 1992). In 1995 Cameroon was declared to be a Severely Indebted Middle-Income Country (SIMIC) (WB 1995). Unemployment increased from 1988 onwards. The 50% devaluation of the currency in 1994 provoked a rise in inflation of 30% (MFC, 1995).

Oil was the mainstay of the economy between 1979 and 1986. Cameroon also exports cocoa, coffee, banana, rubber, timber, tea and pineapple. With the decrease in oil production and the erratic prices of cocoa and coffee on the international market, timber has become the major export of Cameroon. Timber exploitation and logging activities have already created serious environmental consequences such as: degradation of Cameroon's rainforest, the disappearance of the coastal forest, the plundering of the congolese forests, the threat to the semi-deciduous forests and the loss of the afro-montane forests.

Cameroon held its second "democratic" elections in March and October 1992. In both cases, the results were contested by the opposition parties and partly dismissed by some international observers (Africa Confidential Vol. 35 No. 8, 1994). The country's human rights record is often questioned and the proposed new constitution which is meant to reflect the democratization process is still not ready.

It is in this context of political, economic and ecological crises and uncertainties that the current doctoral research was undertaken. The key policy challenge to be addressed is how to bring about sustainable development and environmental conservation in an extremely tentatively democratic but under-developed country with a strong natural resources base? This

core problem provoked a series of other questions. Can the creation of wealth at the national level really lead to an improvement of people's welfare through the trickle-down effect prescribed by classical economics? In other words, is the market-economy or economic growth paradigm really compatible with people-centred-development? Is the market economy and economic growth paradigm compatible with environmental protection? Does the creation of wealth ultimately aim at promoting people's well being and a balanced environment? Or does wealth primarily serve other purposes and if so which ones? If power is one of those purposes, how to tackle this issue? Could democracy be useful to wealth creation and distribution as well as to conservation? Finally, what are the options for sustainability?

I.2 Justification of the Study

There are three motives for this research. Firstly, the misplaced consensus over the policies and strategies to overcome the economic and ecological crises. The major development agencies and the Cameroon government have proceeded as if neo-liberal economic policies and technocratic approaches to environmental depletion were the panacea to address Cameroon's problems.

Secondly, the lack of any up-to-date study on the political economy of Cameroon. Professor Zartman edited a book on the political economy of Cameroon in 1986. The various contributors discussed economic, ethnic, political and social issues as they happened in the late 1970s and early 1980s. Bayart has studied the practice of politics in Cameroon (1979) and in Africa more generally (1992), with its consequences for the use of natural resources. Bayart's theory of "The Politics of the Belly" has

become a classic. Some of its assumptions will be challenged in this thesis. Cameroon's economic, political and social situations have changed dramatically since the mid 1980s. The economy has moved from a positive to a negative growth rate. The wind of democratisation is blowing in Cameroon with some devastating effects on the social structure and the polity of the country. Finally the environment has become an ever more important component of economic development. All these changes needed to be analyzed to provide a better understanding of the current situation in Cameroon.

The third motive for carrying out this study is the absence of research undertaken by a first hand witness from Cameroon.

Either as a child (in the 1960s and 1970s) or student (in the 1980s) and professional (in the 1990s), I witnessed various dramatic changes which have affected Cameroon. These included the disintegration of cultural values which contributed to a disregard for and depletion of the environment, forest and rivers which represented more than material or monetary values. In other cases, my position at the President's office in the main corridor of power, notably in the Civil Cabinet during the hottest years of the economic debacle and political struggles, has prompted my desire to question the policies, the use of the natural resources and the environment, and to understand the mechanisms which have led to the triple crises outlined above.

Importance of the study

This research hopes to make a contribution to:

- an understanding of the links between political stability, economic development and environmental depletion in some

SSA countries;

- the political mechanisms behind the use and the management of natural resources in some SSA countries;
- a revival of the debate over economic and environmental policies in Cameroon and African governments' strategies for development.

I.3 Setting of the Research

Introduction to Cameroon's Ecological Zones

Cameroon is a Central African country which covers an area of about 475,000 km². It is located at the far end of the Gulf of Guinea above the equator. It is situated between 2 and 13 degrees latitude north and 8 and 16 degrees longitude east. Cameroon borders Chad in the north and the north-east (the Sahelian area), Gabon in the south (the equatorial area), Equatorial Guinea in the south-west (the Atlantic coast), Congo in the south-east (the equatorial area), Nigeria in the west (coastal forest, and part savannah area) and Central African Republic in the east (also a mixture of forest and savannah area).

The geographical and ecological environment is characterized by an enormous diversity. From the highlands in the centre, north centre of the country (Adamaoua province), and in the West and Far North provinces, you move to the lowlands of the coastal area and of the Benoue basin. One moves from equatorial moist heat in the south to dry sahelian heat in the north. The west highlands have cool temperatures. Cameroon is half-way between two climatic zones:

- From the 2nd to 6th parallel, there is the equatorial climate.
- From the 6th to 13th parallel, there is the tropical climate.

The soils are also varied. Letouzey claims that there are three ecological regions in Cameroon:

- * the Guineo-Congolese region
- * the Afro-Alpine region
- * the Sudano-Zambezi region (IUCN, 1988).

Yet a fourth region could be added to Letouzey's list:

- * the Sahelian region

Below, we provide a synthesis of the characteristics of each region which is also divided into domains, sectors and groups.

I The Guineo - Congolese region.

The region is subdivided into four domains.

The Nigeria - Cameroon domain.

Two groups or families of forest are located here. First there is the evergreen moist forest at low or medium altitudes; it is also called bialfra green forest. Korup National Park is located in this domain. The other type of forest is also to be found in this domain, the dense moist coastal forest. Limbe Botanic Gardens in the South-West province is located in this sector.

The Cameroon - Congo domain.

This forest belongs to the Congo basin dense evergreen moist forest of medium altitude. It consists of:

- the dense evergreen moist forest
- the marshy forest of Haut-Nyong (south-east of Cameroon)
- the flooded forest of the Sangha River (far south-east of

Cameroon)

- the aqueous prairies of Haut-Nyong.

The Guineo-Congolese domain.

Despite the fact that it belongs to the Congo basin rainforest, this domain is not well-known and has not yet been properly categorised.

The Afro - domain

The forest here is dense, moist and evergreen at highland altitudes. The west and part of the north-west of Cameroon is located in this domain.

II The Afro-Alpine Region.

This region is characterized by its mountain forest. Yet, there are more prairies and bushes than large trees. It is located at the border of the Littoral province and the beginning of the south-west from Mount Manengouba to Mount Cameroon.

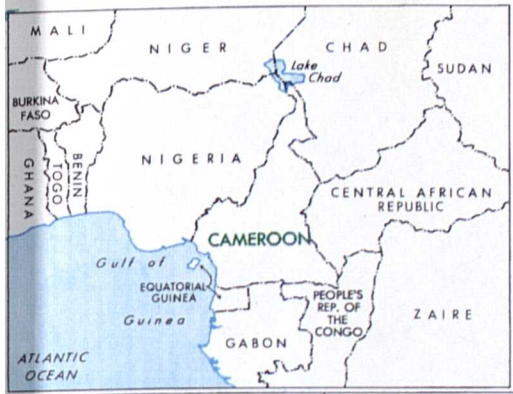
III The Sudanese - Zambezian Region.

This ecological zone is situated between the border of the western highlands and the centre north of Cameroon (Adamaoua) at one end, and the beginning of North province at the other. It consists of some prairies of altitude, some wooded savannah, dry herbaceous savannah, and the steppe.

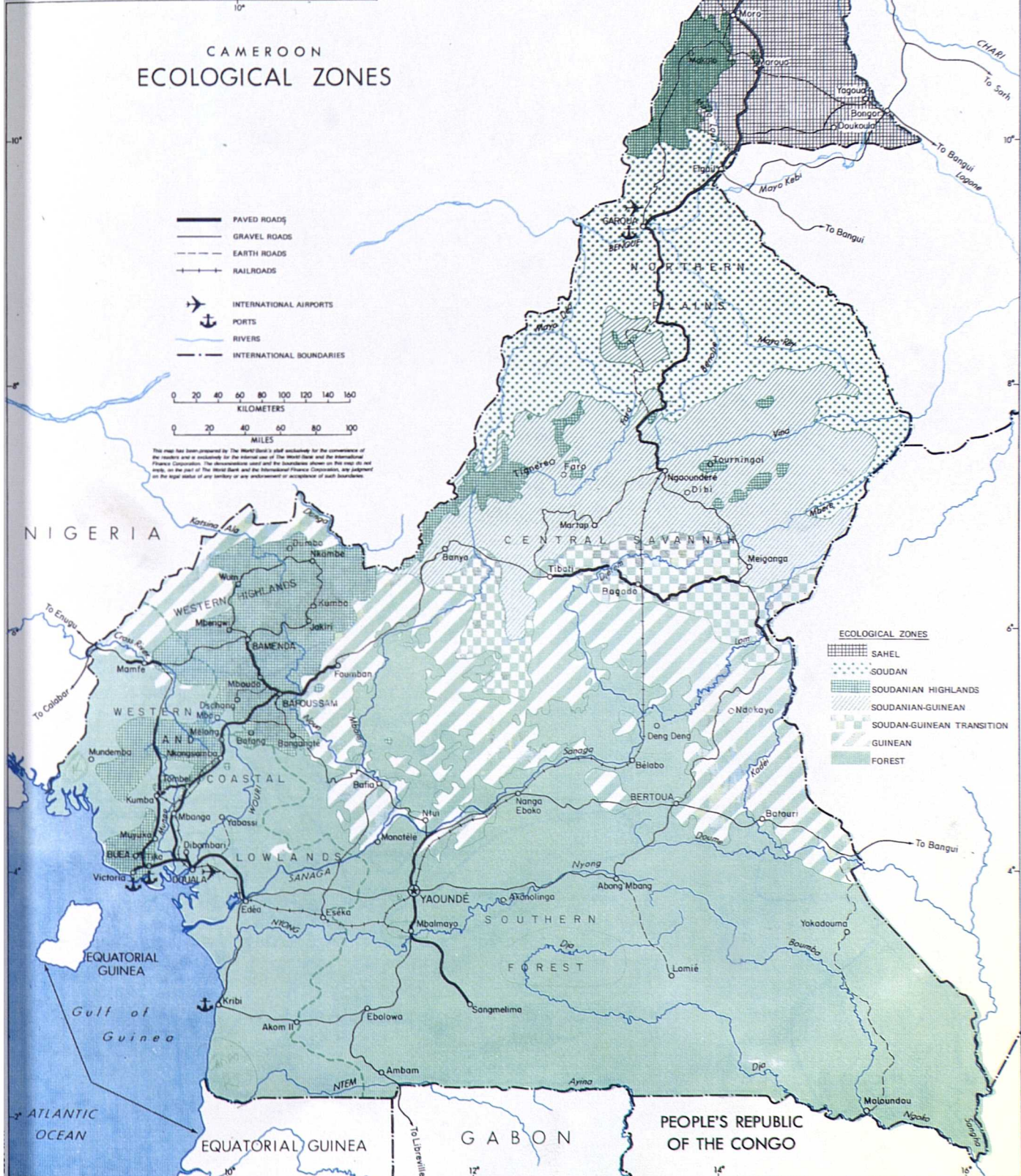
IV The Sahelian Region.

This region runs from the middle of north Cameroon to the far north. It is marked by the discontinuity of its vegetation: scattered dry shrub, and thorny steppes.

This work is concerned with only two of the above regions, the Guineo-Congolese and the Afro-Alpine regions. However, some references to other regions will be made on occasions.



Map 1:
Cameroon Ecological Zones



Defining the Concepts

"Forest" and "Sustainable Development" are the key-concepts in this work. Yet neither is easy to define. There are two understandings of the notion of forest, one is narrow and the other broader. The broader definition describes forest as an area in which one can find trees. Forest is an association of plants and animals in which trees are dominant (Hummel 1984).

The narrower meaning refers to the forest as an extensive area of woodland, a vast cornucopia of plants and animals, managed or not (Dictionary of Ecology, 1982). Serageldin argues that forest is more than a source of wood. It is a vast complex of plants, trees and animal treasures (1990). Almost all practitioners or agencies involved in forest conservation portray forests as a combination of large trees, different species of animals and various species of plants coexisting in a large area (FAO/UNEP, 1981). This combination of all kinds of living creatures can be man-made (secondary forest) or natural (primary forest). The narrower meaning of forest stresses the main characteristics of forest, including density of trees, area covered, biodiversity and the idea of an integrated ecosystem. This second meaning will be used in this work.

The concept Sustainable Development (SD) is widely debated. Terminology used to describe the correlation between development and environment has evolved over years (Redclift, 1987; Ingham, 1993). Some authors talk of green development (Adams, 1990) whilst other prefer the notion of eco-development (UNCHE, 1972). IUCN clearly established the relationship between the preservation of the environment and economic development,

systematically using the concept of SD to combine these two ideas (1980). The Brundtland Commission endorsed this terminology and to some extent gave it an official status (WCED, 1987). The aftermath of the Earth Summit in Rio has reinforced this understanding of SD, although UNDP has been promoting "Human Development" (1992) and recently "Sustainable Human Development" (1994) as the new terminology to replace SD. The Brundtland Commission' definition of SD which refers to the use of natural resources to meet present generation's needs without compromising the needs of future generations (1987), has been superseded by a gallery of other definitions (Pearce, 1989). Each fundamentally relates to the author's own ideological stand or agenda. Definitions suggested by neo-liberal thinkers tend to place the main emphasis on economic development supplemented by environment and redistribution concerns. The environment is valued for its economic usefulness and its conservation depends upon the forces of a renewed market logic which properly evaluates environmental goods (Pearce 1992). The concept has also been defined along development lines. In these cases, SD is about alleviating poverty in the Third World, in order to preserve the life-support system and the natural resource-base (Barbier, 1990). In this study we refer to Sustainable Development as a pattern of lasting human progress both material and non-material, based upon the balancing of economy, environment and social concerns which include people's active involvement in this process. Hence the concept of SD comprises three pillars of equal importance: economics, environment and people.

I.4 Setting the Theoretical Framework

Two theoretical frameworks compete. Both are the expression of two different philosophies and approaches to life, as well as differing views on earth's living creatures. On the one hand there is the human-centred philosophy. The basic assumption is that mankind is the master of all living creatures, and these are the means and resources for his welfare. The human-centred philosophy finds its roots in the bible, Genesis 2. On the other hand, there is the human-cell philosophy. It argues for the autonomy of each living creature. Man is just a cell in a complex system. This holistic view, preaches complementarity and interdependence of living creatures. (The Ecologist 18, 4/5 1980). From these philosophies two theories emerge which are meant to establish a framework for both forest protection and SD.

The first is the resourcist theory, which derives from the human-centred philosophy. Forests are just another economic asset meant to be used or exploited. The need for forest preservation forms part of this utilitarian option. Preservation of the forest is necessary for future use (WCED, 1987). This theory is the dominant one shared by almost all SD and economic researchers, states, and the international organisations (UN agencies). This theory has generated a technocratic view, by which technology and scientific knowledge provide mankind with the means to solve any environmental or economic problem (Davidson 1984).

The Bio-centric or Ecocentric theory originates from the Human-cell philosophy. It emphasizes the idea of harmony between humans and all living creatures;

"Humans must adjust to nature. And we must stop trying to make the forests of the World adjust to demands of unlimited economic growth. From such a perspective, it is we who must come into harmony with ... natural forest ecosystems, and not the forests that must adjust to us" (Orton 1991:113)

Forest preservation and sustainable development cannot be achieved alongside forest exploitation and economic growth (Rees 1990). Deep ecologists, forest people and rural people living in remote areas, at the borders of the forest tend to share this view (Naess 1988).

In Cameroon these two theoretical frameworks, the resourcist and the bio-centric view confront each other. The government and international institutions design their development policies and strategies within the resourcist perspective whilst forest and rural people in remote regions base their lifestyle on the bio-centric model. This research is carried out within the resourcist framework, given the integration of Cameroon in the World system. However, it tries to pinpoint the need for accommodating both theories.

The thesis has an interdisciplinary approach integrating: law, sociology, anthropology, international relations, politics, economics, forestry, history and agronomy, whenever it was possible and necessary.

Methodology

The research involved substantial data collection. This raw material was subsequently analyzed and processed, using a number of methods.

Data Collection

Secondary source data included books, theses, reports, articles,

journals, magazines published in Cameroon and elsewhere. The main emphasis was on the collection of the reports relating to forest issues and economics in Cameroon, elaborated by the UN technical agencies or the leading multilateral development agencies including the World Bank and UNDP. Research was undertaken in the Yaounde branches of the World Bank and FAO libraries. Documents in the UNDP branch office of Yaoundé were also examined. A research trip was undertaken to the UNEP headquarters in Nairobi. In some cases, sadly but inevitably, it did not prove possible to obtain certain documents. For instance, in spite of three letters sent to the International Tropical Timber Organisation (ITTO) in Yokahoma in September and October 1993, the organisation did not reply, nor did it send the most accurate statistics on Cameroon log exports. Equally the logging companies syndicate (or association) refused to collaborate. In other cases, data made available were out of date. For instance the best available indicators of poverty in Cameroon are from the late 1970s and early 1980s. Yet at that time Cameroon was experiencing steady economic growth. Even the 1994 WB report on Poverty in Cameroon draws most of its information from the surveys made in that earlier period. Finally, we were confronted by a serious lack of information in some vital sectors, such as consumption of household energy and biomass energy production. Conferences, seminars and workshops were also attended whenever it was financially affordable and useful for the research. These included a workshop organised by the World Bank in Yaoundé on the 12 July 1994 on Structural Adjustment in Cameroon and the World Summit for Social Development in Copenhagen on 6th-12th March,

1995. In December 1992, Professor Paul Richards from University College of London gave a talk at the University of Liverpool on the Politics of Forests in West Africa. In 1992 Dr Jane Carter held a conference on Conservation in Cameroon at ODI in London. Other conferences were attended on the broad theme of the management of the environment in the Third World.

Three kinds of primary source data were used: interviews (structured and unstructured), classified documents, and inside knowledge in the form of personal witness, and use of informants.

Three structured sets of interviews were undertaken. The first were conducted in November - December 1993 in the rainforest of east-Cameroon, in a triangle of three areas, Lomié, Adjela and Bosquet. 50 Bakas and 50 Kakas and Makas, descendants of the first generation of migrants in forest areas were interviewed. The second round of interviews took place in June and July 1994, with 100 people involved in charcoal and fuelwood activities (50 charcoal and fuelwood producers in villages surrounding Douala city and 50 charcoal and fuelwood sellers in Douala City). In August 1994, 50 civil servants working with the Ministry of External Relations were interviewed.

The objectives of the survey of forest people and the descendants of the first migrants in the rainforest were threefold:

- to obtain their views on the depletion of forest
- to determine to what extent they deforest and establish their level of dependency on the forest.
- to assess their strategies if any, for the preservation of the forest, against the activities of the logging companies

and the state.

Purposive and snowball samplings were used. The purposive sampling focuses on the purpose of the inquiry and gives greater freedom to the researcher to determine on the spot the size of his sample. This was suitable in our case as forest people have a nomadic lifestyle and are constantly on the move. A low population density and high mobility in a vast and dangerous area of rainforest render probability sampling techniques inoperational. On one occasion during the research, to locate a group of 4 families of forest people involved walking a distance of 40 kms. The snowball sampling was inevitable for such difficult geographical and ecological conditions. The information provided by the former interviewees helped to locate other interviewees (Russell, 1988). The research conducted in the rainforest greatly depended on such information. One group would tell when and where (however vaguely) another group could be encountered.

There were three objectives to the interviews with charcoal and fuelwood producers and sellers:

- to determine the motives for their activities,
- to assess their level of awareness of environmental issues,
- to obtain an idea of the tree species in greatest demand in the market.

The main aim however was to explore the potential relationship between unemployment resulting from the SAP, and the rate of deforestation. Two aspects were investigated: on the one hand, the demand for biomass energy in relation to the decrease of household purchasing power following the national implementation

of almost all the SAP requirements; and on the other hand the resort to the production of biomass energy, as a survival strategy adopted by some of the unemployed. The results of this particular survey were unexpected and contradicted initial hypotheses. The results are discussed in chapter 5.

Snowball sampling was used, as we intentionally asked the producers to talk about their competitors. This was a way of discovering other potential interviewees. This mode of sampling was also used because of the financial and time constraints. We certainly acknowledge that more in-depth research on charcoal and fuelwood production, and their markets would usefully employ a probability sample. However, to do so would require significant funds which were unfortunately not available (UNDP/FAO, 1988).

Interviews with civil servants of the Ministry of External Relations aimed at:

- assessing their living standard; it was useful to discover how many civil servants have moved from middle class "living standards", to becoming vulnerable and poor groups after two important cuts in wages and a major devaluation of the currency to 50% of its former value.
- evaluating the impact of the survival strategies on the forests.

Haphazard sampling was used. Russell describes it as being:

"useful for exploratory research, to get a feel for what's going on out there ... It involves nothing more than grabbing whoever will stand still long enough to answer your questions". (Russell 1988:97).

The interview with civil servants posed two problems that only the haphazard sampling could overcome. Firstly, the civil

servants of all the administrations are not accessible. Thus a representative sample is impossible, unless the researcher knows personally people in every Ministry. Secondly, a formal interview would have necessitated an administrative authorization. It is certain that it would have not been granted for reasons that will become apparent with the unfolding of the research findings. Given my personal ties with these civil servants (my former colleagues), the only option available was haphazard sampling.

All the above reasons have limited this research to non probability sampling. There are two major consequences which follow from the methodology employed: the data analysis is based on the qualitative rather than quantitative methods; and the results indicate trends rather than assertion. However, the results and conclusions drawn remain legitimate and scientific as both the non probability sampling and the qualitative analysis are accepted methods frequently used in the social sciences.

Both before and during this research, unstructured and informal interviews were held with various VIPs, including senior Cameroon officials and representative of international organisations on issues directly related to the research-topic. In some cases, a formal audience was granted and an unstructured interview was held. In other cases discussions took place at conferences or summits, or during cocktails and dinners when I was in the diplomatic service. All available opportunities were used to gather precious but dispersed information.

Audiences were granted by:

Mr Herbert Mcleod, Resident Representative of UNDP in Cameroon (1990-1994), 28-12-93.

Mr Lubin Doe, Resident Representative of the IMF in Cameroon (1989-1992), 25-08-92.

Mrs Mary Dyson of the World Bank (Environmental Policy and Research Division) based in Washington. She was on the "Forest and Environment" mission in Cameroon in January 1993, 08-01-93.

Mr Edward Quicke of the World Bank, head of the "Forest and Environment" mission, 07-01-93.

Mr Mark Blackden of the World Bank (Poverty and Human Resources Division) based in Washington. He was in Cameroon in July-August 1994 on a "Poverty" mission, 18-07-1994.

Mr Ateba Isidore, administrator (Cameroon) in charge of the implementation of the social dimension of the structural adjustment programme, 20-07-1994.

Generally, we would arrive with a list of questions and other points were raised subsequently in the course of the interview.

The aim of informal interviews was to gather information from actors and other participants in policy-making who are difficult to meet or who are reluctant to discuss frequently sensitive issues in a formal way. For instance, specific comments on the final declaration of Africa's common position on the 1992 Environment and Development conference were gathered in late May and early June 1992 in Dakar during the OAU Summit. Equally, during the World Summit on Social Development, we managed to have a conversation in the corridors with Dr Sadik, General Director of United Nations Economic Commission for Africa. He provided some important insights on the issue of poverty in Africa.

Discussions with European and American diplomats in Yaoundé were equally used as indicators and trends of opinion in the analysis of foreign governments and their perspectives on the situation of Cameroon. Finally, talks with a wide variety of professionals e.g. an army officer, an owner of a logging company, brought new insights into the research.

Classified documents, include reports reserved for internal use, reports of meetings classified confidential, or internal reports critical of policies, drafts of bills, decrees and laws were of particular importance. In spite of the great difficulty in obtaining these documents, people interested in this research and who trusted the researcher gave the necessary permission to ensure that they could be consulted. These documents emanate from international organisations, as well as from the government of Cameroon and independent bodies.

Inside knowledge was very important for the research. My former position at the Ministry of External Relations and later in the President's office gave me access to a number of documents. Equally a small number of friends and acquaintances in some technical ministries agreed to share their direct experiences, frustrations or excitement by discussing the details of meetings that they had attended. Finally, in late December 1993 and early January 1994 my concern about the future of Cameroon's rainforest and its development prospects led me to attend a plenary session of the National Assembly and to lobby some MPs on the 1994 Forest bill.

The data collection was certainly the most difficult, risky and at times dangerous part of this research. The fear of wild

animals, poisonous snakes and insects in the heart of the rainforest, the potential threats associated with illicit information gathering, as well as the financial sacrifices entailed in undertaking the research, made it both perilous but also exciting. We hope that the findings will make the endeavour worthwhile.

I.5 Structure of the Thesis

The thesis is organised around nine chapters of which chapters one and nine constitute respectively the general introduction and the conclusion.

Chapter 2 lays the foundations of the thesis. It discusses the main causes of environmental depletion in the tropics, put forward by many observers including the leading development agencies. They argue that poverty and population growth are the main threat to the environment (forest) in SSA.

Chapter 3 examines technical options to curb the rate of deforestation and to overcome poverty.

Chapter 4 explores the economic options proposed by the neo-liberal analysts, the leading development agencies and the Cameroon government, to bring about forest protection and economic development.

Chapters 5 and 6 analyze the international community response to the challenges of environmental depletion. Issues of debt, SAP, international conventions, world trade in connection with environment and deforestation are discussed. Both chapters establish the impact of international community proposals and policies on deforestation in Cameroon.

Chapter 7 examines in detail Cameroon forest policies and legislation. It discusses the impact of forest policies and forest legislation on forest protection.

Chapter 8 establishes the links between politics, deforestation, and the use of natural resources. This chapter unveils the driving-force of environmental depletion including deforestation in Cameroon.

Chapter 9, the concluding chapter, sets out a number of proposals which can be explored as alternative options for sustainability for both the environment and people-centred development.

CHAPTER II

DEFORESTATION AND POVERTY

INTRODUCTION

The linkage between poverty and environmental degradation is well established in development debates. Leach and Mearns describe a two way relationship in which poverty both leads to environmental degradation and is caused by it (1991). The World Commission on Environment and Development has suggested a similar correlation:

" Poverty is a major cause and effect of global environmental problems. It is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality." (WCED 1987).

Hence there is a strong correlation between deforestation and poverty.

The causes of forest depletion vary from place to place, however, there are a set of causes upon which everybody agrees. Differences between authors usually occur over which is the principal factor. According to most practitioners and sustainable development thinkers, the 'driving force' of deforestation in the tropics is poverty associated with overpopulation; farmers fell the forest for survival, not for profit (Harrison, 1992).

Sixteen million hectares of tropical forest are cleared each year: 7.8 million for agriculture (mostly by burning), 3.8 million for fuelwood and livestock, and 4.4 million through logging activities (FAO, 1980; Pearce, 1992). Gelder and O'Keefe mention that studies recently conducted by FAO and WRI suggested that deforestation rates would be approximately 50% higher than previously presumed (1992). A recent UNEP report argues that closed forests are disappearing at a rate of 7.5 million hectares

a year and open forests at 3.8 hectares a year (UNEP Brief No 3, 1992). A comparative analysis of the figures shows that agriculture is the main cause of deforestation. Putting together the rates of deforestation due to agriculture, livestock and the search for fuelwood, the SD school of thought draws a conclusion which is also the starting point of their model: the lack of basic needs provides people's motive for destroying their environment. In other words, poverty is the 'driving force' of forest destruction:

"You probably got the impression that the main cause for concern is increasing Third World rural population, which is regarded as causing widespread deforestation of habitats of potentially useful plants and animals which may then become extinct. The problem of this population is not that they have high levels of consumption but that they are poor. Their poverty is held to drive them to seek survival through means which degrade the resources..." (Woodhouse, 1992:102)

Given that this is the 'driving force', the best way to tackle deforestation problems would appear to be to solve the problem of poverty. Robert Chambers argues that the starting point of any programme to alleviate poverty should be reaching the poorest of the poor (1983 and 1995). Humanity as the main actor in deforestation must also be the main focus of any regeneration strategy. People, especially poor people, should be put first and associated with the search for solutions (Chambers, 1995). Failure to do so will jeopardize any strategy to preserve the environment.

Despite the general consensus on the point that poverty is the 'driving force' of deforestation, there still remain some unsatisfactory explanations when it comes to the detailed

analysis. The main criticism is that this explanation is too broad. What is the measurement of poverty, and what is the level at which it becomes necessary for the poor to deforest in order to survive? More broadly, what are the basic needs? Are they similar for each human being or are they specific for each region and each culture? The last question emerges from the theoretical debate on universal and regional values. Are there any universal values from which a common standard of behaviour or living can be patterned?

This chapter aims to search for a correlation between deforestation and poverty in Cameroon, through various models of analysis developed by SD thinkers. Are the models which have been elaborated around poverty and overpopulation relevant to the Cameroon situation? Or do other factors explain deforestation in Cameroon?

The first section of this chapter addresses the polemic over the concept of poverty, its definition and measurements. It will attempt to determine the level of deprivation of Cameroonians as well as to quantify the number of poor people.

The second section explores the correlation between poverty and deforestation, using the data from research carried out in the rainforest of the East province of Cameroon.

II.1 EXPLORING THE CONCEPT OF POVERTY

No widely applicable definition and measurement of poverty has been accepted by the majority of scholars. Instead there is a confusion between poverty and deprivation. In an attempt to define poverty and to establish the difference between the two concepts, Townsend explains poverty by referring to deprivation:

"People can be said to be deprived if they lack the types of diet, clothing, housing, household facilities and fuel and environmental, educational, working and social conditions, activities and facilities which are customary, or at least widely encouraged and approved, in the societies to which they belong." (1987: 125-26)

But they are said to be poor if they lack or are denied resources to obtain these conditions of life (1987:140 and 1993:36). Poverty is not therefore the lack of food, shelter, health and education, instead it is the lack of resources to obtain or to fulfil these needs.

Piachaud, to overcome this impasse, suggests a framework encompassing three approaches which could help in defining the concept of poverty. These approaches are the social consensus, the budgetary measures and the behavioural approaches. They also form the bases of the measurements of poverty (Piachaud 1987:147).

Two models for the measurement of poverty have been formulated in development studies:

- the classical model which refers to the GNP per capita, and
- the basic needs model.

Beyond elaborated models and analyses, there is empirical measurement of poverty, characterized by people's own perception of poverty or their living conditions. This is being promoted as a new path to be explored (Chambers 1995). The participatory rural appraisal method is also inspired by the need to understand poverty through people's own description.

II.1.1 THE CLASSICAL VIEW OF POVERTY OR THE HEAD COUNT RATIO

This model is interrelated to the classical perception of

development. Development is seen as a process of accumulating goods, thus poverty will be the lack of wealth. The measurement par excellence is the GNP per capita. The World Bank analysis typifies this model. A given country is considered poor when its GNP per capita is below US\$ 610 per year. It is also called a low-income country (WDR 1992:XI). But within this group of countries, there is a sub-group of the poorest of the poor, the less developed countries (LDCs). The World Bank classifies Cameroon in the group of low-middle-income countries. It had a US\$ 950 GNP in 1990 (WDR 1992), and US\$ 850 GNP in 1991 (WDR 1993). Despite the fall in its GNP per capita, Cameroon is still considered as a non-poor country. This GNP measure does not reflect the whole reality within countries and the disparities among individuals' situations. As far as individuals are concerned, poverty is measured either by the level of household consumption or their income. This model is known as the head-count ratio. It compares income or consumption of households to a defined poverty line. Poverty is seen as the inability to attain a minimal standard of living (WDR, 1990:26).

The difficulty in this view of poverty lies in the measurement of living standards. Unless we adopt the universalist view, using western society's definition of the standard of living, it is difficult to find evidence that the notion of the standard of living is the same between one culture and another. To overcome this problem, the World Bank worked out a way of capturing the idea of poverty. It sets a global poverty line below which a person is considered to be poor. Any individual earning less than US\$ 275 a year is said to be poor (WDR 1990).

The application of this model to Cameroon certainly gives at first glance a general view of the areas of poverty. Rural areas with no commercial commodities to export will be the ones with the highest rate of poverty. Urban workers would hardly be considered as poor since they have a monthly salary, an official minimum wage of 25.000 Fcfa, equivalent to US\$ 100 in 1986. The reality, however, is more complex. According to the last available agricultural census (1984), the distribution of wealth among farmers in rural areas is as follows:

Table 1: Farm income by province

Province	average gross income per farm (FcFa)	% of farms' marketing output	% total income from			urbanisation rate (%)
			ex p. cr op	foo d cro ps	liv e sto ck	
Far North	53,000	68.6	26.3	26.5	47.3	10.3
North	106,000	81.4	60.0	27.7	12.2	17.7
Adamaoua	167,000	75.5	13.0	68.3	18.7	22.6
East	253,000	92.9	57.6	40.5	1.9	24.0
Centre	229,000	91.5	59.3	39.0	1.7	50.0
South	195,000	92.6	76.9	21.4	1.7	25.8
Littoral	349,000	88.1	81.7	17.3	1.0	80.8
South-west	464,000	89.4	50.9	47.0	2.0	40.7

North-west	226,000	95.0	19 .1	64. 8	16. 0	17.4
West	130,000	91.4	61 .7	35. 0	3.3	27.3
Cameroon	180,000	84.4	51 .2	40. 3	8.5	36.1

Source: MINAGRI, 1984 Agricultural Census

This table shows that poor areas in Cameroon are those with very few export crops and a low rate of urbanisation. Does this suggest that there is a correlation between market places, opportunities to trade, urbanisation and poverty? Rural areas are likely to be poorer than urban ones. Table 1 also suggests a map of welfare in Cameroon:

- a. The provinces of the South-west, Littoral and Centre, are more urbanized and richer
- b. the provinces of the West and North-west, are well-off, and
- c. the provinces of the North and Far North, are poorer than the rest.

If the assumption is correct that there is a correlation between poverty and deforestation, the logic of the classical view would suggest that the North and Far North provinces are the ones most subjected to deforestation in Cameroon, whereas the remaining provinces of the South-west, West, North-west, Littoral and Centre would have preserved their forest better. Of course this is a gross simplification as the relative density of population along with geographical and other variables would also exert their influence.

However an empirical observation suggests that the classical view is verifiable in part. The North and Far North provinces are the

least forested regions. This phenomenon, however, is not linked to poverty. It is a fact of geographical location. Both provinces are located in the Sudano-sahelian area, characterized by savannah. The remaining provinces, mainly the West, North-west, and Littoral have been deforested by human activities, despite their relative wealth. The pillars of this relative wealth are also the causes of deforestation: agricultural activities that produce commodities for export and urbanisation which facilitates the sale of food crops. The same reasoning at the level of an individual suggests that the correlation poverty - deforestation in the classical view is not a workable model. The farmer from the Far North earns Fcfa 53,000 per year (US\$ 210 in 1984). Considering the WB measurement of the poverty line is US\$ 275, farmers are poor in the Far North, thus they deforest. In the other provinces, the poorest farmers' income is Fcfa 106,000, US\$ 424 in 1984 per year. This leads to the conclusion that the poorest farmer is not poor according to the WB measurement; however, he deforests. Thus, deforestation can occur at a large scale even if the indicator of poverty (annual income) is above the poverty line. The classical view in this case fails to produce a workable model of analysis concerning the correlation deforestation-poverty.

II.1.2 BASIC NEEDS MODEL

The basic needs model stresses social indicators. A number of attempts have been made at measuring poverty using various indexes. In 1976, Sen launched his Integrated Poverty Index (IPI) (Sen 1976). In 1979, Morris suggested the Physical Quality of

Life Index (PQLI). New measurements, for instance a Relative Welfare Index (RWI) (IFAD, 1992) have also been proposed recently. Since 1990, the UNDP has been promoting a broad framework encompassing various indexes.

These tools of measurement refer more or less to what is known as basic needs. In this work the combination of food security index, integrated poverty index (IFAD) and the profile of human deprivation (UNDP) will be the principal tools of analysis.

The ideology of basic needs revived in the early 1980s remains a controversial concept to define. Some authors argue a universalist view of people's needs. Their starting point is that there is something objective and universal about human need (Doyal and Gough, 1992). Some needs are common to individuals, irrespective of their race, culture and social status:

"...It is accepted - as presumably it must be - that there are certain needs (e.g. protein, water) which have to be met for humans to survive..." (Doyal and Gough, 1992:43)

Basic needs refer therefore to the vital natural requirements of any human. If these are not met it necessarily leads to the harm of the individual. Townsend sees the consequences:

"...if they do not have, at all or sufficiently, the conditions of life ... which allow them to play the roles, and follow the customary behaviour which is expected of them by virtue of their membership of society." (1987:130)

The core of these basic needs is food, health and shelter (Wisner 1988).

This universalist approach is, however, opposed by relativist analysts. Renshow argues that there is nothing like basic needs common to mankind (1977). Each society and each individual have their own needs at each stage of their development and according

to the social environment in which they live.

This theoretical debate is almost over as far as practitioners are concerned. For agencies and bodies involved in the management of development, a number of amenities are essential to human life. Whoever cannot possess them should be considered as poor. They are food, health, shelter and education. An attempt at increasing their number has been made. For instance, the IFAD team considers the status of women, the state of the environment, and the question of demography as elements of measuring poverty, thus as needs to be met (IFAD, 1992). UNDP human development indicators encompass other elements such as life expectancy, social fabric and children. In this analysis of the state of poverty in Cameroon, access to food and safe water, sanitation, health, literacy, and education will be our tools to measure poverty.

Population growth is a potential threat to development and the environment (UNFPA, 1994). It is also associated with the idea of poverty. Concerning this link, we will provide an overview of the issue of population and deforestation, before examining the indicators of poverty.

POPULATION, POVERTY AND DEFORESTATION

The general assumption is that uncontrolled population growth puts pressure on forests, since there is a necessity to feed more people, towns and villages expand, and new facilities are created. The programme of action of the United Nations international conference on population and development issued after the Cairo conference in September 1994 establishes a close

link between population growth, poverty and environmental depletion:

"Demographic factors, combined with poverty and lack of access to resources in some areas, and excessive consumption and wasteful production patterns in others, cause or exacerbate problems of environmental degradation and resource depletion and thus inhibit sustainable development." (UNFPA, 1994:15).

The Cameroon government has promoted pronatalist policies in the 1970s as part of its development policy. It encouraged couples to have more children through fiscal measures and direct campaigns in the national media. The rationale was that in order to develop, the country needs industries, strong internal production and an important domestic market to absorb part of the industrial production. The outcome of this policy was an increase in population over 20 years, from 8 million inhabitants in 1970 to 12 million in 1992. For a country of 475,000 km² and an average density of 25 inhabitants/km², Cameroon is a low populated country. A detailed analysis of the distribution of Cameroon's population reveals important disparities between regions. For instance, the West province is an overpopulated area with an average density of 95 inhabitants per km² (RC, 1992). The population pressure certainly played a significant role in the disappearance of the primary forest in the West province. However, there are counter examples which show that deforestation can occur in an area where the density of population is low. In Nyong et SO'O division in the Centre province, deforestation has been ongoing since the 1950s. The division has lost its primary forest although the density of population is less than 20 inhabitants per km². This massive deforestation is due to Greek and Cameroonian commercial agricultural activities as well as the

timber trade and timber industries.

South and East provinces have a large area covered by forest and have a low rate of population density: 5 inhabitants per km² in the East province, and the average annual population growth rate in each of these provinces is only 1.5 (UNDP/FAO, 1992). Forests in the East and South provinces could however be affected by the increase in the population if certain policies are promoted by the government, such as the opening up of the area through logging activities which will attract migrants and colonizers from other provinces. Lack of arable lands in other provinces such as the Far North, overpopulation in the West province, and poverty in urban areas are also likely to push people to these forest areas.

Population growth in urban area poses a threat to the forests surrounding the cities. According to the World Bank, the annual population growth rate in Cameroon is 2.9% (WB 1992). By the year 2000, the population will have reached 15 million. 42% of the population will live in urban areas (UNDP/FAO 1992). Thus population growth provides a serious threat to the urban environment including forests, as the demand for building materials, new infrastructure, fuelwood energy and agricultural products will increase. Already two major cities in Cameroon have experienced an unprecedented expansion and forest depletion. Douala's population has increased by about 400% in almost three decades, it has moved from 300,000 inhabitants in 1970 to 1,200,000 in 1987 (MINPAT 1990). During that period its coastal forest of Banya in Akwa-Nord has completely disappeared. A project in 1980 which aimed to build social housing in

Bonamoussadi and Makepe and new infrastructure has resulted to the clearing of a substantial area of coastal forest. Spontaneous housing construction and slum settlements have contributed to the depletion of the Bassa area forest. In the long run the growth of the urban population could be more damaging to the forest than the growth of the population in rural areas.

ACCESS TO SAFE WATER AS POVERTY INDICATOR

Cameroon has good water resource potential (UNDP 1993). This water resource is, however, unequally shared. For instance, the Sahelian region of the Far North and North provinces are vulnerable in the dry season and particularly in drought periods. This was the case during the 1973 and 1985 droughts. In the wet zones of Cameroon, from the Adamaoua to the South provinces, the principal water supply problem concerns its quality. Hence, there is a problem of access to water both as far as the quantity (in the Sahelian regions) and quality (in the forest areas) is concerned.

There are five possible ways of supplying water in Cameroon: water systems in houses, public taps, wells, rivers, and ponds.

Table 2: Distribution of water supply in urban areas (%)

Mode of water supply	1976	1987
Tap water	10.8	27.8
Public tap water	47.1	35.8
Wells	18.8	23.4
Ponds	16.9	8.0
Rivers	5.0	4.0
Other	1.1	1.8
TOTAL	100.0	100.0

Source: MINPAT, 1976 & 1987

Table 3: Distribution of water supply in rural areas

Mode of water supply	1976	1987
Tap water	4.3	2.2
Public tap water	4.0	9.9
Wells	19.9	41.5
Ponds	39.7	10.7
Rivers	29.7	35.2
Other	2.4	0.5
TOTAL	100.0	100.0

Source: MINPAT, 1976 & 1987

Tables 2 and 3 suggest that in urban areas in 1987, the rate of clean drinking water available from a modern water supply system was 63.6%: 27.8% from water systems in houses and 35.8% from public taps. However, a recent report indicates that 60% of the urban population, despite the existence of a distribution system and public taps still use wells and surface water (UNDP, 1993). If one uses the basic needs model of measurement of poverty, which stresses the water access rather than the quality, it can be said that the above 60% of urban population are not poor, which is hardly convincing (Hardoy et al 1990). The measurement of poverty should take into consideration water access, supply and quality. These figures reflect neither the disparities among regions, the differences in the level of water consumption between cities, nor the latest change in Cameroon development policies. Urban areas in the North and Far North provinces will have a lower rate of drinking water, given the limited natural availability and the geographical situation of these regions. The biggest cities (Douala, Yaounde, Garoua) retain the highest rate of drinking water obtained from modern water systems in houses,

since appropriate equipment is available in big cities. The only state water company, a supplier of safe water produces 56 million cubic metres of water each year, almost 3/4 of which is consumed in three main cities: Douala 41%, Yaounde 29%, and Garoua 8.5% (UNDP 1993). Within the big cities, there are also disparities. For instance, only 32% of houses in big cities including residential areas (areas where VIPs, diplomats, wealthy businessmen live) benefit from the modern water supply (MINPAT 1987).

In rural areas, the situation is worrying as far as both water supply and its quality are concerned. In 1987, only 12.1% of drinking water from modern systems was available. 41.5% of drinking water available came from wells (traditional and modern). 46.4% of water used and drunk came from rivers and ponds with dramatic consequences for people's health (UNDP, 1993). A Ministry of Environment and Forests report suggests that 6.9 million out of 12 million Cameroonians' water supply comes from traditional wells, rivers and ponds (RC, 1992). Even the number of modern wells, alternatives to water systems in houses and public taps, is decreasing. Half of them are not in proper working order because of the lack of the equipment maintenance due to cuts in budget as suggested by SAP (UNDP, 1993).

Despite the availability of water resources and access to water in Cameroon, the access to safe water (according to the UNDP standard) is low; only 32% of people had access to safe water in 1988-1990 (UNDP, HDR 1992). The quantity of water needed for each inhabitant per day is not being met in the main cities, where water is easily more available. It is currently 30 to 40 litres

per person, per day instead of the 80 to 120 litres required according to international estimates (UNDP, 1993).

The UNDP has improved this indicator by also taking into consideration the quality of water. This improved indicator (also known as access to safe water) applied to the Cameroon case, suggests that almost three quarters of water consumed by Cameroonians does not meet health requirements (UNDP, 1993). The majority of Cameroonians should therefore be considered as using water not suitable for consumption, which is an indicator of poverty. Recently (early June 1994) populations in Douala and Yaounde have openly complained about the colour and the taste of the water supplied by the state water company. Some rumours have even associated cases of typhoid with the poor quality of water. Privatisation of the state water company was recently announced (Biya, 1995). It implies the closure of public taps that poor people used to fetch clean water free of charge, or the purchase of water from public taps. The rate of access to clean water in urban and rural areas could drop further. The water use issue is closely associated with sanitation problems, another indicator of poverty in the basic needs model. We will turn to this next.

SANITATION, HEALTH AND LIFE EXPECTANCY

The lack of access to safe water also reveals the problems of sanitation (lack of sewerage and drainage facilities), hygiene, and the prevalence of water-borne diseases such as bilharziosis, river blindness and diarrhoeal diseases, and in some cases, epidemics of cholera (UNDP, 1993).

Accurate data on the health situation in Cameroon are

unavailable. However, it is estimated that a number of diseases tend to be frequent in Cameroon, causing health problems and death.

Table 4: Main causes of mortality in Cameroon and the rate of incidence in 1992

Diseases	Cases reported	Rate of incidence (%)
Malaria	351.170	29,85
Skin diseases	120.536	10,24
Worms	113.660	9,66
Catarrh-Flu	80.476	6,84
Pneumonia	56.368	4,79
Sexual infections	38.699	3,29
Rheumatism	38.620	3,28
Diarrhoea	32.953	2,80
Anaemia	30.995	2,63
Mouth-related infections	30.641	2,60

Source: MINSANTE, Note de Conjoncture (31 Decembre 1992)
(Direction des Etudes, de la Planification et des statistiques sanitaires)

Table 4 only includes those cases of ill people who consented to consult a doctor. A significant number of Cameroonians do not go to hospital and their health problems are not reported. Only half of all cases of illness are reported to official institutions (UNDP, 1993). This is for various reasons: lack of health centres in every village, lack of financial means since the diagnosis is no longer followed by free prescriptions, and belief in traditional healing and medicine.

The situation has worsened during the last decade. There are

two major explanations for this decline in the health service:

1. The implementation of the Bamako initiative, which aimed at making people pay for the real cost of their health. In fact this was the first step towards the end of a free health service.
2. The SAP package which suggests the end of subsidies and a cut in government expenditures. In some cases, the number of hospitals decreased whereas the population increased. In other cases, the increase in the number of hospitals was not proportional to the increase in the number of inhabitants, especially in rural areas, which need health centres the most given the low income of poor people.

Table 5: Evolution of health centres

Health infrastructure	1971	1981	1991
Reference hospitals	-	1	3
Central hospitals	2	-	-
Provincial hospitals	5	7	11
Divisional hospitals	21	39	39
District hospitals	63	134	131
Dispensaries	-	534	645
Major health centres	-	233	281
Primary health centres	-	366	528
Pharmacies	-	50	180
Propharmacies	-	169	220
Total of health infrastructures	-	1,533	2,038

Source: MINSANTE 1992

The UNDP Yaounde office figures contradict the Ministry of Health. The UNDP estimates that in 1992 alone the total number of structures providing health care in Cameroon was only 1,856,

not 2,038 as the Ministry of Health states, see Table 5 (1993). As far as the health personnel is concerned, the situation is not particularly good. In 1992, an average ratio of medical personnel to inhabitants was one medical doctor for 12,000 inhabitants and one nurse for 1,800 inhabitants. In Africa, the average is one medical doctor for 22,900 inhabitants (UNDP 1993). The UNDP report on human deprivation concludes that 7 million Cameroonians out of 12 million do not have access to health services (1992). Whatever the particular disparities between regions might be, the overall conclusion is that the poverty health indicator suggests that more than half of Cameroonians are poor.

The most deprived people in the health sector are villagers and forest dwellers. During our fieldwork in the East province of Cameroon where we worked with the poorest of the poor in the forest, the Bakas, it appeared that no single health centre run by the state service was operational in the main areas of their nomadic movement. However, there was one health centre run by the Catholic church in Bosquet, as part of a project which aims at transforming the Bakas into sedentary communities. It could be argued that the poorer people are the more excluded they are from the health service and the deeper their deprivation will be. One major consequence of the poor health service is the relatively low life expectancy of Cameroonians. Despite the improvement in the quality of the health service and hygiene in urban areas (up to the mid 1980s), life expectancy has not improved that much. This is mainly because of the high number of people who do not benefit from the health service. In 30 years, the average life expectancy has improved by just 8 years. In 1965, it was 49, in

1993 it was 57 years (IFAD 1992 and UNDP 1993).

Figures and available data on sanitation, health and life expectancy as indicators of poverty in the basic needs model lead to the conclusion that more than half of Cameroonians are poor.

LITERACY AND EDUCATION

The basic needs analysis of poverty considers literacy and education as indicators of welfare or poverty. Cameroon invested an important share of its national budget into the education sector. Expenditures continually increased from 1960 to 1987, (see Table 6).

Table 6: Evolution of expenses of the Ministry of National Education in billion Fcfa from 1982 to 1991

Years	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Amounts	22,2	35,1	48,5	57,0	94,8	95,7	78,7	78,4	83,3	86,8

Source: MINEDUC/DPOS, 1993

In 1987, Cameroon was officially declared as being in a state of economic crisis. The SAP will lead to severe budget cuts, including the budget for education. These cuts became effective in 1988 when the education budget decreased substantially. Despite the cuts in the budget for education, it remains the case that efforts to educate young Cameroonians are substantial. In 1988, education expenses represented 3.3% of GNP, and 18.7% of total public expenditures (UNDP 1992).

Table 7 provides an overview of education expenses covering the Ministry of National Education for Primary and Secondary Levels and the Ministry of Scientific Research and Higher Education in

charge of universities and research institutes.

Table 7: General evolution of public expenses on education in million Fcfa from 1985/86 to 1989/90

Rubrics		1985/ 86	1987/ 88	1988/ 89	1989/ 90	1990 /91
MINEDUC	D.P.*	90,16 2	78,74 5	66,87 3	67,32 5	73,2 42
	D.E.*	94,56 5	89,79 1	56,63 8	-	94,0 71
University of Yaounde		16,45	14,95 9	13,86 7	13,40 0	13,6 77
University Centres		2,984	6,200	6,988	6,346	6,13 0
Total		109,6 01	99,90 4	87,72 8	87,07 1	93,0 49

Source: MINFI, 1992

* D.P. stands for Depenses Previsionnelles, in English 'forecast expenses'

* D.E. stands for Depenses Effectives, in English 'real' or 'effective expenses'

Table 7 also reveals that actual expenditure on education is generally higher than forecast expenditure. The tricky task is to establish the relationship between the financial effort and the result. Do Cameroonians benefit from these investments? Do educational expenses promote education for all Cameroonians of school age? There are two ways of analysing the issue. The first considers the quantity of service provided and the second stresses the quality of education.

In 1988, 75% of children were enrolled in primary schools in

Cameroon (UNDP, 1993). In the same year, 68% completed the primary level of education. Only 26%, however, registered in secondary schools, and 3% in universities (UNDP 1992). Despite the lack of accurate data, it is empirically established that the demand for education is higher than the supply. In May 1995 during the National Forum on Education in Cameroon, it was estimated by various delegates to the conference that classes are overcrowded both in urban and rural areas, and that a large amount of school equipment is not in effective use because of the lack of maintenance, for instance laboratories in secondary technical state schools (Delegates to the Forum 23rd and 24th of May 1995). Hence the financial efforts and the political willingness are insufficient in promoting education for all. However, a close analysis of the education expenses reveals that available funds are not used well. For instance, running expenses tend to take the largest share, whereas capital expenditure, aiming at providing new equipment and buildings as well as maintenance of the old equipment, shrinks every year (see Table 8).

Table 8: Actual expenditure for education according to use (in %).

Year	Type of expenditure					Investment	
	Running expenses				Total	(I)	F+I
	Person nel	Equip ment	Soc ial	Other		(I)	F+I
1985/86	66,9	10,5	4,8	1,1	83,3	16,7	100,0
1987/88	62,2	8,7	6,1	0,5	77,5	22,5	100,0

1988/89	70,3	4,4	9,4	0,8	84,9	15,1	100,0
1990/91	89,7	2,3	1,1	0,1	93,2	6,8	100,0

Source: MINFI, 1992

In spite of the encouraging rate of enrolment in primary schools, very few Cameroonians will complete their education at secondary and tertiary levels. However, this high rate of enrolment in primary schools has consistently improved the rate of literacy in Cameroon.

A new phenomenon called in Cameroon de-scolarisation has emerged: it is the decrease of the enrolment of pupils in schools. For instance, 50,000 pupils registered and sat the 1993 B.E.P.C session. In 1994 only 42,000 pupils registered and sat the same examination (CT No 5,245, july 1994). A demographic explanation based on the drop in fertility in 1979 (the year pupils sitting that examination are supposed to have been born) cannot be sustained. Hence de-scolarisation could be a consequence of both the economic crisis and SAP. On the one hand parents can no longer finance the education of their children, as school fees are higher and the books are more expensive; on the other hand, state subsidies to the education sector have dropped following the SAP recommendations. It is likely that even the adult literacy rate which increased in the 1970s and early 1980s from 33% in 1970, to 56% in 1985 (IFAD 1992) has also decreased during the last decade. The overall balance of education as far as quantitative indicators is concerned seems to be negative. Within basic needs assessment criteria this is a sign of poverty. The quality of education is related to the end results and the

efficiency of Cameroon's education system. Does the education provided prepare Cameroonians for the struggle against poverty? Is the education system orientated towards training for employment? Basic needs analysts of poverty often fail to raise this important question of the quality of education as the main instrument for solving unemployment problems as well as poverty alleviation. In essence, modern sector formal employment will remain the avenue for the privileged minority. Most of the education system should prepare people for maximising their opportunities in agricultural production or the informal sector i.e sustainable livelihood strategies.

Two educational systems exist in Cameroon. One is known as the anglophone system and is found mainly in West Cameroon (a former British territory) and the other is known as the francophone system and is found in the remaining 80% of the territory.

The former system is characterized by a higher level of specialization. The programme encompasses a limited number of disciplines; however, all focus on the specialisation chosen by the student (as early as the secondary school). This system tends to be more efficient and beneficial to students who gain an acceptable level of knowledge in their field of studies.

The francophone system is characterized by a wide range of subjects at the secondary school and by an emphasis on general knowledge. Its weakness lies in the inability of students completing their secondary school to be usefully employed. Other factors underline the irrelevance of Cameroon's education system to the new economic, social and environmental challenges.

Firstly, it does not train people for a sector that can provide

more jobs. For instance, 80% of the active population depends on rural activities, mainly agriculture, but very little is done in school programmes concerning agriculture. In 1972, manual work was included in school programmes. It remains, however, a marginal subject, disregarded by pupils, teachers and headmasters. The education system trains pupils mainly to meet the needs of formal sector employment, in offices such as the civil service or parastatals. These sectors however, are unable to provide all those who graduate with jobs. In 1981, over 1,827 students graduated from universities, but only half of them (937) got jobs, 2,758 out of 7,435 secondary school graduates found employment, and 3,063 out of 44,372 pupils who left primary schools found jobs (Inack 1983:283-299).

Secondly, the education system does not provide people with skills to create jobs, or prepare people to be self-employed.

The government has recently realised the inadequate nature of the education system to meet the needs of ordinary people, industry, and the national and international economy. It has ordered a full review of the education system. Proposals made by different delegates to the nationally convened forum on education include a move towards specialisation of pupils and students fields such as agriculture, environment, computing and fisheries (MINEDUC, 1995). A poor education system produces a non-skilled labour force and unemployed citizens who could in turn become a threat to the forest as they adopt survival strategies of mining the timber resource.

FOOD AND NUTRITION

There are three ways of looking into the issue of food and

nutrition. Firstly, there is the issue of food availability, secondly of food security, and thirdly the quality of food.

The availability of food

Cameroon has achieved a high level of food self-sufficiency (WB, 1989). A number of factors explain the availability of food for all: the wide variety of crops, low population density, fertile soils, a favourable climate with two rainy seasons (one long and one short) in the southern half of the country, which has the advantage of allowing for two cycles of food production. The diverse cropping patterns increase the overall availability of food. Finally, cultivation of crops that resist drought (cassava in the South and sorghum and millet in the North) reduces the risk of food shortage.

Table 9: The index of food availability by province (%)

Crops	Centre Sud	Est	Nord	Sud-O Littoral	Nord-O Ouest	Yaounde Douala
Tubers	95	97	17	97	84	-
Cereals	63	50	98	61	83	93
Beans, nuts	77	87	61	66	72	75
Vegetables	43	53	40	47	35	30
Meat, eggs, fish	80	63	75	88	63	89
Food for children	10	7	2	16	3	28
Fruits and Vegetable	50	49	46	46	46	80
Palm oil/other oils	77	49	31	93	89	95
Milk	94	96	99	13	7	98

Source: MINAGRI 1978

In spite of virtual food self-sufficiency, Cameroon still imports

rice, wheat flour and fish. Table 9 indicates the deficit of certain products (vegetables, fruits, and food for children) in all provinces. This small deficit is corroborated by a study carried out in 1986 (MINAGRI 1986). This study indicated that food self-sufficiency might not be sustained by the end of the century (MINAGRI 1986). Table 10 shows the forecast deficit as far as the main food products consumed are concerned.

Table 10: Trend of predicted deficit between demand and supply of food products in 1990 and 2000

Products	1990-1991		1995-1996		2000-2001	
	H ₁	H ₂	H ₁	H ₂	H ₁	H ₂
PLANTS						
Maize	67	69	50	52	-3	-1
Rice	-226	-220	-308	-265	-400	-320
Millet/sorghum	34	40	82	89	81	91
Wheat and others	-149	-141	-200	-379	-267	-228
Yams	53	53	54	54	52	52
Cassava	55	53	42	35	-14	-26
Sweet potatoes	68	8	4	6	0	0
Potatoes	77	77	78	79	74	77
Coco yams	58	58	49	47	42	39
Plantains	19	6	-32	-47	-155	-180
Refine sugar	6	8	9	13	17	24
All sugars	-25	18	-53	-37	-100	-72
Dry vegetable	12	12	10	12	5	6
Grains	18	19	25	26	29	35
Vegetable	70	76	113	125	142	165
Fruits	245	254	268	298	249	289
Vegetable oil		28		-8		-48
MEAT						
Cow meat	H ₁	H ₂	H ₁	H ₂	H ₁	H ₂
	-7	-3	-20	-13	-37	-22

Ships, goats	-13	-11	-18	-14	-23	-15
Pork	-12	-10	-18	-15	-23	-20
Poultry	3	3	13	14	30	40

H₁ = high economic growth rate hypothesis

H₂ = weak economic growth rate hypothesis

Source: MINAGRI 1986

Given Cameroon's disastrous economic situation, hypothesis 2 (weak economic growth) in table 10 is likely to occur. The potential unsustainability of Cameroon's food self-sufficiency in the long-term justifies the concern of Cameroon's government in trying to reinforce food self-sufficiency, as is stressed in the country's new agricultural policy (MINAGRI, 1992). But will this short-term policy for food self-sufficiency really guarantee food security?

Food security

Food security is described as the access by all people at all times to enough food for an active healthy life (WB, 1989). Thus, food security implies two major concerns: the availability of food and the ability to acquire it. On these grounds, Cameroon is considered by the major development agencies as a country with a relatively high degree of food security compared to other Sub-Saharan African countries (WB, 1989). The IFAD food security index data in Table 11 corroborates the World Bank's analysis.

Table 11: The index of food security

Country	per capita daily calorie supply as a percentage of requirements		percentage annual growth in per capita daily energy supply	per capita food production index (1979-1981=100)	food staples self-sufficiency ratio	
	1965	1985	1965-1985	1986-1988	1965-1967	1986-1988
Cameroon	88	90	0.09	97	99	94

Source: IFAD Appendix tables 1992

A second variety of measurement of food security suggested by UNDP in Table 12 provides the following data:

Table 12: Food security in 1988-1989

Country	food production per capita index (1979-81=100) 1987-89	agr. production (as% of total GDP) 1989	daily caloric supply per capita 1988	daily caloric supply (as% of requirements) 1988	Food import dependency ratio (%)		cereal imports (1,000 metric tons) 1989	food aid in cereals (as% of cereal imports) 1988-89	food aid (million US\$) 1988
					1986	1988			
Cameroon	96	27	2,161	94	7.0	14.2	345	2	0

Source: UNDP Human Development Indicators 1992 and 1993

The rise in the food import dependency ratio can be explained by three factors.

- Cameroon's food imports have increased between 1986 and 1989. The demand of some imported products, mainly in cities

explains this rise. Products such as rice, frozen meat and chicken coming from Asia and Europe were cheaper than locally produced rice, meat and chicken. The trend in importing food products was reinforced by the first phase of deregulation associated with the SAP.

- The situation in neighbouring countries, mainly in Chad and Central Africa Republic. The imports of these two enclave countries go via Cameroon and the customs service does not always discriminate between incoming goods for Cameroon and those going to the neighbouring countries.

- The exceptional economic situation in Nigeria between 1985 and 1988. The Nigerian government had decided to suspend and in some cases to ban the import of some goods (mainly cereals coming from other continents, wheat flour and rice) in order to stimulate national production. Some Cameroonian businessmen took advantage of Nigerians' dependency on these products and imported high quality rice and wheat flour and sold these to Nigerians illegally.

Some of the reasons explaining the ratio of food import dependency have disappeared. Hence the food imports figures should be lower, for three reasons at least.

- In 1989/1990, the government banned imports of frozen goods for health reasons.
- The situation has changed in Nigeria.
- Since the devaluation of the currency Fcfa, imported goods are more expensive and in less demand.

However the importation of some food products remain high. This is the case with fish.

Table 9 suggested that the deficit in some food product will grow. This will necessarily have negative consequences for food security. Cameroon has already experienced the problem of food insecurity. In periods of drought (in 1975 and 1985), the northern part of Cameroon located in the sahelian ecological zones, suffered from shortages of millet and sorghum, the staple foods of people in those regions. Although there were plenty of tubers and plantains in the southern part of Cameroon, the inability to satisfy the dietary habits of people from the North and Far-North provinces and the weaknesses of the transportation system revealed the fragility of the food situation as well as the vulnerability of people living in fragile ecological areas. The World Bank concludes in its 1989 report that there is a serious risk of food shortage for people in the North and the Far North provinces in case of drought and in some cases when rain comes late (1989). The access to food supposes two things: the means to acquire food, and the availability of food products where they are needed.

Experience from droughts in 1975 and 1985 shows that price elasticity is an important factor for access to food products during periods of natural disasters; high demand for sorghum and millet and a lower supply resulted in a rise in prices which vulnerable and poor people in the northern part of Cameroon could not afford. Transportation, storage and distribution costs also contribute to the overall cost of production. The consequence is the inability of people to access food even though it is available. In 1985-1986, the World Food Program bought from SEMRY

and UNDVA hundreds of tons of rice that was later distributed to the local population that needed, but was unable to buy, food products (UNDP 1993)¹. Food insecurity is an issue and can easily become a major concern for a number of Cameroonians (1,000,000) in the Far North and North provinces. A large number of Cameroonians face another problem associated with food insecurity: the diet or nutrition issue.

The quality of diet

The first column of Table 11 and the third and fourth columns of Table 12 indicate the level of calorie supply met daily by each Cameroonian. Although it remains below the average of 100, the trajectory is quite interesting and encouraging: 90% in 1985 (IFAD, 1992), 94% in 1988 (UNDP, 1992), and 95% in 1992 (UNDP, 1993). These figures, however, do not give an adequate picture of the nutritional situation in Cameroon. A number of studies and analyses point out the huge disparities between rural and urban areas, the regions, and between individuals. The national nutritional survey of 1978 established that people in the main cities have a better diet than those in rural areas (MINAGRI 1980). However, the diet patterns depend on ecological zones and geographic location. For instance, the availability and the consumption of tubers were very low in northern Cameroon - only 17%. On the contrary, the availability and consumption of meat

¹UNDP Yaounde has estimated that since 1984, the WFP has bought foodstuffs from Cameroon's parastatals and cooperatives at the price of about Fcfa 2.163 billion. The food was distributed to Cameroonians in the North of Cameroon, to Chadian refugees in the North of Cameroon, and to Chad when facing food problems (UNDP, 1993).

and milk in that region was very high, whereas that of milk is very low in the South and Littoral provinces. The same survey identified the problem of malnutrition, which affected one fifth of Cameroonian children under the age of five and which has consequences on the children's growth and the relatively high rate of infant mortality (9% in 1990) (UNDP HDI 1993). The survey concluded that malnutrition is worst in the rural areas despite the availability of a large quantity of food. This malnutrition was associated with poverty, lack of information and ignorance about the importance of a balanced diet (UNDP, 1993).

The application and the analysis of the Cameroon situation through the indicators of poverty in the basic needs measurement model suggests two things:

- Generally speaking Cameroon is not a poor country. It has a great potential to meet its people's needs. However, the rate of satisfaction of these needs remains below the real capacity of Cameroon's resources (Mc Cleod, 1994).
- A large number of Cameroonians, one in four, which is 3.5 million (mostly people living in rural areas, which is 2.8 million), do not meet their basic needs (UNDP, 1993). These people fall into the poverty category.

II.2: THE CORRELATION BETWEEN DEFORESTATION AND POVERTY

The general assumption that deforestation undertaken by rural people generally occurs in order to enable agricultural activities appears to be confirmed in the case of Cameroon. What is not yet established is the intensity of the link between

agricultural activities, the basic needs people have to meet, and the extent of forest clearance. No study has demonstrated a clear case of the relationship between deforestation on a large scale and agricultural activities aiming to simply provide people with their basic needs in forest areas. In the light of the research we conducted in East Cameroon, this section will instead oppose the assumption of the correlation between poverty and deforestation. The first part will present the results of our research, and the second part will broaden our hypothesis by giving further examples.

THE LESSON FROM EAST CAMEROON: THE POOREST DO NOT DEFOREST.

The research conducted in East Cameroon in December 1993 and January 1994, particularly in the areas of Abong-Mbang, Lomie, Adjela and Ngoiela, suggests several conclusions which partly contradict the general assumption of the link between deforestation and poverty. The East province covers an area of about 10,900,000 ha, of which 7,630,000 ha is a forest area. One third of the Cameroon rainforest is located there. Four fifths (4/5) of it is the closed forest² (Le Messenger No.315, 1993). Two main groups live in the area; the Bakas and the Bantus (they consist of a number of ethnic groups). In 1991, the East province had an overall population of 578,200, almost 5% of Cameroon's population (RC, 1992). This province is considered to be the poorest in the country despite its extraordinary potential

²These estimates are a sum of different figures. In fact, there are no exact figures. Forest is estimated to be between 16 million and 22 million ha large; it is therefore very difficult to give exact figures.

including the average fertility of its soils, its forests, its minerals (gold, diamonds) and its rivers (Le Messenger No 317, 1993). It has the lowest rate of literacy and education. It lacks means of communication with only 80 km of tarred roads in such a large area (Le Messenger No.317, 1993). There are only two state secondary high schools, one public hospital of an average standard with only one surgeon (Le Messenger No. 317, 1993). It has the highest rate of child malnutrition 26.7% of children (WB, 1989:22), and lacks sufficient facilities to enable access to safe water (see tables above). The whole division of Lom et Djerem has only one pharmacy, which is poorly supplied. The East province of Cameroon is known as the least developed and, worst, the most neglected of the ten provinces of Cameroon (Le Messenger No.317, 1993)

In spite of these negative comments and the visible poverty of both the province and the people, the rate of deforestation due to agricultural activities is very low; much of this land remains rainforest (WB, 1989:10). Most land used for agricultural purposes was cleared by farmers involved in commercial crops, mainly robusta coffee. Up to 1983, 32,000 ha of land were used for the production of this export crop (MINAGRI 1984). Robusta coffee is usually grown by means of extensive agricultural techniques (WB, 1989). Thus extra land is required to produce more, and this leads to clearance of forest.

An investigation we made to determine the agricultural practices of some groups in the area reveals that the Kakas of the village of Siembe, one of the ethnic groups within the Bantu racial

group, practice intercropping associated with tree planting. This has an advantage of providing people with the products they need for their subsistence. But Kakas also fallow the land. Thus they combine both intensive agriculture protective of the forest with extensive agriculture, which is forest-destructive. They do not practice 'bush fire', but they burn grasses after clearing the land before cultivation. Fuelwood used for cooking their meals is mostly from the newly cleared area or the fallow land trees which were felled. Women and children also collect branches of trees broken by strong winds and men cut trees in small pieces after they had been felled by a tornado. Unavailability of sophisticated devices to fell trees such as a chain saw makes it difficult for the Kakas to fell big trees. They partly also depend on some herbs and kinds of bark as far as the cure for some diseases is concerned. Their daily life, in spite of the slow process of integration in modern society, is still largely influenced by their traditional lifestyle. This explains their partial dependency on forest products, and their reluctance to fell trees indistinctively.

Contrary to the Kakas, a Bantu ethnic group, the Bakas (Pygmies), have conserved their lifestyle for centuries. The Bakas are the poorest of the poor in this area and indeed in the whole country. Apart from those who have settled down in the framework of a project which aims at providing them with a sedentary life, the Bakas are illiterate and not educated. They do not have houses, just huts, they have no beds, no access to safe water, or health service. They live in absolute deprivation. They are both the prototype and a perfect illustration of the poor according to the

measurement of poverty following both the classical and the basic needs model. 85% of the adult Bakas I interviewed (they were 50 in total) have never felled a tree. The remaining 15% felled young trees or average size trees, either to build their shelter or while working for a Bantu who was creating a farm. These 15% were either involved in one settlement project (Bosquet village) or they were already living in a village following the Bantu lifestyle. In any case, those who felled trees were in the process of adopting a sedentary lifestyle with all its requirements. The 85% completely depend on the forest to satisfy their basic needs, food, health and shelter. The Bakas do not consider the forest as a means of livelihood. Their perception of the forest is deeper. The forest is their life. To answer the question 'why do you oppose the idea of clearing the forest?', the reply of almost all of them was "because it is our life". Even those involved in the project of settlement reacted in the same way. Despite the fact that they agreed to live in the camps that were considered to be their villages, they usually return to the forest from time to time, even for a short period of time. The expression "forest is our life" has two intertwined aspects which explain their commitment to the forest. Firstly, they meet all their needs thanks to forest products. Secondly, the forest is their civilisation, their soul, the only place where they feel at home with a particular knowledge of it and probably a special understanding of it. They are committed to the forest. In the light of the above figures and these two experiences in East Cameroon, one poor community in rural area, the Kakas, and other poor people rooted deep in the forest, the Bakas, a number of

observations can be made.

1. Despite the availability of land in the East province, few people are involved in agricultural activities leading to massive forest depletion.

2. Those people who are involved in agricultural activities and likely to require more land tend to be literate or have a relative who is literate and who draws their attention to the relative's lucrative activity, or they become involved because they imitate or because they follow a government campaign. In general, they are familiar with the market economy.

3. Few people in the East province grow commercial crops³. We observed that the majority of crops produced by small farmers in many villages (mainly plantain, yam and cassava) remain for a number of days alongside untarred roads, covered with dust.

4. Ordinary people produce subsistence crops in a limited space, thanks to their intercropping system.

5. The lack of markets or the inability of products to reach major markets in cities discourages people from producing more. In a situation where the local demand is very low (case of remote villages) with the possibility of taking the products to cities almost nonexistent because of the absence of means of

³The precise number of people in the East province involved in this activity is unknown. Our empirical assessment and the fact that in the whole of Cameroon 200,000 farmers grow robusta coffee, suggests that less than 10,000 people in the East province were involved in this activity. Furthermore, the cut in prices of robusta coffee in the second half of the 1980s, no more subsidies for fertilizers, and the closure of the main parastatals in charge of agricultural activities in the East province have contributed to a further decrease in the number of small farmers involved in the production of robusta coffee.

communication, transportation and distribution (in the case of a major part of the East province), poor people tend to produce only the quantity of food which is necessary to meet their needs. Thus they use less land and deforest less.

6. The lifestyle of some groups is essentially forest protective. For instance, the Bakas' livelihood entirely depends on the forest and they do not deforest. The Kakas depend partly on the forest, especially for their health and protein supply (meat). They tend to be more friendly to the forest.

In the East province of Cameroon, the poorest of the poor do not put the forest at risk. Their activities have to some extent a minor negative impact on the forest (the case of the Kakas). As far as the Bakas are concerned, Basically they do not deforest. There is an indication that agricultural activities to meet food needs of poor people are not the relevant motive for the clearance of the forest on a large scale. In most cases, forests are cleared to supply urban markets and international markets with food or commercial crops:

"Throughout the tropics, much of the land on productive soils is held in large farms where it is used to produce commercial crops, primarily for export." (Gradwoll and Greenberg, 1988:41)

In Cameroon, the West province with the most fertile soils in the country offers another example of a link between deforestation and poverty. West Cameroon is said to be among the best equipped provinces in Cameroon as far as education, water access, health, food, agricultural revenues and communication facilities are concerned (RC, 1992). Traditionally, rural people used to practise intercropping and in some places agro-forestry. Their diet is made up of tubers, corn and beans (WB, 1989). They

produce a sufficient amount of food to meet their food needs and the surplus is sold in other regions and urban centres. For instance, beans, apples and European potatoes found in any Cameroon market are grown in west Cameroon. The West province has almost lost its primary forest except for a small area of forest in the Noun division. Rural people use the major part of their land to produce commercial crops for exports, for local industries or to supply urban markets with goods.

Between 1971 and 1986, the Bamilekes (the major ethnic group) in West Cameroon increased their plantation and production of robusta coffee from 68% to 87% because of rising prices on the international market (WB, 1989). At the same time, there was a decrease in cultivation of arabica coffee because this variety of coffee needs to be grown in the highlands and there was no more space left in the highlands of the West province. If there were more highlands covered with forests, rural people would clear the forest to expand their farms. The West Cameroon case shows that the clearance of primary forest occurs for other reasons than for the purpose of meeting their food needs:

"Despite the small size of their farms and their traditional farming practices, small farmers are more and more involved in profitable trade-offs...50 to 60% of their crops are marketed." (WB, 1989:12)⁴

When the soil is fertile, when there is food self-sufficiency and when the earnings from selling commercial crops or food crops are

⁴This is our translation; the original version is:
"En depit de la petite taille de leurs exploitations et de leurs pratiques culturelles traditionnelles, les petits agriculteurs participent de plus en plus aux echanges renumerateurs...De 50% a 60 de leurs recoltes sont commercialisees."

higher, rural people tend to deforest as well, according to the economic rationale. It can be argued that the economic rationale of the Bamilekes is also justified by the need to pay school fees for their children and to cover their health needs. Our reading of the events in West Cameroon is that some small holders deforest to meet the needs of their family. Others looked beyond their immediate needs, took advantage of the positive economic climate of the 1970s and the beginning of the 1980s in order to make money and to do business in commercial crops at the expenses of the forest. The analysis of the West and East provinces of Cameroon highlights the complexity of the link between deforestation and poverty.

CONCLUSION

This chapter attempts to explore the entangled correlation between deforestation and poverty. The first step in this attempt was to work out a common understanding of the key concept of poverty. Two understandings of poverty are used in SD thinking. Both models of measurement gave contradictory results as far as Cameroon's state of wealth is concerned. According to the World Bank, Cameroon is not a poor country, it is a low-middle income country. The UNDP meanwhile, using the human development indicators which indicate the extent to which basic needs are being met considers Cameroon as a low human development country. More than three million Cameroonians are poor (IFAD, 1992) ; and poverty is a threat to the forest:

"At the lower end of the income scale, poverty is as great an enemy of the environment as misspent affluence by rich societies." (UNDP, 1992:18)

Our basic argument is that the poorest of the poor do not deforest and poor people in rural areas behave differently towards the forest. Our field research in the East province of Cameroon gives us material to nuance the conventional assumption of a positive correlation between poverty and deforestation.

We distinguish four different situations as far as the link between deforestation and poverty is concerned. In the first situation, there is a negative correlation between poverty and deforestation. This refers to the idea that the poorest people do not deforest since their life, livelihood and lifestyle depend entirely on the forest. That is the case of the Bakas.

The second situation refers to a small probability of a positive link between poverty and deforestation. It implies that in the long term, poor people could deforest in order to meet their needs. This is the case of the kakas. Their behaviour towards the forest is friendly since they partly depend for their livelihood on the forest; their lifestyle has not yet completely shifted to a modern lifestyle.

The third situation refers to the significant potential of a positive correlation between poverty and deforestation. The probability of the destruction is high and the imminence of the process of the destruction depends on some objective conditions such as the existence of markets, the availability of means of communication and transportation. This is the case with a number of rural people living in small urban centres in the East province.

The fourth situation is the existence of a positive link between rural people's will to meet their needs and deforestation. This

is the case of the Bamilekes in the West province of Cameroon.

The existence of these four situations reveals that favourable conditions leading to deforestation by the poor should exist. They include the shift from the traditional lifestyle to modern life, from the barter economy to the money economy, the existence of a viable market as well as the efficiency of means of communication and transportation. The existence of a market and other facilities are therefore indispensable ingredients which will allow for the positive correlation between poverty and deforestation. These factors are also underlined by the fact that people deforest whereas they have stopped being poor, just to build up and to consolidate their wealth or to do business as a number of Bamilekes did in West Cameroon.

CHAPTER III

TECHNICAL OPTIONS FOR FOREST PROTECTION AND SD

INTRODUCTION

The previous chapter addressed the question "does poverty lead to deforestation?". The question could equally be presented in another way. Is poverty compatible with the existence of forests in areas that are considered to be poor? Indeed, can a solution to the poverty problem and development be compatible with forest protection? If so, how is this to occur?

Officially, the Cameroon government defends the thesis of the compatibility of both development and forest protection (RC, Bill No. 544/PJL/AN Nov 1993). Thus it suggests (in accordance with the leading development agencies), three ways of achieving the goals of both development and forest protection. In this thesis, these are defined as the following technical options: forest management, agroforestry, and conservation. In addition, we discuss the remaining scientific options in a fourth section. Cameroon chose to tackle both problems at the same time. However, a number of issues related to the thesis of the compatibility between environment conservation and development have not yet been settled. For instance, what is the place of poor people within the given technical options. Are the options suggested for forest protection both sustainable and acceptable to people? Can Cameroon save its disappearing forest simply by implementing technical measures?

This chapter will examine and assess in detail the available technical options, and discuss their limitations.

III.1 CLASSICAL FOREST MANAGEMENT: AN OPTION FOR SD

Forest management has been promoted in the 1970s in most African countries as the best way of tackling forest problems and a number of development issues (Hummel, 1984). Classical forest management has two main objectives: the protection and regeneration of forest, which consists of afforestation and reforestation (De Saussay, 1987). This classical view of forest management was enriched by a third objective, the economic element. The underpinning rationale is that general economic growth, including forest industries and the timber trade, will benefit the whole country. International co-operation has encouraged and strongly sponsored the implementation of classical forest management. A number of important projects in the forestry sector were funded by international organizations and some European countries. On August 25th 1967, an important agreement to fund the project CMR/67/506 was signed by PNUD/FAO and the government of Cameroon (RC, MINECOP 1977). The project lasted five years. Another agreement to continue this project was signed on January 1st 1973 and lasted until 1976. These two agreements aimed at funding development of forest industries (RC, MINECOP, 1977). The World Bank also funded forest sector development projects. The World Bank signed two agreements about loans No.935/4 and No.429/6 with the Cameroon government (RC, MINECOP 1977). These loans were to enable Cameroon to fund a project connected with transportation of timber for export. Preserving the forest or regenerating it aimed at supplying markets with timber. The World Bank, with the shift in forest sector policy in 1978, acknowledges this:

"Much energy over the last two decades has gone into giving identity to the forest sector and the importance of forestry development rather than to forestry's contribution to development in the widest sense..." (WB, 1978:16)

Despite this rare self-criticism by the World Bank, it is likely that little has changed. Forest is still considered mainly as a source of income and export earnings (WB, 1989). This partly explains the resource-centred view of Cameroon governments who have continued to emphasise the economic value of the forests (Djingoer, 1992). An appraisal of programmes of forest management previously carried out, provides an indication of what has and has not been achieved within the framework of classical forestry options over the last sixty years.

III.1.1 ASSESSMENT OF TREE PLANTATIONS.

Classical forestry places great emphasis on silviculture in the form of afforestation and reforestation. Both activities aim at increasing the area covered by trees and forests. However, they differ one from another as far as the starting point is concerned. Afforestation refers to the plantation of a large number of trees on bare land, whereas reforestation is cultivation of trees in a formerly forested or wooded area.

Plantation of trees in Cameroon (afforestation and reforestation) has been going on since the early 1930s. In 1933, the first silvicultural experiment was carried out in Ngaoundere, a transitional ecological zone, between the dry savannah of the north and the moist forest of the south (ONADEF 1990). In 1936, another experiment was conducted in a forest area, in Makak (ONADEF, 1990).

Unfortunately, the results of these first attempts at afforestation were disappointing (ONADEF:1990). Four sets of factors explain this failure:

- the lack of clear objectives for afforestation programmes,
- the inadequacy of tree species for the ecological conditions,
- the overambition of the silviculture programme, and
- the poor techniques of silviculture used (ONADEF, 1990).

Some of these factors responsible for the failure of initial silviculture efforts have not yet been resolved; for instance the inadequacy of tree species chosen for some ecological zones. From 1933 to 1994, silviculture activities carried out by state bodies (parastatals or under state supervision) have only covered an area of 35,895 ha. in total, including 22,627 ha in the rainforest area, 8,135 ha in the humid savannah area, and 5,133 ha in the dry savannah area (ONADEF,1990:2). These figures, however, do not reflect the real situation. Our research at the Ministry of Environment and Forests and also in ONADEF (the parastatal in charge of afforestation and reforestation activities) reveals that the effective number of tree plantations is significantly lower. This can be explained by the fact that the official figures do not take into account phenomena occurring after the planting of trees such as bushfires, overgrazing and the droughts of 1975 and 1985 in the north (Mahamat 1994).

Tree growing activities are carried out both by the public sector mainly the state through its parastatals, with international co-operation support, and by the private sector. Up to 1992, the state had been conducting its programme of afforestation and

reforestation through the Ministry of Agriculture. The ministry had two parastatals that implemented its programmes: National Office for Forests Regeneration (ONAREF) and National Centre for the Development of Forests (CENADEFOR). In 1990, both parastatals ceased their activities and a new organization was created ONADEF⁵. The creation of the Ministry of Environment and Forests in May 1992 placed ONADEF under the authority of the new ministry. All public programmes of afforestation and reforestation have been conducted by ONADEF since 1990.

From 1933 to 1990, the state sector created 69 tree plantations (ONADEF 1990). The area cultivated varies from 8 ha (Fongo-Tongo plantations) to 5,927 ha (Kienke-Sud plantation) (Ibid). Almost all state silviculture activities took place in forest reserves. In some cases, the state carried out some afforestation activities in certain areas and afterwards the area was classified as a forest reserve. This occurred in the reserve of Fongo-Tongo (8 ha), Dschang signal reserve (47 ha), the reserve of Bandjoun (10 ha), the reserve of Bangou (25 ha), the reserve of Baham (100 ha), the reserve of Baloun (62 ha) in the northern savannah zone of Cameroon, the reserve of Mayo-Oulo (310 ha) and Goshiga reserve (857 ha) (ONADEF 1990).

In other cases, the state extended the area of reserves by cultivating tree farms. This happened in the Baleng reserve created in 1934, which initially covered an area of 98 ha and was later extended to 300 ha, and was also the case with Bamougoum reserve created in 1947 on an area of 32 ha but which

⁵Office National de Développement des Forêts (ONADEF) was created by the decree No.90-397 of the 23th February 1990.

covered an area of 76 ha by 1990 (ONADEF 1990).

An analysis of the state's afforestation and reforestation shows that:

1. State afforestation activities were mainly concentrated in hostile ecological zones such as sahelian or savannah areas, for example Mayo-Oulo or Maroua reserves, or in areas where forests have almost disappeared, as is the case of west Cameroon, with the reserve of Baha (100 ha) or the reserve of Bamendou (62 ha). In the sahelian region, the objective was to slow down further spreading of sand by wind and thus prevent the desert from expanding.

2. State reforestation activities tend to concentrate on damage caused by logging activities, for instance, the reforestation of the reserve of Mbalmayo in the Centre province. This province, particularly the Mbalmayo area, has been deforested following 60 years of logging activities.

In spite of the high number of state tree plantation activities, the actual areas covered are very small compared to the forest area destroyed each year and the total land availability. Between 1933, the date of the first tree plantation, and 1990, the date of the last tree plantation, only 33,590 ha of forest area had been replanted according to official statistics. In reality, only 17,950 ha had been forested a little over half the total area claimed (ONADEF, 1990).

Table 13. Afforestation according to ecological zones.

Details of ecological zones	Area planted in theory in ha	Rate of recovering %	Actual area planted in ha	Afforested Area to change in ha	Afforested Area to clean in ha	Afforested Area to maintain in ha	Tree plantation to treat ha	Tree plantation to clear ha	Tree plantation to exploit ha
forest	21,118	52	11,138	4,430	2,784	3,115	3,169	4,866	713
moist savannah	8,040	60	4,813	848.5	568.3	1,862.6	-	1,202.7	2,847
dry savannah	4,432	45	1,999	815.8	669.7	103.9	-	607.2	1,154
total	33,590	53	17,950	6,094.8	4,022	6,012.5	3,169	6,675.9	4,714

Source: ONADEF, 1990

In 61 years of forest regeneration programmes, only 17,950 ha of forest areas was regenerated. The gap between the rate of regeneration, either by afforestation or reforestation, and the rate of deforestation, 200,000 ha in 1988 (WB, 1989) is staggering. The level of forest regeneration in Cameroon has been extremely low⁶ and poses a real threat to the survival of the forest when the state's inability to place its remaining forests under sustainable management is taken into consideration. One of

⁶In our evaluation, we consider 1933 as the starting period of the regeneration programme and 1994 as the current period. Mr. Mahamat, director of production in ONADEF, reported in an unstructured interview held in January 1994, that no single project of tree planting has been carried out by ONADEF (parastatal in charge of regeneration of forests) since 1990.

the best options as far as forest management policy is concerned, could be to ensure a better balance between exploitation and regeneration of available resources. A failure in reaching this balance inevitably leads to a slow process of forest destruction. In Cameroon, the state itself took responsibility to ensure afforestation and reforestation by

- creating parastatals with these objectives,
- raising taxes from logging companies that were to finance regeneration activities⁷ (RC, 1981), and
- doing less to promote rural and social forestry.

The state's failure to implement its own programme and to carry out afforestation and reforestation suggests that at least one important aspect of the management of forests is missing in the attempt to preserve forests and promote SD.

The private sector has played a very limited role in afforestation and reforestation activities. Despite the lack of data documenting the role of the private sector in tree planting activities, there are a few achievements. For instance, two companies involved in the fruit juice production business planted some lemon trees and guava trees in North Cameroon. In the South-West province, there are plantations of rubber-trees.⁸

These activities, although they end up by covering large areas with trees and forest (in its broad sense), do not contribute to

⁷The law No.81-13 states that reforestation taxes must be transferred to the agency in charge of forest regeneration (Provision 32 of the law No.81-13 on the forest regime in Cameroon).

⁸Basically, these plantations belong to the state (parastatals, CDC and HEVECAM). However, some private companies have shares in CDC.

the preservation of the rainforest. Thus far, the private sector has not yet been involved in "pure" reforestation activities. The government had not given any clear incentive to the private sector. The decree No. 85-1168 of 23 August, 1985 introduced a prize for the creation of new coffee, cocoa plantations and forest tree species (RC, 1985). But the second paragraph of the second provision of the same decree states the objective of tree plantations being to prevent desertification (RC 1985). It could be interpreted that farmers who grow trees in forest ecological zones are not entitled to the prize, since there is no immediate threat of desertification. Furthermore, the prize is low US \$ 666.6 per ha planted, before the devaluation of Fcfa in January 1994 if one takes into consideration all the conditions specified. One of these conditions is that the farmer should plant 5 ha of trees at least before claiming the benefit of the grant. In other words the prize is offered for the 6th ha of tree plantation. Those conditions were rarely met. It was too much work for too little gain. Thus, the private sector did not show any interest in afforestation and reforestation of species other than fruit trees.

Equally, farmers show very little interest in plantation of forest tree species. There are few cases of social forestry in Cameroon. In the provinces of the Far North and North, some attempts have been made. Communities planted trees under NGOs supervision and after the government's campaign aiming at fighting desertification. Projects such as "Sahel Vert" ("Green Sahel"), that were promoted in the 1970s involved rural farmers, pupils and students (RC 1976).

In the southern part of Cameroon, apart from farmers who grow trees for fruit, there is no major activity in forest tree species plantation. Social forestry is not developed in the southern forested part of Cameroon. Thus regeneration of forests is not occurring.

International cooperation has been promoting this activity since the late 1980s; for instance, British co-operation through the Mbalmayo forest management project (RC-UK 1992)

The data available on management of forests as far as silviculture activities are concerned, highlight the lack of sustainable forest management up to 1992. Neither has the state drawn up any convincing policy for afforestation and reforestation or succeeded in implementing the existing policy, nor has the private sector made up for the state's failure. There are a number of explanations for this situation and the poor results of afforestation and reforestation activities. They are:

- Policy makers perception of the forest. The forest has been considered by most policy makers as a means of earning money in a short period of time. It has been seen as inexhaustible resource by some forest dwellers as well as some policy makers.
- The lack of a clear management programme and skills. It is said that French speaking countries in Africa have only recently been initiated into forest management. They had a very poor legacy from their former colonial masters in this sector (FAO, 1985).
- The lack of financial resources. The share for resources reserved to the management of rainforest has remained low since there still are a great number of countries where politicians continue seeing forests as stocks of logs and potential arable

land rather than as a renewable resource which needs a dynamic management (FAO, 1990:27).

- The inadequacy of plantation techniques (ONADEF, 1990).
- The bad choice of species to be planted in some ecological zones (ONADEF, 1990).
- The lack of incentives for the private sector, communities and individual farmers.
- The high cost of afforestation and reforestation activities.

Three types of criticisms were directed at the classical forestry approach. They are technical, social, and managerial.

The first critique is backed-up by the complexity of a typical tropical forest ecosystem. Rainforest is a fragile, complex and relatively little understood ecosystem; so it could be risky to practise silviculture (afforestation and reforestation) before possessing a deep understanding of the ecosystem (UNESCO - UNEP - FAO, 1978). In the case of incompatibility between new seedlings and existing trees, further damage to the ecosystem could occur (UDEAC Rapport de Libreville 1990). This criticism is relevant to the Cameroon case. A number of attempts at reforestation in the rainforest area have failed. Some species could not adapt; others, although they come from the same ecosystem, could not grow properly when replanted by people. This was the case of Sapelli and Sipo in the forest reserve of Ndeng-Ndeng, where the rate of success was only 45% with very slow growth of the tree (ONADEF, 1990:6).

The second critique is social. Classical forestry fails to take into account the social dimension of forest activities (Munslow

et al., 1988). Hummel points out the managerial critique. The management of forests cannot only be undertaken by technicians or foresters because different sectors of society have conflictual and concurrent interests in forests and conflicts of interests can only be solved in the wider policy making framework (Hummel, 1984).

These criticisms are relevant to the case of Cameroon. Conflicts of interests between livestock activities, agricultural activities and afforestation are frequent. In some areas, conflicts between livestock activities and afforestation or even agricultural activities are frequent, as is the case of Mora area in northern Cameroon (ONADEF 1990). Silviculture in Cameroon still depends to some extent on various conditions which cannot be met merely by classical forestry or technicians.

The management of Cameroon forest also includes other activities, such as attribution of licences to individuals and logging companies, and monitoring of these activities.

III.1.2 MANAGING FOREST ACTIVITIES.

The Ministry of Agriculture has supervised forest activities up to May 1992 through its immediate direction of forestry with two attendant parastatals (ONAREF, CENADEFOR, later ONADEF). During this period, its main activities were the processing of requests forestry licences and monitoring of these activities.

Issuing licences.

Between 1970 and January 1993, the Ministry of Agriculture processed 157 requests for licences for logging activities (see appendix 1). The procedure of providing individuals and companies

with licences has evolved over time. Before 1991, two main departments used to be involved: the Ministry of Agriculture (its Division of Forests) and the President's office. However, the examination of the dossier requesting the licence was done by a committee.

In 1991, the President's office transferred the task to the Prime Minister's office. With the transfer of the file from the Ministry of Agriculture to the Ministry of Environment and Forests in May 1992, the Ministry of the Environment together with the Prime Minister's office issue licences. A request is sent to the Ministry of Environment and Forests, to the Division of Forests. The Division of Forests passes the file to a national committee which examines it. It is important to note that the director of the division of forests is a member of this committee and has an influential voice. The seven members of this committee send the file back to the Ministry of the Environment with some recommendations. After examining it, in theory, the Ministry of the Environment sends it to the Prime Minister with their recommendations. The Prime Minister's collaborators re-examine the file and then decide whether or not to issue the licence. In theory, this double check aims at preventing biased recommendations and corruption. In practice, the recommendations made by the committee are almost automatically adopted by the minister, then by the Prime Minister. This quasi-automatic recommendation gives a great deal of power to the members of the committee. The members, too, become very vulnerable to corruption. So far, no case of corruption has openly been presented. However, it is commonplace to hear civil servants in

the Division of Forests say that being the director of that department is a "juicy position". Our investigations have also revealed that one long-serving senior civil servant in the Division of Forests was granted a licence for logging activities. Appendix 3 provides the details of requests for licences processed both by the Ministry of Agriculture and the Ministry of Environment and Forests.

The first task of the department in charge of forest activities has been carried out: 157 requests were examined and 125 licences were issued to individuals and companies. However, the manner in which requests were processed and, later, licences issued did not always meet all legal and moral requirements. In some cases, senior civil servants or their relatives were issued licences just because of their positions. This led to a practice known as leasing of licences. Owners of licences who could not afford to buy material for logging activities rent their licences to some foreigners or create companies on that basis. We also discovered cases of licences issued without the request for this licence going through the usual channels (the Division of Forest and the national committee). This was the case of Cameroon Pulp and Paper Company (CPPC) an Indonesian company which bought Cellucam (a parastatal) in 1990. The file was sent to the Ministry of Industrial Development, which is in charge of industry and trade. The Ministry processed the file, sent the file directly to the Presidency which passed it to the Prime Minister's services. The latter issued the licence to the new company without any recommendation of the national committee or the Forests Division. At the Ministry of Industrial Development, the explanation given

for this was as follows : the file is one of industrial development, since the new company will be involved in forest industries, producing paper, although it could also have logging activities. This explanation, however, is insufficient, since the extension of the area would have needed some formal recommendation of the Division of Forests and the national committee. The irony is that the same Indonesian group was involved in a political deal⁹.

Monitoring Activities in the Forest.

Monitoring activities consist of controlling logging, hunting or any other activity likely to put illegally the forests and wildlife at risk. They help preventing the misuse of logging licences and poaching. They are also useful in supplying the evidence of foresters misconduct in the forests.

This task is carried out by a special corps of forest guards. This corps is often helped by civil servants based in the capital city. In 1994, there were fewer than 100 forest and hunting guards to patrol more than 20,000,000 ha of forest including 69 forest reserves and a number of national parks and biodiversity reserves. There were no vehicles available to carry personnel to monitoring locations. In some cases, it is the logging company which was issued a licence which ensures transportation of forest guards and other monitoring teams into the forest. In other cases, the information needed by the Ministry of the Environment and Forests is given by either the logging companies association

⁹We will come back to this issue in the chapter on the politics of forest protection.

or by the individual logging company (Informant Civil Servant A January the 6th 1993). How reliable and objective can such information be? The paucity of personnel, the lack of means of transportation, and zero motivation of forest guards who remain isolated in remote areas and unable to collect their meagre salary in time might be the causes of their inability to monitor activities in forests.

The consequences of this lack of effective monitoring are devastating: poaching is common, forests reserves are cleared and remain in existence only in government decrees and official publications. Logging companies extend their area of exploitation with impunity. ONADEF reported in 1990 that a number of reserves have simply lost their primary forest. For instance, in one of the oldest reserves, Makak, the indigenous forest has disappeared completely. The remaining forest area of 1,304 ha is the result of an extraordinary programme of afforestation which, at best, is only a secondary forest, and at worst, a temporary wooded area which will be cleared as soon as the local population needs more land or fuelwood (ONADEF, 1990).

Honourable Etoue A Wan, Member of Parliament, president of the committee of constitutional law in the National Assembly and senior member of the CPDM (the President's party), stated on national TV that some foreign logging companies exported logs felled in the East province forest illegally and channelled them by the river Ngoko to Congo or Gabon (Etoe a Wan, 12 December 1993). This statement corroborated by the opposition newspapers confirms the inefficiency of the Ministry of Environment and

Forests in ensuring monitoring and surveillance of logging activities in Cameroon forests.

A new practice of authorising logging companies to exploit forest has been developed. It consists of mutual agreements between the logging company and the villagers (Africa International No 263, Juillet 1993). Thus, illiterate and uneducated poor people could be cheated by the logging companies which propose the deal.

Classical management of forest has failed to meet both the state's and people's needs. Three main arguments underpin this view: firstly the rate of afforestation and reforestation is low and the areas afforested and reforested is small. Secondly forestry administration has failed in its monitoring and licence issuing role. Finally the private sector and people in general were not encouraged to participate in the afforestation and reforestation activities. FAO, one of the former promoters of this kind of forestry, has reached similar conclusions concerning its failure:

"During the last twenty years, the tropical forest world has changed, and both the energy crisis and desertification were the starting point. In fact, they have revealed the great mistake of the management of tropical forestry which, pretending to centralize the management of forest to the state's benefit, had deliberately ignored rural people...When we became aware of the importance of those issues, we went far deeper by linking capabilities of rural areas in the search for solutions through production and conservation and later on, the management. This implied agroforestry and communal forestry" (PNUD/FAO, 1988:3)¹⁰

¹⁰This is our translation. The original version is:
"Durant les vingt dernieres annees, le monde forestier tropical a bouge, et la double crise energie - desertification a ete le declic. Car elle a montre l'enorme erreur de gestion de la foresterie tropicale, qui sous pretexte de centraliser la gestion

III.2 AGROFORESTRY - AN OPTION FOR SD

SD thinkers assume that meeting people's needs for food will alleviate poverty and therefore lessen pressure on the environment (Chambers 1988). This "sustainable livelihood security" will be one reason for people's increased concern for the long-term management of their environment (Chambers 1988 and 1995). There is an obvious link between poor people's food security and preservation of the environment in which they live and make their living. Improving agricultural yields and increasing the production of wood to meet poor people's needs for energy is what this section is about.

III.2.1 RE-DISCOVERY OF AGROFORESTRY

The persistence of food shortage and effects of 1973-1975 and 1984-1985 droughts in Africa (famine - starvation) have revealed the weaknesses of food policy and agricultural systems. In most African countries, the green revolution failed to achieve its objectives, instead it contributed to environment depletion (Timberlake, 1988). During the 1980s, the great concern for environment and the evidence of a connection between the food supply problem and environmental degradation in Africa led thinkers and practitioners to consider new ways of tackling both problems. Agroforestry seems to be the most hopeful way and the

des forets au profit de l'Etat avait oublie le monde rural... Quand on a su realiser l'importance de ces problemes, on est alle aussitot plus loin, en liant les capacites du monde rural a la recherche des solutions permettant de les resoudre tant sur le plan de la production (agroforesterie) que de la protection et plus tard de la gestion (foresterie communautaire)." (PNUD-FAO, 1998:3)

one promoted by international development agencies. Agroforestry combines agriculture and social forestry. The use and the goals of agroforestry have changed. Originally, it was a mere combination of herbaceous plants and trees the classical image of agriculture and traditional forestry. Nowadays, because of new concerns about sound environment and alleviation of poverty, agroforestry plays new roles:

- supplying agriculture with natural inputs (promoting sustainable agriculture),
- helping to solve fuelwood energy problems,
- alleviating poverty through an increase in agricultural production.

Agroforestry was a traditional method of agriculture for some forest inhabitants in Latin America. Caboclos Indians in Amazonia have been practising it for centuries. Their method consists of alternating periods of cultivation of crops for a short period and fallow; during the fallow period (long period), trees are planted on that land (Dubois, 1992).

The Bamilekes in Cameroon have been practising intercropping for centuries. Mandaras in northern Cameroon also practise intercropping. They associate small tree plantations with crop plantating to avoid erosion (Peltier, 1988). The re-introduction and the spread of this method is seen as a major hope for SD thinkers and agriculturalists. Several experiments are carried out all over Third World countries. In Brazil, the EMBRAPA, the Brazilian office of agronomic research and the INPA (the National Institute of Amazonia Research) have been carrying out some research in agroforestry since 1985. In Para, Amazonas and

Rondonia states, three main agroforestry systems are in use:

- agroforestry based on improving bush fallow,
- family-owned agroforestry orchards, and
- agroforestry systems of cocoa and coffee production (Dubois, 1988).

In Africa, agroforestry, silvopastoralism and intercropping are popular (Kerkhof, 1990).

Although agroforestry is seen as a solution to conservation and development by SD thinkers and practitioners, some criticisms have been voiced.

Susanna Davis et al (1988) argues that food security and environment protection must be analyzed at different levels: international, national, and local. Though food security and environment complement each other at a local level, there is a conflict at the national and international levels (Davis et al. 1988). Agroforestry seems to be confined to the grassroots level; but this level depends on other levels (national and international). The outcomes of the conflict between food security and environment protection at the international and national levels can have negative effects on the grassroots level, and affect the result expected from agroforestry (1988).

Agroforestry has become so complex that rural people will not be able to afford it. To obtain some interesting results, financial and technical means are required (Kerkhof, 1990). Precise scientific knowledge is necessary, such as the technique of combining of seeds, seedling varieties, the study of soil. The

complexity of the task (to protect environment and to produce food for everyone) requires an holistic approach which takes into consideration many factors (human, social, economic, agricultural, ecological), and this can no longer be done in classical agroforestry (Conway and Barbier, 1990).

For any kind of agroforestry to succeed in Third World countries it will be necessary to solve first the problems of land tenure. This can only be achieved if there is a political will, pressure or incentives (Colchester and Lohmann, 1993).

These critiques - political, technical and social- raise the underlying problems of modern agroforestry. It is too early to draw any definite conclusion. Most experiments are recent. But in some countries like Sri-Lanka and Indonesia, agroforestry is practised over large areas. Furthermore, the fact that some rural people used it as their traditional mode of agriculture could be an interesting indicator of its efficiency in rural development. To illustrate the agroforestry debate, we will discuss a case study of the PAFSAT project in Cameroon.

III.2.2 A CASE STUDY OF AN AGROFORESTRY PROJECT

The Promotion of Adopted Farming Systems based on Animal Traction (PAFSAT) is an agroforestry experiment in the Bamenda North West province of Cameroon¹¹. The project was launched in 1984 after the failure of the agricultural mechanization programme in 1960. The GTZ former manager of the 1960 programme, changed its approach from mechanization to animal traction. The

¹¹The North-west province is one of the regions with a high density of population and fertile soils, but its forest is threatened.

project, which is being implemented both by GTZ and the Cameroon Ministry of Agriculture, has two components. The first is the introduction of animal traction into agriculture. Its objectives are

- to reduce the burden of hoe cultivation,
- to allow farmers to cultivate large areas, and
- to use oxen manure as a fertilizer and as traction.

The second component is the introduction of the intercropping system (agroforestry). Its objectives are

- improvement or maintenance of soil fertility,
- search for appropriate permanent farming methods, and
- erosion control.

The target groups are crop farmers and livestock herders, but a special place is also given to women's participation, either as members of farming families, as independent farmers or in women's farming groups¹².

As part of the project, farmers are trained in animal traction and permanent farming techniques. The project service provides them with

- animals and equipment on the basis of five years' credit,
- follow-up advice on farming methods, such as the use of contour bounds with permanent crops, contour farming or seasonal crops, use of cow dung and fertilizer, manuring with crop residues and mixed cropping, and follow-up advice on animal husbandry and care and maintenance of equipment.

The design of a basic farm consists of five contour bands planted

¹²At the very beginning, men were more involved in the project. In 1988, GTZ tried to introduce positive action.

with permanent crops (plantain, coffee for reinforcement), intercropped with seasonal crops (beans, groundnuts, soyabeans), then planting of annual crops and finally intercropping with legumes.

From the PAFSAT project, two positive points emerged:

- the farmers have adopted new techniques (ox-ploughing and use of contour ridges, use of cow dung and recycling of crop residues), and
- the project enables farmers to increase their earnings through growing seasonal crops and selling them in urban markets.

Various problems have been faced and many questions have been raised. At the beginning of the trial programme, the farmers were upset by the project. They did not know what was going on, therefore they were unwilling to participate. They had the impression that they were wasting their time or that they were working on the PAFSAT plot. They had a feeling that the project was not there for their benefit but for someone else's benefit.

The farmers also rejected intercropping crops with legumes; sowing and planting legumes was regarded as a loss of productive land. The farmers were not convinced of the longer-term benefits or the inputs brought by the legumes to the soil.

Other problems remained unsolved:

- the quantity of cow dung or fertilizers needed per hectare (10 tonnes of cow dung or 250 kg of fertilizers) is too high for an ordinary farmer,
- the choice of plants to intercrop is also a problem for an

ordinary farmer without any knowledge of seed compatibility; she or he will always need advice from state agents or project services and therefore there is no real autonomy,

- the results of the four-year trials are still to come,
- the project has an annual budget which varies from one year to another, depending on both Cameroonian and German fundings - both are irregular, however. Up to now, an effective available budget has varied from US\$ 270,000 to US\$ 800,000.

The existence of problems raised earlier in the general and theoretical discussions was verified by the PAFSAT project: the people's participation aspect in agroforestry projects, their motive for participation, their expectations from the project, the financial and technical sustainability of the project were all encountered.

III.3: CONSERVATION: AN OPTION FOR SD AND FOREST PROTECTION

Defining conservation raises a number of problems. Two broad meanings of conservation exist. Firstly, conservation refers to strict preservation and protection of an area, landscape, environment or endangered species (Gomez - Campo, 1985). This radical understanding of conservation is defended by deep ecologists and was implemented by colonial rulers in African countries in the 1930s. It consisted of creating reserves, national parks and game reserves the use of which was forbidden to local people (Bell, 1987).

Robert MacNamara, quoting President Nyerere, suggests that for a long time, conservation has been considered in Africa as something that was imposed on people by colonial rulers.

Liberation movements in these countries rallied the support of their people against their exclusion from conservation zones (MacNamara, 1990:31).

This radical approach to conservation has been practised at people's expenses and has produced the opposite effect from that which was intended including poaching activities and encroachment in the reserves and parks. Secondly, conservation in environmental literature is seen as a limitation of resource use in order to preserve endangered species or biodiversity threatened by unsustainable exploitation. John Button describes it as the thoughtful use of resources in order to ensure that no unnecessary harm is done to them (Button, 1988:93).

The same author concludes that the mainstream environment lobby, IUCN, WWF, and UNEP, who launched the World Conservation Strategy in 1980, directed their efforts in three directions:

"a. to maintain essential ecological processes and life-support systems,

b. to preserve genetic diversity, which is being dangerously impoverished, and

c. to ensure the sustainable use by us and our children of species and ecosystems."

(Button, 1985:94)

Such an understanding of conservation is essentially preventive. It is associated with a cautious strategy known as a "risk-reducing' approach (Myers,1988). As far as forest conservation is concerned, it implies a preventive attitude since the state of knowledge of the tropical forest ecosystem is far from complete.

Conservation for SD thinkers is, therefore, a compromise between the idea of absolute protection and its principle of non-use, and

the possibility of using resources in a sustainable way.

Such a compromise, although welcomed by thinkers, has by no means solved all of the problems, for instance deciding who can use resources has not yet been settled. Furthermore, it is not yet determined who will decide about how to carry out the conservation programme in a given country.

There are two contradicting theses. The first one defends the idea of state intervention. The state should design and implement a conservation strategy in collaboration with NGOs and people (WB, WDR 1992; Anderson et al, 1988).

The second thesis argues for the empowerment of people. People at their local level should decide on the way they want to conduct their conservation programme (Adams and McShane, 1992).

Which philosophy underpins Cameroon's strategy for conservation, and how workable is the model adopted by Cameroon? Has Cameroon thus far achieved a sound preservation of its forests through its conservation strategy?

After reviewing and discussing the programme of conservation in Cameroon, a conservation project case study will be analyzed

Forest Conservation in Cameroon.

Cameroon has witnessed the implementation of two different philosophies of conservation; the radical and sustainable use. From 1933 to 1988, emphasis was put on absolute conservation. More than 69 forest reserves were created¹³ and a dozen national

¹³Precise data are not available. So far, there are 69 forest reserves that we have precise information about. However, we know that some areas that were declared reserves by the government have never become reserves. They were simply occupied by people, e.g. the reserve of Yabassi.

parks for wildlife and biodiversity conservation. Table 14 indicates that encroachment rate in average is low. However, two thirds of the forest reserves (49 out of 69) are either encroached, colonized or have experienced settlements (ONADEF, 1990). The rate of this occupation of forest reserves goes from 0.5% to 98% of their area. Foreke-Dschang in West Cameroon created in 1953 experienced a 98% colonization of its area. Other reserves were completely invaded by local people, as in the cases of the reserves of Menoua (West province of Cameroon) and Bansa in the North-west province (ONADEF 1990). However, some activities in reserves and encroachments do not present any risk for the reserves. This can be because the rate of settlement is very low compared to the whole area of the reserve, which is the case in the reserve of Ndeng-Ndeng, an area of 227,200 ha with very few people who grow their subsistence crops on 4% of the area (ONADEF, 1990). Or it can be because activities carried out in the reserve are compatible with conservation activities, as in the case of the reserve of Bonepoupa, where rural people grow crops under trees (ONADEF 1990). A detailed analysis of the situation of each forest reserve reveals some clear trends.

In the transitional ecological zone, which is a zone between the forest in the south and the savannah in the north, 21 out of 23 forest reserves were encroached; two reserves simply disappeared. In the savannah zone, cases of encroachment were reported and several reserves exist by decree but not in reality. Causes of encroachment of settlement in reserves generally vary

from one ecological zone to another. In the forest ecological zone, illegal logging activities tend to be more frequent in the reserves. For instance, three important reserves experience these activities. They are the reserves of Edpagham, Bamboko and Muyuka-Kompina (ONADEF 1990).

In the transitory ecological zone (moist savannah), although there are very few cases of illegal logging activities (the reserve of Baleng), felling of trees in the reserves is motivated by the search for fuelwood; six reserves are frequently visited by rural people in search of fuelwood (ONADEF, 1990). In this zone, grazing and population pressure are important causes of settlement in the reserves. This phenomenon is particularly obvious in the province of West Cameroon with a population density of 95 inhabitants per square kilometre.

In the dry savannah zone, overgrazing and bushfire seem to be the main threats to the reserves. Favourable natural conditions also explain the tendency of some groups to encroach upon or to colonize the reserves.

The highest number of cases of encroachment is found in the area covered by the most fertile soil in Cameroon, the West province and the Mungo division in the province of Littoral.

In the Mungo division, clashes between forest guards and farmers who systematically extend their farms in the Melong forest reserve have been reported (ONADEF 1990). Cocoa, coffee and bananas are grown in these areas. Interests are therefore divergent between the farmers' desire to earn more money and the government's duty to preserve the disappearing forest of the West province and the Division of Mungo.

People's needs motivate their encroachment and settlement in the reserve. 98% of cases of encroachment or settlements in the reserves are in one way or another motivated by the necessity for people to meet their daily needs including food (they grow subsistence crops), fuelwood (they fell trees), and fodder for their herds. However, farmers' encroachment is also motivated by cultivation of commercial crops for exports. This is the case of 85 % forest reserves in the West province and the Mungo Division (ONADEF 1990).

The above discussion of trends suggest that Cameroon's radical conservation has failed to keep reserves untouched or out of reach of the population. A number of reasons explain this failure:

- a. The lack of means to ensure effective surveillance of the reserves.
- b. The inexistence of maps of these reserves. Hence, it is very difficult to determine the boundaries of the reserves.
- c. The lack of communication between the state and local people. Farmers, and lumberjacks were not involved in the management of the reserves. The state officials did not explain to them the utility of such reserves.
- d. The absence of alternatives to these activities. Rural people involved in the use of forest resources, directly or indirectly, do not have an alternative activity even if they agree to stop encroaching upon the reserve.
- e. The complicity of certain local authorities with smugglers, in which they make deals concerning illegal logging activities carried out in some forest reserves (ONADEF, 1990).

Despite the high number of forest reserves encroached upon, 49 out of 69, the area encroached still only comprises 9% of the total area of 588,315 ha of forest reserves.

Table 14: Evaluation of forest reserves

Details of ecological zones	Initial areas in (ha)	Rate of encroachment in (%)	Actual areas in (ha)	Areas concerned (ha)	Rate of coverage (%)	Areas available (ha)
forest	484,516	9.2	448,381	21,118	5.0	427,266
Moist savannah	72,328	9.0	64,620	8,040	14.0	56,580
Dry savannah	31,471	7.8	23,432	4,432	19.0	19,000
Total	588,315	9.0	536,433	33,590	6.0	502,846

Source: ONADEF, 1990:158

A case study of conservation: The Korup National Park¹⁴

The Korup National Park is located in the South-west province of Cameroon, at the Cameroon, Nigeria border. It covers a total area of 126,000 ha. The park was officially established by the government of Cameroon by the decree No.86-1283 of October 30th 1986 but it has been functioning only since 1988. It is managed by the World Wild Fund for Nature (WWF) under the direct supervision of the Ministries of Tourism and Agriculture (the Ministry of Environment and Forests is indirectly involved). The United Kingdom, Germany, the United States, and Sweden finance

¹⁴The Korup National Park is not a forest reserve. However, it is the only park where a new way of managing parks and reserves is being experienced.

the park through their co-operation agencies. Cameroon also contributes to the overall expenses of the park, providing forest guards and agricultural technicians for resettlement of people. The project aims at protecting the Korup forest's biodiversity while preserving people's livelihood, that is allowing them to meet their basic needs. The Korup project's objectives are twofold:

- to protect various species of plants, trees, birds and other animals including leopards, forest elephants, chimpanzees, short and long crocodiles, and
- to promote rural development of dwellers (WWF,1992).

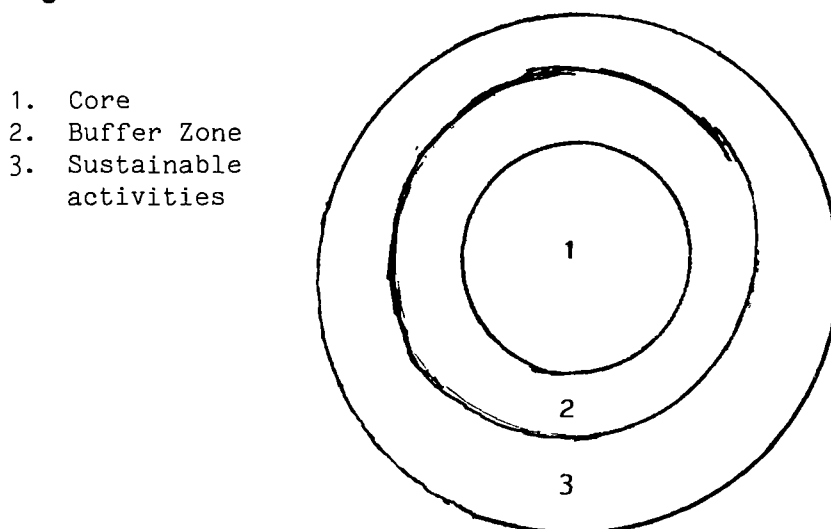
To achieve their aims, WWF and the state have adopted a moderate interventionist method. First, they removed inhabitants from the core of the forest park to its periphery, after making a number of promises to them. Second, they resettled the dwellers in areas that were considered to have fertile soil. Third, in the line with the promises made, they are trying to provide the local people with some facilities that were missing in the core area of the park, such as health-care, education, and water supply. At the same time, WWF and the government of Cameroon tried to introduce alternative sources of protein such as soya. Dwellers were allowed to harvest renewable resources (bark and plants for their traditional medicines and honey) and to hunt small animals in the buffer zone. The results of this first attempt to combine conservation and rural development were reasonable at the first stage of the experiment.

WWF acknowledged the bad mood among the population after their resettlement from the core of the forest (WWF, 1992). Their

resentment became obvious since they realized that the promises made by the government and the alternatives offered were less attractive than their life in the forest. WWF also mentioned the failure of their experimental crops (WWF, 1992).

The World Bank raised the financial aspect. According to this institution, the funding of the Korup park project would face serious problems in the near future (WDR 1992). The funding provided by donor countries is not sustained and the project is not self-funding. It is reported in the Ministry of the Environment and Forests that only eight forest guards, who are poorly equipped, patrol an area of 126,000 ha (Informant Civil Servant A, January the 6th 1993). This lack of personnel explains the poaching activities that daily, take place in the park. Some of the poachers come from neighbouring Nigeria. The system of conservation in the Korup Park is based on a concentric circles model: the farming area, then the buffer zone where some sustainable activities are allowed to take place, and then the core of the park, the use of which is forbidden.

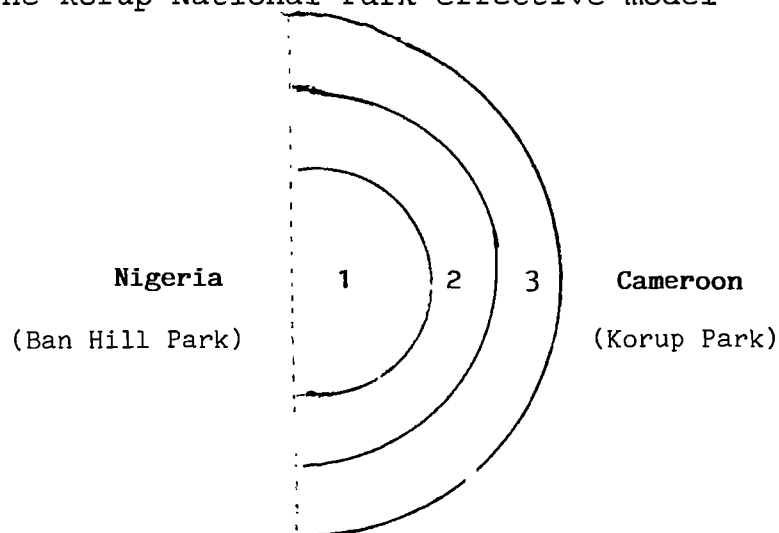
Figure 1: Model of Concentric Circles of Conservation



This pattern of concentric circles could not work given the

geographical location of the park. The Nigeria - Cameroon boundary transformed this pattern into a semi-moon pattern, open to invasion from the Nigerian side.

Figure 2: The Korup National Park effective model



The lack of agreements between Cameroon and Nigeria over the specific issue of the park had been a threat to the conservation project. After 1993, talks were held by the WWF with the Nigerian government in order to establish a similar park on the other side of the frontier. The talks were successful and the park (the Ban Hill Park) is to be established. Recent work undertaken on the Korup National Park suggests that communication between the WWF-Cameroon administration and forest dwellers has improved. The level of people's involvement in activities is higher (R.M.Amadi, 1993). However, illegal hunting stimulated by the existence of a bushmeat market continues, as well as tree felling. Equally, despite the higher level of people's involvement in the activities of rural development, which aims at creating alternatives to their livelihood, Cameroon's administration has not yet proceeded to people's empowerment. Local people are still working under the WWF and the administration's scheme.

Nevertheless, the Korup National Park experiment, that combines conservation and rural development, is worth investing in.

It is still too early to draw any definitive conclusions from the Korup experience. However, it is useful to point out the exact nature of local people's collaboration. Even if they enjoy the benefits of the park, they are not involved in the management or in the design of the project as some defenders of people's empowerment suggest.

Some argue that the success of attempts to reconcile conservation with development will depend on the existence of democracy in the sense of full participation, at all stages of the project (Adams and McShane, 1992) or people's empowerment, including their self-determination and their right to manage their forest as they have been doing for centuries (Lohmann, 1991).

III.4 THE SCIENTIFIC OPTIONS FOR FOREST PROTECTION AND SD

The resource-centred view of environment goes hand in hand with the technocratic approach. The latter stresses the ability of mankind to tackle any environmental problem as long as the technology is available (Davidson, 1986).

Technologies to colonize fragile soils and to grow new forests are available. Equally, the use of bio-technology in agriculture (Lipton, 1989) and mechanization (Davidson, 1986) have transformed food production. In India, for instance, the manipulation with genes of some species of rice resulted in the creation of new seeds with higher production. India has moved from the position of being a rice importer in the 1970s to the position of a rice exporter in the 1980s (Lipton and Longhurst,

1989). Hence the use of bio-technologies in agriculture and food processing opens a new area of food production and a new opportunity to alleviate poverty:

"biotechnologies could be deployed to enhance the socio-economic viability of low-input farming system by endowing crops with biological resistance to disease and pests, and in developing countries, to improve tolerance to resource-poor environments cultivated by the vast majority of rural workers".
(Goodman and Redclift, 1991:170)

In spite of the potential of genetic engineering in improving varieties of crops and raising production, some criticisms are echoed. Bio-technology remains a monopoly of developed countries and breakthroughs were made for crops which are not staple food for people in developing countries (Young, 1994). Artificial varieties also need quantities of herbicides, pesticides and fertilizers which most developing countries cannot afford (Young 1994). There is also a risk of harming production and exports of crop grown in the LDCs by these new seeds, with their high yield. Competitiveness of products from agri-multinationals will be higher and damaging for poor peasants' products (Young 1994). Anthony points out the different policies pursued by multilateral development agencies, which underpin their choice of technology. He takes the example of Tanzania under the rule of President Nyerere and argues that the rejection of mechanized agriculture with its large-scale pattern of soil use was not compatible with the social organization of communities characterized by a model of populism. He concludes that agricultural development is a process of economic change, the success of which depends on the ability of political institutions to mobilize technical resources

and technological skills (Anthony, 1988:144).

Technology is a means whose efficiency and effectiveness is determined by the social, cultural and political realities of each society, a fact that tends to elude promoters of technocratic approaches. However, the use of technology in forestry can be useful, particularly in the area of determining the species of trees to be felled. It is estimated that the margin of error is quite high and this leads to unnecessary felling of trees and loss of about 35% to 56% of trees which are felled and abandoned in the Cameroon forests because they were not the right species (CT No 5133, May 1992).

Felling a tree the wrong way can make it impossible to use and not suitable for export. Lack of available equipment means that each tree felled destroys every single young plant in its close environment when it falls and during the process of removal from the forest to the main road where the lorries are located. It is the government's responsibility to impose the use of forest-protective technologies on logging companies in the course of their logging or felling activities. If this is not required, it is unlikely that logging companies on their own will invest extra money in acquiring new technologies - they consider it as an extra cost.

CONCLUSION

Technical options for forest protection and SD exist. The point is to determine whether they are enough to bring about environment protection and development. The analysis of the three

main options available in the Cameroon case reveals that none of the options has given a satisfactory response to the challenges of reconciling economic development and environment conservation. Classical forest management did not provide the state with the necessary managed forest areas needed for regeneration or renewal of disappearing forests. Nor did it help to prevent the massive deforestation which began in the early 1980s. Equally, it did little to involve people in the management of their forests. A close assessment of the conservation practices has highlighted the reasons for the failure of existing technical options. They range from the financial to technical and cultural reasons. However, it is gradually being acknowledged that politics (ethnic and national politics) are obstacles to conservation. Carter (1992) pinpoints ethnic politics as a potential obstacle to forest conservation projects. In her study on the establishment of a new park in the Mount Cameroon area, she argues that the Bakweri people (dwellers in this area) are ready to accept a new park if their livelihood is secured and if their children and they themselves can benefit from it rather than strangers, that is people from other ethnic groups or Nigerians (Carter, 1992). FAO which is far from being a political agency, also puts forward another political dimension to forest conservation issues:

"No action for forest management in order to ensure a sustainable production in the long term is possible without a political awareness of the necessity to conserve the national forest resources."
(FAO, 1990:89)¹⁵

¹⁵This is our translation. The original version is as follows: "Aucune action en faveur de l'aménagement des forêts en vue de leur assurer un rendement soutenu à long terme n'est réalisable sans une prise de conscience politique de la nécessité de conserver les ressources forestières nationales" (FAO,

There are examples of entanglement between the technical options and politics. For instance, it is reported that Valery Giscard D'Estaing, the former French President, owns the SIBAF logging company. This company was issued a licence for logging activities without the request file having been channelled in the regular process (La Nouvelle Expression No. 115 December 1993). Its concession area is Kika, where cases of illegal exports of logs to Congo through the river Boumba-Ngoko are mentioned (La Nouvelle Expression No.115 14th-20th December 1993).

It is hard to offer other explanations than political, for the impunity granted to some logging companies whose shareholders are prominent politicians. We argue that ill-designed state policies, the lack of integrated development and conservation policies, the lack of human and financial resources, the state's inability to implement its own policies and to enforce law and order, the conflict of interests between users of forests, the lack of local people's involvement in the design and management of forest resources and political entanglements have undermined the capacity of the technical options to promote both development and forest conservation.

CHAPTER IV.

ECONOMIC OPTIONS FOR SUSTAINABILITY

INTRODUCTION

The resource-centred view places economics at the core of environment conservation. The policy and practice of some international organisations (WB, 1992; FAO, 1988) and the Cameroon government lead to the conclusion that economic concerns greatly influence the fate of the forests (MINEF, 1992). This economic approach to forest issues underlines the importance of the economy in sustainable development debate and practice. Considering that the current economic situation of Cameroon is characterised by macro-economic imbalances and growing poverty at the individual level, can forests be protected? Is the absence of economic growth and continuing underdevelopment compatible with environmental protection? How can a developing country facing an economic crisis, with zero economic growth, a shortage of funds and capital, with a debt burden, with a predominantly agrarian economic structure, achieve sustainable exploitation of its natural resources including forests? What are the determinants in economic decision-making in Cameroon?

Generally speaking, there are two contradictory economic options in the search for sustainability. On the one hand, there are Green Economists with their basic ideas of decentralizing the state and producing for subsistence (Porritt, 1989; The Group of Green Economists, 1992). The self-consumption pattern of production leading to small-scale production is seen as the best way of protecting the forest and achieving its sustainable exploitation (GGE, 1992). On the other hand, there are the neo-

liberal thinkers with their market-oriented approach. They assume that production of goods meets the needs of consumers in a market. And the market regulates itself according to supply and demand principles. Therefore sustainable exploitation of forests depends on market mechanisms (Pearce 1992). In this chapter, we will focus upon the market-centred approach because of its major influence on current forest policies and its explanations of causes of deforestation.

The market oriented approach places emphasis on markets, costs, benefits, gains, losses, value and price. Mastering market processes, evaluating properly the gains and losses of exploiting the forests, and devising appropriate economic policies for developing countries will help to tackle the deforestation problem (WB 1992; Pearce 1992).

The starting point of the economic approach is a criticism of existing approaches. According to some economists, conventional economic thought fails to

- incorporate environmental values and ecology into economics (Philippe Saint-Marc, 1971),
- and give proper values to services provided by natural environments (Barbier, 1989).

Those services are provided free; therefore the environment degradation results, in part at least, from the fact that it is treated as a zero-priced resource when in fact it serves economic functions that have positive value (Pearce et al, 1989:7). Hence, deforestation occurs as a result of two things, the bias of a cost-benefit analysis and the economic policies of states.

IV.1 THE BIAS OF A COST-BENEFIT ANALYSIS (CBA)

CBA is a methodology of appraisal of projects (Price 1989:341). It aims at giving a "fair" estimate of the costs and the benefits of a given project in comparison with the alternative options to the project (Price, 1989). As far as the forest is concerned, a CBA permits an appraisal of the benefits of log exports and converted forest areas for agricultural use in comparison with the benefits of forest conservation based on other usages of forests. CBA is seen as the main hope, within the economic approach, to tackling the deforestation problem, since it gives a complete picture of possible gains and losses in case of conservation or exploitation of forests. Any conservation project using the CBA technique involves three stages:

- identifying what would happen in the absence of a conservation project,
- quantifying the timing and the amount of the economic costs and benefits of these physical changes by assigning a "shadow price";
- calculating and determining whether the conservation project is actually worth it.

CBA techniques have evolved over years. They have moved from simple calculations of few items to complex calculations of many items. For instance Price has drawn a pattern of a cost benefit analysis for a forestry project in early 1980s. This was characterized by a limited number of items in the rubric of long term benefits in case of conservation (Price 1989). Only two items were taken into consideration; these are the subsistence value and the conservation benefits (1989: 337).

Ruintenbeck's CBA technique used for the appraisal of the Korup project was more detailed and the calculations more complex. Fifteen items were considered in the rubric of long term benefits in the case of the conservation of Korup park (1992).

The London Environmental Economics Centre (LEEC) proposes another CBA technique based on the sets of items; each set comprises many items. And each item of the set has its own economic value. These sets of items are: the indirect value, the option value and the existence value (Pearce et al. 1988). The fact that CBA has not been used systematically in the decision-making process determining the exploitation of the forest explains in part why destruction of some forests has occurred so easily (Pearce et al., 1988). A good evaluation of gains and losses can be helpful in taking decisions to avoid deforestation in some cases.

Philippe St Marc (1971) argues that materialistic society values the natural environment to a great extent when it produces material wealth, but this depletes the environment. Thus destruction of the environment results from the difference between the high material value of goods and the low or inexistent value of non-material goods:

"This gap (always important) between the price paid for the use of nature for its industrial and building purposes, and the price paid for its non-material use for biological and scientific purposes is the fundamental cause of the destruction of nature."
(StMarc, 1971:18)¹⁶

St Marc's first point is exemplified by the CBA argument.

¹⁶The original version is as follows:
"Cet ecart toujours important ... entre le prix paye pour l'usage materiel de la nature a des fins industrielles on immobilieres et le prix paye pour son usage immateriel a des fins biologiques, artistiques ou scientifiques est la cause fondamentale de la destruction de la nature." (P.StMarc, 1971:18)

Analysing road building in Paris, St Marc shows that to build a branch of the west highway at the exit of Paris, the government had to choose from the following alternatives:

- a tunnel which would preserve the park which is in that area, or
- a road which would destroy the park but would cost FF 50 million less. The Ministry of Equipment chose the latter alternative because of the apparent lower cost (P.StMarc, 1971:19).

Most forest assets are not marketed; thus decision-makers are misled when they are supposed to choose between felling trees for the timber trade, conversion to agricultural use and conservation of the forest (Helm, 1991). The London Environmental Economics Centre (LEEC) argues that some values of the forest are not taken into account when more exact evaluations of tropical forests is made. According to LEEC, the total economic value (TEV) of tropical forests is made up of the direct value (DV), the indirect value (IV), the option value (OV), and the existence value (EV) i.e $TEV = DV + IV + OV + EV$. Up to now, only the direct value, i.e. timber and non-timber products (agriculture, recreation, or tourism, mining activities, medical plants) are taken into account and appear in the state's public accounts. The indirect value (nutrient cycling, watershed protection, pollution reduction, micro-climatic functions, carbon store), the option value (future uses) and the existence value (cultural heritage) have been neglected. The fact that all these values are missing in all calculations presented by state managers and policy-makers biases their judgement and the cost benefit

analysis made by them. The tendency of developing countries is to give priority to marketed products, i.e. to the direct value (timber, crops, minerals, meat, hydro-electricity), because they have a visible commercial value and generate a cash flow which developing countries need for their development programme (Pearce et al, 1988, 1989, 1990, 1991).

IV.1.1 THE CBA OF THE KORUP PARK PROJECT

The CBA was applied in the Korup project, and it brought the following results:

Table 15: CBA of the Korup park project

Direct costs of conservation		-11,913
Opportunity costs		-3,326
lost stumpage value	- 706	
lost forest use	-2,620	
direct benefits		11,995
sustained use	3,291	
replaced subsistence production	977	
tourism	1,360	
genetic value	481	
watershed protection of fisheries	3,776	
control of flood risk	1,578	
soil fertility maintenance	532	
induced benefits		4,328
agricultural productivity gain	905	
induced forestry	207	
induced cash crops	3,216	
net benefit project		1,084
adjustments		6,462
external trade credit	7,246	
uncaptured genetic value	- 433	

uncaptured watershed benefits	- 351	
net benefit - Cameroon		7,545

Source: Pearce et al 1989

Commenting on the results of the Korup project CBA, D.Pearce et al state that the CBA includes not only the direct operating and capital costs of the project but also the opportunity costs of lost timber earnings (lost stumpage value) and the lost production from the six resettled villages (lost forest use). Thus, it appears that the conservation project offers substantial net economic benefits at the project level and the national level (Pearce et al, 1989:154).

H.J.Ruintenbeck, the author of the Korup project CBA, compares the benefits of conservation and exploitation of the Korup forest:

"Cost-benefit analysis shows that the benefits of continued exploitation of the Korup forest are about US\$ 1 million, whereas the benefits associated with conservation approach US\$ 25 million. One of the most important conservation benefits (about US\$ 7 million) is associated with the protection of a watershed that supports an economically important downstream mangrove fishery." (Ruitenbeck, 1992:243)

IV.1.2. THE LIMITS OF CBA

Two criticisms are generally directed towards the CBA.

The first argues the irrelevance of CBA for practical application: though it is a good attempt in theory to take into consideration all factors involved in decision-making, in fact

"It is ambitious and all-embracing, attempting to aggregate costs and benefits of many kinds, to all people, in every generation ... The problem is, in practice can it be done?" (Price, 1989:253).

It is not possible to evaluate precisely all factors (material

and non-material) involved in the forest debate (conservation or exploitation). For instance, the Korup project CBA did not evaluate the carbon storage function of the Korup forest in case of deforestation. This criticism shows that the results of the CBA can only be estimates; or that these estimates are in general vague because they also depend on other equally vague estimates. For instance, the estimates of the direct costs of conservation in the Korup project CBA were calculated on the basis of average prices in the 1980s. But timber prices can double by the year 2010 because of the scarcity of hard wood (on the international market) coming from the primary forest. The reverse can also happen: anything is possible.

The second criticism is political. CBA removes decisions from the people's representatives and deliver them to unaccountable technical experts (Price, 1988: 344). This political criticism is verifiable in the case of Cameroon where decision-makers tend to prioritize political gains and losses rather than economic ones.

In 35 years of its independence, Cameroon has fully adopted the economic growth paradigm: only material goods appear in the national accounting. Other services than tourism provided by nature were not taken into account. The direct value of the forest has been and remains the only recorded contributor to national economic growth. The main export products are more or less forest products, in the form of timber, or converted land for agricultural use.

In 1989, timber export earnings were assessed at US\$ 130 million

(fourth after oil, cocoa, and coffee) (MINEF, 1992). The same year, cocoa export earnings were about US\$ 280 million, while coffee generated US\$ 230 million (MINEF, 1992). These three major forest products (direct in the case of timber or converted lands in the case of cocoa and coffee) funded 1/5th of the national budget that year. In contrast, tourism earnings were only US\$ 4 million and medicinal plants US\$ 2.5 million (MINPAT - MINAGRI, 1991). In Cameroon, 7,300,000 people directly depend on forest products (FAO- UNDP, 1988:40). In 1993, logs exports rose to US\$ 400 millions (CRTV, 3rd June 1995). From these figures, it is arguable that Cameroon's income and its people's welfare is dependent upon the restricted current economic structure of the country. The structure of Cameroon's economy does not offer any obvious alternative to the leading role of the direct value components of the forest. Therefore, the risk is that, as long as there is no shift in Cameroon's economic structure, decision-makers will not have a significant choice in their decision-making (at the national level). The economic realities and imperatives limit dramatically the choices of decision-makers when it comes to choosing between conservation and deforestation (exploitation). They might give priority to the direct value or commercial forest products because of the structure of the economy and the needs of both the state and its people.

Cameroon's government has made a clear choice in its sixth five-year plan: to increase the forest production, its exports and to continue the industrialization of the country (RC, 1986). Hence, the development process will continue to be backed up by the

direct value components. Economic sectors related to these DV components receive the most funding both by the state and international donors. Up to 1987, the investments in the major component of DV (agriculture) had been increasing.

Table 16: Agricultural investment (in billions Fcfa)

	1960 - 1965	1966 - 1970	1971 - 1975	1976 - 1980	1981 - 1985	1986 - 1991
plan	11.0	26.7	18.0	125.4	545.1	
actual	4.4	18.7	42.0	99.3	335.1	
actual / plan (%)	40.0	70.0	223.0	79.0	62.0	

Source: MINPAT 1992

Table 17: Share of agriculture in total investments (%)

	1960 - 1965	1966 - 1970	1971 - 1975	1976 - 1980	1981 - 1985	1986 - 1991
plan	19	17	6	17	24	
actual	14	15	12	14	15	

Source: MINPAT 1992

This section of the thesis has put forward three main arguments:

- The CBA can be useful since it takes into consideration all factors involved in the forest debate and since it gives decision-makers a better idea of gains and losses in the short and long term, for example the Korup project CBA.
- The CBA seems to be applicable at the micro-level (for instance for projects) but difficult to implement at the macro-level. Some critics doubt the efficiency of CBA in practice.
- It is difficult for a Cameroonian decision-maker to respect the

objective results of a CBA at the national level: the structure of the economy, and urgent needs of the state and people as well as the ruling class interests determine the rationale of decision-makers rather than the theoretical indicators of any CBA.

IV.2: THE STATE'S ECONOMIC POLICY AND DEFORESTATION

The LEEC claims that deforestation occurs generally because of the state's economic policies. Analysing the deforestation process in Amazonia, David Pearce argues that Brazil's economic policy was directly responsible for deforestation occurring in Amazonia from the middle of 1975 to the late 1980s:

"It is because of direct government interference that the price signals are distorted, making timber extraction and, more important, clearance (usually by fire) for agriculture profitable." (Pearce, 1992:44)

Economic incentives and policies such as road building programmes, tax incentives to promote or facilitate private investment, rural credits to encourage agricultural production, export subsidies, conversion of lands for ranches and commercial crops, lower prices of fuelwood, subsidies for fuelwood, fertilizers and pesticides, are the main deforestation factors (Pearce, 1991 and 1992; Barbier, 1989; WB WDR, 1992).

The market-centred school of thought suggests a set of three measures to re-instate sustainable exploitation of forests:

- A reduced role of the state and increased dependence upon free market mechanisms.

The right way to bring deforestation to a sustainable level is to limit the role of the state in the economy and to avoid its

interference in market mechanisms:

"A great deal of deforestation would be avoided if markets were allowed to function more efficiently ..."
(D.Pearce, 1992:44)

- The practice of objective pricing.

This set of measures has its origin in two arguments: one from the LEEC, the other from the World Bank. The L.E.E.C. suggests pricing of non-marketed forest products, for instance, pricing of the IV, OV, and EV. The pricing of the IV is justified by the fact that the indirect value is essentially represented by environmental functions of the forest which indirectly support economic activities and human welfare; thus they have a value and they should have a price (Pearce et al., 1988 and 1990). The role of a forest as a carbon store should be paid in the form of carbon tax.

The pricing of the OV is related to individuals who are willing to pay for the conservation of tropical forests for future use. The pricing of the EV of the forest refers to the evaluation of a resource as a unique asset in itself with its biodiversity and its unique cultural and heritage assets (Pearce et al. 1988). The World Bank argues that distortion of energy prices is one cause of its overuse, therefore also a cause of forest depletion. This distortion is due to either energy subsidies which lower the price of energy, or low prices originating in the free access of wood-sellers to forests (WB, WDR 1992).

- Funding of forest conservation

The basic idea in this third set of measures is the transfer of funds from developed countries to developing countries in order

to tackle the deforestation problem. Four main measures are suggested:

a. creation of a carbon tax according to the "polluter pays" principle (WCED, 1987 and Pearce et al. 1989). The funds will be transferred to tropical countries for the function of their forests as a carbon store,

b. establishment of a biodiversity fund (WB, WDR 1992),

c. conversion of Third World countries' debt to international bonds and finance conservation programmes (WB, WDR 1992 and WDT 1993);

d. increase in the GEF funding capacity (UNCED, 1992)

The aim in this section is to examine how realistic is this analysis, given the existing situation of Third World countries. Are those states whose economy depends upon forest products and whose people's survival depends on increasing food production, willing to change their economic policy? Do they have the means to change their economic policies? Are there any alternatives to the existing economic policies?

Considering the Cameroon case, two main points will form the cornerstone of the analysis: the Cameroonian leaders' perception of development and the means available for achieving development.

IV.2.1 THE CAMEROON MODEL OF DEVELOPMENT.

The legacy of German, British and French colonization and mandates in Cameroon is, in the economic field, the western liberal model. Free enterprise and the market are at the core of economic activities (Ndongko, 1986). Since independence,

Cameroon's governments have introduced a social dimension to its model and a certain degree of state intervention in economic activities. This local version of liberalism has been called communal liberalism (Biya, 1987) However, the perception of development by Cameroon's leaders has been profoundly influenced by western countries' analysis and models. The dominant paradigm was and still remains economic growth to achieve development. In the early 1960s, development meant for the leaders a process of capital accumulation leading to industrialisation (Ndongko, 1986) better economic performance, an increase in material goods and access to all aspects of modern western life. The basic measurement was the GDP and the GNP. Cameroon's sixth five-year plan adopted in 1986 emphasized an increase in production expressed in terms of the economic rate of growth (RC 1986).

In the implementation of their social policies, Cameroon governments gave priority to the education sector and to infrastructure. The infrastructure was supposed to transform Cameroon into a modern state (Paul Biya, 1987 and 1995), including roads, railways, airports, construction of dams (for hydro-electric power), construction of social housing and therefore the expansion of towns.

The construction of roads and dams was needed both for the people and the nation-state. People needed roads to communicate, to exchange goods and they needed energy for lighting. The state needed to be present everywhere, to assert its authority and to ensure the building of the nation or the process of national integration (Bayart 1979). To achieve this end, means of

communication were vital. The outcome was the clearance of forests in some areas of Cameroon (the Douala - Yaounde highway).

The idea of development

To Cameroon governments, development was a synonym of modernization and westernisation. It meant the move from traditional society to adopting western style organization, infrastructures and structures. It also meant the move towards a consumer society (Rostow, 1960). The result is the introduction of western pattern of the consumption with all of its effects on resources and the environment.

IV.2.2 THE ECONOMIC AND ENVIRONMENTAL IMPACTS OF THE PRESIDENTS' POLITICAL AGENDA.

Cameroon's first president, Ahidjo (1960-1982), set a political goal: national unity. This goal was the driving force of his actions and all his initiatives, economic as well as social, were aimed at achieving it. He wished to bring together both Anglophones and Francophones, people from north and south and to wipe out the traces of the 1958-1970 civil war and to give a sense of nation to 220 tribes in Cameroon (Ahidjo, 1968). This goal of national unity was at the basis of some voluntarist policies regardless to the economic and ecological rationale of the projects policies. For example the Green Revolution programme which was at the origin of monoculture of some crops (wheat, rice and plantain) resulted in the conversion of large areas of forests into agricultural lands and later, in the mushrooming of agricultural-related parastatals which other aim was to provide

jobs to Cameroonians according to the "regional balance" principle.

The second president of Cameroon, Paul Biya (1982 -) adopted the same political agenda; however he changed the designation: instead of national unity, he talked of national integration (Biya, 1987). He did not reconsider the means used by his predecessor to achieve this goal. In addition to what had already been done, he introduced another factor into the political agenda which has had an effect on the forest. He attempted to shift the balance of financial power within Cameroon. Financial and economic power is held by the Bamilekes (the main competitor ethnic group to political power). They claim more political power given their dominant financial and economic position. The strategy adopted by the Betis-Bulus (a wide ethnic group to which the president belongs) in order to hold onto power and to resist the Bamilekes pressure was to promote a Beti-Bulu business class. One way to achieve this objective was to give loans to young Beti-Bulu businessmen so that they can build up their economic and financial power and thus balance the Bamilekes' financial power. One of those businesses was the creation of cocoa plantation in the Centre and in the South provinces of Cameroon. Thus, many cocoa plantations were created in this forest area from 1984 to 1987. This required clearance of the forest. It can be argued that the clearance of the forests in these two provinces between 1984 and 1987, results in part from the power struggle and distribution between two major ethnic groups, as well as the political agenda of Cameroon rulers.

IV.3. CAMEROON'S ECONOMIC STRATEGY AND FOREST DEPLETION.

Cameroon is an agricultural country and its economy is based on forest products. There are, however, other activities, such as tourism, mining, and other industries that contribute - and will contribute more - to the implementation of the economic policies of Cameroon. The sixth five-year plan of development detailed the basic objectives of Cameroon's agricultural policy. As the sector of agriculture is the most important in the national economy, there is a tendency to analyze the economic strategy of Cameroon through its agricultural sector (WB, 1989), whose objectives are:

- reinforcement of food self-sufficiency, and food security,
- expansion of agricultural products both for internal consumption and export earnings,
- increase in timber production and exports,
- expansion of wood production and timber industries,
- expansion of fishery and livestock (RC 1986).

Up to 1975, 82% of Cameroon's exports were agricultural products (WB, 1989). From 1965 to 1978, agricultural activities represented 32.3% of the GDP (MFC, 1995). In the early 1980s, this percentage was reduced to 20.5% because of rising oil exports. In 1993, however, due to a decrease in oil production and export earnings, agriculture and timber exports represented more than 50% of Cameroon's exports earnings (MFC, 1995).

Table 18: Agriculture in Cameroon's economy.

	1971-1975	1976-1981	1982-1988	
share of GNP (%)	29.9	29.2	29.5	
share of exports (%)	82.3	72.3	45.9	
GDP growth rate (%)	4.2	11.5	5.6	
agricult. growth rate (%)	3.4	7.0	1.6	
employment shares	79.4	72.6	75.0	
per capita GDP (US\$)	236.0	596.3	903.8	
per capita GDP agriculture (US\$)	69.9	172.2	204.0	

Source: The World Bank, 1989

In 1988, the ratio of the debt service to exports was 18% (WB, 1992); in the same period forest product exports represented about 50% of Cameroon's total exports earnings. It could be argued that forest products covered half of the payment of the debt service - in the form of timber exports and converted land for agriculture in the late 1980s.

Referring to the general economic situation, the World Bank stated that:

"In the foreseeable future, Cameroon will have to rely on agriculture to replace losses of export revenues from declines in oil production and prices... The prospects for increasing export revenues from timber export is good. The future for exports, however, lies in the exploitation of decorative wood which commands a high world market price. To promote increased exports of the high valued timber product, Cameroon needs to open up access to the forests in the East..." (WB, 1989, pp.IV-V)

The World Bank report on Cameroon points out two major points:

- the key role of forest products in Cameroon's development strategy, and

- the limited margin of manoeuvre for Cameroon.

Forest products should be taken into consideration as a significant component in any development strategy.

Cameroon's economic policy has been profoundly influenced by international financial organizations since 1988. Some critiques have even argued that Cameroon is being managed by foreigners or that the country is under multilateral financial institutions' mandate (Eboua, 1995). Basically there is no conflict between the WB recommendations made in 1989 and the sixth five-year plan guidelines elaborated by Cameroon's government in 1986. The convergence of the analyses of both Cameroon's government and the World Bank indicates two things:

- There is no alternative policy to overcome the economic and financial crisis in Cameroon. Only an export-led growth policy based on agriculture and forest products exports can bring about development.

- Cameroon's government will be flexible vis-a-vis farmers and logging companies in terms of forest use.

IV.3.1 ECONOMIC STRATEGY, AGRICULTURE AND DEFORESTATION

There are about 1.1 million small farmers in Cameroon cultivating crops on small plots averaging about 1.8 ha per farm with 70% of farms below 2 ha operating on 40% of the land. About 20% of the cultivated area is in the 5% of the farms above 5 ha (WB, 1989). In parallel with the traditional sector, the modern estates

operated by the state and private sectors cultivate an area of about 139,000 ha. Cocoa is produced on an area of over 350,000 ha by 262,000 planters (WB, 1989). Almost 90% of cocoa production originates in the Centre, South and South-West provinces, which are rainforest areas par excellence. From 1985 to 1990, cocoa export earnings decreased sharply. Cocoa represented 7.2% of Cameroon export earnings and 8.9% in 1992 (MFC, 1995).

Coffee is grown on an area of about 255,000 ha by 367,000 farmers (WB 1989). It is produced mainly in West and North-west provinces (Arabica coffee) and all over the country except in the North and Far-North provinces (Robusta coffee)¹⁷. Coffee represented 3.6% of Cameroon export earnings in 1991 and 5.1% in 1992 (MFC, 1995). Seven million people depend directly on forest products (WB,1989). Apart from some villages in west Cameroon where intensive and semi-intensive agriculture are practised, the farming system in rural area is extensive. Livestock breeding is another important activity which also places pressure on forests. Because of its semi-intensive practice, livestock breeding represents one of the main threats in the transitional forest area in the Adamaoua province. Herds of cattle move from one area to another, from the north to the south in search of pasture. Despite the introduction of ranches in the North-west (Santa) and in the Adamaoua provinces, the small herders cannot adopt this intensive technique of livestock breeding which is more protective of forests and natural vegetation.

The government's objective to increase the production and

¹⁷We will deliberately take those two major products to analyze the impact of the World Bank's recommendations on clearance of the forest.

consumption of meat from 15 kg per person per annum (present consumption) to 35 kg per person per annum by the year 2000 (RC MINAGRI, 1990) is likely to put more pressure on forested lands for the breeding of an increasing number of cattle. In terms of economic recovery, the World Bank's predictions seem to be very encouraging for Cameroon's economy (WB, 1989). Meanwhile this improvement will have some consequences on the environment as it implies an extension of forest clearance:

Table 19: Growth Projection

	ACT U A L		P R O J E C T I O N S w/o strategy			P R O J E C T I O N S with strategy		
	80-86	86-88	89-90	90-95	95-2000	89-90	90-95	95-2000
	food crops	4.7	4.8	3.3	3.3	3.3	4.0	4.5
ind. & export crops	4.4	-4.0	-4.0	2.0	2.0	0.0	3.5	3.5
live - stock	-1.0	-0.1	-1.0	0.0	0.0	2.0	3.0	3.0
fishery	3.8	8.2	5.0	5.0	5.0	5.0	5.0	5.0
forestry	11.5	0.8	2.0	3.0	3.0	5.0	5.0	5.0
total agriculture	4.1	1.9	1.0	2.5	2.5	3.0	4.1	4.3

Source: WB report No.7486, 1989

Under the scenario of "w/o strategy" as in the table above, food production will grow (at the worst) at the population growth rate (2.9 per annum).¹⁸

Under the "with strategy" scenario in Table 19, the yield of forest products (agriculture and forestry) will increase greatly: 4% per annum for food crops, 3.5% for industrial and export crops and 5% for timber production (WB 1989). In terms of forest clearance, these increases in production mean a further extension of forest depletion or increasing pressure on forests. The actual rate of forest clearance in Cameroon (200,000 ha per annum) should be changed according to the increasing rates of food, export crops and timber production. Therefore, Cameroon's forecasts regarding clearance of primary forests are incorrect. Primary forests will disappear earlier than 2092 as predicted, since the rate of clearance has changed. This is one of the consequences of the convergence of the World Bank's and Cameroon's analyses of the economic strategies to overcome the crisis.

IV.3.2. ECONOMIC STRATEGY, AGRICULTURAL SUBSIDIES AND DEFORESTATION

The convergence of the World Bank's and Cameroon's analyses of economic strategies is weaker in practice than it appears. Two kinds of logic contradict. On the one hand, there is the World Bank's liberal principle which rejects the state's intervention and which tends to reduce the state's expenses for example by

¹⁸One of the objectives of the government's economic policy, which is food self-sufficiency, will be achieved.

advocating no subsidies to agriculture. On the other hand, there are the government's practices of subsidizing agricultural inputs. As such, the World Bank and the Cameroon government agree upon objectives but their opinions differ on the means to achieve these.

Governments in Cameroon use two kinds of incentives to increase production. They subsidise the agricultural sector and they directly encourage the creation of new plantations. Two ways of subsidising were adopted. Subsidies were provided for agricultural inputs. The state funded the purchase of fertilizers and pesticides, and it also funded the agencies in charge of rural development and agricultural training and management.

Up to 1987, the average amount of subsidies for fertilizers was about Fcfa 7 billion per year. According to a study undertaken by USAID (the Yaounde agency), the subsidies for inputs, mainly for fertilizers, have contributed to the increase of export crops and some food crop yields (1987).

Table 20: Cost benefit ratio for selected crops at the optimum use of fertilizers.

CROPS	WITH SUBSIDIES	WITHOUT SUBSIDIES
Arabica coffee	8.76	3.28
Robusta coffee	5.84	2.28
maize	4.15 - 8.31	1.70 - 3.50
rice	8.16 - 10.45	3.05 - 3.82
sorghum	5.89	2.27

Source: USAID Fertilizer Sub-sector Reform Programme, 1987

The cost benefit ratio for selected crops at the optimum use of fertilizers undertaken by USAID forecasts the crops yields in case subsidies

in fertilizers sector are maintained or cut off. Table 20 suggests that subsidizing the fertilizers sector is more beneficial to agricultural production.

Cameroon's governments also subsidized the agencies in charge of rural development and agriculture for about Fcfa 56 billion per year (WB, 1989). Before the implementation of the structural adjustment programme, 21 parastatals in the agricultural sector benefited from these subsidies.

Table 21: Costs of parastatals in agricultural and rural development sectors.

(Annual results in Fcfa millions, 1988/89)

No.	Name	Expenditure	Income	Operating deficit
1.	CDC	2,390	1,540	1,850
2.	CENADEC	1,240	390	850
3.	CENADEFOR	2,970	150	2,820
4.	CENEEMA	1,000	100	900
5.	HEVECAM	4,100	3,400	700
6.	MAGZI	1,640	600	1,040
7.	MIDENO	1,480	0	1,480
8.	MIDEVIV	4,300	370	3,930
9.	MIDO	500	0	500
10.	OFFICE CEREALIER	1,210	630	580
11.	ONAREF	4,790	1,460	3,330

12.	ONDAPB	4,500	3,650	850
13.	ONPD	1,200	0	1,200
14.	SEMRY	11,430	2,830	8,600
15.	SODECAO	12,500	2,400	10,100
16.	SODECOTON	41,000	27,280	13,720
17.	SODENKAM	930	160	770
18.	SODERIM	1,070	90	980
19.	UNVDA	4,500	3,900	600
20.	WADA	1,010	690	320
21.	ZAPI-EST	3,600	2,800	800
	total	117,360	51,440	55,920

Source: Mission de Rehabilitation des Entreprises du Secteur public du Secteur Agricole 1989

Most of the parastatals have been dissolved. All of these parastatals were operating with a deficit (Willame, 1986). From an economic and financial point of view they were a burden on the state's budget (Biya, 1995). President Biya has recently revealed that subsidies to all the 150 parastatals amounted US\$ 800 millions a year (Biya, 1995). However their role was important in promoting rural development and agricultural activities as well as in providing Cameroonians with jobs in the parastatal sector.

Cameroon's government also created in 1980 a new scheme to increase agricultural production - the Farm Award. The government

awards Fcfa 200,000 for the creation of a cocoa or coffee farm more than 5 ha in size. The aim of this award was to encourage the creation of new plantations and renewal of the old ones (RC 1980)

A parastatal (Service Civique de Participation au Development, later: Office National de Participation au Developpement) was created in 1974, with the following objectives:

- to settle or re-settle young Cameroonians in rural areas by providing them with free agricultural training, free plots, basic agricultural equipment and seeds,
- to deal with redundancy and rural exodus problems, and
- to promote agricultural activities all over the country and increase crop production.

According to the World Bank, the results of these incentives were disappointing (WB, 1989). Fewer than 1,000 young men took advantage of the measures offered. The rural exodus continued because of the oil boom (Willame, 1986). Despite their failures, the measures were economically rational and socially useful (in 1974). Nowadays they are likely to be criticized as being forest-destructive, because of the pressure put on the forest by the unemployed people or economically inappropriate because of the subsidies.

Despite the World Bank's and USAID's recommendations to cut agricultural subsidies, Cameroon was willing to continue with them in part, but only in some sectors. For instance, subsidies to agriculture through the parastatals in charge of promoting agricultural training, activities and management have been cut

since 1988 (the case of SODECAO, ZAPI DE L'EST, ONDAPB etc.) (WB, 1989) and some parastatals were dissolved e.g ZAPI DE L'EST. Direct subsidies for fertilizers were partly cut. The Cameroon government has successfully tried to persuade the World Bank that a sudden and total removal of all subsidies will dramatically affect the whole agricultural sector. The World Bank accepted the idea of removing the subsidies gradually (WB, 1989).

The World Bank's recommendation to cut subsidies for fertilizers has to be carefully considered given the economic crisis and the growing state of poverty amongst people whose main income come from agricultural activities. For instance, in West Cameroon the main activity is agriculture and it provides 90% of the active population with an income of US\$ 400 per capita, (WB 1989). The density of population is one of the highest in the country with a serious threat of complete deforestation. Fertilizers are used both for export and food crops: 40% of small food farms use chemical fertilizers and up to 1987, 98% of these fertilizers were subsidized by the state (WB 1989). In West Cameroon, fertilizers play two main roles: first, they increase the yield of coffee plantations (one of the major export crops), and second, they increase the food crop production so that the national objective of food self-sufficiency and food security can be achieved.

Historically there was also a political reason: to reconcile the Bamileke group with Ahidjo's regime after the repression that occurred in that region in the period from 1958 to 1970. This reason is nowadays irrelevant.

West Cameroon is one of the few areas in which some farmers practise semi-intensive agriculture. Thus the pressure on the remaining forest is not entirely caused by the agricultural methods employed. But it is not yet clear whether they are abandoning extensive agriculture because of the use of cheaper and subsidized fertilizers which increase their production, or if they are forced to adopt intensive agriculture because of the high density of population. If we assume that the first hypothesis is true, it can be said that the subsidies for agricultural inputs (mainly chemical fertilizers) can be protective of forests since they introduce intensive agriculture, which is less demanding of land. There is a general consensus on the beneficial role of inputs in agricultural production and, to some extent, in forest protection¹⁹. The debate raised by the SAP is rather about subsidies. Why should the state share the cost of inputs in private business? Why do farmers not buy their inputs since they utilize the outputs, the benefits?

Beyond the ideological debate between welfare state versus liberal state or interventionist state versus free-market state, some practical arguments can justify the role and the necessity of subsidies, from environmental, economic and social points of view.

The World Bank argues that the state has a role to play in the protection of the environment:

"The world has learned over the past two decades to rely more on markets and less on governments to

¹⁹The use of chemical fertilizers has good affects because it helps increase production and avoid new clearance of forests. But it has also a negative effect on water and some plants because of the possible pollution due to the chemicals.

promote development. But Environmental protection is one area in which government must maintain a central role." (WDR, 1992:1)

Yet, the World Bank does not define this role. Therefore two options are opened. States themselves define their roles or they are indirectly limited in their actions by the SAP. The first option gives freedom to the state to protect its environment through direct and indirect incentives, such as subsidizing some protective environmental activities. In this scenario, the Cameroon government can argue that subsidizing agriculture aims at preventing more forest clearance by introducing intensive agriculture.

The second option is to leave states to draw the general policy frameworks, but to limit their actions. In practice, this is the option adopted by the World Bank. In this scenario, the protective role of the state is determined by the World Bank's recommendations and the state's bargaining power. In Cameroon, the WB recommendations tend to be forest-destructive, both directly and indirectly. Directly, the WB recommends increasing timber production to maximize Cameroon's export earnings (WB,1989). Indirectly, the recommendation stops the process of spreading semi-intensive agriculture by calling for a cut in subsidies for an important agricultural sub-sector (fertilizers); instead it reinforces farmers' tendency to practise extensive agriculture.

According to the World Bank, farmers should buy fertilizers at a market price. This conforms to the market-centred approach. In practice, the consequences of such a move can be extreme. Cutting fertilizer subsidies and shifting the responsibility for its

purchase to farmers implies high costs of production for farmers, thus an increase in price of goods. This will have two kinds of consequences on households purchasing power and on economic policy:

- an increase in food crop prices due to cuts in fertilizer subsidies will provoke inflation which contradicts the WB-IMF low inflation prescription in the SAP. This inflation, combined with the current decrease of wages in the public sector will trigger a dramatic fall in household purchasing power,
- an increase in food crop prices will affect the overall economic policy. Instead of buying local food crops, according to the price elasticity principle, consumers will look for imported substitutes that are cheaper, even if their quality is worse.

Consumer purchasing power in the period of economic crisis, unemployment and low wages will lead to the decrease in local production of food crops, and later to food dependency (rice imports). A cost-benefit analysis would give the following result: on the one hand, fertilizer subsidies cost the state or tax-payers money, and do not conform to the IMF-WB SAP or market-centred approach; on the other hand, they protect forest by limiting the pressure and the demand for new lands, they ensure food self-sufficiency and security and they contribute to economic growth by increasing export earnings. In short, they meet the economic policy expectations. Following the cost-benefit analysis, and the objectives of the economic policy, the decision-maker would certainly be tempted to subsidize this agricultural sub-sector (fertilizers), provided that the state

can financially afford it. Food and export crop cultivation is certainly private or individual business, but they have a public interest function.

Despite our scepticism about the SAP suggestion, we do believe that a selective cut of subsidies in the agricultural sector (for instance some parastatal funding) combined with alternative agricultural systems (agro-forestry) or use of improved seeds that are more productive and less demanding on inputs, can be forest-protective in the medium term.

IV.3.3. ECONOMIC STRATEGY, LOGGING ACTIVITIES AND FOREST PROTECTION

There is a link between logging and tax regulations on the one hand and forest protection on the other (WB, 1992). The World Development Report 1992, citing cases of South-east Asian countries argues that a good licensing and taxation policy contributes to changing logging companies' behaviour (WB, 1992:70). In addition to the longer-term concessions system (Malaysian experience), the World Bank suggests the "concession licence performance-based extensions" as in Canada (WDR, 1992). This system is based on giving companies licences with provisions that force concessionaires to bear the costs that their initial harvests impose on future resource returns. Good behaviour in relation to the fiscal department and to the forests should be rewarded by an automatic renewal of the logging companies concession.

Despite the promising prospects of these two systems of licensing concessions, the two examples are not relevant to the situation

of African countries. In the cases of Malaysia and Canada, there are two main factors determining the success of such licensing which are missing in the Cameroon case: the bargaining power of the state and the state's capabilities to carry out checks.

Kumar in his study of Malaysian forest economics and development states that there are four categories of licensing concessions in Malaysia:

- short-term licensing concessions, these concessions are annual but in fact there is a tendency towards perpetual renewal,

- medium-term licensing concessions, the concessions last for 5 to 10 years;

- long-term licences, these concessions last for about 30 years.

These involve big companies or entrepreneurs who are Malaysian, although there are some joint ventures with foreign companies (including Chinese or Japanese companies).

- Very long-term licences; they last for a century. To date, only the Sabah Foundation from the Sabah state (a kind of state agency) has benefited from a concession of 100 years. In the Malaysia case, long-term licences only go to Malaysian companies

"... there is no free competition in the bidding for concessions and direct participation by capital - owning non-Bumiputera and foreign enterprises is ruled out" (Kumar, 1986:85).

Kumar also points out the fact that each state government owns the forest and the federal government is in charge of national forest policy and coordinating forestry programmes (1986). This enables a double check to take place and gives a great deal of bargaining power that African countries such as Cameroon do not have in negotiating with foreign multinational companies. In the case of Malaysia, theoretically the structure of a federal state,

with an autonomous state such as Sabah, creates a counter power to any unilateral and risky concession. Neither the state government nor the federal government can take any risky decisions which will threaten the forest resources. In Canada, green political movements are empowered and well-organized to check both the government's, local and federal forest policy and practices, and the concessionnaires' practices. In other words, there are legal and civil authorities or groups to ensure the enforcement of laws and regulations and to make sure that terms of contracts are fully respected by concessionaries. In Cameroon, those structures do not exist. How can a model tested and applied in a given case with particular conditions or criteria be successfully generalized and applied in countries without the same structures?

Cameroon's logging concessional regulations are quite different. Up to January 1994, there were two categories of licences:

- very short-term licences; the concessions are annual, renewable and often given to individuals, and
- short-term licences; the concessions last from 3 to 5 years. They are renewable and are often given to foreign companies. The taxation system is complex and the rate of taxes is fixed each year by a financial law (national budget provisions). The World Bank and the government of Cameroon have agreed upon the need to change the current regulations. The new forest law has brought some deep changes. The most important are the extension of the concession to 25 years (maximum) and the simplification of the taxation system (RC 1994).

Cameroon has moved towards the Malaysian pattern without having the same structure, the same basic infrastructure or the same political features. The threat of political instability can have an effect on foreign logging companies; in that respect the long-term concessions will not be sufficiently secured for their investment. Furthermore, there is no guarantee that taxes will be paid regularly ; it is already reported that in 1993, the Cameroon government raised only US\$ 2 million out of the US\$ 400 million of the timber exports earnings (Ngango, 1994). Neither is there any guarantee that money paid in taxes will be used for re-afforestation.

Other sectors in Cameroon's economy are equally important to the strategy of economic recovery: ecotourism, industrialization and mining. Some of them threaten forests.

IV.3.4 ECONOMIC STRATEGY, TOURISM AND FOREST PROTECTION

The LEEC, the World Bank and some other thinkers have discussed alternative sources of income for developing states, both economically profitable and forest-protective. Ecotourism is the ideal type of the neo-liberal model of environmental economics as it is compatible with all other environment assets (the DV, OV, IV, and EV). It combines economic, financial and ecological gains. Cameroon with a varied landscape, rainforest and varied wildlife could take advantage of ecotourism.

In 1989, tourism brought to Cameroon Fcfa 1 billion (RC, 1992), which is very little compared to Kenya with a less varied landscape and without rainforest. In 1990 only 100,000 tourists visited Cameroon despite the worldwide positive publicity that

the country enjoyed after the 1990 World cup. This represents a drop in the number of tourists, as 130,000 foreigners visited the country in 1986 (MINTOUR, 1994). Two things undermine the boom of tourism: the burden of the past (no interest of the former Cameroon governments in tourism and an excess of regulations) and the lack of a coherent tourism policy combining incentives, financial means, infrastructure, and good organization. In 1992, for instance, the annual budget of the Ministry of Tourism was US\$ 400 million (the same amount of money that tourism generated in 1989) (MINTOUR, 1994). 3/5th of this budget was used for running the ministry and for its expenditures. In 1993, only 8826 beds were available to tourists. Generally speaking, tourism and specifically ecotourism in African countries, is an uncertain source of income: its development depends on many factors such as the political situation, the financial situation of industrialized countries' citizens, and fashion. It also deals with human tastes and the existence of alternatives. These unpredictable factors should be taken into account in planning ecotourist development. So far only technical and administrative aspects are taken into consideration in the new tourism policy (MINTOUR, 1994). No details of the strategy to be undertaken to promote eco-tourism appear in the draft of the new tourism policy. WWF has however pioneered eco-tourism in Cameroon as it advertised the Korup park in various leaflets. A few people visit the park including Prince Charles in 1990. Thus far tourism in Cameroon still is associated with wildlife and safari in the savanah area rather than green tourism in the forest area.

IV.3.5. ECONOMIC STRATEGY, MINING AND DEFORESTATION

The debate on the impact of industrialization on social structures and landscapes has been going on since the industrial revolution. The complexity of the issue lies in the fact that nowadays, industrialization in the Third World occurs in a period of great environment awareness. In the 1960s, the search for economic development justified all excesses wrecked on the environment and social structures of underdeveloped countries (Rostow, 1960). Some cynics in the World Bank continue to whisper the idea of trade-off by which a country should concentrate its efforts and resources on economic activities at its first stage of economic development (George and Sabelli, 1994). Within the World Bank itself, this view is being challenged (WDR, 1992). Analysts and practitioners influenced by neo-populist thought propose an alternative view which brings together the environment and people's welfare and which is critical of large scale models of industrialization (Schumacher, 1973). However, this new approach promoted by SD thinkers, is still in the process of development; it is looked upon suspiciously by developing countries' governments (Kumar, 1986). The existing literature on this issue can be examined within these two theoretical frameworks. The promoters of the resource-centred view, stand for the use of all natural resources and promoting the technological capacities available to improve their economic situation e.g the Cameroon government, whilst the neo-populist analysts advocate a careful balance between the use of resources and environment care (GGE, 1992).

Mining activities, building of industries, or construction of

dams are some of the central elements upon which the industrialisation of Cameroon is based (Presidence de la Republique [PRC], 1992). Yet all of these activities have an impact on forests.

A number of studies have been done on the effect of mining activities on the Amazonia forests. They conclude that there are negative impacts of mining activities on the environment, pollution of rivers by mercury in the case of gold mining in Brazil, soil erosion, clearance of forest (Hecht 1989). Thus far no study on the correlation between mining activities in Cameroon and deforestation has been carried out. Hence, mining activities have not yet been identified as a cause of deforestation. The main reason is that apart from oil production, extraction industries were not very developed and contributed very little to the GDP. Since 1988, the decrease in state income, the economic and financial crisis, the pressure of WB on Cameroon's government to increase its income and the decrease of oil export earnings (from US\$ 2.1 billions in 1984-85 to US\$ 412 millions in 1993-94 (MFC, 1995)) have made the Cameroon's government consider exploitation of its mineral resources. If economically, extraction of minerals could be profitable, from the ecological viewpoint it could reveal to be unsound or forest destructive. Most of those mines are located in forest areas either in semi-open or closed forest.

Two important sites of bauxite have been discovered. One is the Mini-Martap site located in the province of Adamoua with an

estimated reserve of more than 1 billion tons. Mini-Martap is in a transitional ecological area on the borderline between the semi-open forest and the beginning of the savannah. The area is rich in endemic fauna and flora species. A survey undertaken by Stuart in 1986, the conclusion of which was adopted by the IUCN in 1988, shows that this area is of great interest to scientists because of its transitional position. The risk is the loss of biodiversity.

The other bauxite site is in Fongo-Tongo, the West province in the Dschang area, in the Western highlands. It is a tropical evergreen forest area. It covers 3,800 km² of Cameroon's territory. According to specialists, species found in this disappearing forest area are poor, without any scientific value. The Fongo-Tongo site has a reserve of 50 million tons. West Cameroon, with its fertile soil and coffee plantations, has a very high density of population. The choice will have to be made between bauxite export earnings, sustained coffee plantations or the remaining forest.

There is also iron. Two sites are known: Mbalam and Mamells.

The Mbalam site with an estimated iron reserve of 750 million tons is located in South Cameroon, in the forest area. This forest of the Congo basin is rich in species. Up to now, it has been officially considered as not being threatened. But because of the content of its soil, it will probably be replaced by a huge open iron mine by the year 2005.

The Mamels site is located in the Kribi area, in the coastal forest. Its reserve is about 300 million tons. Despite various

species, the coastal forest will disappear because of iron mining.

Other sites of minerals are located in the South and in the East of Cameroon, the main areas of rainforest and pristine forest. There is rutile in Akonolinga, gold in Betare - Oya, diamonds in Yokadouma, rubies and sapphires in Mamfe, disthene in Nanga-Eboko, Otele and Edea. In other areas with fragile ecosystems, uranium and cassiterite have been found (RC, 1992).

Taking into consideration Cameroon's financial needs, the interests of private investors (and some officials) and the value of those minerals on the international market, it is likely that the economic rationale and pragmatism will prevail over the conservation ideal. The mining sector will probably present a great challenge for conservationists in Cameroon in the coming years and the greatest threat for Cameroon's forests and forest dwellers. In fact the damage done to the forest by mining is almost irreparable and this makes the mining activities unsustainable and unsound.

Industrialization is a permanent goal in Cameroon's development plan (RC, 1986). This industrialization mainly depends on raw materials either agricultural products or minerals, and on energy whose production is forest destructive (for example the construction of dams for hydroelectricity). So far agro-industries which require agricultural products and manufactures which process or transform some minerals are the main industrial activities in Cameroon. And they often have negative impacts on

the forest either in the form of clearance of the forests or in the loss of biodiversity. In early 1990s, the World Bank has recommended Cameroon's government to make an environmental impact assessment for projects which are likely to have a negative impact on the environment (Quicke 1993).

There is a general tendency to prioritise all activities, industries, agriculture, mining which can help to tackle the country's economic problems including unemployment. The government's willingness appears in the new code of investment and in the regulations creating the free zone in Cameroon. Both give special advantages to industries and pay little interest to environment issues.

Conclusion.

Cameroon's economic situation and development perspectives is bleak. Cameroonians are getting poorer (MFC, 1995). Hope of economic recovery is placed upon the agriculture, mining and forestry sectors; people's livelihoods depend upon forest-related products. In 1993, the forest-related products represented a third of Cameroon's GDP (MFC, 1995).

Strategies recommended by the World Bank also revolved around the agriculture and forestry sectors (WB, 1989). Hence the current Cameroon government's economic policy is and will remain forest destructive into the foreseeable future.

The determinants of economic decision-making depend on the structure of the state's economy, the balance of power within the state machinery (who controls what and in whose interests), the

influence of external factors and actors, and the economic situation, a better economic situation can alleviate pressure on the forest and increase the state's bargaining power during negotiations with foreign partners. To date these determinants point in one direction: the depletion of the forests for economic development objectives. Meanwhile, the government gives the impression of considering (under foreign pressure) the environmental dimension of the development process. The reality is, however, rather different. Forest-related activities is the fastest growing sector in the 1990s. In 1993, food crops generated almost US\$ 1 billion, whereas commercial crops earnings amounted to US\$ 172 millions (MFC, 1995). In the same period the timber sector continues to grow sharply with some record earnings. In 1992 timber export earnings were as high as US\$ 260 million (MFC 1995); in 1993 they amounted to US\$ 400 millions (CRTV 1995). These trends are likely to continue with adverse effects on the forests. In many developing countries, environmental aspects will remain secondary if considered at all. The structure of Cameroon's economy, the financial needs of the state, the government's policy and strategy to overcome the economic crisis and the SAP recommendations inevitably lead to unsustainable exploitation of forests.

The former Malaysia Prime Minister makes it clear:

"It is very easy for conservationists living in countries that had waxed rich on the rapacious exploitation of the world's resources in the past to condemn the systematic elimination of these forests. But for Malaysia which is faced with all kinds of restrictions to the export of manufactured goods, there is no choice but to exploit natural wealth like timber. In any case the land has to be cleared in order to grow rubber or palm oil or to mine tin. These are the only things that we can sell. The World will

not pay us to preserve the forests. And so a choice has to be made - deforest and develop economically or remain poor so that the rich can glorify in the beauty of the Malaysian rainforest with their majestic trees... (Datuk Sevi Mahathir Mohamad in Kumar, 1986:79)

This feeling is shared by many officials even though they cannot express it in public. The choice is clear: economic development is the prime goal while conservation is marginal. The problem in African rainforest countries is that there is a risk of losing both the forest and economic development.

CHAPTER V

DEBT, THE STRUCTURAL ADJUSTMENT PROGRAMME AND FOREST PROTECTION IN CAMEROON.

INTRODUCTION

This chapter analyses the consequences of debt and the structural adjustment programme (SAP) on forest protection and the prospect of SD in Cameroon. Do debt and the SAP contribute to or hamper forest protection in Cameroon? Is there any interaction between deforestation and debt or deforestation and SAP?

The first section discusses the sensitive issue of debt and deforestation in Cameroon. The second section addresses the much debated correlation between SAP and deforestation. It also explores other WB mechanisms to address SD issue in Cameroon. More importantly it presents a case study of the consequences of some aspects of SAP on the forest.

V.1 THE CORRELATION BETWEEN DEBT AND DEFORESTATION .

The assumption of a link between debt and deforestation has been spread by the left wing within SD thought. The Group of Green Economists clearly establishes a close link between management of the debt of the Third World countries and the extent to which the environment is depleted in these countries (1992). The most frequently cited example is the Brazil case. Brazil occupies first place in terms of forest depletion, and is also the most indebted Third World country. In some countries of Sub-saharan Africa (SSA), the coincidence between the state of their forests and the level of their indebtedness is surprising. For instance

Nigeria, with its external debt of US\$ 32.531 billion in 1993 (WB, WDT 1995) has already lost its primary rainforest. Ivory Coast with its external debt of US\$ 19.146 billion in 1993 (WB, WDT 1995) is on the verge of loosing its primary rainforest (Reed, 1992). Cameroon, with a moderate debt of US\$ 6.601 billion in 1993 (WB, WDT 1995) still has a forest area of about 20 million ha. But the rate of deforestation is alarming: 200,000 ha per year. How are we to interpret these data? Is the link mere coincidence between the size of a particular debt and the magnitude of deforestation? The possible correlation between the size of the debt and the magnitude of deforestation could be verifiable in some cases, however, there are inevitably exceptions and Cameroon could be one of these.

V.1.1 THE HYPOTHESIS OF A LINK BETWEEN DEBT AND DEFORESTATION.

The thesis of a relationship between the burden of external debt and the rate of deforestation suggests that the Third World countries' external debt accelerates the rate of extraction of natural resources, including forests, in order to enable the country to fulfil its international financial obligations (GGE, 1992). Susan George (1992) also establishes a debt/deforestation correlation. Four arguments underpin her hypothesis:

- tropical forests exist in countries with a significant debt burden;
- those Third World countries that deforested the most and most rapidly in the 1980s are also the biggest debtors;
- in a number of small countries with less significant forest reserves, the most rapid deforesters were also the most heavily

indebted;

- those countries which have the highest debt service ratio or which are subject to the highest levels of IMF conditionality also tend to be the largest and fastest deforesters (George, 1992).

Can the hypothesis of a link between debt and deforestation be applied in the Cameroon case? Let us examine each of the propositions in turn.

a. Tropical forests exist in countries with a significant debt burden.

Cameroon has a forest area of about 20 million ha. Among the top thirteen countries with the most substantial reserves (at least 150,000 km²), Cameroon is the twelfth, before Malaysia and after Brazil, Zaire, Indonesia, Peru, Papua New Guinea, Venezuela, Colombia, Thailand, Gabon, Mexico, and India (George, 1992). Cameroon's external debt of US\$ 6.601 billion is relatively bearable compared to Nigeria's debt (US\$ 32.531 billion) or with Ivory Coast's debt (US\$ 19.146 billion).

Compared to other countries with approximately the same or smaller area of tropical forest, Cameroon has a relatively light debt burden (though it is considered as a Severely Indebted Low Middle Income Country [SILMIC]) (WB 1995).

b. The Third World countries that have deforested the most or the fastest in the 1980s are also the largest debtors.

This argument also seems irrelevant in the Cameroon case. According to figures of the Ministry of the Environment and Forests, since 1985 the timber sector has been contributing substantially to the state budget on average US\$ 128 millions

(Fcfca 32 billion) per year (RC, 1992). During the same period, the contribution of cash crops to the state budget has decreased. Since 1987, the contribution coming from oil exports has also decreased. In this atmosphere of a general decline in export earnings, the timber trade appears to be the most reliable source of income. The tendency in the last two years (1992, 1993) has been to further increase its contribution to the state budget. In an interview given to a government journal, the Ministry of the Environment and Forest encourages this increasing contribution of the timber trade to the national wealth (CT.No 5133 Mai 1992).

There are two ways of analysing the possible link between deforestation and debt:

- the first refers to the use of data of forest products extracted between 1981 and 1989
- the second is based on the number of licences for timber extraction.

Cameroon has produced 14,159,000 tons of forest products between 1981 and 1989 (RC, 1992). Apart from a slight decrease in 1987-88, this production has increased each year from 1,880,000 tons in 1981 to 2,370,000 tons in 1989 (RC, 1992). The latest data (expressed in cubic meters) also suggests an increase: 3,070,000 cum in 1990 and 3,132,000 in 1991 (ITTO, 1992). These figures indicate the growth of logging activities taking place in the forest. Although there is no recent figure on the evolution of the rate of deforestation for the same period, it is tempting to link the increase in the extraction of forest products with deforestation. Such a link suggests that the rate of

deforestation is partly proportional to the extraction of forest products.

Using the list of licences issued for the exploitation of forests as an indicator (see appendix 1), as far as our data are accurate, it is observable that between 1980 and 1985 only 21 licenses were given or extended to individuals and companies. Between 1985 and 1992, however, 68 licences were issued. The government granted three times more licences between 1985 - 1992 than it did between 1980 - 1985. The most interesting fact is that a number of new licences were issued for the exploitation of what was considered as the closed forest of Cameroon - the south-east forest. Hence there is a potential for an even faster growth of deforestation. In recent years the forest in the South-east of Cameroon has experienced the fastest rate of deforestation.

In spite of this fact, during the same period (1985-1992), Cameroon's debt has sharply increased. It remains however difficult to establish a clear link between the increase in the number of licences issued to logging companies, the increase in the number of forest products extracted and exported (and thus a potential growth in the rate of deforestation), and the steady increase of Cameroon's debt.

c. Countries with the highest debt service ratio or subject to the highest level of IMF conditionality also tend to be the largest and fastest deforesters.

This argument suggests that any economic effort made within the country is absorbed by the reimbursement of the debt. One implication is that nationals rarely benefit from the export

earnings, despite their sacrifices. The second outcome refers to the flight of these export earnings. They are rarely re-invested in the local economy. The states are left with no option other than to increase the extraction of natural resources, including forests, to be able to increase their earnings if they want to meet their development needs:

"Thus, the higher the ratio of debt service payment to exports of goods and services, the stronger the pressures to increase one's export earnings even more, simply to have some hard currency left over for investment or imports." (George, 1992:14)

According to the World Bank's recent figures, Cameroon's debt service ratio has increased in recent years (WB [WDT], 1995). This is due to the slow-down of economic activities, a decrease in oil exports (in terms of earnings) and in export earnings more generally because of the fall in prices of commercial crops, and the increase in the size of the debt.

Table 22. Total external debt ratios of Cameroon.

Total external debt as a percentage of exports of goods and services		Total external debt as a percentage of GNP		Total debt service as a percentage of exports of goods and services		interest payments as a percentage of exports of goods and services	
1980	1993	1980	1993	1980	1993	1980	1993
136.7	295	36.8	65	15.2	19	8.1	9

Source: WB, WDR 1992 and WDT 1994-95

In 1980, 15.2% of export earnings were used for the reimbursement of the external debt. In 1990, 21.5% of Cameroon's export earnings were dedicated to pay off the debt (WB, WDR 1992).

According to the latest WB figures, in 1993, Cameroon has concentrated only 19% of its exports earnings on the payment of its debt. Susan George suggests that this ratio is even higher: 32% (1990:15). The difference in the figures could be explained by the rescheduling of Cameroon's debt in January 1992 and in March 1994 by the Paris Club. If these data are correct, the increase in Cameroon's debt service ratio could be one of the fastest in SSA - approximately five percentage points per year, ten points between 1990 and 1992.

Each year the Cameroon government is expected to spend on average US\$ 200 millions (Fcfa 100 billion) of its national budget on the repayment of its internal and external debt (RC MINEF, 1992). In practice this has not proved possible since the beginning of the economic crisis. For instance, Cameroon has failed to pay back in time, its loans which amount to US\$ 16,250,753.7 (WB, 1995). This sum is due to the World Bank and was supposed to be paid in April and May 1995. Such a failure to meet its external financial obligation shows that Cameroon continues to have financial difficulties. This could lead the government to search for ways to increase its revenue.

The Cameroon case shows that despite the faster increase in deforestation, the general level of indebtedness remains low compared to other countries. However, the trend is worrying. There is a faster increase in licensing logging companies, an increase in extraction of forest products (thus the potential to increase the rate of deforestation), a growing indebtedness, a

high pace in the increase of the debt service ratio and financial problems. A defender of the thesis of a positive link between debt and deforestation will conclude that this combination of facts and figures is more than a mere coincidence: rather it is a case of "extremely disturbing correlations" (George, 1992:8).

V.1.2 LIMITATIONS OF THE HYPOTHESIS OF A POSITIVE LINK BETWEEN DEBT AND DEFORESTATION.

Defenders of the thesis of a correlation between debt and deforestation underpinned their arguments with statistics. There is a critique of their method and of the conclusions they reached.

Mearns criticised Georges' model of a link between SAP and deforestation. He qualifies it as "popular" (1991).

Reed warns of the danger of using any statistical relationship as a causal link between debt and forest depletion. He suggests a case-study approach to find a link between debt and deforestation. Drawing his conclusions from the analysis of three case studies (Ivory Coast, Thailand, and Mexico), he states that the relationship between debt and the environment is not simple. (Reed, 1992:143)

His arguments are as follows:

- There is no relationship between the cause of indebtedness in the 1970s and 1980s, and forest depletion.
- Forest depletion through exploitation of natural resources was encouraged by the elite to

"assuage social discontent among the poor, often as a way of avoiding re-distribution of assets and income that might threaten their position of relative privilege" (Reed, 1992:144)

Following the results of the case study of Ivory Coast, Reed concludes that

"...when the gross domestic product (GDP) was growing slowly or falling, those in charge of the government used whatever means were at their disposal to sustain investment and consumption levels and protect their positions, even when doing so was to the detriment of the more vulnerable social groups and the natural resource sector." (Reed, 1992:144)

- There is a lack of objective data consistently collected over an extended period of time which can contribute to a clear understanding of the mechanisms, processes and link between debt and deforestation; thus the thesis that there is a link between debt and environmental degradation warrants further analysis. The point made by Reed, the lack of consistent data, is a notorious problem. Nearly everyone who works on African development issues encounters it. Secrecy and poor archives make a rigorous analysis based on data collection very difficult to carry out. For instance, it is difficult to establish a correlation between felling of logs and the general rate of deforestation. However, an empirical assessment can give an indication of consequences of the increase of logging activities in a particular area. Logically, an increase in forest production over the last ten years should lead to an increase in the rate of deforestation. It could be more than the official rate of 200,000 ha per year. This difficulty undermines any scientific effort to establish a positive correlation between debt and deforestation.

In spite of its imperfections, a statistical method based on an interpretation of general figures (debt service ratio, size of the debt, rate of deforestation) remains the only way of examining the relationship between debt and deforestation. In the

light of this method, there are indications that financial difficulties (including reimbursement of the external debt) faced by Cameroon's government have contributed to the acceleration of the extraction of natural resources, including deforestation. This analysis shows that, simultaneously between 1985 and 1992, the contribution of timber exports to the national budget has increased, as well as Cameroon's debt and Cameroon's debt service ratio. These indicators, according to Susan George (1992), provide evidence that there is a link between debt and deforestation. In the absence of more data, we argue that there is a presumption of a link between a deterioration of the economic situation (including the debt problem) and deforestation (because of logging activities, agriculture, and fuelwood). Debt might be just one of the causes of the increase in the rate of deforestation.

V.2 THE STRUCTURE OF CAMEROON'S GREEN DEBT.

General literature sees the origin of the debt crisis in:

- the rise in oil prices or the oil crisis of 1973-74 and 1979,
- high interest rates caused mainly by the US budget deficit,
- the world recession which has depressed the commodity trade,
- the funding of some prestige projects and importing goods and arms,
- capital flight,
- easy access to international loans due to the excess of money from the oil producing countries, and
- the willingness of commercial banks to place the money deposited in their banks.

(Clark, 1986; Adams, 1991; George, 1989).

V.2.1 CAMEROON'S MULTILATERAL DEBT AND DEFORESTATION

Cameroon's indebtedness hardly fits into the above categories. The structure and evolution of Cameroon's debt suggests two major comments:

1. The level of Cameroon's international debt was very low during the period when most African countries became indebted (comparing countries at the same economic level). Up to 1985, Cameroon's debt was US\$ 2.700 billion. At the same time, Ivory Coast's debt was US\$ 7.445 billion (WB, WDT 1994).
2. For 25 years, Cameroon's policy of indebtedness was characterized by moderation and prudence.

As far as multilateral organizations are concerned, the World Bank contributed to the funding of several agricultural or forestry projects, seen as green debt. The World Bank, which comprises three agencies - IFC, IBRD, and IDA - intervened in different areas. IFC took some shares in the Cellucam project industrial complex, combining forestry with the production of paper. IBRD and IDA funded 24 agricultural operations between 1967 and 1987 for a total of US\$ 496 million (WB, 1989).

Table 23: Agricultural projects funded by the World Bank.

YEAR	PROJECT	IBRD US\$ M	IDA US\$ M	TOTAL US\$ M
1967	CAMDEV I	7.0	13.26	20.26
1969	East Cameroon Oil Palm	7.9		7.90
1972	SEMRY Rice I		3.70	3.70
1973	Cameroon Oil Palm	1.7		1.70
1974	Livestock Development	11.6		11.60
1974	Cocoa	6.5		6.50
1975	Niete Rubber Estate		16.00	16.00
1976	Plaine de MBO Rural Development		2.00	2.00
1977	SOCAPALM II	25.0		25.00
1977	Rural Development Fund		7.00	7.00
1977	CAMDEV II	15.0		15.00
1978	ZAPI integrated rural development		8.50	8.50
1978	SEMRY Rice II	14.50	14.50	29.00
1978	Western Province Rural Development		13.00	13.00
1980	Livestock Development		16.00	16.00
1980	HEVECAM Rubber II	16.50	15.00	31.50
1980	Northern Province Rural Development	25.00	12.50	37.50
1982	Forestry	17.00		17.00
1982	Oil Palm and Rubber	50.80		50.80

1984	Western Province Rural Development II	21.50		21.50
1985	HEVECAM Rubber III	8.30		8.30
1985	FSAR II	25.50		25.50
1986	National Agricultural Research	17.80		17.80
1987	Cocoa Rehabilitation	103.00		103.00
Total 1967-1987	24 projects	374.60	121.46	496.06

Source: World Bank: Report No.7486 - Cam 1989

In 1987, Cameroon's green debt to the World Bank was US\$ 496.06 million. Only US\$ 17 million were used for forestry projects. Eleven projects of a value of US\$ 230.20 million concerned development, plantations and restructuring of the commercial crops sector.

From the economic standpoint, green debt for commercial commodities is directly in line with the Cameroon government's development strategies. From an ecological point of view, it is forest depleting because of its funding of large scale plantations of commercial crops. The above data suggest two comments.

1. Cameroon became indebted in order to build its commercial agricultural capacity with the double effect of
 - increasing the burden of its debt
 - destruction of its primary forest.
2. Cameroon's green debt grew because of the "choice" of the

lender and the acceptance of the borrower. The IBRD funded most projects and provided the most important loans (e.g. cocoa rehabilitation in 1987 - US\$ 103 million) at a market interest rate, instead of the IDA with its attractive low interest rate. Expanding the analysis from the green debt, to Cameroon's total debt to the World Bank, the same paradoxes can be observed. Recent figures (1991) show that the number of projects funded by the World Bank more than doubled between 1987 and 1991. From 1967 to 1987 the WB funded 24 projects, whereas it financed 34 projects in 4 years (1987-1991) (see Table 24). There are two broad explanations for this situation. Firstly, 1987 was a turning point in Cameroon's economic crisis. The deterioration of the financial situation, combined with the scarcity of private bank loans, obliged Cameroon to depend on WB-IMF's sources of funding. Secondly, the 1991 figures included agricultural and non-agricultural projects, the structure of the debt remains the same as far as the lending agency is concerned. Over 58 projects between 1967 and 1991 were funded by the World Bank, 43 were loans from the IBRD while only 15 came from the IDA.

Table 24: The World bank's loans to Cameroon in 1991 (in US\$ millions).

IBRD LOANS		IDA CREDITS		TOTAL	
number	amount	number	amount	number	amount
43	1,271.4	15	253	58	1,524.4

Source: WB, the World Bank Annual Report 1991

Table 24 indicates the difference between the volume of the IBRD's loans and the IDA's loans.

V.2.2 CAMEROON'S BILATERAL DEBT AND FOREST CONSERVATION.

A number of European and American countries have granted loans to Cameroon. These bilateral loans constitute a part of Cameroon's public debt. France is Cameroon's most important creditor and its most important economic partner. For these two reasons, Cameroon's debt to France will serve as an example in an attempt to determine the mechanisms involved in the building-up of the green debt, as well as the overall debt. Our study will cover the period 1980 - 1990, for three reasons. This period includes the shift of Cameroon's economy from positive to negative growth. This period is an era of Cameroon's huge indebtedness. This period is also a period of greater French political influence, in particular since 1989.

Four agencies managing France's overseas aid have funded a number of projects in Cameroon. The FAC (Fonds d'Aide et de Cooperation), formerly FIDES (Fonds d'Investissement pour le developpement economique et social), the CCCE (Caisse Centrale de la Cooperation Economique), formerly CCFOM (Caisse Centrale de la France d'Outre-Mer) and now Caisse Francaise de Development (CFD), the ACTIM (Agence pour la Cooperation Technique, Industrielle et Economique), and the Ministry of Cooperation. In theory, the main co-operation agencies are the CFD and the FAC. But the analysis of French aid to Cameroon shows that between 1980 and 1990, grants to Cameroon through the FAC decreased while at the same time loans increased.

Table 25: The evolution of France's financial aid to Cameroon
1980 - 1989 (in million FcFa).

YEARS	BILATERAL AID				
	subsidies	%	loans	%	total
1980	5,050	24.40	15,650	75.60	20,700
1981	4,935	30.89	11,040	69.11	15,975
1982	2,435	10.00	21,600	90.00	24,035
1983	1,580	8.64	19,010	91.36	20,590
1984	2,240	8.93	22,840	91.07	25,080
1985	1,100	5.13	20,350	94.87	21,450
1986	1,820	11.00	13,888.25	89.00	15,708.25
1987	1,450	7.00	16,980	93.00	18,430
1988	1,865	5.85	30,020	94.15	31,885
1989	1,470	3.77	37,425	96.23	38,895
total	23,945	10.30	208,803.25	89.70	232,748.25

Source: Bekono 1991

Table 25 indicates that the funding of projects in Cameroon is largely undertaken through loans. During the period 1980 - 1990, France has lent Fcfa 208 billion and has donated Fcfa 23 billion in the form of books, technical assistance, and so on. An analysis of table 25 reveals that during the first five years 1980-1984 loans represented 83.42 % of France's aid to Cameroon. From 1985 (the beginning of Cameroon's economic crisis) to 1989 (the depth of the economic and financial crisis) this average moved from 83.42% to 93.85%. Two interpretations are possible:

1. The more difficulties a country with economic potential faces, the fewer grants it obtains. Middle-income countries tend to become more indebted during a period of economic crisis. This is the case of Cameroon.

2. The more indebted a country is, the more money it needs and the more it increases its debt as there are no grants in the form of cash and very few creditors are willing to cancel the debt of middle-income countries.

In Africa, this is a vicious circle and a dilemma of the so called low-middle-income countries (Cameroon, Congo and Gabon). The structural adjustment programme has activated the creditor countries' and institutions' tendency to reschedule loans for middle-income countries rather than giving grants. Without cancelling a substantial part of the debt of these countries and without a shift in the nature of the aid from less loans to more grants, it is unlikely that the debt crisis of low middle-income countries like Cameroon will be solved. Even the destruction of the forest to reimburse the loans will not be enough to bring the debt crisis to an end.

In the indebtedness process, there is an interaction between the economic capacity of a country, the financial difficulties it faces, the mode of aid chosen by donor countries (loans and grants) and the political intention of the main creditor country. Hence some loans given to developed countries serve in the first place the donor country's political, financial or economic interests. The details of France's loans or projects in Cameroon underline this dimension. Most loans granted by France to Cameroon's government were either destined to local branches of French companies or to companies in which French nationals possess shares. In a study on external aid to Cameroon, Bekono (1991) argues that between 1982 and 1988 ALUCAM, a local branch of the French Pechiney Group, received loans from the French aid

agencies almost every year:

- in 1982, Fcfa 771 million loans to Cameroon were used for the extension of ALUCAM,
- in 1983, Fcfa 800 million loans to Cameroon were also used for the modernization of ALUCAM,
- in 1984, Fcfa 765 million to ALUCAM,
- in 1985, Fcfa 328.25 million,
- in 1987, Fcfa 410 million, and
- in 1988, Fcfa 200 million.

(Bekono, 1991)

France subsidizes its company (Pechiney Group) by indebting Cameroon. To put it another way, Cameroon's government became indebted to fund foreign companies. Taxpayers will reimburse these loans at a higher interest rate to France. This paradoxical process of indebtedness also leads to the depletion of forests, since the loans have to be paid back eventually, by export earnings of forest-related products.

V.2.3 DEVELOPMENT PROJECTS, DEBT AND FORESTS

The analysis of projects funded by loans suggests a classification (according to the impact of the debt on forests) into two broad groups: loans useful to development despite their negative impact on the forest and useless loans.

1. Loans useful to development.

Some loans taken by the government have contributed to the welfare of people and the improvement of the infrastructure of Cameroon. These loans were inevitable and justifiable from economic and development standpoints though they were used to

fund projects with a negative impact on the forest. For instance, the construction of the Songloulou Dam in Adamoua province. The forest here was cleared. However, it has increased Cameroon's energy production. North and Far-north provinces are now supplied with electricity 24 hours a day, which was not the case before the construction of the dam. The second example is the construction of the new road connecting the two biggest cities in the country: Yaounde and Douala. Substantial loans were given to construct that highway. On the one hand, the project has facilitated economic and social exchanges between these major cities. On the other hand, the construction of this road has facilitated access to the forest and settlement of people along the road. It has thus contributed to the felling of trees for fuelwood and charcoal production, as well as clearance of the forest for agricultural purposes. For instance, Japoma, a small rural centre 30 km away from Douala, is becoming Douala's suburb since people have settled and organized economic activities along the new road. New villages have also emerged along the road. This facilitates clearance of the forest from the roadside inwards. The villagers are also suppliers of commodities to the towns. Loans for development projects although useful have indirectly put more pressure on the forest.

2. Useless loans.

This heading refers to loans taken by the government with the aim to fund certain projects. Those projects revealed themselves to be of no immediate contribution to Cameroon's development, were forest-depleting, and non-profitable. They actually increased Cameroon's debt burden. That is the case of the new Yaounde -

Nsimalen international airport. The new airport, which cost Fcfa 75 billion in loans (PRC, 1992), has a capacity of 3 million passengers per year. To be financially self-sufficient (to be able to cover its costs of functioning), it needs to be used at least at 1/3 of its capacity, i.e. 1 million passengers per year. Yaounde, the capital, is neither the economic and financial centre, nor a tourist destination. Douala international airport, the most active in the country, receives 300,000 passengers per year. At best, Yaounde-Nsimalen airport will be used by 300,000 passengers. It will need government subsidies for its continued functioning and the maintenance of its equipment. The result is that the forest was cleared in that area, the government took an important loan and has to subsidize the airport, Cameroon's debt has increased because of this non-productive project and the debt will be reimbursed at the expense of further forest clearance, since Cameroon's exports are commercial crops and timber.

V.2.4: DEBT-FOR-NATURE SWAPS FOR CAMEROON

Before and after UNCED, cancellation of part of Third World countries' debt was considered as an option for environment protection as well as for sustainable development. Cancellation of the debt, or part of it, will lessen the pressure on natural resources exploited to pay back the debt (GGE, 1992). Some countries have benefited from this move. For instance, part of the public debt of LDCs in Africa was cancelled in 1992 and Mali, Tchad and Burkina Fasso directly benefited (WDT, 1995). For middle-income countries like Cameroon, (Ivory Coast has been reclassified in 1994 as a low-income country), Gabon and Congo,

the international community consented to reschedule some of their debts in 1992 (WB, WDT 1995). Cameroon has however benefited a second restructuring of its debt through the "Enhanced Toronto Terms" in September 1994 (WB, WDT 1995). This mechanism aims at setting new modalities of the repayment of ODA and non-ODA debt. It also helps countries to access new debt relief facilities such as Debt-for-Development swaps or, Debt-for-Nature swaps (WB, WDT 1993). This new mechanism created in December 1991 for low income-countries within the Paris club framework was extended to some SSA countries after the devaluation of the Fcfa (WDT, 1995). But the existence of forest in these SSA middle-income countries gave a reason for hope. The debt-for-nature swaps mechanism was made available to them through the Enhanced Toronto Terms. Debt-For-Nature swaps consists of transforming the commercial debt of developing countries into finance for the environment. This financial transaction has a double objective. It helps to finance worthwhile environmental activities with substantial funds. It is also a suitable way of managing developing countries' debt; for instance, the sum of money to be paid to the implementing agency of an environmental project, is paid in local currency and there is a great deal of flexibility in arrangements between the government and the agency. In July 1987, Bolivia benefited from this operation (WB, WDR 1992). An American NGO bought US\$ 650,000 of Bolivia's commercial debt for US\$ 100,000. In exchange, the Bolivian government committed itself to having an equivalent of a stock of US\$ 200,000 in local currency for protection of an area of 1.4 million ha of its rainforest. In November 1987, WWF and Ecuador also used this mechanism. In

March 1988, Costa Rica benefited from the same mechanism. In Africa, Madagascar benefited from it as well. Sudan benefited from the debt-for-development swaps mechanism. In 1988 the Midland Bank donated UNICEF its loans to Sudan totalling US\$ 800,000. The Sudanese government paid this amount of money to UNICEF in local currency. The latter funded projects in water, health and afforestation with that money (Jaycox, 1992).

Despite the creation of a new national reserve, the reserve of Dja, considered by UNESCO as "common heritage for humanity", Cameroon has not yet benefited from debt-for-nature swaps. Instead, France has proposed to cancel part of its debt if Cameroon agrees to allow exclusively French logging companies to exploit its forests (Pearce, 1994). This offer was identified as a debt-for-nature destruction swap (Pearce, 1994).

Mechanisms used to promote forest protection for every single country are turned down when it comes to protection of Cameroon forest. Debt-for-nature swap, successfully used in the cases listed above, is forest-destructive in the Cameroon case since it aims at protecting financial and economic interests of some groups, individuals and logging companies.

V.3 THE CORRELATION BETWEEN STRUCTURAL ADJUSTMENT PROGRAMME AND DEFORESTATION.

The World Bank has initiated a number of activities and incentives as part of its response to the environment and development crisis. These include introduction of green conditionality to obtain loans, management of GEF (in collaboration with UNEP and UNDP) and the SAP package. Before

addressing the core discussion of this section, the interaction between SAPs and deforestation, a presentation of other WB's options for sustainability will be made.

V.3.1 THE WORLD BANK'S OPTIONS FOR SUSTAINABILITY

The World Bank supported the TFAP in the mid 1980s. In the late 1989, it launched its own strategy to address environment and development problems. Its strategy is underpinned by two sets of actions: the green conditionality package and a set of measures to alleviate poverty.

1. Increase environmental care, a new conditionality for loans.

This includes mechanisms of direct and indirect intervention, such as involvement in the design of new forest regulations, reform of land tenure and taxation of forest activities. Cameroon's new legislation on forests has been highly influenced by the World Bank's view in two ways:

-the general philosophy of SD in Cameroon (priority of economic concerns over environmental requirements); this reading of SD is suggested in the explanatory statement that introduces the new law on forestry (Bill No 544/PJL/AN, Nov 1993);

-the second sign of WB involvement is the similarity between the WB strategy for forest regulations contained in the World Report 1992 and some provisions in the draft of the bill. The World Bank suggested a long period of concessions, 15 to 25 years, land reform, simplification of taxation and extension of areas of exploitation up to 500,000 ha. The draft of the bill presented to the National Assembly in December 1993 states the same changes

in articles 16, 46, 46 (R.C. 1993). It was submitted by the government from the initial draft of the Department of Forests. The latter held two important meetings in one year with the WB missions coming from Washington: one in June 1992, the other in January 1993. During the negotiations between the WB representatives and the officials from the Ministry of Environment, the threat was always the same: "If we do not agree upon this reform, there will be no funding from the World Bank." (Informant, Senior civil servant, January 1994).

2. The second mechanism of intervention is indirect and is known as environmental impact assessment (EIA). In October 1989 the WB issued The Environmental Assessment Operational Directive (EAOD) (WB 1990). The World Bank tried to impose environmental impact assessment in some development projects which might have negative effects on the environment (forest). EIA aims at ensuring that development options under consideration are environmentally sound and sustainable, and that any environmental consequences are recognized early in the project cycle and taken into account in the project design (WB, 1990).

The World Bank suggested that an EIA be carried out before the launching of CPPC activities in the Edea area (Mr. Quicke, 8th January 1993).

A number of criticisms have been directed at the World Bank's requirement of EIA.

- Although EIA is required by the WB, the survey or studies are funded by countries that look for loans from the World Bank. WB specialists just study feasibility of the project but not EIA

itself (Le Pestre, 1992). There is a risk with a specialist being paid by a government to carry out an EIA that a biased report will be produced. The World Bank specialist could be misled by such a report.

- Another criticism is related to the complexity of the identification of projects likely to require EIA. The EAOD delineates four categories of projects (from A to D). Category A contains 21 kinds of project which require full-scale EIA. Category B consists of projects which may have specific environmental impacts: it covers about 13 kinds of project or activities. The remaining categories do not require any specific EIA (WB, 1990). It is likely that there will be problems of categorization of projects since these are not always clear cut. For instance, building a factory in a forest area. In which category will it be?

Furthermore, the World Bank's sanction (in the case of the lack of EIA) is not a sufficient deterrent. The World Bank will simply refuse to contribute or to fund a controversial project. But if it is a private company without need for financial help, as is the case of CPPC, the World Bank's threat will be insignificant.

3. The third observation is that the WB's willingness to protect forests is not sufficiently strong or convincing. In 1989, the World Bank proposed that Cameroon opened up its forest in the east but never demanded an EIA. Equally, its recommendations for a reform in the forest sector are not forest-protective if you consider the duration of concessions in the Cameroon context or the areas conceded. As long as the economic growth paradigm underpins the World Bank's thinking and practices, it is unlikely

that the Bank will refuse voluntarily to fund a financially profitable project.

The second set of actions to tackle environmental issues deals with addressing rural poverty. The World Bank decided in 1990 to address rural poverty, which seems to be one of the major causes of environmental degradation (WB, 1991) by giving priority to loans for projects which aim at managing the environment such as silviculture for sustainable forest management, and projects related to rural development, to poverty alleviation and which bring benefit to local communities (WB, 1991).

Two projects related to this approach have been initiated in Cameroon in the general framework of the social dimension of adjustment. These projects are PRODEC and FIMAC. Both projects funded with the help of WB loans, aim at financing activities of local people, mainly vulnerable and poor people by giving them loans. In practice both projects are ill-designed and likely to fail. Our study of the FIMAC project suggests that conditions required to obtain loans are too tough for poor rural people.

A group requiring a loan should present 20% of the sum that they would like to borrow and 5% of this sum will be their deposit or guarantee. The group should also present another kind of contribution in the form of property. The documents of FIMAC clearly state that "each group must bring important contributions" (FIMAC, 1992:2).²⁰

These conditions can hardly be met by the rural poor who do not

²⁰This is our translation. The original version is "chaque groupe devait avoir un apport important" (FIMAC, 1992:2).

have the initial capital or other forms of property. In case they want to mortgage their land, they do not even have any legal document proving their ownership. They own their land in virtue of customary law. But the committee needs a legal document that they cannot provide.

The impartiality of a provincial agent of FIMAC is not guaranteed if you take into consideration the local context of ethnicity, clientelism and corruption. In spite of its new actions and options for sustainability, the World Bank has not yet built any convincing framework to bring about forest protection and sustainable development. Its SAP seems to be even more controversial.

V.3.2 THE IMPACT OF THE SAP ON FOREST.

In the 1980s, the Structural Adjustment Programme (SAP) became a controversial notion amongst thinkers and practitioners of development, as well as being politically "tricky" for Third World government officials. The concept of the SAP comprises two different dimensions. The first refers to the stabilization of macro-economic indicators; it is a domain of the International Monetary Fund, through its standby agreement. The second, namely the structural adjustment related to a series of economic reforms, is the traditional preserve of the World Bank. The convergence of the approaches of both Bretton Wood's institutions has led to the understanding that SAP is a combination of both dimensions: the IMF's stabilization and the WB's adjustment. This meaning is also the one adopted in this thesis.

A number of authors have argued a link between SAP and the environment, for instance ENDA (1989), Kahn (1990), Thornes (1991) and Reed (1992). However, there are two different readings of this relationship. The first suggests a negative effect as a result of the link. It is argued that the SAP leads to environmental depletion including deforestation (The Ecologist, 1993; George, 1992; Green Economist, 1992; OXFAM, 1991). The second reading argues that the consequence of the link SAP - environment, is not predetermined. The SAP could have a destructive effect as well as a protective effect on the environment. Thus determining the outcome of the link should be done on a case study basis (Mearns, 1991). We subscribe to this second reading. The link (negative or positive) of SAP/deforestation in Cameroon will be established according to this approach which requires fieldwork.

SAP AND DEFORESTATION: A CASE STUDY

When the first SAP came into effect in Cameroon in 1988, the Government reluctantly agreed to implement all the measures. Some were oriented towards the macro economic stabilisation (demand side) and others dealt with the economic performance (supply side).

* The impact of Cameroon resistance to the macroeconomic stabilization on the forest.

The macroeconomic stabilization consisted in balancing public finances. Two objectives were assigned by IMF-WB: the reduction of the government expenditure, and the switching of these expenditures from less productive to more productive sectors.

Cameroon initiated a programme of: the abolition of state subsidies in agriculture (and other sectors), the closure of a number of parastatals, the privatisation of others and the restructuring of banks. The social cost was very high as people made redundant could not find new jobs. Concerning the environment, deforestation due to increased agricultural production was delayed in some areas. West Cameroon farmers deprived of cheap fertilizers would have probably switched from semi-intensive and intensive to extensive agriculture in rare areas where there are some forests left. This represents a threat to the already disappearing west Cameroon Forest. In 1989, USAID, the WB and Cameroon government agreed to gradually withdraw the subsidies on fertilizers (WB, 1989). This agreement has delayed the risk of massive deforestation in some areas of Cameroon (West and North-West Provinces of Cameroon). In other provinces (Centre), former employees of parastatals are likely to reconvert to agriculture, mainly, those who used to work with parastatals in agriculture-related activities e.g. MIDEVIV, FONADER.

The worst is to come as Cameroon is preparing to cut in half the number of civil servants. These 80,000 future jobless people will probably become involved in agriculture-related activity.

* Adjustment and forest depletion.

The supply side or the adjustment aspect of the SAP stresses the need for increasing export earnings. Cameroon designed a number of policies which resulted in the deregulation of the economy (abolition of price controls, simplification of exports procedures, dismantling of the protectionist regulations), the

reform of the code of investments, the tax reform, the rise of interest rates and "lately" the devaluation of the currency by 50%. An empirical analysis suggests that the WB - adjustment package has had an impact on the forest. For instance, the deregulation has permitted the removal of a number of authorizations to export products; logging companies find it easier to export logs now than 10 years ago: this implies more production of logs. Equally the new investment code gives fiscal facilities to companies which are export-oriented (MINDIC, 1994). Logging companies benefiting from this status will export logs for 10 years without paying a number of taxes. This measure has encouraged foreigners once operating in the Côte d'Ivoire's disappearing forest to move on to Cameroon. A greater number of logging companies implies a greater log production, hence more deforestation. Finally the devaluation of the currency by 50% has made the exports of raw material more profitable. Better returns, low cost of production, less taxes (in real terms) due to the devaluation of the Fcfa, have made logging activities a very lucrative activity for loggers and destructive of the environment. Above all, the initiator of the structural adjustment programme has given carte blanche to loggers, for a massive exploitation of the once remaining closed rainforest of Cameroon (WB 1989).

These data from an empirical analysis indicate a strong positive link between the SAP and deforestation in Cameroon, which needs to be detailed. Our analysis based on a survey in a specific area gives further insights into the relationship.

SAP and Deforestation: The case of fuelwood energy.

From 28th June to 30th July, 1994, we carried out surveys in villages surrounding Douala City and inside the city itself. 100 charcoal and fuelwood producers and sellers were interviewed (50 producers and 50 sellers). The main aim was to find out the relationship between unemployment resulting from the SAP and the rate of deforestation. Two aspects were looked at: on the one hand, the demand for the fuelwood energy in relation to the decrease of household purchasing power following the implementation of almost all the SAP requirements. On the other hand, the supply (production) of fuelwood energy. A detailed analysis of these surveys offers very interesting insights into the link between the SAP and deforestation. Some could be expected, whilst others were not.

A- Expected Results: the Division of Labour

One strong aspect of our assumptions during the phase of the design of the questionnaire, was the possibility of a clear cut division of labour between females and males. Females would be more involved in the sale of fuelwood energy, whilst males would be involved in production. An analysis of the results suggests that 82% of the fuelwood energy sellers are women. Only 18% of males are involved in this activity. In general the males are either old, or weak (because of health-problems). They live in the villages located at the entrance of Douala city. Very few young men are sellers, of these some were pupils or students of secondary schools helping their mothers.

As far as the production is concerned, 90% is ensured by males. Women involved in production do not fell trees. It is not known

whether it is a cultural taboo for women to fell trees as in Kenya (some tribes) or simply a consequence of the traditional division of labour. They simply gather dry branches broken by the wind. In one case a lady was running this business, though she did not fell trees herself. Her employees did so on her behalf.

B - Unexpected Result: The missing link between SAP and deforestation related to the production of biomass energy?

We started the survey with a strong feeling that there could be a link between SAP and deforestation in the coastal forest for three reasons:

1. A number of parastatals closed, or sold to the private sector were located in the Littoral province which main city is Douala.
2. Many people were made redundant; the rate of unemployment since the late 1980s is very high in Douala area.
3. There are a large number of fuelwood selling points within and outside Douala City. We counted 45 selling points between Japoma and Douala in July 1994 (about 30kms). There were far less, during the golden economic years of 1980-1985. In that period, plantain, yams, fish and bushmeat used to be the main products sold on this road.

These three reasons guided the choice of the research location.

The analysis of the results suggests that the situation is far more complex than anticipated. 24% of the producers used to work in government bodies or in parastatals. Only 10% of the producers formerly employed by a parastatal were sacked. The

remaining 14% either resigned or retired. In both cases, the percentage of producers falling in this category is low, (10%). Instead, 76% of the producers were either in the private sector or have never been employed. These figures imply that there is a direct link between unemployment and biomass related-activities for production or sale. This unemployment is partly due to the economic crisis which began before the SAP. Economic crisis has resulted in a fall of economic activities, an increase in unemployment, a decrease of purchasing power and abandonment of some activities (like car repairing, drivers, gardeners, food sellers etc.). An average daily earning of a producer is US\$ 8.33. By Cameroon standards in 1995, this is a good wage.

On the demand side of the fuelwood energy, the picture is equally murky. The analysis of the survey of civil servants indicates that their demand for fuelwood energy has not changed despite the cuts in wages, the devaluation of the currency and the rise of inflation. 92% of the civil servants acknowledge that they use less gas for their household needs. Instead they use paraffin. However they continue to use charcoal for special dishes. These results oppose our initial assumption.

They are not however conclusive regarding a lack of linkage between SAP and deforestation which is related to fuelwood energy production. There are a number of reasons for this:

- The size of the sample was too small and not sufficiently representative; it would have been better to take sample from the list of the former parastatals employees. This was impossible for the reasons explained in the methodology section.

- The SAP still is to be completed in Cameroon. 80,000 civil servants have to be sacked by 1997.
- People made redundant in parastatals and who returned to their villages have probably reconverted to agriculture.
- Fuelwood energy production tends to be left to a small number of healthy people, as it is physically more demanding.
- The demand of biomass energy by the "civil servant" still is low. When 80,000 are made redundant, the demand will rise.

During the survey, almost all of the interviewees relate their reluctance to use fuelwood energy to their habitat. They live in flats and cannot instal traditional or improved stoves, as both produce smoke. Thus a change in habitat due to the fall of purchasing power could lead to the use of fuelwood energy; and unemployment is a major cause of the fall of purchasing power. The link between deforestation and SAP should be explored on a case by case basis. However this requires a number of complex parameters to be taken into consideration. In the case of our limited study in a small area, it cannot be concluded that the SAP led to deforestation related to fuelwood energy production, even though the SAP was not yet fully implemented. This initial work is useful as a starting point for further research endeavours.

CONCLUSION

The hypothesis of the correlation between the SAP, debt and deforestation is verifiable in certain cases. However, the

assessment of this correlation needs to be undertaken on a case by case basis. The Cameroon case suggests that the broad picture of the correlation is complex and murky. Mechanisms such as cancellation of the debt or debt for-nature swaps likely to relieve the debt burden, have not been granted to low-middle income countries; these are also forest countries in SSA Cameroon, Congo, Gabon, and Ivory Coast. Thus, deforestation will carry on either as a result of the positive correlation between debt and deforestation, or as part of the overall political and economic causes of forest depletion. SAP also has a negative impact on forests. The empirical analysis of the Cameroon case has confirmed the hypothesis of a correlation between SAP and deforestation. Yet a detailed analysis based on a survey has implied that such a correlation would not be easy to establish as many parameters need to be taken into consideration. There is a consensus over the idea that debt and SAP and the social dimension of the SAP (as they are currently handled and managed), are morally wrong, economically counter-productive, socially inhuman and ecologically disastrous. The questions is why do such policies which are doomed to failure continue to be implemented? Cameroon's process of indebtedness has highlighted a new trend in dealing with low-middle-income countries. The more indebted they are, the more they are likely to receive loans rather than grants. Lenders' aim could be either to do business and secure their profits in the future, or to take political and economic control of these countries or both. For instance, France has financial, economic and political interests in the low-middle-income countries of the SSA, including Cameroon.

Susan George and Sabelli pinpoint politics as the core issue. They derive their statement from Huntington's forecast of the international politics:

"...the core of global politics will be the interaction between the West and the non-Western cultures; the next World War, if there is one, will be a war between civilizations" (Huntington 1993:22).

From this statement George and Sabelli conclude:

"If these authors are correct, as many newspapers suggest these days, then the Bank will be required to deal with this new World disorder. We see the Bank visibly positioning itself as a major political actor in the next phase of World history ... The Bank is no longer needed as a cold war player on the side of the West but it can bet its chips on the latest security threat: the new dangerous classes...>> (George and Sabelli 1994:145-146).

Debt and SAP are therefore political weapons in global politics. Such suggestions may seem exaggerated. The frustration of billions in the Third World could however lead people to overvalue the conspiracy theories.

CHAPTER VI

PROTECTING CAMEROON'S FOREST: THE INTERNATIONAL RELATIONS CONTEXT.

INTRODUCTION

Concern for the environment grew in the developed countries in the 1960s. Awareness was widespread worldwide by 1972 (Thomas, 1992). The United Nations Conference on the Human Environment in Stockholm in 1972 moved environmental concern from a regional to a universal issue. African countries however, felt unconcerned by this debate. They viewed environment concerns as a luxury to be addressed when developmental issues were solved (Grubb et al, 1993). Forest protection was not on the international agenda. Even a tacit go-ahead for forest exploitation was given by the Declaration of Stockholm. The Declaration formally recognizes the sovereignty of states over their natural resources and their right to exploit them, but with the duty to avoid transboundary damage principles 21 and 22 of the Declaration (UN, 1972). The Declaration of Stockholm also reinforced the dominant notion of the compatibility of economic development with the sort of exploitation of natural resources carried out in developing countries. Meadows et al, however, drew the attention of the world to the effect on natural resources of the consumption pattern in developed countries. They concluded that if the ongoing patterns of consumption were not changed, the world ran the risk of running out of certain natural resources (Meadows et al, 1972 and Meadows et al, 1992).

Although the warning was not directed in the first place at developing countries, these countries were concerned because they

were both producers of raw materials and aspired to economic development. In 1980 the Brundtland Commission, worried by the persistent gap in the level of development between the North and the South, argued that the best way of managing the existing natural resources is to ensure a better redistribution of wealth between the North and the South (1980). The 1980s experienced increased environmental awareness characterized by interest and campaigns over the disappearance of rainforest in Amazonia and holes in the ozone layer (Cormick 1989). For the first time, forest protection was brought onto the international agenda. In the 1970s droughts in some SSA countries struck the international community; but the awareness on the environment was less than in the 1980s. The awareness of environmental issues was captured by the Brundtland Commission, which formally brought to the international agenda the issue of environment and development in its current form. The UNCED marks the first attempt to set a general legal framework over forest matters.

Other bodies and organizations discussed forest issues either indirectly (in the case of OAU, UDEAC, ACP-EC) or directly (ITTO, UNEP, FAO-WB). The wide variety of actors involved in forest issues indicates that all areas of international relations are involved: international economic relations, international politics, international law, and technical co-operation. What are the opportunities and constraints (in international relations) to the protection of Cameroon forest?

The first section analyses the timidity of international actors. The second section explores the contradictions and the tricky question of international economics and forest protection. Lastly

we discuss the Tropical Forest Action Programme in Cameroon and its impact on forest protection.

VI.1: INTERNATIONAL CONVENTIONS FOR FOREST PROTECTION

International conventions refer to the agreements of various states (or other international actors) which bind the signatories once they have been ratified (Greig, 1976). They aim at regulating a particular area or subject and constitute a major source of international law (U.N. ICJ article 38, 1945). For a decade, forest awareness has been on the international agenda and calls have been made by environmentalists to set up a legally binding framework in this matter. A number of texts have been produced. However, it is not yet clear if forests have received adequate international legal protection. The recent Earth Summit has produced general principles on the matter but what is the legal value of such a text? Is it binding for all states? Why did the summit adopt principles rather than a formal convention? The section will discuss what continuity there appears to be in the international actors' stand over the regulation of forest matters at all levels: sub-regional (UDEAC), regional (OAU), inter-regional (ACP-EC), and international (Earth Summit).

VI.1.1 REGIONAL CONVENTIONS AND FOREST PROTECTION

Attempts have been made to give legal protection to plants and wildlife since 1933. The London Convention of 1933, known as the African Convention for Wildlife (UNEP, 1985), provided the first legal framework for hunting activities. The same year, the first

forest reserves were established in Cameroon (the reserve of Makak). However, this convention did not regulate logging activities which had been carried out in Africa since 1885 (Hauser, 1900). The convention stressed the need for reasonable hunting of animals, so as to avoid species extinction and an imbalance of ecosystems. An attempt at broadening the London Convention was made at the Bukuvu Conference in 1953 (UNEP, 1985). This attempt failed, probably because of the divergence of views and interests among colonial rulers (Belgium, France, the United Kingdom).

When most central African states acceded to independence, there was no explicit convention on forest protection. However, the OAU showed an early interest in environmental problems (Ntoupendi, 1992). Two major resolutions reveal the concern of the OAU. The resolution OAU/CM/Res No.379 (XXIII) of 11th June 1974 explicitly referred to preservation of African ecosystems. The resolution OAU/CM/Res no.383 (XXIII) of 11th June 1974 calls for development of silviculture in African countries (OAU, 1986). The OAU has adopted other resolutions related to environment issues including the resolution CM/Res 1361 (LIV) of 1st June 1991, concerning an African position for the Rio Summit. This resolution outlined the basic ideas to be defended by African states. The document was updated by the Council of Ministers of OAU member states. The text CM/1701 (LV) of 28th February 1992, recognizes the importance of environment protection and the need to take necessary steps to integrate it in the development process. However, it states the "sovereign right" of African countries to use their resources for development. More

importantly, it warns donor countries and international development agencies to avoid using environmental issues as a condition to provide aid to African countries (OAU 1992 CM/1701 (LV): Provision 56).

OAU also initiated a number of conventions related to environment protection in Africa.

The Convention on Plants Protection was signed 13th September 1967 in Kinshasa. Cameroon signed and ratified this convention, which aims at fighting plant diseases in Africa. The African Convention for the Conservation of the Nature and Natural Resources was signed on 15th September 1968 in Algeria. Its objective is to encourage states to conserve by making rational use of resources like soil, water, wildlife and flora, for the well-being of their people. Cameroon signed but did not ratify this Convention. By signing the document, the government acknowledged the importance and the need for a regulation. The government however abstained to legally commit or bind Cameroon as by refusing to ratify the Convention. Therefore Cameroon is not legally obliged to implement the Convention.

There exist some institutions at a sub-regional level. Two economic institutions, UDEAC and ECOCAS, do not explicitly refer to environment protection. Instead, they encourage member states to use their natural resources for their own economic development and the well-being of people in the sub-region. The irony is that the Congo basin rainforest is located in Central Africa, mainly in ECOCAS countries: Zaire, Gabon, Cameroon, Congo (full

members), and Angola (observer). So far these countries have not taken any direct action in the form of a convention related to protection of their forests. Instead, the Organization for Conservation of African Wildlife (OCAW) was created in 1986. It was elaborated within the framework of the Washington Convention, which was adopted in 1973 and is known as the Convention on International Trade in Endangered Species (CITES). Cameroon has ratified agreements related to the Organization by a decree No.87-1038 of 24th July 1987 (RC JO No.16, 1987). The Organization aims at protecting wildlife from poaching activities and trade in endangered species. The subsequent agreement, however, failed to address the problem of the habitat of these endangered species. Poachers are not the only threat to these species. Clearance of their habitat through logging activities and agriculture is the major threat. By avoiding the problem of the habitat of the endangered species, the member states (Cameroon, Centre African Republic, Congo, Gabon, and Sudan) refused to address the issue of forest protection.

The analysis of the existing texts on protection of wildlife or forest at sub-regional and regional levels show three broad trends. Firstly, the texts, whenever they exist and refer to a specific point of forest or ecosystem protection, are not binding. This is the case of the OAU resolutions CM/Res No.379 (XIII) and CM/Res No.383 (XXIII). OAU resolutions are not necessarily a source of legal obligation and states are not bound to enforce it. This lack of legal value weakens any attempt at protecting forest from the point of view of international law.

Secondly, African states tend to put forward the idea of national sovereignty over their natural resources whenever they are engaged in multilateral economic negotiation. This was the case with the OAU texts on the African position in UNCED (CM/Res 1361 [LIV] and CM/1701 [LV]). This strategy has a deterrent effect on any attempt to adopt a binding agreement which might deprive the countries from controlling and protecting their natural resources. The outcome is a standstill in promoting an international law on forest protection. Lastly, the existing international conventions on protection of plants (1967) and conservation of nature and natural resources in Africa (1968) do not directly refer to the conservation of forests in the sense of creating reserves and regulating logging activities. They are vague on the topic of forests and refer instead to rational use of resources such as soil, water, wildlife and flora (1968). African countries at sub-regional or regional levels did not take a firm step towards protection of their forest. Forest protection has not been at the forefront of OAU activity or a major concern of member states. Interests of various groups (internal and external) have inhibited any genuine initiative in the field of forest protection. This seems to be a permanent feature in the history of forest conservation in Africa. It is argued that the London Convention in 1933 was the lowest common denominator on the matter because the interests of colonial rulers were divergent. Equally, the failure of the Bukuvu Conference in 1953 was due to the reluctance of some colonial rulers who wanted to protect the mining and logging activities of their national companies (Mvogo Tabi, 1988). Hence the lack of sub-regional

agreements on the matter just continues the rivalry of foreign and national interests over natural resources (Mvogo Tabi, 1988). Cameroon, therefore, does not have any binding legal obligation as far as forest protection is concerned at the sub-regional and regional levels. Existing conventions, agreements or resolutions promote economic development in the classical sense, rather than sustainable development.

VI.1.2. INTER-REGIONAL AGREEMENTS ON FOREST PROTECTION

French speaking countries in the framework of the "Francophone Summit" in 1989 addressed for the first time the problem of the environment. The Dakar Resolution on the environment conveyed the need for environmental protection and sustainable development in member states. Two years later, the Tunis Declaration (1991) went further and indicated what ought to be done:

"The states and governments express their support and their adherence to the following principles:
- to exploit renewable resources according to practices and ways which ensure their sustainability
- to dedicate collectively at least 5% of their territories to safeguarding the patrimony with the aim of promoting conservation of ecosystems and biodiversity in the context of sustainable development." (Tunis Declaration, 1991)²¹

Both Provisions 9 and 16 of the Tunis Declaration are quite explicit over the question of environment protection. All African countries with a substantial rainforest area are members of the

²¹This is our translation. The original version is as follows: "Les Etats et gouvernements affirment leur soutien et leur adhesion aux principes suivants:

- l'exploitation des ressources renouvelables selon des pratiques et des normes qui en assurent la perennite,
- consacrer collectivement au moins 5% de leurs territoires pour la sauvegarde du patrimoine dans le but d'y privilegier la conservation des ecosystemes et la diversite des especes dans le contexte du developpement durable." (Declaration de Tunis, 1991)

Francophone group. By adopting this Declaration, were they taking a formal, legal, binding commitment? International law is not that clear on this matter. A declaration, (like the Tunis Declaration), which does not assert clearly its binding effect does not have a strong legal value (Greig, 1976). It cannot constitute a base for a legal action in case a country fails to devote 5% of its territory to conservation. On the other hand, by agreeing to such a principle, Cameroon made a moral commitment which could be considered as the beginning of evidence that it ought to preserve its environment or ecosystems. In this particular case, preservation of ecosystems was imprecise; there is no explicit reference to forest protection.

Cameroon is also a member of the ACP-EC Convention. The first conventions, Yaounde I and II, and later on Lome I and II did not have any specific provision on forest conservation in the ACP (Frish, 1992). Instead, the Community funded a number of projects in the forestry sector. Lome III addressed partially the problem of ecosystem conservation. It specifically referred to desertification and its subsequent consequences - droughts, famine. Lome IV (1991-2001) gives absolute priority to the issue of ecosystem preservation.

To emphasize the importance of this matter, the environment issue was examined in the first chapter related to cooperation, before agriculture, food security and rural development. In all of these other chapters, there is a reference to the need to protect the environment. To show its determination to protect the forest in Central African countries, the European Development Fund has

provided funds to finance several projects in those countries, mainly concerning forest protection. At the Rio Summit, EC has also contributed to the idea of a general declaration of principles over forest preservation; with the long-term objective that this declaration will become a convention (Robbins, 1992). Despite the determination and the apparent will of the EC to promote conservation of the rainforest, the Lome convention lacks legal force:

"As far as operating methods are concerned, some agreements are negotiated, others are unilateral, they can be with individual countries or with groups of countries, some cover specific matters while others are framework agreements, and some are more binding than others, but the underlying principle is always political dialogue." (David, 1993:52-3)

The Lome Conventions belong to the category of framework conventions. Their legal values are quite soft. They set a broad frame in which cooperation will take place. This is reflected in individual member states' behaviour towards timber trade (one way of promoting forest protection). EC countries are divided on that matter. Two controversial areas appear.

- Introduction to EC of import regulations of tropical timber. Two different practices exist within EC countries. Some have implemented the ban on tropical timber. In the Netherlands, some municipalities have forbidden use of tropical timber (Kienkes, 1993). At the national level, however, the central government proposes to ban imports as late as 1995, unless timbers are from managed and sustainably harvested forests (The Economist, Vol. 326, No 7796, 1993:72). Equally in Germany, a number of cities including Bremen, Hamburg, Frankfurt, and Munich now boycott the use of tropical timber (Kienkes, 1993). In France and Italy, the

main importers of timber from Cameroon, such moves have not yet been made. Both countries' logging companies have major concessions for logging activities, whereas none of the countries calling for boycott enjoys the same facilities. Both France and Italy do not have any active green movement concerning protection of the rainforest, thus no pressure is put on their parliaments and governments. In EC, the views on protecting the rainforest diverge because of the existence or inexistence of economic interests in logging activities and because of the differing strength of environmental movements in the member states.

- Eco-labelling of tropical timber.

Some countries have proceeded to labelling of timber in order to control the origin of timber. Holland, Germany, and Great Britain have introduced these practices. In Great Britain, an independent body made up of environmentalists or companies will ensure this eco-labelling. The company B&Q has already informed its suppliers that beginning 1995, timber should come from sustainably managed forest (The Economist, Vol. 326, No 7796, 1993). The European Community, although considering eco-labelling (Bell, 1993), remains divided on the issue.

VI.1.3. INTERNATIONAL AGREEMENTS ON FOREST PROTECTION

The Rio Summit was regarded as a major opportunity to lay down international legislation on the environment. In anticipation, drafts of environmental laws were drawn up (Munro et al, 1987). Some aspects of the environment have been protected better than others. For instance, conventions on climate change and biological diversity were adopted whereas other issues were

embodied in the Declaration or Principles.

Forest protection, despite the existence of a specific text, is treated in three different documents. Firstly, it is treated in the Convention on Biodiversity, secondly, in the Agenda 21, and lastly, in Forest Principles. Biological diversity, mainly genetic resources are found in forests and other ecosystems. Hence any convention over biological diversity has consequences on forest protection. The Convention on Biological Diversity should belong to the category of binding texts according to international law. In this particular case, it has produced a self-limitation mechanism. Article 3 presents the nature of the Convention. It is a "guiding principle" document. Foremost it introduces a controversial statement in its article 6 according to which each contracting party

"shall, in accordance with its particular conditions and capabilities, develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity..." (1992, article 6).

By adopting such a flexible provision, the UNCED has given states grounds to escape their responsibilities. A contracting party could always allege that its actions are just what it can afford given its financial and technical capabilities. The looseness of such an important provision weakens the effectiveness of the Convention. Jacques Delors criticized the convention as being too timid (Grubb et al, 1993). Munson concludes:

"The convention generalises the activities each national government should undertake, but fails to set out a framework for truly international action for the conservation of species." (Munson 1993: 83)

Despite the softness of the Convention on Biological Diversity,

Cameroon has not ratified it (up to July 1995).

Forest protection is also evoked in Agenda 21. Chapter 11 "Combating deforestation" outlines the broad ideas of what ought to be done to protect forests. Most points raised are general statements based on

- experiments already carried out in some countries; for instance, the need for states to adopt the National Forest Action Programme, creation of protected areas, public awareness,
- analyses done by SD thinkers; the whole literature on conservation of traditional habitats of indigenous communities, importance of taking into account other forest economic values than only direct values, people's participation, capacity building, and
- call for international co-operation and environmental law on forest protection.

Agenda 21 is a repetition of, and in some cases a development of some principles discussed in other conventions, declarations or principles.

"It is intended to set out an international programme of action for achieving sustainable development in the 21st century... It is not a legal agreement; governments are not required to follow each recommendation, paragraph by paragraph, and line by line." (Koch and Grubb, 1993:97)

Cameroon therefore does not have any legal binding obligation resulting from Chapter 11 of Agenda 21.

A specific text on forests was adopted during the Earth Summit. The text known as Forest Principles is one of the most ambiguous adopted in Rio. Its full official title "Non-legally binding

authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests" (UNCED A/CONF 151/6/Rev.1) reflects the sensitivity of the issue.

The 57 paragraphs of the main text mention possible actions experimented and proposed by SD and which are likely to contribute to sustainable use of forests. These actions include areas like funding of projects (section 7b), reduction of countries' debt (section 9a), people's participation (section 2d), capacity building (sections 3a, 13d), international co-operation (section 3b), indigenous people's rights (section 5a), economic valuation of forest assets (section 6c), reforestation (section 8a), and technical co-operation (section 8c).

The text (Forest Principles) lays down the necessary foundation on which forest protection could be built. However, the text was weakened by a number of points:

a. Some articles are either ambiguous or contradictory. Section 2d recommends governments to promote participation of interested parties, including local communities and indigenous people, industries, labour, NGOs, and forest dwellers, in development, implementation and planning of national forest policies. But at the same time, paragraph h of the preamble recognizes the states' responsibility for forest management, conservation and sustainable development, provided that they act in accordance with their constitution and/or national legislation. To recognize the power of the state to determine the appropriate policy for conservation and management of forests is almost incompatible with the right of other actors in civil society to participate

in forest policy-making. Once the right and the power of the state is recognized, empowerment of other actors in civil society depends either on the balance of power or on the good will of the state. Both are hardly possible.

b. Emphasis is placed on the sovereignty of states.

"Forest Principles" stresses the notion of "sovereign rights" of the state. The preamble (Paragraph h) makes constitution and national legislation the driving force of any action aiming at forest protection. Nothing contradicting these can be undertaken in the domain of forest. This recognition of the sovereignty of countries also presents limitations on any interference (internal or international) in forest matters. Any measure taken for forest protection should either meet the requirements of a national constitution or national legislation. In this context, the margin of manoeuvre of the international community could be jeopardized. It is symptomatic that the first article of the main text of the "Forest Principles" is devoted to the re-affirmation of the states' "sovereign right to exploit their own resources pursuant to their own environmental policy..." (Section 1a). Equally, the second section refers to the "sovereign and inalienable right to utilize, manage and develop their forests in accordance with their development needs..." (Section 2a). Francis Sullivan reported that governments from tropical countries spoke out very powerfully against the concept that the rest of the world should have the right to lecture them about how to manage their forests (1993).

c. "Forest Principles" has self-limited its legal value.

The full title states it clearly: "Non-legally binding". The

legal value is therefore quasi-nonexistent. Forest protection was not ensured by international law during the Rio Summit. Neither Agenda 21 nor The Convention on Biological Diversity or Forest Principles have succeeded in providing the international community with a legal tool to protect Cameroon forests.

At all levels - sub-regional, regional, inter-regional and international, the failure to protect forest is obvious. Four combined phenomena tend to undermine any attempt at promoting a legally binding obligation for forest conservation. The first one is the interests at stake. These interests can be those of individuals, states or companies. Within countries, individuals compete for the gain and use of available natural resources. This competition takes place in the framework of a "non-zero-sum" game. A group of individuals with the best tools (legislation, funding, technology) exploit available resources at the expenses of other groups. And national legislation reflects the existing balance of power. In the case of Cameroon, top officials including some members of parliament and some senior bureaucrats are involved in logging activities at the expense of the Bakas, indigenous and native forest dwellers. National legislation reflects this reality and only protects interests of the strongest and dominant group. And this legislation is the one which is presented at the international forum to oppose any regulation concerning logging activities. Our research in the East Cameroon forest has revealed that 100% of Bakas (irrespective of their involvement in sedentary projects) want the forest to remain as it is with no logging activities and no managed forest. Their interest is in its preservation. But they

do not make laws and they cannot voice their interests.

The states' interests also conflict. Developing countries' interest in forest development is to use the forest for the economic development of their countries. Most developed countries perceive forest (under green movement pressure) in its ecological role rather than its economic role. The interests contradict and the outcome is a deadlock observed in negotiations on Forest Principles.

"The discussion was not about forests, forestry or even sustainable management, but more to do with international politics..." (Sullivan, 1993:161)

The Rio Summit reasserts the old economic North-South tension. African countries gave the impression of being determined to defend their interests as the OAU resolution (OAU 1992 CM/170 [LV] provision 5b) states it. Equally, mobilisation for international legislation on forest protection was real (Sullivan, 1993). Even among developed countries, interests diverge from one state to another. The president of the United States (George Bush) refused to sign the Convention on Biological Diversity, arguing that it could contradict interests of Americans. The analysis of the role of EC in forest protection also revealed divergence among EC countries over the timber trade. Holland and Germany were calling for tougher regulations over timber imports, whereas France, whose logging companies are very active in the Congo basin rainforest, was reluctant to adopt tougher measures. In most cases the states act on behalf of their national companies whose interests are at stake.

The second obstacle to the emergence of international legal protection of forest refers to the concept of sovereignty.

Sovereignty as an absolute power of a state over its territory contradicts the idea of supra-nationality. It gives the state legal protection against interference in its internal affairs by other states. This legal protection was institutionalized by the United Nations. The resolution of the General Assembly of UN No.1803 (XVII) of 14th December 1962 laid the foundation of sovereignty in economic matters. It explicitly recognizes states' permanent sovereignty over their natural resources. Stockholm conference in 1972 re-asserts this principle with regards to the environment debate. It is rather indicative that Forest Principles (1st article) repeat word for word Principle 21 of the Stockholm Declaration adopted 20 years ago:

"states have, in accordance with the charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction."
(UNCHE 1972, principle 21 and UNCED 1992, Forest Principles article 21)

Sovereign rights of states over natural resources are incompatible with the idea of "global commons" and external control or regulation of national resources. To some extent, African states gave the impression of sticking strongly to this principle (see OAU resolution over UNCED). They were not prepared to accept what was seen as Western diktat, or eco-imperialism; a major threat to independence and freedom to use their resources.

Beyond this rhetoric of international politics, it is a fundamental question of the structure of international society,

which is raised. So far, states remain units of international society. Actions and activities continue to be taken within these units. How can units, whose engine is sovereignty, suddenly disappear because of an hypothetical supra-structure which makes decisions about environmental care ? If it is admitted that sovereignty is the fundamental defining nature of states and that states remain the main units in international relations, it should be argued that states will not give up their sovereignty for environmental purposes unless the whole structure of international society is changed; this remains very unlikely (Smith 1993).

However, the obstacle of sovereignty can be overcome in the existing structure of international society. On a temporary basis and in the form of a contract, states can give up sovereignty over part of their territory and over their natural resources when the ruling group identifies an interest in doing so. In 1976, Zaire, for instance, granted a concession to a German company OTRAG. This concession gave the company right over 100,000 km² of Zaire's territory including forest areas. The company was allowed to make use of this territory including experiments with space engines for a period of 25 years. By doing so, Zaire would have received DM 75 million. Following various pressures, the government of Zaire pulled out of the deal (Elikia, M'bokolo, 1985).

If Zaire had not been under pressure, it would have conceded part of its territory, and consequently, it would have been prevented from developing mining and logging activities in that part of its

territory for the duration of the contract.

More openly, the World Bank and the International Monetary Fund have proved during the last decade the ineffectiveness of the notion of sovereignty. Various conditionalities put forward to grant loans to developing countries directly altered national sovereignty. Regulations concerning forests adopted in recent years by African countries including Cameroon are almost drafted by some leading development agencies. Where is sovereignty in cases like these? The concept of sovereignty contradict in theory the idea of external interference and supra-nationality. In practice, the concept is inoperational. Reference to the notion of national sovereignty over resources is either a cover-up of individuals' interests in decision-making circles or a means of negotiation in the context of bargaining power in order to maximize possible gains (either of a dominant group or a country). The gap between the assumption over the concept of sovereignty and the reality of sovereignty in Third World countries gives a clue to the main obstacle often raised by developing countries: the lack of international community commitment to pay for the preservation of rainforests.

Protecting the environment incurs costs, direct and indirect. Direct costs are visible and related to management and implementation of projects designed to protect the environment. In the case of forest conservation, when creating reserves, displaced people need to obtain compensation. Forest guards are needed and teams to monitor and manage the forest are necessary. Equally, governments need to be compensated for the loss of taxes coming from logging activities. These expenses have to be covered

by someone. Can the states that agree to contribute to protection of the Earth also bear the burden of these expenses? The question is usually "who pays for the cleaning of the Earth?". The Korup park in Cameroon is on the verge of facing this dilemma.

"The issue then becomes whether the rest of the world is willing to pay Cameroon for the costs it would incur to protect an environmental asset that is valuable for the world as a whole" (WB, WDR 1992:152)

The newly declared reserve of Dja (560,000 ha), which is being considered by UNESCO as a common heritage site, was still waiting for funds in 1993, despite the European Development Fund's commitment to finance part of the project. The point is that even when countries are prepared to implement some international recommendations, the international community response is slow, insufficient at times or negative, despite promises and recommendations contained in some international documents e.g. case of Section 7b in Forest Principles, which calls for financial support from the international community.

There are indirect costs related to the impact of strong environmental conservation policies on the development process of individual countries. A ban on logging activities in Cameroon would mean the loss of funds coming from taxes which finance the national budget, pay off the debt and are invested in the economy for development purposes. Who will pay these indirect costs? The frustration felt by developing countries comes from the impression they have gained that the international community (especially the developed countries) make them pay for the mistakes made by the developed countries during their development process. Moreover, by adopting the environmental requirements of the international community, the products of the developing

countries are unlikely to be competitive. Developing countries often feel cheated and treated as fools.

African countries do not reject the idea of preserving the environment because of the principle of sovereign right over their natural resources. They reject having to bear the largest share of the burden of environmental protection. They are prepared to bring their contribution to the protection of the Earth if the international community is also prepared to pay for it. OAU resolution CM/1701(LV), Articles 16,17, and 18 concerning the African position at the Rio Summit, is quite clear on this. A number of African countries suggested creating forest reserves during the conference (Centre African Republic). Unless the world economic system is based on a kind of keynesianism to fund environmental costs (Harris, 1991), the problem of funding will continue to hamper efforts to protect forests.

The final obstacle deals with the global economic framework. The debate over forest protection takes place in an economic environment of active economic competition among countries. The slogan seems to be "sell what you can in order to survive". Each country uses its assets. The export-led-development ideology spread by the neo-liberal thinkers stimulates the "export fever" (WB, 1993). Cameroon was officially asked to open its closed and richest forest of the East province for logging activities and to become the first timber export country in Africa (FAO, 1988;WB, 1989; Pearce, 1994). In a context where development is promoted within the economic growth paradigm keen on exports of

natural resources, forest protection is unlikely to be achieved. The international community was not prepared to address the whole range of these new issues. Environmental issues are at the periphery of international relations; they are "low politics" issues which are unlikely to become a major issue on the international agenda (Smith, 1993). As long as they are at the periphery, no genuine step will be taken by the main international actors to address the issue. Such realistic analysis reflects the nature of the international arena and politics: states as units and main actors of international relations tend to maximize their gain, look for their national interests and increase their share in the balance of power. Their involvement in action and their commitments are guided by "high politics" such as global security matters of which forest conservation is certainly not a part.

VI.2. WORLD TRADE AND FOREST SUSTAINABILITY

VI.2.1 THE CORRELATION BETWEEN WORLD TRADE AND DEFORESTATION

The free-marketers defend the idea of free trade which is considered as the driving force of growth. International trade is an important source of income. It generates export earnings which will contribute to overall economic growth in the trading countries. Neo-classicists developed this argument within the theoretical framework of comparative advantage. According to this theory a trading country may raise its level of welfare above that which would have been possible in a state of autarky by specializing in the production and foreign sale of commodities

which, relatively or comparatively, have the lowest costs of production (Ricardo 1926). There is a necessity of free trade among regions and countries; and comparative advantages of costs determine the pattern of international trade (Ohlin 1933). Viner (1953) argues that free international trade would make things such as machinery and raw materials available. Five assumptions originated from this theory.

1. International trade leads to a transfer of technology and know-how from developed to developing countries.

2. The assumption that international trade would lead to a transfer of technology and know-how implies that this could be efficient for sound management and exploitation of forests.

3. International trade leads to fair competition, to faster economic growth and also raises efficiency of production and distribution.

4. An international division of labour is necessary. This is derived from the need for efficiency and profit, subsequent to the specialization of countries and regions or the comparative advantage costs principle.

5. There is a domino effect. The international economy is said to be interdependent, and development in one part of the world has necessarily positive effects in other countries taking part in the international trade.

Neo-liberal thought has perpetuated this mercantilist assumption. The world trade is beneficial to any trading country.

Neo-liberal thinkers argue that the world trade structure is dynamic, i.e. changeable or evolving, and determined by the

market mechanism. The prices of raw materials (in this case timber) and the demand for forest products which eventually lead to deforestation depend on a market situation. Thus, international trade through market mechanisms could be forest-protective if all services provided by forests are priced (Pearce, 1992). Logging and timber trade provide states with export earnings necessary to promote development and to reforest (WB 1989 and FAO 1988).

Structuralists argue a deterministic view. World economy structures are designed by industrialized countries whose purpose is to dominate, exploit the "periphery" and maximize their profits (G.Frank, 1967; Wallerstein, 1979). The existing structures determine the international division of labour: the Third World countries' fate is to be a raw material supplier, while industrialized countries specialize in processed and manufactured products. The First World's monopoly and control over international trade structures imply an increase in their bargaining power as well as their dominant position in fixing commodity prices produced by the Third World countries. Consequently, underdevelopment and forest depletion are inevitable. To extend Samir Amin's argument, unless delinking occurs, forest protection cannot be achieved within the existing world economy structures. For the structuralists the issue should be analyzed from the power politics perspective. World trade is no longer analyzed as a neutral economic mechanism. Power is at stake, and constitutes the engine of world exchanges.

OAU members also underline the link between international economic structures and forest depletion:

"We deplore that poverty, debt and difficult conditions of international trade oblige us not to preserve these forests..." (OUA CM/1701 [LV] 1992: 7 art 21)²².

Recent work on the topic challenge both neo-liberal and structuralist schools of thought.

The IFAD working group, backing their analysis with case studies of NICs and OPEC experience, develops a contingency view. IFAD takes the structuralist point of the existence of exploitative world economy structures. But they reject the static character of these structures. There are opportunities in the world system which can be seized as NICs did, or the OPEC cartel which succeeded in increasing its earnings by increasing its bargaining power in the 1970s. But IFAD mentions that the historical context of these break-throughs has changed. Nevertheless, the world system can provide developing countries with opportunities (IFAD, 1992; Hettne 1992). Wallerstein, who shares the dependentist analysis of the existence of rigid structures, rejects Amin's idea of delinking. The system must be transformed from within, and there are sometimes opportunities for Third World countries to improve their individual economic situation by using the existing world system (1980).

Environmentalists have also developed a model of analysis of the link between international trade and environmental degradation.

²²The quotation is our translation, the original version is as follows: "Nous deplorons que la pauvreté, la dette, et les conditions draconiennes du commerce international nous obligent à ne pas pouvoir conserver les forêts..."

According to them, the ideology of free trade protecting the environment is a fallacy (GGE, 1992). Free international trade as it operates within the economic growth paradigm, encourages the massive exploitation of resources likely to provide states with export earnings, and this is destructive of the forest. Environmentalists oppose the idea of a generalisation of free trade (Morris 1990); but they promote the democratisation of the global economic system (GGE, 1992: 3). Thus the environmentalists reject the ongoing campaign for trade liberalisation. They have formulated a number of objections to GATT:

- trade liberalisation encourages economic growth, and thus damages the environment,
- GATT, by limiting national sovereignty, limits the right of countries to apply whatever environmental measures they choose,
- GATT does not allow countries to keep out a product because of the way it is produced or harvested,
- GATT will encourage the harmonisation of product standards,
- GATT prevents countries imposing export bans,
- GATT frowns on the use of trade measures to influence environmental policy outside a country's territory,
- GATT resolves disputes in a secretive way, without allowing environmentalists to put their arguments and without making available important papers on the cases,
- GATT may undermine international environmental agreements (The Economist Vol. 326, No 7800 27th Feb. 1993).

Whenever international regulations can help protect the environment, they should be encouraged. Thus environmentalists favour selective protectionism.

The three schools of thought however (implicitly or explicitly) have the market as the spine of their analysis. It is seen as being either environment friendly (The WB, the neo-liberals thinkers, and WTO), or environmentally destructive (The Group of Green Economists).

The neo-liberal view of the market is normative rather than positive. It overestimates the autonomy of market mechanisms. International trade, despite the existence of GATT, is not exempted from phenomenon of power observed in international politics. Cases of distortion of the market have been pointed out despite the claim of free trade at international levels, for instance, the "multifiber agreement", which sets quotas for some Third World countries' exports of textile. The agreement was the result of the balance of bargaining power between the negotiating parties rather than the orthodoxy of the theory of comparative advantage.

Equally the environmentalist view seems out of touch with reality. States prioritize their interests and tend to adopt export bans or restrictions if their interests are best served in that way. For instance Holland, Austria and Germany have restricted or banned the import of hardwood if this is not felled from managed forests, regardless of the GATT (WTO) recommendations.

Pearce's and WB's argument of a positive correlation between the world's demand for products and better protection of nature is irrelevant to the Third World countries' situation. The World Bank's recommendation (1989) to increase production of forest products to improve export earnings and in return to better

manage the environment is simply inappropriate in the Cameroon case. There is no clear causal relation between pressure on forests and lands through an increase in production and an increase in export earnings. The analysis of the Cameroon case over the last ten years indicates that the pressure on lands occurs notwithstanding the increase or decrease in export earnings. Five situations have been observed:

1. The international demand leads to an increase in production and export earnings and to the creation of new plantations. The growth of demand in the international market combined with the increase in the amount of forest products leads to an increase in export earnings and more pressure on forests (deforestation). Cameroon experienced this in the 1970s and the early 1980s. Cocoa and coffee production was stimulated by international demand and prices. The World Bank states that the large plantations of cocoa founded in the late 1970s were a response to high prices (1989:31). From 1972 to 1984, the number of farms increased to about 2390 (MINAGRI, 1990:12). Clearance of the rainforest without re-forestation was the ecological price to be paid.

2. There is a decrease in international demand and a decrease in export earnings without any decrease in production.

This pattern refers to the situation when the decrease in demand on the international market did not affect Cameroon's production because of the lag factor between the period of plantation and the year of production. Furthermore, the fluctuation of the market due to overproduction of the product is not predictable. The ecological cost remains the same. The decrease in earnings or the stabilization of production did not lead to a decrease in

pressure on forests. That was the situation in 1986 - 1987. This case is similar to the one pointed out by the Brundtland Commission. The argument is that, reduced earnings for the developing countries increases their indebtedness and leads to an "unsustainable overuse of the natural resource base" (WCED 1987: 80).

3. There is a decrease in international demand, a decrease in export earnings, a decrease in production and an increase in the pressure on forests.

The fall in prices of commercial crops in the early 1990s led to two kinds of farmers' response: conversion of plantations and creation of food crop farms.

a. Conversion of plantations - conversion strategies.

Some producers of arabica coffee have converted their plantations to vegetable and fruit plantations. These were more profitable for them. They sold their produce on either local or overseas markets as in the case of pineapple exports. This tendency was observed in provinces of littoral and west Cameroon.

b. Creation of new farms added to the former plantations' diversification strategies.

Most small cocoa producers, in addition to their commercial crop plantations, created food crop farms. This phenomenon was observed in the province of the South where the government created a food crop frontier market. This market aims at supplying UDEAC countries, mainly Gabon and Equatorial Guinea, with food crops. Plantain and cassava plantations replaced parts of forests. Farmers change their strategies with the aim of preserving their purchasing power and with the hope of an

increase in prices later on.

4. Stagnation or decrease in international demand - decrease in export earnings - decrease in state income.

This pattern leads to overexploitation of a product whose price is the highest on the international market. This is the case of timber trade in the mid-1980s and early 1990s. Timber trade is revealed to be more profitable for Cameroon than traditional commercial exports (cocoa, coffee). Thus logging activities increased. The government issued as many logging licences as possible to increase its income through taxation on this activity and on products exported. This pattern is forest destructive.

5. Stagnation of international demand, increase in export earnings, stagnation of production.

This pattern, which is very rare, was experienced in August 1993 on the coffee market when the coffee price rose.

The uncertainty of the international market and its effect on export earnings and forests divides Cameroon's government on the choice of strategy. Two strategies were discussed.

The first, known as opportunist strategy, suggests that policies be adapted to international or the existing opportunities. Farmers should be prepared to convert their plantations to more profitable crops or commodities. Although it is demanding and places stress on farmers, this strategy is less forest-destructive.

The second strategy combines long term and short term policies. Commercial crops which need long-term and heavy investment should be maintained and complemented by food crops which are in great demand on the international as well as domestic markets.

Combining both gives an opportunity to the farmer to save his purchasing power by compensating the losses from export earnings, with food crop earnings. It also helps the farmer to be competitive and ready for a later recovery of the world economy and increase in international demand.

The second strategy, also known as the diversification strategy, is less forest-protective, since new plantations or farms have to be created in order to face the changing demand for products (MINAGRI, 1992).

The Cameroon case (the above five patterns) suggests that whatever the international market of commercial crops is like, forest depletion occurs. We conclude that forest depletion is less a matter of an increase or decrease in the demand for products, or export earnings, than the very existence of a market for forest products (timber or crops and cattle grown in forest converted areas) and the motives of people or companies involved in these trading activities.

Meanwhile some patterns (1 and 2) offer better opportunities for reforestation since resources are available (1) or since there is a possibility to convert plantations to woodlands (2, option a). But generally speaking, the neo-liberal argument is not verifiable. Deterioration of terms of trade is also forest-destructive as shown above. Diminution of export earnings, despite an increase in production, often obliges farmers to produce more and more with the purpose of preserving their purchasing power. Critics also mention the role of protectionist policies of industrialized countries in environment depletion.

According to OXFAM, poor countries could double their export earnings if they could process their products or produce before selling them. In some cases of processing, however, there still are impediments to their sale because of protectionist regulations:

"They do try to break into these markets, but find that the industrialized countries impose tariffs on such imports, restrict access by rigid quotas or impose other barriers. Nearly a third of developing countries' agricultural exports to the West are restricted by such barriers. For cocoa, coffee, rubber, and tobacco, only a fifth (in term of value) was imported in processed form by developed countries. There is even fiercer protection when it comes to manufactured goods. Only 3% of manufactured goods in industrialized countries are made in developing countries". (Clark, OXFAM, 1986:42)

The Third World countries' and NGO's argument of a positive link between a fair international economic order and forest protection is understandable in many respects:

- securing access to rich countries' market provides peasants with a sustainable source of income,
- purchasing goods or products at their value is economically beneficial to both partners and morally fair (the equity argument).

The following two observations can be addressed to this progressive thinking:

1. The analysis of the pattern of producers' behaviour in the Cameroon case (above) suggests that the increase in export earnings did not slow down the rate of deforestation. On the contrary, it stimulated production of commercial crops since producers wanted to maximize their earnings (pattern 1). Thus there is no evidence of such a positive link.
2. Securing the access of the Third World's products to

industrialized countries' market is not a panacea as such. And there is no evidence that fair economic practices at the international level will bring about forest protection. It represents a potential benefit however, since two obstacles related to Third World countries themselves have to be overcome: - first, the Third World countries' products have to be competitive, and

- second, their access to markets will face the law of supply and demand. Producing the same products, the market could be saturated. The outcome in case of oversupply is a fall in prices (case of the cocoa crisis in 1989 and 1990).

3. The third criticism is related to the theoretical underpinning of Third World countries' argument: equity.

International relations, political or economic, take place in the framework of power politics. And each actor tends to maximize its gains and lower its losses. The notions of equity and fairness are moral and normative rather than positive (what is occurring). There is no moral commitment for any country or group of countries toward another. International morals are an exception in international relations. Power and interest underpin the relations among nations.

There is no evidence that an increase in farmers' earnings leads to a better attitude towards the forest. During the golden era of commercial crops at the international market, farmers tended to expand their plantation in order to maximize their earnings (e.g farmers in West Cameroon). Moreover, other people became interested in the commercial crops sector.

The proposals of environmentalists to allow the ban on some

products could be inefficient in stopping forest depletion. The ban on logs could provoke a shift of strategy: from the export of logs to the increase of cash crop production which will need more converted forest areas for agricultural purposes.

VI.2.2 TIMBER TRADE FOR SUSTAINABLE FOREST

Timber trade is compatible with forest protection. This assumption is defended by a number of international actors, including the International Tropical Timber Organization (ITTO). ITTO was built up with the aim of promoting the tropical timber trade by bringing exporters and importers of tropical timber closer together. But its role has extended since the time that states and people began to show their growing concern for the environment. In 1992 it included the re-structuring of the tropical timber trade, the promotion of sustainable logging, and the conservation of tropical forest. This includes the design and the implementation of projects related to sustainable forest management (ITTO, 1992 Decision 2; Poore et al. 1990), and also the funding of projects considered as being forest protective as well as workshops and seminars on the issue (ITTO 1992 Decision 1).

A number of criticisms have been directed to ITTO's programme and activities. Colchester argues that the voting structure of ITTO, which is dominated by timber importers, automatically favours the promoters of the timber trade at the expense of conservation (Lohmann and Colchester, 1990). There cannot be a balance between promotion of the timber trade and conservation of forests in the same organization (Shrybman, 1990). A second criticism denies any

feasibility of sustainable logging. Such a concept is a myth since in practice there is no case of sustainable logging (Anderson, 1989). Logging activities are forest-destructive, directly and indirectly, as they contribute to the opening up of previously inaccessible forests to landless settlers and poachers, who at the final stage will clear the rest of the forest (Lohmann and Colchester, 1990).

Radical ecologists who reject the ITTO's idea of sustainable logging suggest "the" option for forest protection. Their starting point is the cause of logging. Logging activities take place because there is a market for timber and other forest products. Since international demand for timber stimulates logging activities, acting on this demand could have a better impact on logging activities. Green movements agree upon this principle but diverge on the type of actions to be undertaken. Hardliners (Dutch and German Greens) suggest a boycott of tropical timber. Some Dutch movements call for the ban of some hardwood species such as mahogany (The Courier, No 143, 1993). This radical line has been criticised by producer countries for whom such a ban or a boycott could have dramatic social consequences since it implies a decrease in export earnings necessary to the Third World countries' public finances (Cameroonian delegate to ITTO Conference, 1992).

Conventional ecologists have suggested a reduction in the demand and the import of tropical timber (Porritt 1989). This second proposal was equally criticised by timber producers. They saw it as leading to a progressive move to a complete ban on tropical timber. In the long run, a progressive reduction will produce the

same result as the radical ecologists' solution (Zairian delegate, 1992).²³

The compromise lies therefore in an attempt to take into consideration producers' and consumers' needs as well as conservationist groups' claim. At the Tenth World Congress of Forests held in Paris in September 1991, a breakthrough was made. Producers and consumers agreed upon the principle of a progressive reduction of felling, exporting and importing tropical timber coming from the primary rainforest. Beginning in 2001, tropical timber exported or imported should come exclusively from managed forest (Marches Tropicaux, No 2395, 4 Octobre 1991). Cameroon's Prime Minister, Mr Achidi Achu, in the inaugural meeting of ITTO on 6th May 1992 commented that the Paris agreement was a convenient solution for producers (CT, No.5128, 1992). An internal note of the Ministry of the Environment and Forests reports the reactions of some groups: Dutch ecologists continue to demand the boycott of tropical timber coming from non-managed forests. However, they proposed the year 1995 instead of the year 2001 as the deadline for the timber trade shift (The Economist, Vol. 326, No 7796 30th January 1993). Despite the compromise between producers, importers, and ecologists, and the Cameroon Prime Minister's declaration, Cameroon is not ready to meet the new requirements. Its area of managed forest is quite small and very young. The very first projects of managed forests, So'o Lala project and Southern Bakundu projects were effectively launched in 1993. The head of

²³This argument was put forward by one of Zairian delegates at the tenth session of ITTO meeting that was held in May 1992 at Yaounde, Cameroon.

the reforestation desk at the Ministry of the Environment explains that Sappelli or Ayous, the most frequently exported species need at least 30 years to reach maturity. The FAO report 1988 (TFAP) points out a similar constraint: the attempt at replanting Sapelli and Ayous was unsuccessful - unavoidable parasites caused diseases in Ayous, and Sapelli's growth is very slow (UNDP-FAO, 1988:19). The report concludes that Cameroon should extend the planting of tropical pines and eucalyptus, which grow faster and which could be sold to neighbouring countries such as Chad and Nigeria (op cit).

If the report maintains the option of growing Sapelli, it is a very long term prospect. For the above reason and the fact that the programme of sustainable forest management is quite recent in Cameroon compared to Malaysia, for example, where it is 15 years old, Cameroon is not able to fulfil these requirements. The ITTO's new deadline and Cameroon's unpreparedness are certainly other causes of the massive logging activities which are taking place these years.

The ITTO's deadline of 2001, the ecologists' pressure and the new regulations in importing countries have a paradoxical effect - an increase in logging activities and thus in deforestation. Ecologists failed to anticipate this move and increase their pressure both on producers and importers, especially Asian and African producers. Countries with weak green movements such as France or Italy, without any boycott of timber activities, take advantage of the situation and increase their stocks of hardwood.

Cameroon also failed to adapt to the shift that occurred in the timber trade in the mid-1980s. Starting in 1985, the volume of processed timber is the same as the volume of "raw" timber or logs sold on the international market. The shift has benefited Malaysia which increased the "added value" of its timber (Documents ITTO, 1992). SOFIBEL, one of the most important logging companies involved in timber processing, exports half of its processed timber production. The remaining production is sold on the national market. These failures of Cameroon mean new challenges in the future.

In Cameroon, 4 out of 350 trees species are intensively felled because of their high financial value on the international market; they are Sapelli, Ayous, Azobe and Framery. This intensive exploitation has three consequences:

- unsustainable exploitation of these four species with the risk of exhausting them in the near future,
- unbalance of the ecosystem created by this selective felling (Wilks, 1990), and
- leaving behind trees felled by mistake, which is a waste of timber.

According to official figures, the exports of Cameroon timber have risen in the last 10 years from 1.8 million cubic meters in 1981 to 2.45 million cubic meters in 1991 (R.C 1992).

Table 26: Evolution of Forest production

YEARS	198 1/ 82	198 2/ 83	198 3/ 84	198 4/ 85	198 5/ 86	198 6/ 87	198 7/ 88	198 8/ 89	198 9/ 90
Forest production (in 1000 of tons)	1,880	1,809	1,920	2,090	2,087	2,090	1,970	2,120	2,370
Exports earnings (in million Fcfa)	25,360	22,350	18,340	36,289	33,108	24,910	28,114	32,340	-
Percentage of total export earnings	-	-	-	11.74	10.50	10.06	11.51	12.89	-

Source: MINPAT-MINAGRI 1992

ITTO complements MINPAT-MINAGRI's data and gives more detail:

Table 27: Production, trade and consumption of forest products
(in thousands cubic meter)

Product	Production		Imports		Exports		Domestic requirements	
	1990	1991	1990	1991	1990	1991	1990	1991
Logs	2480	2540			906	915	1575	1625
Sawn-wood	480	492			240	236	249	257
Veneer	50	50			36	30	15	20
Plywood	60	50	3	3			63	62

Source: ITTO (Tropical Timber Market Worksheets 1990-92)

In 1991 Cameroon's forest products were mainly exported to Europe and Japan (see table 28). Italy and France are the main importers of Cameroon logs. France remains, however, the main beneficiary of the logging activities in Cameroon. 75% of foreign logging companies in Cameroon belong to the French (Mvogo Tabi 1988).

Table 28: Importers of Cameroon's timber

Cameroon export in 1991 to	Logs		Sawnwood		Veneer		Plywood	
	volume 1000 cum	value million US\$	volume 1000 cum	value million US\$	volume 1000 cum	value million US\$	volume 1000 cum	value million US\$
France	108.6	31.30	27.0	11.93	2.0	1.32	2.7	1.34
Italy	181.4	45.68	-	-	-	-	-	-
Japan	15.2	6.02	1.7	1.07	-	-	-	-
Netherlands	65.3	14.40	15.4	6.58	0.0	0.0	-	-
United Kingdom	5.5	1.84	4.6	2.70	0.4	0.96	-	-

Source: FAO Trade in Tropical Timber:1991 (1992)

VI.3 THE TROPICAL FOREST ACTION PLAN

VI.3.1 CAMEROON'S NATIONAL FOREST ACTION PLAN

UN agencies' response to the deforestation issue was the launching of the Tropical Forest Action Plan (TFAP). Three of the main UN specialized institutions were involved in its design and implementation - directly (FAO - UNDP) or indirectly (WB). Since its inception in 1985, 73 developing countries have initiated a national plan inspired by the TFAP. Most developed

countries have accepted to fund the development of forests mostly within the framework of TFAP (Colchester and Lohmann, 1990:1). TFAP was conceived as an international coordination mechanism which aims at tackling the problem of tropical forest depletion and promoting sustainable use for people's social and economic benefit. FAO - UNDP set up five directions for action:

- forest industries,
- fuelwood and energy,
- forestry in land use,
- conservation of ecosystems, and
- institutions.

Cameroon's NFAP was inspired by TFAP and sponsored by FAO - UNDP. In 1988, FAO - UNDP's report on Cameroon recommended the government to take several actions:

Forest industries.

For FAO - UNDP, forest industries have a great potential and Cameroon should take advantage of this to increase its production in order to improve its export earnings both through log and processed timber exports. Cameroon should modernize its forest industries to increase productivity (FAO-UNDP 1988). So far only two timber factories (SOFIBEL and ALPICAM) out of 66 are modern and process the biggest part of the timber. These 66 timber enterprises have a logging capacity of 3,200,00 m³, but only 1,750,000 m³, hardly half of it, is used effectively (FAO-PNUD, 1988, Vol.II:58). The report also mentions the need to involve people and the whole communities in logging activities. The report suggests setting a precise objective for the development

of forest industries:

"set an integrated system of supplies and use of resources which combines the forest, forest industries and local populations, and which constitute an economic development pole" (FAO-UNDP, 1988:6)²⁴

Fuelwood and energy.

FAO - UNDP' report states that fuelwood and energy present a new problem in Cameroon. Although some regions in the far North-West will face shortage of fuelwood in the near future, it is important to consider the problem at the national level. In rural areas as well as in urban areas, fuelwood remains the main source of energy. In order to alleviate the pressure on forest, FAO - UNDP suggests three sets of actions:

- to implement regulations linking use of forest and reforestation,
- to create incentives in order to bring people in rural areas to establish tree plantations for multiple use, and
- to take action aiming at saving energy.

Forestry in land use.

The report subscribes to the idea of the tree as a means of food security and suggests setting up systems of land use based on a combination of agriculture, silviculture, and farming. The report comes up with four ideas. The first relates to agroforestry as it is the traditional agricultural method for Bamilekes. The second refers to the planting of individual trees on farms, such

²⁴This is a translation. The original version is as follows: "mettre en place des systemes integres d'approvisionnement et d'utilisation des ressources associant la foret, l'industrie forestiere et la population locale et constituant des poles de developpement economique"

as acacia, albida, or karite, which have some fertilizing properties (this variety of trees is suitable for the savannah area). In forest areas (south and central provinces of Cameroon), the Teuminalia (frake) should be used as a tree protecting cocoa. The third consists in using trees with fertilizing properties during the fallow period. The fourth suggests a combination of trees and cattle. Peasants or farmers should grow trees whose fruits or leaves can feed cattle and people. The report suggests Calliandra and Glyricidium tree species, which produce a lot of leaves.

Conservation of ecosystems.

The report reveals that Cameroon's government has underestimated this problem. It is vital for the future to preserve ecosystems. FAO - UNDP concludes that the common strategy of conservation of "protected areas" as national parks should be complemented with management of areas where forest dwellers could carry on their development activities. Meanwhile, protection of endangered mammals should be absolute. This could be done by a tight control and persuasion.

The institutions.

FAO - UNDP report recommends Cameroon to enhance the existing forestry institutions and create a special institution aiming at the coordination of all activities related to forest, forestry and management of natural resources. The report makes a number of proposals:

creation of a co-ordinating body in charge of forest activities.

In April 1992 this recommendation was followed by the creation of the Ministry of the Environment and Forests,

- institutionalization of inter-ministerial meetings involved in forest activities and territory planning,
- institutionalization of permanent coordination between all national agencies in charge of the forestry sector,
- creation of incentives for training in forest activities, and
- creation of a central body of rural forestry.

At a round table organized in Yaounde (April 24th-28th 1989) on the Tropical Forest Action Plan, the Ministry of Agriculture, then in charge of forests, presented the guidelines of Cameroon's forest plan (MINAGRI, 1989).

The report underlines the importance of the forestry sector in Cameroon's economy in the context of the economic crisis, puts emphasis on the potential of forest activities contributing to the development process. These guidelines are deeply influenced by the FAO - UNDP recommendations contained in their report, mainly in the economic implications. For instance the five pillars of the TFAP are replicated.

The national guidelines puts particular emphasis on the development of forest industries, mentions the impact of fuelwood on the overall conservation of energy in Cameroon and the financial importance of the fuelwood trade (40 billion fcfa) (MINAGRI, 1989:29-30). Although the Cameroon report mentions the need to involve people in forest activities and management, there is no indication of a strategy or incentives to be taken by the government in order to implement that desire. As far as

conservation is concerned, the report states that new protected areas will be created and biodiversity will be preserved through controlled exploitation of forests and their management. This point is unlikely to be implemented since shortage of means and personnel already impede protection of the existing protected areas. Unless additional resources and means are given to the agencies in charge of conservation, the report's recommendations will remain a wish.

The FAO-UNDP's idea of forestry in land use is welcomed by the government. Forestry in land use should refer to agroforestry and exploitation of useful forest plants or trees such as medicinal plants, nutritional plants, and plants or trees used for making furniture (MINAGRI, 1989:31).

Commenting on the fifth point of TFAP (institutions), the Cameroon report on its Forest Action Plan identifies the lack of co-ordination of procedures as the main institutional problem (MINAGRI, 1989:31-32). Recent comments by Cameroon's officials suggest that Cameroon's government is fully satisfied with the philosophy (economically oriented) underpinning the TFAP. In the internal note No.0095/L/MINEF/DF of the 18 May 1992, the Minister of the Environment and Forests states:

"It [the TFAP] has shown in that respect the possibility of increasing our exports on the tropical timber European market..." (Djingaer, 1992)²⁵.

The Minister puts emphasis on the vital point:
"Our national constraint, which is a shortage of liquidity caused the decrease in prices of main raw

²⁵Our translation; the original version is:
"Elle a degage a cet effet les possibilites de developpement de nos exportations sur le marche europeen de bois tropicaux ..."

material, inspires our new forest policy. In this context, the prices of timber have remained stable and it is admitted that the forestry sector is an opportunity to develop ..." (Djingoer, 1992)²⁶

The UN agencies' response to the deforestation problem is criticized. Marcus Colchester and Larry Lohmann have denounced Cameroon's forest action plan in five points:

1. The forest action plan will cause a major acceleration of deforestation by opening up the isolated forest in the South and in the South-east provinces of Cameroon to logging activities.
2. The provisions suggested by FAO - UNDP and Cameroon's government to ensure sustainability of logging are unconvincing.
3. There is no mention, or very little attention is paid to the need and rights of the rural population, forest dwellers (the Pygmies), and women. Furthermore, NGO's input is not taken into consideration.
4. The report does not contain any explicit mention of pastoralism and shifting cultivation which directly affects forest.
5. The question of land reform has also been ignored, preventing people from claiming their rights to their habitat or dwelling (Lohmann & Colchester, 1990).

The two critics include:

"Traditional forms of land use, the social institutions of forest dwellers, the role of non-timber products in the local economies, the ownership and the control of forest resources by local communities are all given scant consideration".

²⁶Our translation; the original version is:
"Elle ...s'inspire surtout de nos realites nationales marquees par une crise de liquidites dont l'origine est la baisse des cours des principales matieres premieres. Dans cette mouvance, les prix du bois sont restes stables et l'on admet aujourd'hui que le secteur forestier constitue un atout a developper ..."

(Lohmann & Colchester, 1990:42)

Since 1985, UN agencies' analyses of the TFAP has evolved. In 1988, UNEP issued a document pointing out the need for implementing strategies which aim at valuing other forest assets (1988: 36). The economic evaluation of other forest functions was explicit in the TFAP (1985 version).

Reconsidering its TFAP issued in 1985, FAO has published a document (1991) which takes into consideration various observations and criticisms, and complements the basic TFAP. Emphasis is put on

- the necessity to involve forest dwellers, people in forest activities; however it is not clear if this involvement implies at all stages (design and implementation), and
- the need for multidisciplinary approach.²⁷

FAO considers these as major changes since they deal with the underpinning of the idea of the Tropical Forest Action Plan, and suggests a change of the heading to the Tropical Forest Action Programme (TFAP₂) (FAO, 1991:3).

This recommendation of TFAP₂ implies a new general objective:

"to slow down the tropical forest depletion, by promoting the sustainable use of their resources in order to meet local and national needs" (FAO, 1991:4)²⁸

The TFAP² recognizes the importance of NGO's action and

²⁷FAO's document's heading is: Programme D'Action Forestier Tropical (PAFT): Principes Operationnels.

²⁸The translation is ours. The original version is as follows: "... freiner la destruction des forets tropicales en favorisant l'utilisation durable de leurs ressources pour satisfaire les besoins locaux et nationaux"

recommends their further involvement.

This transformation and these changes have been revealed to be insufficient. Ecologists and environmentalists have anticipated these late moves with criticisms. They argue that one of the important steps to make is freedom of information:

"As a minimal first step, this would require that the TFAPs leading agencies, bilateral institutions and national government lift the veil of secrecy which now keeps virtually all NFAP documents out of the public domain." (Lohmann & Colchester 1990:96)

The criticisms directed at the TFAP, despite the changes, suggest a pessimistic or reserved view of the future of forest protection through the TFAP or the TFAP₂. Two deep-rooted causes will prevent a genuine forest protection from occurring through the UN system: the interests at stake and the balance of power between destroyers and protectors within the UN systems. Colchester, locating the interests of UN agencies involved in the design and the implementation of the TFAP, concludes in a deterministic way:

"One reason why the NFAP planners are reluctant to tackle issues of land tenure, timber extraction, development projects and debt repayment is that they feel that the institutions they have to work with will not permit these politically difficult topics to be touched... It is known, for instance, that FAO staff think TFAP cannot address the land rights issue due to its sensitivity among national governments. Similarly, the World Bank consultants working on TFAP are not likely to question income-boosting or debt-repaying logging, hydroelectric or plantation projects that the bank itself is supporting..." (Lohmann and Colchester, 1990:95-96)

Despite new developments observed in UN agencies' attitude towards people's involvement in development activities and the new law on forests in Cameroon, Colchester's remark on interest and political sensitivity is relevant in the Cameroon case.

Political and economic interests are interlinked and determine the fate of Cameroon's forest²⁹. TFAP remains mainly economic and marginally social. Despite FAO's move from TFAP to TFAP₂, no single action favourable to forest dwellers has been taken so far by Cameroon's administration. And people's involvement in forestry activities tend to be of individual or communal concern rather than a clear strategy implemented by the government³⁰.

VI.3.2 THE EVALUATION OF TFAP IN CAMEROON

The FAO/UNDP mission has identified 58 projects in the context of the TFAP (FO:DP/CMR/86/003 vol.III). So far 12 out of 58 are being carried out. Most of these projects existed before the adoption of TFAP, for instance Limbe Botanic Garden rainforest genetic conservation project has been going on since the early 1960s. TFAP has just incorporated some of those projects into its framework.

Table 29: Major projects of TFAP in Cameroon

Name of the project	Nature of the project	Funding body	Implementing agency
Planning Office for Forest Matters	institutional activity	UNDP/FAO	FAO and Ministry of Environment (Department of Forests)
Southern Bakundu Forestry Project	forest management	Cameroon/ ITTO	ONADEF and Ministry of Environment and Forests

²⁹Our seventh chapter will analyze this particular issue.

³⁰The case of Dr Mbock and the programme of forest use.

Forest Management and Regeneration Project Mbalmayo	forest management	Cameroon/ ODA	ONADEF
Limbe Botanic Garden of Rainforest Genetic Conservation Project	conservation	Caneroon/ ODA	Department of Forests
SOS Louti North Project	conservation of ecosystem	GTZ/ODA Cameroon/ USA	ONADEF
Planning Office (II)	institutional activity	ACDI	Department of Forests
TIGER	research	Great Britain	Department of forests
Pilot Project for the Sustainable Management of the SO'O Lala Forest	forest management	Cameroon/ ITTO	ONADEF
Project for the Integrated Management in Dimako	forest management	France	Department of Forests
Conservation and Utilisation of Central African Rainforest Ecosystem: The DJA Project	conservation	European Development Fund	Department of Wildlife and Protected Areas
The Korup Project	conservation	Cameroon/ WWF/GTZ ODA	Department of Forests
Trop en Bas Programme	research	Tropenbas Foundation	Department of Forests and Ministry of Research

Source: ONADEF 1993

The study of one project will give us the first trend in the implementation of TFAP. The projects concerned are: the Southern Bakundu Project, Forest Management and Regeneration Project in Mbalmayo, and the Pilot Project for the Sustainable management of the SO'O Lala Forest.

I. The Southern Bakundu Project

The Southern Bakundu has been a forest reserve since 1940. It is located in the Meme division, the South-west province of Cameroon. The climate is equatorial and the rainfall is an average of 2,200 mm per year with an average annual temperature of 23°C. The Southern Bakundu forest is an evergreen rainforest which contains various species of plants, animals and trees. The population in the area is estimated at 2,000 people, mostly the Bakundu people. Some forest workers (from forest services and a research centre) live in the reserve.

The reserve is near the town of Kumba. Given its fertile soils, people tend to encroach upon the reserve to be able to grow crops there which they then sell in the town of Kumba. There are also some industrial activities. Cash crops are grown in the area, even in what is part of the reserve. The Cameroon Development Corporation (CDC), Mukete plantations and Unalor grow cash crops and some trees (rubber tree, palm-oil tree, banana, etc.)

The main aim of the project is to conceive and initiate the implementation of a global plan of forest management of the reserve of Southern Bakundu (Document of ONADEF, 1993).

The broad objectives of the project are

- to promote new improved methods of silviculture which are cheap and efficient,
- to involve people living in the area in the management of the reserve by integrating their agricultural activities in the management plan,
- to boost the economy of the area through forest and agricultural activities,

- to train agricultural workers for the management of forest resources,
- to help dwellers to maximize their social and economic gains from their activities, and
- to popularize agroforestry techniques in the area (ONADEF, 1993).

As far as the government is concerned, the project should help - to acquire the expertise needed for the design and implementation of management of forests previously exploited and under local people's pressure (encroachment and illegal settlement),

- to acquire knowledge of monitoring of main activities related to management and exploitation of forests, and
- to acquire practical experience of silvicultural techniques.

Project Appraisal

The Southern Bakundu project has a very detailed schedule. A number of activities are supposed to be carried out in the first year of the project (see table 7).

Table 30: Schedule of activities of the Southern Bakundu project for the first year of the project.

Activities	Duration (months)	Starting period (month)	End
Draft of the management plan	8	1st	8th
- survey and analysis of existing physical, socio-economic and sociological data	12		12th
- first study to complement the knowledge and the profile of the socio-economic situation of the area...	13		h
- limitation and map-making of the area where management activities and forest research is to be made	3	2nd	13th
.....	3		h
- discussion, finalization and adoption of the programme.....		5th	5th
.....			8th
Finalization of technical aspects related to improvement of plants and the design of a manual for field workers	3	3rd	6th
Discussion and Finalization (in collaboration with dwellers) of techniques of agroforestry and the design of a manual for field workers	3	3rd	6th
Putting administrative proceedings in order to entrust ONADEF with the task of managing the project	4	8th	12th
Briefing dwellers about the project beginning of actions to set up co-operatives and various organizations	12	1st	12th
The design of a plan for agricultural development of the project area	3	3rd	6th

Identification of areas where agroforestry will take place	1	8th	9th
The design of a schedule of conditions and choice of a logging company	4	8th	12th
Preparation and signature of an agreement between the project board and the Centre of Research in Forests	4	8th	12th
Reparation and fittings of some facilities: camps, forest posts and tree nursery	12	1st	12th
The design of training courses for workers in charge of carrying out activities aiming at improving plants and agroforestry	2	6th	8th
Appraisal of the first phase of the project			12th

Source: ONADEF 1993 (internal documents)

The cost of the project was estimated at US\$ 2,105,500 for the duration of the project activities, 48 months. Cameroon should contribute US\$ 939,500 and ITTO US\$ 1,116,000. It was also concluded that material for logging activities will be provided by the logging company. Cameroon's contribution is, however, mainly in material. The government provides the national staff and personnel, offices, furniture, some technical facilities (phone, fax, exemption of taxes for the material imported for the project) and fitting out of camps. ONADEF, the implementing agency, will also be in charge of a number of expenses (ONADEF, 1993).

The initial launching of the project was due to commence on the 1st January 1993. The inauguration of the project and the official installation of the general manager took place instead

on the 19th February 1993. Thus the beginning of Phase I of the project was postponed until 1st March 1993. The report of activities during the period March 1st - August 31st 1993 revealed that there was a serious delay in the implementation of the activities scheduled for this programme. Even the appointment of the personnel required to start the project did not take place even six months after the official beginning of the project. Part of the national staff and personnel is now in place: the general manager, technical adviser, agro-economist, people in charge of silviculture and agroforestry and one driver. Secretaries and other intermediary personnel were not yet appointed. Equally, external consultants and technical assistants (from ITTO) are not yet in Cameroon.

Some material and furniture have been brought or rented and exploratory trips (2) were made in the project area as well as in the villages surrounding the reserve. The report clearly acknowledges the failure to meet objectives for the first six months (see Table 30):

"It seems difficult to assess the level of implementation of the activities." (Managing board of the project, 1993)

The delay in the implementation of the project was due to the lack of personnel and equipment (Managing board of the project, 1993). Funds from ITTO have not yet been received. ITTO committed itself to giving its contribution under the condition that a detailed programme of work will be submitted for their approval. In a note sent to ONADEF (the implementing agency of the project), the general manager of the project urges ONADEF to act:

"It becomes imperative and expedient that both consultants and technicians meant for the first year

of the project be recruited." (Note 062/ONADEF/BP/KBA, September 1993)

The first assessment indicates a poor start for the project. When we visited ONADEF headquarters in Yaounde on 24th and 30th January 1994 and Kumba's office (site of sub-Bakundu), the staff involved in the project were worried about the possibility of keeping to their time-table, and some even doubted the possibility of carrying out the project. Generally speaking there are a number of phenomenon which undermine the successful completion of some projects in Cameroon and probably elsewhere in LDCs:

1. The availability of staff and personnel

In general, people are eager to join a project when it is financially interesting; if their salary is paid by the international funding agencies or if they receive an extra payment by external agencies in addition to their meagre salaries. Whenever their salary remains the same and is paid by the government, they lack motivation and are not prepared to leave their family and home town to go to a remote area. Thus the availability of staff and personnel depends on financial motivation. In most cases there is none, such as in the Southern Bakundu project.

2. The sustainability of the financial contribution of the host country.

During the negotiations preceding the signature of the agreement, countries always agree on the principle of their contribution. At the beginning, the contribution is often given. Thereafter, they simply cannot afford to continue giving their share because of the lack of resources. Projects face dilemmas. Either the

external partner accepts to carry the burden alone, or abandons the project altogether.

3. The conditionality of the financial contribution of the external partner

Contributions of external partners can be dependent on one or more conditions being met by the host government. For instance, Great Britain demands that the Cameroon government satisfies a number of conditions before she brings her financial contribution to the Forest Management and Regeneration Project in Mbalmayo.

These are:

- to appoint an implementing agency acceptable to ODA,
- to pay salaries of the national staff,
- to reorganize commercial exploitation of timber coming from the area to regenerate before the beginning of the programme of regeneration, and
- to ensure representatives of the ODA freedom to consult all reports, maps, pictures, data, publications and other information related to the project (Protocol of February 8th, 1991).

4. The take-over of the project after withdrawal of the external partner.

Even when a project is successful, withdrawal of the external partner who provides funds generally leads to abandoning it or to a long-term failure of the project. The contribution of ITTO to the southern Bakundu Project and the SO'O Lala Project has to last for four years. Forest management is a long term process and some species of trees (sapelli) need at least 30 years to reach maturity. The project will need maintenance which Cameroon will not provide because of the lack of funds.

The above limitations are pervasive in the practice of projects implementation in Africa. There are doubts about sustainability of the Southern Bakundu Project (ITTO), SO'O Lala (ITTO) or the Forest Management Project and Regeneration Project Mbalmayo (ODA), which are designed in the same pattern, with the same objectives and almost the same techniques and methods. They are major components of the TFAP in Cameroon. Their failure or their unsustainability will automatically lead to the failure of the TFAP. This is foreseeable.

CONCLUSION

A decade after the incorporation of forest issues onto the international agenda, a number of initiatives were undertaken in three areas: international economics, technical co-operation, and international regulations. An analysis of each area supported by a case study or examples suggests that in spite of all efforts and initiatives, forests did not receive adequate protection from the international community.

International economics (world trade) influenced by the neo-liberal assumption and the economic growth paradigm privileged free trade which in some cases tends to be forest-destructive. Technical cooperation is powerless in promoting sound management of forests and better trade practices. Neither ITTO nor TFAP took decisive steps to implement their ideal of sustainably managed forests. Lastly, international law on forest protection is unlikely to emerge (Bomba, 1991). International arrangements initiated at the UNCED are too weak to set up a legal basis for forest protection. Texts adopted are neither binding nor a

deterrent for countries.

How to explain this lack of action and resolve of the international community? A number of arguments are put forward, including technical, financial and political. The fact is that there is a recurrence of the classical international politics scheme characterized by the dynamics of individuals' and groups' interests (economic and financial), the structure of the international community (on the one hand developed countries, on the other LDCs), and the permanency of the struggle for power between nation-states.

Forest protection remains a "low politics" issue which cannot lead to a reshaping of international relations (Smith, 1993) or restructuring of the international community. Interest and power politics rather than "global commons", nation-state (sovereignty) instead of international community hamper any attempt at international protection of forest.

CHAPTER VII

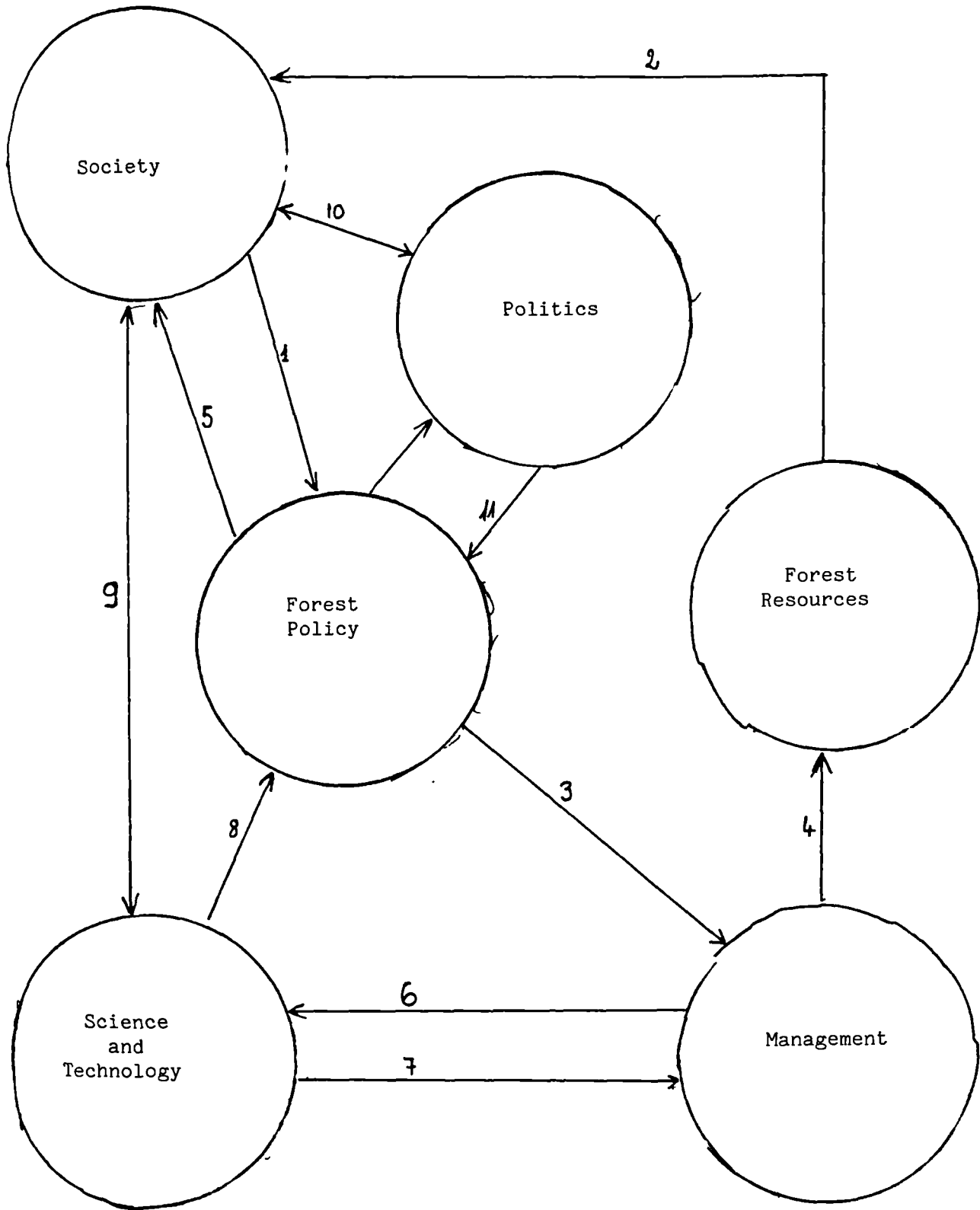
SD AND FOREST PROTECTION: CAMEROON'S FOREST POLICY

INTRODUCTION

Various perspectives on forest policy are reflected in current forestry literature. Some put the emphasis on action, the managerial aspect of the policy. This view is rather restrictive however and has a sector-based approach. Others emphasize the need for an integrated policy, which takes into consideration both action and planning. Hummel (1984) describes forest policy as one method of action to be considered in conjunction with other alternatives. It should be used as a guide to determine future decisions. Yet the most comprehensive and satisfactory definition comes from Worrell:

"A forest policy specifies certain principles regarding the use of a society's forest resources which it is felt, will contribute to the achievement of some objectives of that society" (in Hush 1987:3) Forest policy is therefore one component of Government policy which interacts with other components. Two models of this interaction have been developed. The first model suggested by Hummel (1984) shows the complex interrelations surrounding forest policy.

Figure 3: Framework of interrelations around Forest Policy.



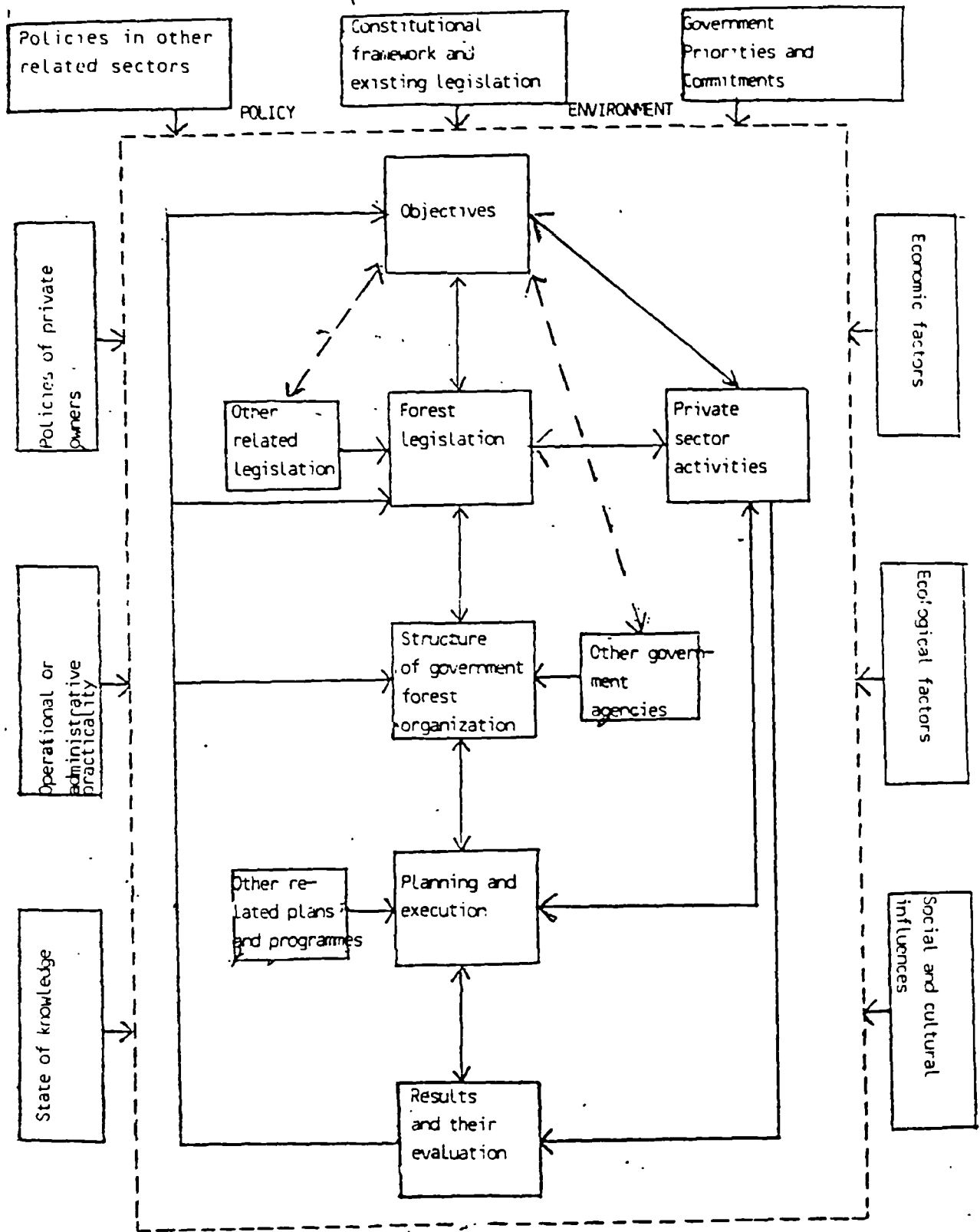
Source: FC Hummell 1984

1. Needs for forest products and services (consumption and expectations)
2. Output of the forest resource (functions)
3. Instructions for management (e.g. objectives or goals)
4. Treatment and the use of the forest resource
5. Policy influencing society demands
6. Problems to solve by science and technology
7. Expertise
8. Scientific basis for policy
9. Interaction between society and science (research/education)
10. Party - politics
11. Political decision-making

In spite of the comprehensiveness of the diagram, it fails to show the full range of interrelations and all the actors involved in the process of forest policy design and implementation. Husch has suggested a second model, very much influenced by systemic analysis. He portrays forest policy as an integrated system of elements which are:

- the statement of objectives
- a body of legislation
- the structure and administrations of a government forest organisation
- the planning, budgeting and execution of programmes of the government forest organisations (Husch 1987).

Figure 4: Forest policy as a system.



Source: Husch, FAO 1987

Husch's model is a better reflection of the process of forest policy design in Third World countries as various interest groups and institutions (national and international) make their inputs in the decision-making process. This model will therefore provide our analytical framework when considering forest policy. When referring to Husch's model one can ask the question does Cameroon have an integrated forest policy? Assuming that there is a forest policy in Cameroon, is it forest protective and compatible with SD? How does it protect the forest and what are the impediments to its protective function?

In the first instance we shall discuss the relevance of the official documents, as they are meant to set up a forest policy, and look at their impact on the programmes being implemented. Then we shall explore the complex issue of land tenure. The analysis will go beyond the rhetoric of securing rural people's rights, to point out the deep constraints to global land reform, necessary for people-centred development. Finally, an analysis of institutions involved in forest policy design and implementation will provide an insight into the politico-institutional entanglement of the forest issue in Cameroon.

VII.1: FOREST POLICY: THE CONFIRMATION OF THE IMBALANCE BETWEEN CONSERVATION, PEOPLE'S INVOLVEMENT AND ECONOMIC PRIORITIES.

The role of forest policy in a broad SD strategy may be evaluated through three components: the economics, the social component and conservation. This section aims at assessing the balance between the three components as they appear in the 1992 and 1993 forest policy documents and in the 1994 forest law.

We shall be using the count method and content analysis to assess the government forest policy. The count method aims at determining how frequent a notion is being used in a given work, compared to other important competing notions. The content analysis refers to the technique used to determine the objective, systematic and quantitative description of the content of communication (Stempel, 1987; Holsti 1969).

We proceed as follows: we count the number of sentences or references for each of the three components and relate the sentence to the action being taken and then weigh the importance of the sentence or the reference in each case. We then compare the results of each component. Finally we assess the importance of the component compared to its frequency and the emphasis count. Hence the component with the greatest number of references and emphasis will be considered as the major priority for the Government. The one with less references, a lesser set of concrete and credible actions or package of vague incentives, will be seen as the least important for the government.

The final result will give a broad picture of the real objectives of the new Cameroon forest policy. Is it:

- Economic objectives as the core, with conservation on the periphery and people's involvement as a sham?
- Economic objectives balanced with conservation and people's needs?
- Economic objectives with a flavour of social and environmental concerns to appease criticism and attract green aid?

The section will also explore the logic of forest policy by

assessing the impact of the 1992 and 1993 forest policy documents
on the 1994 forest law.

VII.1.1: FOREST POLICY DOCUMENT ASSESSMENTS: BALANCE AND
IMBALANCE IN THE 1992, 1993 AND 1994 DOCUMENTS.

Figure 5: Evaluation of the 1992 Forest Policy Document.

ECONOMICS			ENVIRONMENT (Protection)			PEOPLE'S INVOLVEMENT (Social Aspects)		
Pag es	No	Reference	Pag es	No	Reference	Pag es	No	Reference
1		Contribution to the economy.	1		Reference to conservation.	1		General statement on people's participation in economic development by using forest resources
2		Financial contribution of forest to the economy	2+3		Reference to depletion.			
4		Contribution to the economy. Trade of forest products. Contribution to the state revenues.	7		Reference to ecological role of forests. Major way of protecting forests.	4		Need of people's participation in the management of forest resources. Acknowledgement of the non involvement of people in forest exploitation and that they have not yet benefited from the forest resources.
7		The place of forest policy in the economic development strategy. The economic role of forest policy.	8		Reasons for conservation.			
3		Ways of trading timber of the national estate. Industries involved in forest production and timber processing. Details of the ways the new forest policy will value forest resources. Ways of promoting forest industries. Various advantages to attract investors.	9		Way of funding the conservation programme. Reference to waste of timber due to the wrong technique of tree felling.			
9		Export of new species of timber. Details of the ways the export of the new species of timber should be done. Proposal for the creation of a parastatal to collect fund.	10		Reminder of the need to protect the forest. Strategies to ensure the forest protection. Reference to the non profitability of conservation in the short term.	7		Reference to the social functions of forests. Proposal for the creation of forests reserved for rural communities. Reference to social and community forestry.
			11		Activities likely to help protect forest. Area of Forests to be automatically protected 30% of the national territory forest.	8		
						9		Reference to rural development for the improvement of the living standard of rural people.

16	Detailed measures to be taken to increase the share of the products.	20	Reference to main ways of conserving forest (reforestation and forest management).	11	Reference to the environment as it affects people. General statement on the correlation between protection strategies and people's involvement.
17		21			
18		22			
19					
20					
23	Infrastructure facilities for the export of timber, Financial advantages to logging and other forest companies for a better competitiveness.				
				13	Concrete incentives to promote rural people's involvement in forest protection, while benefiting from it.
				14	
			15		
25	Promotion of other forest products				

From page 26 to page 33 legal and institutional aspects.

N.B. Each number (bar) refers to a reference.

Figure 6: Evaluation of the 1993 Forest Policy Document.

ECONOMICS			ENVIRONMENT (Protection)			PEOPLE'S INVOLVEMENT (Social Aspects)		
Pages	No	Reference	Pages	No	Reference	Pages	No	Reference
1		Contribution to the economy.	1		Reference to conservation.	1		General statement on people's participation in economic development by using forest resources.
2		Financial contribution of forest to the economy. Reference to the increase of export earnings from timber trade.	3		Reference to forest depletion. Causes of deforestation			
		Expression of disappointment as forest exploitation has not substantially increased export earnings as was expected.	4		Acknowledgement of the overexploitation of some forests. Imbalance between logging and regeneration activities.	3		Acknowledgement that the non-involvement of people is a weakness of the current forest protection strategy and practices.
3		Details of forest products other than timber, likely to provide rural people with extra incomes.	5		Causes of the disappearance of wildlife.	4		Criticism of the non-involvement of people.
		Reference to the poor competitiveness of forest exploitation despite the increase of logging activities.	7		Conservation as a function of forest Policy. A way of conserving forest: forest management.	7		Reference to the social functions of forests. Need of people's involvement in the management of forest resources.
4		Imbalance between processed timber in Cameroon (decreased) and timber exports (increased).	8		Conservation for people's future use.			
		Explaining the poor contribution of the forest sector to the state revenues.	9		Reminder of the need for conservation.	8		Conservation for people's future use.
		The place of forest policy in economic development strategy. Major objective of forest policy (increase the economic functions of forest). Economic benefits when people are involved in the implementation of forest policy.	10		Detailed incentives for a good conservation strategy.	9		Need of people's involvement in the management of forest resources: direction of forest policy.
		Emphasis on the main objective of forest policy. Proposal for the development of the forest industry.	11			13		Detailed incentives for people's involvement in forest conservation and the way to benefit from their involvement.
			12			14		

9	Need of structuring forest product trade Reminding of the main role of forest policy: help to increase the contribution of forest products in the GNP.					
16 17 18 19,	Detailed measures to be taken to increase the share of forest products to the economy.					
22 23 24 25	Other ways of increasing revenues from forest exports Details of means and actions to achieve the industrialisation of the forest sector.					

From Page 19 to Page 22; Reference to administrative and technical aspects of forest policy.

Pages 26 and 27; Use of wildlife resources.

From page 28 to page 33: Legal, Institutional and educational aspects of forest policy.

Figure 7: Evaluation of the 1994 Forest Law

ECONOMICS			ENVIRONMENT (Protection)			PEOPLE'S INVOLVEMENT (Social Aspects)		
Ar ti c l e	No	Reference	Ar ti c l e	No	Reference	Ar ti c l e	No	Reference
41		Reference to forest exploitation activities.	11		General statement on the duty of the state having the main responsibility for forest protection.	8		Acknowledgement of people's rights to harvest forest products. Restrictions on these rights.
42		Conditions of leasing in forest activities. Reference to the issue of share holdings in forest exploitation companies	14		Ban of uncontrolled fire in the national forest estate.			
45		Procedure for the sales of the standing volume in a state production forest.	16		Conditions for the clearance of state and council forests. Reference to EIA.			
66		Details of the financial obligations related to the exploitation of forests.	17		Creation, protection and means to protect national parks or other areas			
67								
68		Beneficiaries of the money from taxes over forest exploitation. Detail of deposit given for forest concession.	18		Ban on the disposal of hazardous wastes in the forests			
69			19			Incentives to encourage reforestation		
71		Reference to the percentage of timber to be processed in Cameroon and that of logs to be exported	43		Power given to forestry service to protect any tree when necessary.			

VII.1.1 Analysis of the three documents in the light of SD

elements: economics, conservation and people's involvement.

Two major messages emerge from the foregoing detailed analysis of the 1992 and 1993 documents on past policy and the 1994 forest law: the prominence of economic considerations and the lack of concern with the intrinsic value of conservation.

Economics provides the core concern of Cameroon forest policy. The three documents invariably stress the economic necessity, benefits and assets of the exploitation of the forests through logging activities or other uses of the forest. The reference to the economic aspects is either explicit, for instance in page 7 of the 1992 and 1993 forest policy documents, or implicit as in the 1994 forest law. In any case, details about incentives or measures to increase economic benefits from forest activities are precise and clear; for instance on pages 8, 9, 16, 17, 18, 19 and 20 of the 1992 documents, and pages 16, 17, 18, 19, 22, of the 1993 documents. In the 1992 document, 19 direct references to economic aspects were made in 14 pages. 16 were made for conservation in 11 pages and there were only 9 references to people's involvement.

The 1993 forest document confirms the economic orientation of forest policy with only 8 direct references to people's involvement instead of 9 in the 1992 document. Twenty direct references to economic aspects were made in 17 pages in the 1993 documents representing a slight increase in terms of pages and references compared to the 1992 document. At the same time there

was a decrease in direct references to conservation, with only 11 direct references in 10 pages. This represented a decrease of about one third. There are two possible explanations for this situation.

The high number of direct references to conservation in the 1992 document could have been a reflection of the influence of both the Rio Earth Summit and the Cameroon National Report on Environment and Development, and the prospect of attracting some green funding. The disappointing UNCED outcome, has left Cameroon with no other option but the need to find financial resources by any means for its development, including the overexploitation of what is officially known as Cameroon best export in the 1990s - logs.

The second interpretation could be found in the influence of the WB on Cameroon forest policy. In January 1993 a WB mission on Forest and Environment, led by Edward Quicke had several meetings with Cameroon officials including those in charge of the forestry department. During the meetings held in the Forestry department, the discussions focused on the new Cameroon forest policy and the outline of the new draft of forest law. It is likely that the WB input was very influential in the orientation of forest policy. At least two elements underpin this hypothesis. The 1993 document has three major packages which are reflective of the WB's doctrine on the use of forest resources. These are: the need for long term concessions to logging companies; the large area proposed for concessions; and the taxation policy. These three packages are additions to the 1993 document which were largely

promoted in the 1992 WB report on Environment and Development (WB,1992). The second element is related to the traditional WB view of Cameroon forest, which includes advocating the opening-up of the closed forest of the East to logging activities in order to increase export earnings (WB 1989). Hence the WB had an active role in the change noticed between the 1992 and 1993 documents on forest policy; though the disappointing outcome of the UNCED has weakened Cameroon's bargaining power as there is no extra funding for forest protection and has narrowed the room for manoeuvre as there is no new funding for development projects. "Economics first" seems to be the underlying message of the documents on forest policy.

b. Conservation for Economics.

Conservation is currently valued by its present and future economic value. The maintenance of ecological systems is not the main motive for the conservation strategy. This is the foundation for the correlation between conservation and economics. In order for Cameroon to promote conservation, its economic goals will have to be achieved in the first place. In other words, funding aimed at promoting conservation is useless unless economic needs are addressed. This rationale reinforces the utilitarian view of the forests defended by the Cameroon government. Thus, to promote conservation in Cameroon, one has to promote economic development in the first place. This is very much in line with Liberal theories which argue the principle that there is a trade-off of environment conservation for economic growth in the initial development stage. In the 1992 forest policy document, there are

only two direct references to the ecological dimension of conservation (pages 7 and 8). Environment and people's participation considerations involving shared benefits are marginal concerns in both documents. They remain subordinate to economic concerns. Hence SD seen as a balanced, integrated policy bringing together economics, environment and people's involvement does not appear to be the overreaching aim in these forest policy documents.

VII.1.2: THE IMPACT OF THE 1992 AND 1993 DOCUMENTS ON FOREST LAW

Forest legislation is an element of forest policy. The new forest law should therefore derive from the 1992 and 1993 forest policy documents. Our investigations at the Ministry of Environment and Forests, in the National Assembly (Parliament) and the Presidency of the Republic (President's Office) undertaken in January 1993, December 1993 and July 1994 provide further insight into the impact of forest policy on forest law. From a technical viewpoint, the Forestry department within the Ministry of Environment and Forests prepared and wrote the 1992 and 1993 forest policy documents as well as writing the initial draft of the 1994 Forest law. Evidence of this can be found in the explanatory statement of the new forest law.

From the constitutional angle, government has submitted a draft of the forest law to parliament who amended some provisions, then voted it in as the new forest law. The amendments have fundamentally changed some articles, considered important by both the Government and the WB. Three of these amendments deserve

analysis as they reflect the ongoing political change, the battle of interests and the real bargaining power of the different bodies that have contributed to the new forest law.

The first refers to the way that the standing volume of timber in a state production forest may be sold. The 1992 and 1993 Forest policy documents clearly state:

"Access to forest resources for exploitation must be based upon the principle of transparency and competitiveness. In the case of the national forest estate, it should be by public auction".(1) (MINEF 1993 p.8)

The draft of the bill no. 544/PJL/AN sent by the Government to the Parliament in November 1993 has a provision in line with the 1993 document on forest policy. Section 45, paragraph 3 of the draft states:

"Standing volume of timber shall be sold by public auction to the highest bidder, for a non-renewable maximum period of one year" (RC Draft of the Bill no. 544/PJL/AN 1993 : p.16).

The 1992 version is similar. The opposition, backed by a number of MPs of the parties of the ruling coalition government amended that section as follows:

"Standing volume of timber shall be attributed by the Minister in Charge of Forests after the recommendation of a competent commission, for a non-renewable maximum period of one year". (Law no.94/01 of the 20th January 1994: 9).

MPs who defeated the Government on this article argued two points. Firstly, proceeding by auction to give access to logging activities in the national forest estate would have put Cameroonians out of competition for this type of forest exploitation, as they are not wealthy enough to compete with

foreign logging companies. Secondly, the auction system was a sell-out of the forest to foreigners.

However, technocrats who prepared the very first draft of the bill and who negotiated with the World Bank delegation have another view of the matter. Auctions were meant to increase state income from forest exploitation (the standing volume of timber) and to put an end to a 'murky' granting of licenses which leads to corruption (Informant, senior civil servant, 1994).

Beyond the apparent motives above, nationalist argument versus economic rationale, there were other interests at stake. Some of those MPs arguing for a nationalistic stand had a hidden agenda. There were political motivations. The 1994 Forest law was, and still is, very unpopular, it was hotly debated. People in rural areas irrespective of their tribes and blood ties, or other connections with the ruling coalition, were fearful of losing the land of their ancestors. MPs were very much aware that they could be defeated as a consequence of people's anger in the forthcoming elections. Cultural beliefs and ancestral ties to the land are strong enough in rural people's minds to outweigh any loyalty to their representatives. MPs portrayed as traitors to their ancestors would certainly find it difficult to keep their seats during an election. A heady mixture of politics and cultural beliefs and values is certainly one of the characteristics of politics in Africa. The second motive for the dissent of MPs was their financial interests.

Some MPs are involved in logging activities either as shareholders in a logging company or as owners of licenses leased by logging companies. Hence paragraph 3 of article 45 of the

bill was viewed as a threat to their interests. Foreign logging companies with larger capital could easily take over their areas of the forests in case of a public auction. The third motive is related to their power and privileges. MPs enjoy a number of privileges such as access to the decision-makers. Intervention for the granting of a license or authorization for a friend is common place. Thus the auction system meant for them the end of this privilege and a reduction in their power over the bureaucrats.

It is surprising that the government gave in so easily on article 45. Amending paragraph 3 of article 45 should have been applauded by the government. It gives the government room for clientelistic manoeuvre: rewarding friends, buying off potential opponents and depriving enemies. It also offers the Minister of Forests bargaining power when he deals with MPs and other interested groups.

The defeat of the Government on this paragraph suggests two things. Firstly, a slow change in the political culture as parliament has moved from having a figurative role to a more effective one. However, is this a new trend or a one-off event? Forthcoming debates in parliament will be more instructive on this point. Secondly, an innovation in the practice of politics, the Cameroon parliament has experienced in its new political environment of semi-democracy a non partisan vote. This cross-party political manifestation could be repeated whenever a major issue related to cultural beliefs or values is at stake.

The second example of the impact of forest policy documents on

the 1994 forest law, deals with the time span and the area of concession given to the logging companies. Forest policy documents in 1992 and 1993 were vague on the issue of the duration of the concession. They used the phrase "long period of time" (1992 : 19) (1993 : 20) to indicate the duration. The draft of the Bill submitted by the Government to the Parliament was explicit. Paragraph 2 of article 46 states:

"Management-exploitation contracts shall be concluded for a maximum renewable duration of 25 (twenty-five) years. They shall be assessed every five years." (RC Bill no. 544/PJL/AN)

The same draft suggested a maximum total of 500,000 hectares to be conceded to the logging companies (article 49). The WB's influence is obvious. In 1992, the World Bank argued that concessions of long duration, and extended area were the best for achieving sound forest exploitation and efficient conservation (WDR, 1992). The Parliament amended both articles (46 and 49), reducing the duration of the concession to 15 (fifteen) years and the area to 200,000 hectares. The amendment of article 49 which relates to the area of concession is in fact a restatement of article 24 of the former forest law. No clear-cut conclusion concerning the impact of forest policy documents on these two articles of the 1994 forest law can be drawn.

The third example refers to the volume of logs for export. Following the ITTO recommendations, the 1992 Forest policy document suggested a gradual decrease of log exports and its complete ban by the year 2000 (MINEF 1992 : 8). The 1993 document was more precise, as it suggested processing 80% of

timber in Cameroon and just 20% for export (MINEF 1993 : 8). However the draft of the bill submitted to parliament increased the quantity of logs for export to 30%. The majority of MPs rejected the idea of exporting logs at all, considering that timber should be processed by local industries before being exported. Three arguments underpin their stand:

- Processing timber in local industries would create new jobs in remote rural area and this could revive the local economy.
- The Cameroon economy and state will benefit more, as added value on processed timber will be higher; various taxes could also be collected by the state.
- It provided a good opportunity to modernise the sector and attract genuine investment into forest industries.

Behind the curtains and in the corridors, a group of ultra nationalist MPs whispered other reasons to defeat the government on this article. Banning log exports was (for them) the best way of:

- * Stopping the anarchic exploitation of Cameroon's forest by foreigners and the smuggling of logs via neighbouring countries.
- * Assessing the real intention of logging companies.

Pressure from the French government and lobbying of the logging companies forced the Government to use all means possible to get the provision passed. The last meeting of the plenary session of the Parliament which was meant to vote on the amendment and the whole Forest bill, was postponed for about six hours. The French Minister of Co-operation for overseas development flew from Paris to Yaounde on the 4th January 1994 as a matter of

urgency to meet both the President of the Republic and later the Speaker of the Parliament. In a short interview with the state owned television, Michel Roussin the French Minister portrayed this as a courtesy visit. As a matter of fact it was most probably a lobbying visit exerting strong direct pressure from France. This visit on the day of the last meeting of the national assembly had two consequences:

- It made the government more determined to reject the amendment and to get the bill through.
- It delayed the whole proceedings.

The second point turned out to be determinant for the future of the bill. This meeting of the parliament called an extraordinary session. It was the last one for 1993 and the next was due only in June 1994. On the one hand the constitution states that no prolonging of an extraordinary session is possible. On the other hand the government refused to allow the examination of the bill in the coming session which was June 1994. All the ingredients for high politics were there: external pressure on the government, a division of the coalition on the issue, dissenting MPs who rejected the partisan vote and party discipline, opposition to the bill by public opinion, and the revival of nationalist feeling. High manoeuvres to break the stalemate were then used. The Speaker of the House, after consulting the leaders and chairman of the parties represented in the Parliament, and referring to the MPs, decided to entrust the Secretary General of the National Assembly with the task of rewriting paragraph one of article 71, after individual consultation with the leaders and the chairman of each party.

The final version of paragraph 1 of the disputed article 71 was then incorporated into the rest of the Bill as follows:

"70% (seventy per cent) of the forest products shall be processed by local industry" (RC, 1994).

Three observations can be made. Firstly, by transferring the duty of discussing paragraph 1 to the leaders and the chairman of the parties, the Speaker's strategy was exposing this group of people to various types of pressure including corruption, political blackmail and lobbying. Secondly, the procedure was non-democratic as it excluded many MPs who should be able to express the concerns of their voters. Finally, the move was unconstitutional. Article 13 of the current constitution states that the Parliament passes laws or bills on a majority vote of MPs. However the Parliament can authorize the President of the Republic to take some decrees that have the effect and power of law (article 21 of the constitution). In the case of the 1994 forest law, especially article 71, it was neither the President of the Republic, nor the Parliament, but some MPs with the support of the technical staff of the Parliament who agreed the law.

Article 71 is certainly the most detrimental provision in the new forest law. It is forest destructive and economically counter-productive as it expresses the quantity of logs to be exported in terms of a percentage of the total logged instead of giving an overall limiting quantitative volume. Logging companies will fell as many trees as they need to meet the demand of the market. The quantity of logs to be exported does not depend on the quota. It depends only on the needs of the market. In other words the system of quotas gives room for manoeuvre to logging companies

as their quantity can increase within their quota provided that they fell enough trees to reach the internal quota of 70%. Indeed, one could go further and argue that the lucrative export market could drive excessive and unnecessary logging for the domestic market just to increase the export quota. Cameroon forests would have been better protected if the quantity of logs to be exported was expressed in volume, in cubic meters rather than in a percentage.

The new forest law is a poor compromise between the WB proposals, the Cameroon government's economic policy, logging companies interests backed by external actors, private interests of Cameroonians including some MPs and Government officials, tinged with a flavour of nationalism. Certainly, it is inspired by the 1993 forest policy document on many points.

Both documents have interesting new elements with relevance for sustainable development. There is an attempt to involve rural people in the management of forests and to give them a share of the benefits. An attempt to rationalise the exploitation of forests was also made. This included the linking of exploitation with management; or allocating sections of the forest to the national estate, communal estate and council estate; describing possible use of these areas; and recommending an environmental impact assessment. However these measures alone are insufficient to promote SD.

Article 7 of the new forest law which acknowledges people's right to use the forest, also sets out a number of restrictions including the possibility of temporary suspension of these

rights. The fate of a number of other articles depend upon Government decrees to enable enforcement. When will the decrees be passed? And would they not alter the content or the meaning of articles proposed by the Parliament? Past experiences in the forest sector have shown that Government has never been in a hurry to pass decrees of enforcement. For instance, the decree to enforce the former forest law voted in 1981, was taken 3 years after the production of the law.

The new forest law is tough on rural people. Articles 14, 15 and 16 of the new forest law referred to the clearance of forest by bushfire, yet only rural people are involved in these forest destructive activities. Tough sanctions will be taken against people infringing the law (RC, 1994). A deep analysis of all articles related to the punishment for infringing the 1994 forest law suggests that the toughest measures aiming at protecting the forest will affect poor rural people more than the logging companies. Uncertainty surrounding the notions of a community forest in country with multiple tribes is another weakness of the new law (Watts: 1994). The weakest point of both the 1992 and 1993 forest policy documents and the new forest law in promoting SD lies in the total exclusion of indigenous people. There is not a single reference in the three documents to their rights, their livelihoods or their future in connection with logging activities.

VII.1.3: THE DEEP CONSTRAINTS OF A PROTECTIVE FOREST POLICY

There are two major constraints to the implementation of a coherent forest policy: external interference and the lack of

political commitment by decision-makers. External interference in economic matters (including forest exploitation) has increased remarkably in the late 1980s and 1990s. The economic crisis has made Cameroon dependent on the WB/IMF and France for loans and investment (Eboua, 1995). These two parties have in some cases different interests. But in general the action of the WB has been profitable to France's economic interests. For instance, the opening-up of the East Cameroon forest recommended by the World Bank to the Cameroon Government has benefited French logging companies (Pearce, 1994). Equally, the new forest law pressed by the World Bank is beneficial to French and Italian logging companies as they can carry on exporting logs in an unsustainable manner. Even when the WB indicated its willingness to reverse its traditional forest policy in Cameroon, the balance of power within the different sections of the World Bank halted this move. Thus far the WB's view on Cameroon's forest policy has been characterised since 1991 by two apparently contradictory trends which have promoted instability in Cameroon forest policy. On the one hand there is the resource view of the forest. Maximize profits from forest product exports in order to increase export earnings and the state's revenue. This view ignores the rights of indigenous people. This was the case of the first version of Tropical Forest Action Plan which was blessed by the World Bank (Winterbottom, 1992). The same exclusion of Bakas appears in the 1989 WB document on agricultural policy, and recently in the forest policy document. On the other hand, the WB gives the impression of being more aware of the situation of rural and indigenous people. For instance the Bank has reviewed

in 1990 its indigenous people's operational directive (Dyson, 1992). Hope of change was raised: rural and indigenous people could be taken into account when forest policy is designed.

In the case of Cameroon, the resourcist view seems to be the more dominant within the World Bank. During the latest WB mission on "Forest and Environment" in Cameroon, the delegation was dominated by economists. The head of the delegation was an economist, there was a specialist in fiscal matters, and an anthropologist. In spite of the desire of the anthropologist to secure permanent access of Bakas to forest resources, this point of view never appeared in any forest policy document published since 1993. Eventually she received verbal assurances during the meeting with Cameroon officials (informant, senior civil servant, July 1994). The economic and resourcist view, the traditional standpoint of the World Bank are perceptible in both the 1993 forest policy document and the 1994 forest law.

Cameroon decision-makers have to take their share of the blame. They have endorsed the World Bank view and have been passive vis-a-vis French pressure. However, the most damaging factor to increased forest protection is the lack of forest policy. Indeed, Cameroon does not legally have a forest policy. Neither the 1992, nor the 1993 forest policy documents have yet been officially endorsed by any political body, the President's Office, Prime Minister's office or the Government, as the forest policy of Cameroon. This has created a vacuum and could give the wrong signals to various actors in the forest sector.

VII.2 THE IMPACT OF LAND TENURE SYSTEMS ON FOREST PROTECTION AND SD

Good land tenure systems are conducive to environment conservation and SD. Securing people's rights to land is vital for long term conservation strategies (Mearns 1993), for SD (Chambers 1987; IFAD 1992), and for good agricultural production (WB 1989). No consensus exists over the positive impact of rights and entitlements on conservation and SD, though the nature of these rights differs from one end of the political spectrum to the other. For instance the left wing stresses the absolute rights of people over their lands (Colchester and Lohman 1993). Such a normative stand, raises a fundamental question: how should these rights be promoted?

Latin America's experience of land reform in the beginning of the 20th century suggests two models: liberal "state-led-reform" or radical "people-press for reform".

Analysis of both models suggests that land reform was initiated within a political framework. Populism in Mexico in the 1930s with land reform and promotion of the Hacienda is the best example of the political dimension of land reform.

This section argues that the Latin American model of land politics cannot be duplicated in Cameroon. Land politics in Cameroon developed in a different way. Cultural beliefs and local history are dominant features of land politics and the controversy over the 1974 law on land tenure reflects the entanglement of ethnic politics, requirements of modernization and the state ideology of national unity. Finally, it is argued that as with the 1974 land tenure law, the 1994 forest law fails

to address the issues of forest protection and SD through the reform of the land tenure system.

VII.2.1: POLITICS AND LAND TENURE REGULATION UNDER THE 1974 LEGISLATION.

A series of ordinances published in 1974 lay down the land tenure system in Cameroon. These ordinances 74/1, 74/2 and 74/3 of 6th July 1974 have been modified a number of times. Before 1974, three systems of land tenure used to exist. One related to custom, another known as the "written law system" was in force in the French speaking part of the country and a third one based on customary law was in force in the English speaking part of Cameroon. The 1974 legislation merged the three systems. It also extended the area of the national estate. Under the 1963 land law, the national estate encompassed vacant lands and lands without owners. The 1974 legislation extended the national estate to occupied lands provided that the occupants or exploiters had no legal title on these lands. Such extension of the national estate restricted the number of people likely to claim permanent rights by virtue of occupancy. The second innovation of the 1974 legislation was the state's new role in land matters.

Paragraph 2 of article 1 of the ordinance 74/1 states:

"The state is the custodian of all lands. By this virtue, it can intervene to ensure a rational use or to take into account the imperatives of national defence, or national economic policy" (RUC, 1974).

This new move does not imply that the state owns all lands. Nevertheless the State will have a say in all lands whenever it is found to be necessary. The 1974 legislation differentiates

between the occupancy status and permanent rights. In theory, individuals under the 1974 legislation can occupy and use national estate lands as long as they are not protected or reserved areas. This apparent liberal legislation has benefited some farmers in the late 70s and early 80s, mainly those in the South and Centre provinces involved in commercial crop activities.

Historically, individual's rights over the land under title deeds did not exist. Individuals enjoyed usufruct rights on their ancestors lands. Thus communal ownership, as lands belonging to the community, was the main land tenure system (Tchouen, 1982). The 1974 legislation reinforced the idea of communal lands and common ownership, but also endorsed social change in communities by making individual ownership easier. From the conservation stand point, communal ownership is a gamble especially in a market economy environment. It implies a developed sense of the "commons" which is shrinking in modern Africa. The economic rationale and population growth have led to the deforestation of areas where traditional techniques of forest protection were abandoned e.g Banya in Douala city.

The 1974 ordinances fails to overcome the heady land politics problem: that is the issue of the access of non-natives of a given region to lands in other regions of Cameroon. Can any Cameroonian settle in any communal land, have usufruct and claim legal right on it? Does any Cameroonian have the same rights to lands everywhere in Cameroon irrespective of his ethnic group?

Herein lies the tricky problem of building national unity. Recently, this issue has gained a new dimension with the shaky democratization process. MPs are elected on a regional basis. Constituents and voters tend to vote in general for a native of their region. In such conditions, inhabitants of a given region should by their majority, be the natives of that constituency. An imbalance in the composition of the population of an area could change the balance of power in the constituency.

The land politics expands to the field of economic and financial interests. Controlling wealth is an instrument for power. Land, forest products and mineral resources found in the forest are valuable assets for accumulating power as well as being potentially beneficial for development. They should therefore be controlled by the natives of these regions (Mbome, 1992).

The 1974 ordinances were designed to reflect the social realities of Cameroon. These were and seem to remain ethnic politics inspiring land tenure regulation. Cameroonians can own lands everywhere in Cameroon and enjoy their rights provided they bought the land. They can only use communal lands or occupy them if they have the consent of the community. Even occupancy of the land of the national estate by a non-native should be submitted to the approval or consent of the neighbouring community (RUC, 1974).

Cameroonian scholars are divided on the issue. Tchouen rejected the 1974 legislations as being in contradiction with the official rhetoric of national integration (1982). Mbome, to the contrary, acknowledges the symbiosis between land tenure regulation and the social realities (1992). These analyses are not neutral.

Tchouen is a native of a migrant ethnic group, the Bamilekes. This group is originally from the most densely populated region in Cameroon, the west. This group usually claims to be discriminated against. Mbome comes from a group which has very strong ties with the land and ancestors the Bassas. This group is found in the Centre province, one of the lowest density area and one of the largest forested areas. To some extent both scholars defend interests of their own groups though they claim to make objective analyses.

Blame can easily be put on the 1974 legislation on land tenure systems. Nevertheless, the issues connected to land tenure go far beyond the land tenure system per se. It is a highly political issue which should be fully addressed. Ethnicity, power, financial interests, and national unity are so entangled that only a genuine and appropriate framework set by politicians and the people could address the matter. Cameroon's case suggests that securing people's rights over lands is not easily achievable. Cultural, ethnic and political constraints need to be overcome in the first place.

VII.2.2: THE IMPACT OF THE 1994 FOREST LAW ON THE LAND TENURE SYSTEM.

The 1994 Forest law does not explicitly refer to land tenure. And the land tenure law has not yet been harmonised with the new forest law. However article 20, paragraph 2 suggests a close link between the notion of land and forest: forests are located on lands. Thus regulations over forest should inspire

the land tenure regulation. The analysis is based on the assumption that harmonisation between the land tenure regulation and the forest law will come about, provided that the governments' environment policy is consistent. If this will be the case, it could be argued that the 1994 forest law has created three categories of land: state lands or national estate; council lands or council estate; and community land or community estates. State lands cannot be owned by a council or individual. However, the local population or natives where the forest is located, "shall maintain their customary rights" (article 26 paragraph 1). Customary rights refers to the rights of use according to the French version of the 1994 law. However this right to use is strongly monitored, thus fragile. The same article 26 paragraph 2 warns that these rights may be limited in some cases. Importantly the access to state forests may be regulated or prohibited.

The principle of the rights of use being given to the local population does exclude the possibility of claiming any permanent right on the state land. People can use it but their rights cannot be secured. Another restriction set by the law is that only natives of the region where the lands and forests are located can have the right of using the forests. Non-natives are excluded. The 1994 forest law on this point of ethnicity and land has reiterated the social realities already stated in the 1974 ordinances.

Council forests can also be considered as council lands. The 1994 forest law gives the rights to local populations (natives) to use the land; but it denies ownership rights on any part of

council land or forest to individuals (article 30).

Community forests (or community lands) belong to the village communities. The 1994 law is vague on the issue of sharing the lands among the members of the community. The precedence and practices observed in rural areas before 1994, show that as populations grow and economic interests derived from land exploitation increase, people tend to claim individual ownership rights. This is the case in Lekie Division where 60% of disputes brought to court are land-related issues involving people of the same ethnic group (Mbome 1992). The 1994 law can be confusing as it does not refer to the 1974 ordinances on land tenure. The issue is therefore one of co-ordination of the forest law and the land tenure regulation.

Access to land and legal entitlement over land for natives give a liberal appearance to both 1974 land tenure legislation and 1994 forest law. For non-natives, access to land is rather difficult as long as they have not got the consent of natives. Even a liberal legislation would not promote entitlements for every Cameroonian, anywhere in Cameroon. Attitudes, beliefs (ties with the land of the ancestors, or home to the soul of the ancestors) and behaviour of rural people exacerbated by politicians and other tribal interest groups would undermine such legislation.

A weakness of the mainstream thought over promoting entitlements and "securing rights", lies in the scholars failure to question the practicability of such solutions in African countries and social context. The legal aspect of the issue was prioritized.

The politics of land tenure was underestimated. The cultural aspect, the attachment to the ancestors' dwelling place and the symbol of the land as the link between ancestors, the present generation and future generations were overlooked. Working out a lasting arrangement which secures access for everyone to land everywhere, needs to be preceded by an examination of the former issues. Even political will such as that which brought about land reform in Latin America would not be enough. Cameroonian cultural differences and the current political environment are not conducive to the Latin America models of land reform.

VII.3: INSTITUTIONS, POLITICS AND UNSUSTAINABILITY.

Good forest policy should take into account the institutional aspects of forest management (Hummel 1984, Hursh 1987). Hence institutions play a major role in promoting sound forest policy and eventually forest protection. Hursh's diagram (above) shows a complex network of linkages and a large number of actors. The issue is, therefore, one of the choice of institutions. Which institutions to involve first and what would be the effect of involving many or few institutions in forest policy design and implementation? And how could one ensure their co-ordination in order to avoid crippling the whole system? Assuming that the co-ordination is satisfactory, does it lead necessarily to efficiency amongst the institutions involved in forest policy? Or are those institutions engaged in a competitive race for resources and a struggle to increase their share of influence in the decision making process? These issues go beyond our initial research focus. Nonetheless we shall examine the functioning and

the co-ordination of institutions involved in forest policy in Cameroon in the light of these theoretical questions. The analysis of the politics of these institutions gives us further insight into the sustainability of forests and development.

VII.3.1: TOO MANY INSTITUTIONS AND POOR CO-ORDINATION.

Nine institutions are directly involved in forest policy making and implementation. These are:

- The Prime Minister's Office
- The Ministry of Environment and Forests
- The Ministry of Agriculture
- The Ministry of Urbanization and Housing
- The Ministry of Industrial Development and Trade
- The Ministry of Tourism
- The Office of Forest Development (ONADEF)
- The National Assembly (Parliament)
- The Presidency of the Republic (President's Office)

The Prime Minister's Office plays a liaison role. The Prime Minister runs government activities (article 9 of the Constitution); by this mandate, he has a say in any deal, any initiative or plan carried out by ministries involved in forest policy.

The Ministry of the Environment and Forests is mainly responsible for forest policy. The decree 92/069 of the 6th April 1992 details its attributions. These are:

- Elaborating the national policy of environment, co-ordinating its implementation and assessing the results.
- Making proposals of rational management of natural

resources in collaboration with other ministries and specialised bodies.

- Ensuring public awareness, and the ministry's involvement in the management, conservation and restoration of the environment.
- Enforcing national and international regulation of environment protection.
- Working out sector-based plans of environment protection in association with related ministries.
- Negotiating international agreements and conventions related to environmental protection.

In theory, the Ministry of Environment and Forests plays the major role in forest policy design and implementation.

The Ministry of Agriculture previously in charge of the forest sector still has a considerable impact on forest policy. Firstly, economic recovery depends partly on commercial and food crop exports (WB 1989). Secondly, food self-sufficiency, a pillar of Cameroon development policy, requires land. Both are essential elements in economic development, and depend on land availability including converted forest areas. These objectives provide the Ministry of Agriculture with a say in land and forest matters.

The Ministry of Industrial Development and Trade is responsible for the industrial and trade policy of Cameroon. It intervenes in all exports of industry-related activities. Hence forest industries and the timber trade are supervised by this ministry.

The Ministry of Housing and Urbanization is involved in all matters concerning the use of lands for settlements, urban expansion and the national estate. With the phenomenon of rapid expansion of towns and the subsequent clearance of forests, its activities overlap with some of those from the Ministry of Environment and Forests.

The Ministry of Tourism manages the development of tourism, national parks and reserves. These are important components of the national forest estate and their management necessarily affects the Ministry of Environment and Forest's activities.

The Office for Forest Development (ONADEF) is the state implementing body for forest projects (mainly afforestation, reforestation and restoration of damaged soils). In theory, it works under the supervision of the Ministry of Environment and Forests.

The National Assembly (Parliament) has again in theory a political role, to initiate and discuss drafts or bills related to forest policy or activities. Before 1992, this political role was superseded by a technical one. The MPs' real input into bills was the technical improvement in the quality of the bills (in terms of making them more understandable). Since the introduction of the multiparty system in 1992, Parliament has played both political and technical roles. The amendments of the 1994 forest law, and the defeat of the government on some articles are examples of this new role. Parliament's constitutional capacity of checking and questioning the Government gives it the opportunity to intervene in forest policy even at the implementation stage.

The Presidency of the Republic (President's Office) also intervenes at both political and technical levels. It initiates and determines the overall economic and development policy including environment policy. It also endorses the choices and management of the State's agencies. Finally, through its Secretary general, "it sees to the implementation of action plans approved by the Head of State" (decree no. 92/070 1992).

Alongside the State's institutions, private and international bodies also intervene in Cameroon forest policy, directly or indirectly. These are, the trade union of logging corporations, other interest groups who wish to gain access to forest land, the World Bank, FAO, UNDP and some donors countries. All these institutions make an input into forest policy. The problem is not so much the number of bodies involved, but achieving the efficient co-ordination of all the actors.

Decree 92/069 concerning the attributions of the Ministry of Environment and Forests partly gives this department the co-ordinating role. The Ministry co-ordinates the activities related to the implementation of forest policy. This is a post-policy-design co-ordinating role. None of the other institutions or actors have been formally granted the policy design co-ordinating role. Hence there is a legal vacuum and two negative consequences:

- A lack of direction to guide various actors' inputs.
- Open competition for various inputs to become the core proposal or the dominant element of forest policy.

The lack of direction has led to a situation of floating and uncertain forest policy; for instance the frequent change of

forest policy documents (1992 and 1993 proposals).

The ethos of competition has led to a forest policy dominated by the input of the most influential lobbies and institutions. For instance the most important articles of the 1994 forest law have the World Bank's "stamp" and France's "shadow".

Neither the Prime Minister's office, nor the Secretary General of the Presidency, which should have been this policy design coordinator, has played this role adequately. This failure was recently denounced in an internal report by the Ministry of Environment and Forests (MINEF, 1994). It pointed out the lack of a mechanism for inter ministerial co-ordination (MINEF 1994). There are two explanations for the lack of co-ordination in policy design. The creation of the Ministry of Environment and Forests was not followed up by a restructuring of the Prime Minister's office or the President's office. Specific desks in charge of this new file were not created. The President's Office encompasses various divisions, each of which is in charge of a set of files related to the activities of each Ministry. The creation of a new Ministry should normally be followed by the restructuring or the creation of a new division (or at least a new desk) to ensure the follow up of the file at the Presidency level. In 1992 this was not done despite the creation of the Ministry of Environment and Forests. Such desks would have been instrumental in channelling various competing inputs into the system, while securing the main points, the core of the Government forest policy.

The second explanation is political power struggles among various

government institutions.

VII.3.2: POLITICS WITHIN INSTITUTIONS.

Open political systems are receptive to lobbying. Outputs of such decision-making systems are often a reflection of the existing balance of power among actors. In Cameroon as in other pluri-ethnic African states, the power game gets more complex given the ethnicity variable; and recently the complexity has been further increased by the advent of a multiparty system and coalition government.

Where decisions used to be taken by a government which spoke with a single voice, the half-way house democratisation has introduced new parameters into the murky black box of decision-making. The end result is: too many players in the system, less co-ordination and a power struggle among institutions involved in forest policy.

The lack of a policy design coordinator has led to the reversal of the former hierarchy of government institutions and to the abuse of power. Inputs likely to have a significant effect within the system are those well connected in the state apparatus. Such inside channelling implies a powerful middle-man (friend or relative) or institution. Thus the real power of any structure depends less on the official hierarchy and formal attributions than the network of contacts at the head of the structure and the ability to use these effectively. Three kinds of relationships are often encountered: a blood tie, common financial or political interest or other connections such as membership of the same secret society - (Freemason or Rosicrucian

lodges).

The share of power or influence of a structure also becomes greater according to the head of the structure's position in the dominant party or the position of his party (strategic, vital or not) in the coalition. Recent events in Cameroon polity, politics and forest policy are enlightening. In 1991, the Cameroon Pulp and Paper Company (CPPC) took over the ex-Cellucam Cameroon parastatal that went bankrupt. Mr Rene Owona, then Minister of Industrial Development and Trade and now special adviser for the President of the Republic negotiated the deal alone without referring to the Minister of Agriculture, then in charge of forests, or the Prime Minister. The deal partly concerned forest exploitation, possible logging activities and the extension of concession areas. None of the institutions whose competence and domain were overlooked reacted. The Minister of Industrial Development's conduct could be explained by three factors:

- His special ties with the President of the Republic. He was and still is his close friend. This unique position obviously deters his colleagues from questioning his actions.
- The government desperation to seal that deal and a possible direct "go ahead" given by the President.
- The period when the deal was made. It was during a period of political turmoil in Cameroon. Thus the Government could not afford internal division on such a "low politics" issue.

In July 1994 a complex case of power politics between

institutions broke out. Madeng Ambassa the new Minister of Industrial Development and Trade issued two edicts (000.008/MINDIC/ONZFI/ of the 4th January 1994 and 000009/MINDIC/ONZFI/of the 17th March 1994) granting the status of free industrial zone to some logging companies. Article 74 of the new forest law states that such authorization can only be granted jointly by the Minister of Industrial Development and the Minister of Environment and Forests (RC, 1994). By acting thus, without referring to or consulting his colleague in the Ministry of Forests, Minister Madeng violated the law. Though he did not survive the political crisis following this violation, he resisted for a while and the authorizations were not withdrawn. Politically, the Cameroon Government is a coalition of four parties: CPDM (the dominant partner and the President's Party) MDR, UNDP and UPC. The Minister of Industrial Development is a member of CPDM. The Minister of Environment and Forests belongs to the tiny MDR party. In terms of the balance of power within the coalition the MDR does not have any bargaining power. Even if it pulls out, the coalition can still govern. In terms of priority, the Cameroon Government puts the highest priority on industrialization and export earning including (logs exports). The Minister of Industrial and Commercial Development was well backed in terms of connections compared to his colleague at the Ministry of Environment and Forests. He used to be a close collaborator with the former Minister (who is the friend and now the special adviser to the President of the Republic). Minister Madeng is a member of the CPDM and he belongs to the same ethnic group (Beti) as the Secretary General of the Presidency and the

Secretary General of the Prime Minister's office. By contrast, the Minister of Environment and Forests had very poor connections in this network. His only support would have come from his party leader. Furthermore, the weight of his party (MDR) in the coalition is negligible. It is unlikely that his leader would have provoked a major crisis on such a minor issue. The balance of power among institutions is sometimes deeply rooted in the balance of power among the parties.

Despite the violation of the law, no action was taken by the Government. The edicts granting the new status were not annulled, nor has the Minister responsible resigned. Parliament then stepped in and pressed the Minister to withdraw his edicts. But he refused to do so. How could a head of department abuse his position, overlook his colleague, challenge the Prime Minister's office, and refuse to comply with Parliament's recommendations? Explanations can only lie in the support or backing he then enjoyed, the balance of power in the coalition, the weight of various institutions involved in this controversy, and the overall balance of power between the Executive and Parliament.

CONCLUSION

Cameroon has a narrow understanding of forest policy. The Ministry of Environment and Forest stresses the managerial role of forest policy and the utilitarian functions of the forest (MINEF 1993:8). A detailed study of the forest policy documents at the beginning of this chapter and the 1994 forest law, based on a content analysis and word count methods has confirmed the

ultimate goal of the forest policy: to promote economic development through the exploitation of forest resources. Even conservation measures envisaged or taken, have finally aimed at promoting economic development. Hence there is an imbalance between economic objectives, conservation requirements and people's needs.

Forest policy has another weakness. It is a sector-based policy. Such a sector-based approach is prone to problems such as lack of co-ordination and global vision. Finally forest policy was overwhelmed by the politics of the forest. Actors interests have given rise to a power struggle which has paralysed a poor decision-making system. A major outcome was the inability of the Government to resist or oppose external pressure and lobbying. Subsequently it failed to find a balance between the interests of all the actors. Yet the disarray of forest policy did not affect the issue of land tenure.

In spite of a consensus among scholars to increase people's rights over land, Cameroon land tenure regulations remain the same. It sticks to the realities of the social structure. So far it has escaped from the fashion of change. How can one explain this permanence? Land politics involves ethnic politics, issues of national unity, cultural beliefs, financial and economic interests and survival of the regime; thus government tends to be very careful in its manoeuvring. The first phase of forest policy has seen the triumph of external actors' ideas. In contrast to the land tenure issue, the government has been passive in forest policy and people were virtually excluded from

the discussions over the future of their forests. But how long will forest policy escape from land politics?

There are signs that the artificial separation between both forest policy and land tenure issues (including land politics) will not hold. The exclusion of people from forest policy discussions could well be temporary. As the second phase, the implementation of forest policy comes about, people will react according to their interests and cultural values or beliefs. This new input at the second phase could reduce the importance of external actors, or at least it could force the government to review its position and practices. Such an input from the people is needed, and sustainable development implementation could well depend on some new balance developing.

CHAPTER VIII

THE POLITICS OF FOREST PROTECTION AND SD

INTRODUCTION

Previous chapters have highlighted some of the political dimensions of forest protection and SD. Indeed, politics seems to be a common denominator in all of the chapters. Arguing that politics is the only element which can explain the inability of Cameroon to protect its forests and promote SD appears odd. Yet it could be the vital element, the central determining factor around which other factors revolve. Such a position is slowly finding a growing acceptance as research on SD progresses and the implementation of various development programmes confront serious setbacks. The Ecologist argues forcefully that the essential problem is political (1993). Others pinpoint it also, Colchester and Lohmann (1993) talk of structural inequalities in society. But how are these structural inequalities to be overcome without reversing the existing order and balance of power between the haves and the have-nots? Even leading multilateral development agencies have sought political explanations for African misfortune. The World Bank has talked of the failure of public institutions (1989) and the need for "political entrepreneurship" (WDR 1992). Its diagnosis of the problem led to a call for democratization and later adding a good governance conditionality to its SAP. A consensus began to emerge around the linkage between politics, the environment and SD. But in practice, does this analysis hold? In the case of Cameroon, it is the argument of this thesis that such a linkage can also be made. Development agencies and foreign diplomats alike agree that the problem of

economic reform and overall development is political. Interviews with senior officials of UNDP, the IMF, and a number of diplomats from European countries and the USA confirmed this (see section on methodology). Generally, these observers tend to associate the political problems with democracy: lack of genuine democracy is the root of the failure of development strategies and policies. In this work, political concerns are viewed more widely than democratic concerns alone. Politics is about complex interactions between various actors in the pursuit of a struggle over power or in the pursuit of economic and financial interests. Democracy in this case, is just one of the frameworks in which these interactions and conflicts can take place. Thus, is there really a case to suggest politics is jeopardising SD and forest protection? In other words to what extent does Cameroon politics hinder forest protection and SD placing these in jeopardy and how does this work? What are the mechanisms involved? Is the lack of democracy to blame as many suggest? Or are there other deeper explanations to discover? Our analysis will be divided into two sections. The first section examines the link between resource control and power struggles, offering an insight into the strategic relationship between wealth and power in Cameroon. The second section explores further the debate concerning the correlation between democracy, forest conservation and SD in Cameroon.

VIII.1: NATURAL RESOURCES FOR POWER.

Forests are natural resources and they must primarily be used for development purposes (MINEF 1992). This resourcist approach is

the dominant view among Cameroon policy-makers. Before the oil boom of 1979, Cameroon development had been funded mainly by commercial crop export earnings (MFC, 1995). The oil boom reduced the importance of these crops grown in converted forest areas (Willame, 1986). The post oil era combined with the deterioration of the terms of exchange has increased the importance of timber exports from the late 1980s. The real issue of the contribution to be made by forest exports to development is far deeper. Funding development projects is just one aspect of the debate. The vital aspect to consider is whether these exports have laid the foundations for a lasting development trajectory. What are these forest resources being used for? And who is using them? And to what extent can it be argued in the case of Cameroon that whoever controls the forest, controls power? Is there any relationship between the resource base and power? Can it be said that the use of national resources serves anything more than the sole purpose of economic development? Our discussion focuses initially on the possible link between natural resources (forests) and the power struggle in Cameroon politics. Hence, determining the balance of power in the forest provides the second focus of this section.

VIII.1.1: NATURAL RESOURCES AND THE LINKAGE TO POWER STRUGGLES.

Forests in the tropics symbolise natural resources for two reasons. They have an important total economic value (Pearce et al, 1989) and they are also the location for other important tradable products, including minerals. So far, two broad views on the use of forests as natural resources have been developed.

The first considers the use of the forests as a means to encourage the emergence of a leading national bourgeoisie. This bourgeoisie in connection with the state apparatus and politicians uses forest export earnings to build up the capital necessary for investment in the industrial sector and for overall development (Robinson, 1986).

Malaysia and Indonesia have followed this pattern though a number of allegations, including corruption and political patronage have been made (Colchester 1994).

The second view refers to the "politics of the belly" (Bayart 1992). Wealth generated from the extraction and export of natural resources is distributed to the supporters of the regime. The building-up of a state, the consolidation of a national bureaucracy and ruling class, clientelism and patronage are the ultimate purpose for which natural resource export earnings are used.

For the past 30 years, Bayart's model was relevant to many African countries, including Cameroon. Natural resources (timber, cocoa, coffee, oil) have benefitted the ruling elite who maintain the loyalty of their supporters, and ethnic relatives by redistributing part of the embezzled state wealth. Thus, contrary to the sultanate model of Asian countries (Colchester, 1994), forest resources have not contributed to the emergence of a national bourgeoisie prepared to promote capitalism and development. But as in the sultanate model, corruption, nepotism and political patronage have flourished thanks to natural resource exports, including forest products.

The "belly politics" model is no longer completely relevant to

the new situation of French speaking countries in SSA. Bayart's argument that by using natural resources the ruling elite can secure power and the construction of the state, through regional, local and ethnic loyalties, or through the building-up of a national bureaucracy or a broad national hegemonic alliance (1979; 1992) is now being superseded by a new trend. We name this model, the allegiance model. Natural resources are being used to secure the power of the regime through outsiders, external supporters mainly. The shift which has coincided with the economic crisis and the democratisation process has not eliminated the internal support. It continues to exist, though the number of supporters measured by the number of beneficiaries sharing the "cake" has diminished. The army, particularly the high rank army officers are still instrumental in ensuring the stability of the regime, thus they enjoy a share in various ways of the "national cake". Other categories of civil servants and ministers in strategic positions also share the cake, and when needed, they throw some crumbs to supporters. The formerly quasi-automatic support of one's ethnic group is also fading away. Such support re-appears however, when there is a civil war threat as was the case in late 1991 and early 1992 during the "ghost towns" period.

There are three possible explanations for this move towards the shift of model or paradigm. The first one refers to the shrinking "national cake", whilst the second concerns the new nature of the power struggle and the third relates to the weakening of the traditional channels of power.

The shrinking of the national cake as a consequence of economic crisis and the SAP has affected people's opportunities to receive, through intermediaries and relatives, their "crumbs". Part of the welfare system was based on non-official, clientelistic, ethnic and family networks. The same networks were also the channels or the networks of power. The paralysis of the networks of distribution due to the lack of wealth leads automatically to the crippling of a substantial part of the political support networks. For example, the closure of parastatals, unemployment, the privatisation of some firms, the cutback of wages and the inability of senior officials to "oil the machine" or to be "good chiefs" in recent years have destabilised the networks; the outcome is the reduction of the level of internal support for the regime. There could be a correlation between the level of support for the regime and its capacity to distribute wealth through the official and non-official networks. The decrease of support is more quantitative than qualitative as less people receive crumbs, less people support the regime.

The shrinking of wealth or the national cake however does not necessarily mean the shrinking of natural resources. For instance some sectors of raw material or mineral exports are booming while other are in recession. Log exports have been booming since 1987 while the cocoa and coffee sectors are in recession. What determines the size of the cake recently is the mode of ownership and management of the resources. Forests are traded by private companies, and commercial crops (since 1989) are also in private hands. This shift of ownership from the

state to the private sector has deprived the government of valuable financial resources and the necessary ingredients to sustain the usual internal political support networks. Hence the internal political support will come from those who are benefiting from the natural resources, including owners of logging companies and some businessmen. But, these beneficiaries are few in number, and their support is not sufficient to ensure the stability of the regime.

The second explanation relates to the new political environment. Democratization has created a far more complex picture of the politico-ethnic configuration of Cameroon. Some political parties are national-based, as is the case of CPDM, UNDP and SDF and to some extent UPC. However each of these tends to recruit the majority of its members from a specific ethnic or regional group. CPDM members are mainly from the Betis-Bulus groups, in the Centre, South and part of East provinces of Cameroon. Yet CPDM have members and supporters from other ethnic groups and regions of Cameroon. UNDP members come mainly from the Fulbes groups in part of far North and North provinces, though they have militants and sympathizers from groups in other regions. UPC is split. It is the most famous political party in Cameroon because of its role before and after independence. It led the rebellion against Ahidjo's regime and his French allies (Joseph, 1974). For these reasons, it used to have members from all ethnic groups. However, the Kodock faction of UPC recruits its members and militants mostly among the Bassas, in the Littoral and some divisions of the Centre province. SDF members and militants come

from various tribes. As such there is not a dominant ethnic group. However, most of its militants are from the English speaking part of Cameroon. His supporters come invariably from the West and the Littoral provinces. It is probably the only party of Cameroon without any ethnic dominance.

Other parties are regionally based, though they are trying to recruit militants or members from other regions and ethnic groups. This is the case of MDR whose militants and members are almost of the same ethnic group: the Toupouris of the Far-North. Given the total number of the population and the share according to ethnic groups, no ethnic group can have an absolute majority in the elections even if the vote is strictly along the ethnic lines. However there are three major groups in terms of size: the Bamilekes, the Betis-Bulus and the Fulbes. The last legislative elections have not given a clear majority to any party, which would have allowed it to govern alone. Thus Cameroon has a coalition Government of CPDM, UNDP, UPC and MDR. This coalition is however undermined as UNDP is divided over the issue of participating in a coalition. In February 1995, this crisis led to a split in the party, with the creation of a faction in UNDP whose leaders are members of the coalition government. The same kind of split had undermined UPC in 1992. In a shaky and changing political environment of unstable alliances, where there is a lack of a widespread lasting internal support and a clear majority to allow a government to rule, the ruling elite or regime tends to look for safer alliances or a safety net as they want to secure and to maintain their power.

The third explanation refers to the weakening of the traditional rulers' power. Authority used to be exerted at two levels in early 1960s: these were the national and the local levels (Susungi 1991). The national level implies party politics, the construction of an hegemonic alliance, the building of a nation-state and the setting up of a national bureaucracy (Bayart, 1979). The local level concerns the traditional rulers and their control over their subjects. These two types of authority legal and traditional (Weber, 1947) hardly co-exist in the same territory. In the case of Cameroon, a crisis of legitimacy, authority and loyalty to the authorities broke out. On the one hand, Cameroon government wished to have a genuine control over its territory and its citizens. On the other hand, traditional rulers wanted to maintain their hereditary authority over their subjects. The government used two strategies to extend its control and authority. Each of these strategies however led to the weakening of the traditional rulers' power and authority over their subjects; and subsequently to the destruction of one of the most effective channels of state power at the local level. The first strategy was co-operation. Traditional rulers enjoyed some constitutional recognition in Cameroon polity, and had a mediation role between the state and their subjects (RFC, 1961). Collecting taxes on behalf the administration, rendering justice on several matters (family, land) were their main duties. This co-operation strategy laid the foundations for a major aspect of the politics of the belly, since money and other facilities were given to the chiefs for their loyalty who in their turn could throw some crumbs to members of their entourage (Bayart, 1979).

As the administration was expanding, the government appointed personal representatives of the head of state in different regions and urged the traditional rulers to collaborate with them. The second strategy consisted in subordinating the authority of some chiefs to the local representative of the president. Traditional tasks formerly performed by the rulers were gradually transferred to the state apparatus such as justice, law and order up to a certain level, collecting taxes etc. In some cases, there was simply a duplication of tasks. This change of strategy was a serious blow to the power, authority and prestige of the traditional rulers in the eyes of their subjects. By implicitly limiting the field of competence of chiefs and transferring some of their power to the government representatives, the government ruined the myth and the legend of traditional chiefs. Such loss of the foundations of their power and authority had a devastating effect on the whole structure of power and the support network. People's support to the government via this network became uncertain (given the choice between a legal and traditional authority) and less efficient. Young people especially, distanced themselves gradually from the traditional authority. This move was rendered easy by the phenomenon of rural exodus. Traditional rulers used to have a better and more direct knowledge of each family (Susungi, 1991); thus influence and discipline in villages were greater. By undermining and loosening these ties, the government was losing his most influential ally at the local level. Democratisation in the late 1980s gave the final blow to the traditional rulers' power. Democracy implies freedom of thought

and choice. Chiefs and Kings had a serious dilemma, a difficult equation to solve: how to make their choice of political party according to their interests and convictions, whilst taking into account the government's expectations of support and their subjects wishes? Strong chiefdoms and kingdoms e.g Bamilekes and Bamoun societies of west Cameroon or the Fulbes societies of north Cameroon have suffered the most from democratisation in terms of the loss of the king or chief's authority. The division of urban elites over their political choices motivated by their personal interests were transferred to the chiefdom and kingdom levels. For instance, Fosto Victor, a Bamileke and the richest businessman in Cameroon gave his support to the CPDM candidate (Paul Biya) during the 1992 presidential elections. Soyem also from the Bamilekes ethnic group and a rich businessman too, backed the opposition candidate. This division of the Bamileke elite had consequences on the chiefdoms as the chief took the side of the CPDM candidate while the majority of his subjects were opposed to such a choice and voted for the opposition candidate. In another case, the sultanate of the Bamoun openly gave his support to the CPDM candidate to the 1992 presidential elections while his cousin was backing the opposition candidate. When traditional rulers interfere in democratised political life and take sides openly, they undermine their moral authority. A subsequent consequence is a loss of trust and loyalty to the ruler and a possible questioning of his ability to represent and to express the wishes of his people. Indirectly, it leads to the disappearance of an important network of internal support for the government and the president. A weak and undermined traditional

ruler is a useless ally and a dead channel of support for the president.

Bayart makes the mediation role of traditional rulers, the local and urban elite a keystone of his model. Networks of internal support and power were based on the existence and the actions of mediators (Bayart, 1979).

The above explanatory factors for the weakening of internal support suggest that new networks have to be found or old ones have to be reinforced. So far there are two major alternative sources of support to the regime: the army and external allies. The Cameroon government has secured a good relationships with the army by refusing to cutback heavily the wages of the senior officers as they did with other civil servants. Sixty percent of civil servants' salaries were cut whereas only 20% of the wages of members of the armed forces were cut (MFC, 1995). However, the army is not a monolithic or homogeneous body. Power struggles within the hierarchy, divisions along ethnic lines, the wage gap between high ranking officers and soldiers, and the race to individual enrichment undermine the unity of the army and impede its ability to conduct a coup d'etat. This paralysis gives room to manoeuvre to the government with some members of the armed forces offering their support and loyalties to the regime in exchange for personal rewards. Lack of unity in the army paradoxically also gives worries to the ruling elite, as isolated elements can rebel. The regime has attempted to secure external support in case such a scenario occurs.

The ruling class might also seek external support in the case of

an invasion from Nigeria. This was the case in 1993-1994 during the Bakassi affair. France sent some military advisers to Cameroon (Africa Confidential Vol 35, No 8, 1994). Finally external support is needed to resist external pressures and to have the necessary financial, and diplomatic backing when it is needed. In 1993, President Biya heavily relied on France to overcome the western community's isolation of the Cameroon government, following the disputed results of the 1992 presidential elections and the WB-IMF threat to suspend Cameroon from having access to international financial facilities (Africa Confidential, Vol 35, No 8, 1994).

But external support has a price. This price is usually in the form of financial or economic rewards. There are many examples of this. Privatisation of the former parastatals likely to make profit are sold at knock down prices to friendly foreign companies e.g. the Cameroon Banana Company, (potentially profitable) was sold to the French "Compagnie Fruitiere" with the excuse that it is not well managed and with potential difficulties for Cameroon bananas gaining access to EU markets. "Juicy" contracts for the exploitation of mineral resources are given to friendly foreign companies. The major logging exploitation licences attributed since 1987, were given to companies owned by French citizens including the former President Mitterrand's special adviser for African Affairs, who is also his son (Mr Jean - Christophe Mitterrand) (Pearce, 1994) There is a new trend in French speaking African countries' politics since the beginning of the democratisation process and the growing

economic problems in SSA. It consists of receiving external political support from France to overcome internal opposition, in exchange the government concedes to the French companies financial and economic facilities (a monopoly in some sectors, access to natural resources, share in privatised firms). When a leader resists such a deal, his job is at stake. Such as the case of President Lissouba of Congo who won the presidential elections in 1992 but was unable to rule the country because of continuous unrest. Congo experienced chaos and virtual civil war when president Lissouba signed an oil extraction contract with an American company, breaking the Elf monopoly. In central African States where France has major economic, financial and strategic interests, virtually all the former Presidents are said to have lost the elections, but many managed to remain in office thanks to the support of Paris. The tricky issue is the motive behind Paris' choice. Is it the natural resources or financial gains? There are a number of reasons why incumbents may be preferred. The first is their record is known and on this basis, choices can be made. The second reason is the existing networks through which business is undertaken. The third is the risk of shifting or changing alliances. The fourth one is the securing of financial and economic interests, including the control and exploitation of natural resources.

The argument here is, although France gives its support to the leader who defends its economic and financial interests best, other reasons including stability, geopolitics, cultural ties (fear of loosing the biggest area where french is the national language) and hegemony motivate its support for a particular

person.

The new model, the politics of allegiance does not totally dismiss the politics of the belly. It indicates the changes in process. It shows how the main support to the regime is shifting from internal support to a greater external dependency and support. It does not deny the importance of internal support rather it puts it into a different perspective. For instance, wealth

- redistribution for power is central in the politics of the belly: get richer, become powerful, redistribute some of the wealth to widen the network of people who are supporters and thereby grow more and more powerful. Wealth here is associated with the image of the cake, gaining financial advantage and a good job or position in the public service. There is a trickle down effect of the wealth.

In the politics of allegiance the pattern is different. Wealth is not necessarily accompanied by redistribution. It is wealth with very few beneficiaries. And wealth is more associated with access to natural resource exploitation or indirect advantages such as licenses to run a lucrative business or an opportunity to obtain a share in a good privatised parastatal. Allegiance is personal and direct, without major mediators (chiefs or kings) as is the case in the politics of the belly model. Hence wealth redistribution to obtain loyalties and to secure the leader's position is not as vital as it was in the politics of the belly. At best, political leaders spend money during their electoral campaign, as then they face competition. In the allegiance model

the government tolerates the use of natural resources by people for their survival, or because the government is unable to enforce law and order effectively within its territory. In either case the government's tolerance of people using natural resources is not to gain their loyalty or support, nor is it a conscious development strategy. It is a tactic to avoid further social tensions and acts to disguise its failure to promote sound development policies. The leader of the government party gets a great deal of his support from the external protectors. In return he secures their access to natural resources and commits his loyalty to them _ a Cameroonian president attended a francophonie summit (the annual meeting of French speaking countries Heads of states) for the first time in November 1991, precisely when President Biya was facing a fierce internal political opposition and he needed the firm support of his external allies.

Political Survival and Forest Use

The history of political stability in Cameroon suggests that various regimes (two so far) have used the forest either to survive a major crisis or to organise their conquest of power. Ahidjo (the first president) succeeded in his power struggle against his radical opponents between 1958 and 1973 (the UPC of Um Nyobe and later Woungly Massaga) by taking control of the forest of the West, Centre, South and South-East, then held by the rebels (Joseph, 1974). In some cases, forests were burnt as a military tactic to oust rebels by removing their cover (Ebaka, 1995). This was particularly the case in the Bassas' lands -the

Centre province. In other cases, forests were cleared and roads were constructed (by specialised army units), likely to facilitate the access of soldiers in forest areas held by the rebels e.g the road connecting Mbalam, Alati to Djoum in the south, was built in early 1970s, precisely in the triangle where the Woungly Massaga rebellion was very active (Ebaka, 1995).

Ahidjo also used the land tenure system as a political weapon to promote one of his main political goals, national unity. In 1974 the state became the owner of an extended national estate. Thanks to the large national estate, the Head of state (President) could control the use of the forests and could claim (on behalf of the state) the ownership of natural resources found in forest areas. This attitude resulted however, in ambiguous land tenure regulations whereby all Cameroonians in theory could use land of the national estate, provided that the area was not designated as a national Park or Reserve (RUC, 1974), in order to grow crops for export or for their food. The third use of the forest to secure the leader's power was its use for economic purposes. In this respect, the resourcist view of the forest is a long and deep-rooted thought and practice of Cameroon decision-makers. All Ahidjo's five year plans of development revolved around converting forest land into a variety of products, mainly through agricultural production. Encouraging Cameroonians to increase crop production and export crops was the main means to boost economic activities in the early years of independence. Bayart argues that the businessmen who took advantage of the emerging economic activities in the late 60s and early 70's, top civil servants and politicians formed a ruling class that he

called a "hegemonic alliance" (1979). This hegemonic alliance organised by Ahidjo was meant to promote further national unity and secure Ahidjo's power (1979).

President Biya (in office since 1982) has also used forest assets to secure his power and to maintain the integrity of the territory (Richards 1992). In 1984, Biya survived a coup d'état thanks to armed forces units based in the forest areas (in the provinces of Centre and South). Taxes from forest exploitation, mainly export of timber have been used since 1987, as the Government's oil revenue decreases to complement the national budget (RC, 1992). Equally turning a blind eye to forest use and misuse by people adopting survival strategies has prevented President Biya's regime from embarrassing riots and unrests. Forests have also been instrumental in sealing a political deal between President Biya and France. Yet the most obvious trade-off of forest resources for political power happened in the second half of 1991. A close friend of the President, Mr Rene Owona, then Minister of Industrial Development and Trade signed a deal with CPPC company. The Company agreed to provide 20,000 tons of rice to Cameroon. In return the Cameroon government would give the company forest exploitation facilities, including a licence for the exploitation and extension of the area of forest to be allocated (La Nouvelle Expression No 056, June 1992). This rice was meant to be distributed or sold to the inhabitants of Yaounde in case the capital city (blockaded by food producers of other provinces) ran out of food (MINDIC, Owona 1992). A blockade of the capital organised by the opposition party aimed to oblige people and civil servants to flee the capital, and thereby oblige

President Biya either to call for a national conference or to step down. It was a power struggle whose main weapon was food supply to the capital city. Though the government did not have to use this rice, it took its precautions to avoid a defeat. The price paid by the government was the extension of the forest area allocated to the CPPC. To some extent, the fate or survival of any regime in Cameroon seems to depend on its ability to use the forest. Events outside the forest shape the state of the forest. Yet, forests determine to a great extent politics in Cameroon. Any regime ignoring this correlation is likely to lead Cameroon to a civil war or to poverty, and the regime exposes itself to political oblivion. Hence we return to the issue of what forces are operating in the forests and who retains an influence thereby on the fate of Cameroon and Cameroonians?

VIII.1.2. THE BALANCE OF POWER IN THE FOREST.

It is too hard to imagine that the high stakes of Cameroon politics rest in the forest. At best the power of the forest was associated with the might of nature, black magic, traditional medicine; it was the dwelling place of ancestors and of wild animals. Yet the forest has considerably more power than that. The outcome of Cameroon's politics depends upon forest resource. Contrary to President Biya's famous statement during the power struggle in 1991: "As long as Yaounde breathes, Cameroon is alive", (1991), we would argue that the lungs and the heart of Cameroon are in the forest and will remain there until fundamental structural change of the Cameroon economy comes about. Hence, the vital issues are to determine what are the

forces operating in the forest or are engaged in the control of the forest, and how is the power struggle articulated in the forest.

In the case of the Amazon, Hecht and Cockburn have identified three main groups: the developers, the destroyers and the defenders, (1989).

In the case of Cameroon, five groups can be identified: people, corporations, the state, international organisations and non governmental organisations, and bilateral donors or foreign states. Some groups are directly and purposefully involved in forest politics and economy; others are indirectly and accidentally concerned. Two major characteristics emerge from the two groups.

First, neither group is homogeneous. Each has its own inner problems and division along interest lines or financial gains. People are divided along tribal or even racial lines as well as economic lines, e.g. Bantus tend to abuse Bakas' rights to forest. Logging companies also compete for access to resources. They look for the best and largest forest areas to exploit and the best deals to be made with local leaders, concerning exploitation of the community forest. Divisions also exist between Cameroon foresters and the foreign logging companies (Gahdir, 1995). The state itself is divided with its various bodies fighting each other, or individual policy-makers trying to secure the best deal or gain for their own sake. International organisations contradict themselves, run competing projects, design different policies, pursue different interests e.g. the World Bank imperative to have its loans paid back at the

expenses of opening up new forests. Finally foreign states pursue different interests in the forest. A serious case to illustrate the latter was a criticism by a visiting delegation of American senators directed towards France's overexploitation of Cameroon forest (ESSAMA, 1993; MBOTO FOUUDA, 1993).

The second characteristic is the lack of clear-cut dichotomy between destroyers and defenders. Member of each group have been both destroyers and in some periods defenders of the forest e.g. the changes in the World Bank's analysis and policies on the forest since 1978 (WB, 1978). Some groups have been more involved in destroying the forest than others: e.g. the logging corporations and the state (Le Messager No 343, January 1994). Some international organisations, some foreign states and some groups have also been very instrumental in forest destruction. The lack of a clear-cut dichotomy shows that involvement in forest activities revolves around group interest (Horta, 1991). Hence forest politics is concerned with the competing interests each group has in the forest. Some are political, this is the case with the government, since controlling the forest means controlling the natural resources necessary to win the struggle for power. The use of these natural resources in the power struggle could be to satisfy people's needs and thus gain the electorate's sympathy. But it could also be channelled into allegiance politics whereby natural resources are used to gain the support of powerful internal and external groups. Interests can be economic or financial, e.g. logging companies lobbying during the run up to the new forest bill, aiming to secure the best deal possible for themselves. The determination of some MPs

to reject the public auction procedure had no other objective than protecting their share of forest business. State interests, economic or financial are hard to disentangle from the hidden interests or agenda of some politicians.

Forest politics is being played on unequal terms. An imbalance of power between various actors and groups undermines not only the conservation of the forest but also compromises more broadly the sound use of natural resources for development (Colchester and Lohmann 1993).

Cameroon's decision making system impedes people's involvement. Three main actors enjoy the privilege of making an input into the system: the bureaucrats, the government and parliament (Atanga 1991). However, second rank actors such as religious groups, corporations and some local groups can have an input as long as they lobby the right person or group. So far the structures have benefited logging companies and international organisations whose capacity to lobby and to influence both the government and the administration has proved to be very efficient. The second cause of the imbalance lies in the organisational capabilities of the groups. Lobbying in Cameroon requires solidarity among the lobbying group members. A single strong voice, well channelled, produces better results than a divided multitude. Logging companies have learnt this lesson and they are organised into a corporation known as the "Forest exploiters trade union." Despite some internal problems, this corporation succeeded in limiting a substantial tax increase for forest exploitation. The grouping has persistently refused to give the statistics for log

exports to the forestry services (informant, senior civil servant, 1994). By way of contrast the Cameroon people have revealed an incapacity to organise to defend their interests. Public opinion does not exist without a voice in the media. The media is either controlled by the government whose version is often inaccurate, or by private groups whose political agenda determines the editorial line. Even when private newspapers take a stand, their analysis is said to be biased and influenced by ethnic, regional or political ties. Such impediment to developing a strong public opinion jeopardises people's input into the political system. In some cases, ignorance is simply the main reason for people's apathy. The interviews with Bakas have revealed that none of them, including those involved in the Bosquet project to establish a sedentary lifestyle has ever seen a member of parliament. They simply do not know what legal or lobbying actions could be taken in order to protect their dwelling place and their livelihoods. No internal government or NGO structure has raised the issue of their land rights in the forest (MINASCOF, 1988; SNV, 1994; SAILD, 1995). Some international NGOs mainly Survival International have lobbied to preserve their forests. But their action is very limited as no representative is in the field. Their strategy consists in the lobbying of funding agencies: e.g. they asked the African Development Bank to postpone the funding of the road project which crosses the west border of the Dja reserve as long as the ESIA is not done (Survival International, 1992) .

The process of democratisation has brought new opportunities to

people to increase their input into the political system. To date, the process has not overcome the iron law of oligarchy. Top officials tend to highjack people's power or misinterpret their opinions.

Forest politics has recently reached a new stage whereby the control of the forest by the government is no longer automatic. Political constituencies held by the government have been relatively docile throughout the forest issue debate. Places where serious riots and clashes have occurred are constituencies where the opposition holds the seat. Is it still too early to conclude that forest politics as it was known until 1992 is fundamentally changing? Can a multiparty system bring change where an authoritarian regime failed? Or is party politics going to be played in the forest as the control of natural resources and power are at stake? Coming legislative elections will give an idea of the change in Cameroon political culture and practice. Things could get more complex: party politics will inevitably involve forest and ethnic politics as both are the pillars of any power struggle. The current balance of power in the forest is not permanent. Current winners, the ruling political elite, logging companies, the World Bank and France who determine at present the fate of the forest are unlikely to maintain their advantages. People's growing poverty, the on-going split within the ruling political elite and the survival strategies adopted by an increasingly desperate population could speed up the latter's involvement in forest politics. The people's demand for a share of forest resources will not necessarily threaten the position of all logging companies. Instead, it will increase

demands upon the forest resource and accelerate the deforestation process. Civil servants and others with education have recently displayed their interest in forest or agricultural activities. Our survey undertaken in July 1994 in the Ministry of External Relations establishes that one fifth of the diplomats interviewed are thinking of creating a plantation. Two percent of the interviewees have bought electric saws. Their relatives in the village fell trees or clear the forest in the aim of creating plantations. Because the state lacks the means and will to monitor activities in the forest, it could be overwhelmed by such clearance. Equally, people more aware of the lucrative logging activities could oppose logging companies' operations without the payment of money to the community. This was the case of the Mezime people in Mondja area, in January 1993 where local people destroyed a bridge on the Boumba river in order to prevent lorries from entering or leaving the area (La Nouvelle Expression, No 153, Mars 1993). Clashes were reported elsewhere in the village of Kagnol (East Cameroon) (Dikalo No 64, March 1993). In other cases, the local elite and people have simply refused to continue dealing with those logging companies which did not fulfil their promises, or companies who make deals with the urban elite of the region without gaining the people's consent. For instance, on the 27th June 1994, in Bokito (Mbam Division, Province of the Centre) violent incidents broke out between rural people and logging company workers over the issue of the exploitation of the Bougnoungoulouk forest (La Nouvelle Expression No 171, Juillet 1994). For the first time rural people won a significant victory as the government decided to

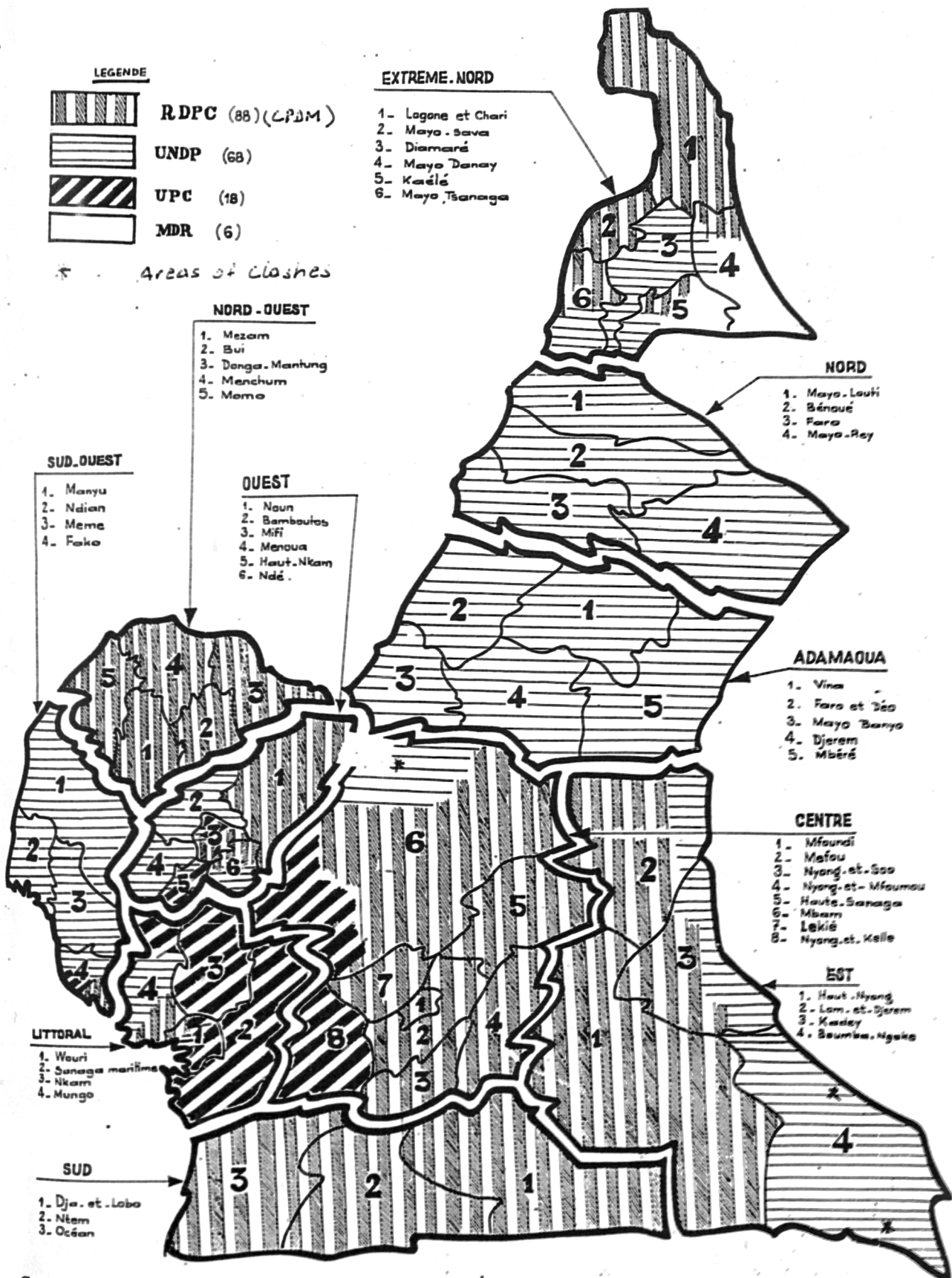
withdraw the exploitation license of that company (MINEF 1994). The balance of power in the forest is constantly changing: where logging companies used to have an absolute upper hand over the resources, rural people have started reacting and are making some headway. Government's absolute power and its means of coercion are also being challenged. In some cases Government has backed down or retreated. At last the USA are strongly criticising and in some cases opposing France's "upper hand" over Cameroon's forest resources.

These changes however do not indicate that there is an effective alliance for the conservation of the forest. In the main, it reflects clashes of interests. Rural people react by claiming their share of the profits, at best, they make a claim for control of their resources. The USA would like to break the French monopoly in central African countries (The Economist vol.336 No 7927, August 12th, 1995). The current regime in Cameroon has always accused the USA of supporting the main radical opposition party, the SDF. Uprooting France from the forest would probably deprive France of one of its motives for supporting President Biya. This could be a short term US strategy to bring a balance of power amongst Cameroonian political protagonists, and to promote genuine democracy in Cameroon. Inside Cameroon, the balance of power between different groups is changing slowly but surely. Bantus are still dominating Pygmies (Bakas and Bakolas) who in any case do not benefit from the financial compensation that logging companies could pay to people. The rural-urban bias is changing. Our survey in the Ministry of External relations suggests that almost

15% of the diplomats in the Ministry of External Relations who are from the Centre province, receive some help from their relatives who are in the village, often in the form of food grown by the family. Such a reversal of the current urban bias has some consequences, for instance, the end of the myth of the wealthy and prestigious civil service and the cities; or the decrease of the complex of superiority that civil servants used to have over villagers (MFC, 1995).

The last legislative elections indicated a progressive shift of power in the forest. Where the President's CPDM party was said to have the monopoly, the support is now dying away. For instance, the provinces of Centre, South and to some extent, East were said to be mainly populated by the Betis, Bulus and Fangs groups who are roughly associated with the president's ethnic group support. The greater part of Cameroon rainforest and minerals are located in these three provinces. CPDM's control here is therefore of major importance. The results of the last legislative elections point out that the CPDM and the major party of the coalition have lost ground in two out of three provinces. In East province, the most important remaining rainforest, the Boumba-Ngoko divisions is now controlled by the UNDP opposition party (a faction of this party however agreed to be a partner in the coalition government). Could this be an explanation for the violence against logging companies workers? In the Centre province, UNDP and UPC have also broken the CPDM monopoly. It is more than a coincidence that it is in the Mbam division, Bokito near where the CPDM lost its seat that the violent incidents occurred on the 26 June 1993.

Figure 7: Political Map of Cameroon after the 1992 legislative elections, and areas of violence related to forest exploitation.



Source: MINAT, 1992

The breaking down of the earlier configuration of power in the forest raises a major issue: what is the best means to achieve a new order in the forest? Are there political means which can help to achieve the conservation objectives and the development needs of the people? Does the shift in the balance of party political power in the forest, in favour of the opposition parties lead to a change of attitude towards the forest and developmental policies? Are violence and confrontation the ultimate weapon of people in their effort to have a power shift? Are the sabotage techniques used so far a way of preventing the deforestation or simply a means of people taking claim to their share of the crumbs of cake? Could these clashes be seen as a new strategy of self-empowerment? Whilst it is too early to predict or forecast the outcome, it is arguable that forest politics will never again be what it used to be under a single party system. Does it mean therefore that democracy could be instrumental in bringing about forest protection and SD in Cameroon?

VII.2: DEMOCRACY FOR FOREST PROTECTION AND SD?

Recent discussions in SD have explored the interrelationship between environment, sustainable development and the nature of a political regime. For those who argue a positive correlation, democratic competitive political regimes are likely to promote forest conservation and SD (WB 1992).

Hence is democracy necessary for conservation and SD to occur? Some authors have observed that lack of democracy goes hand in

hand with underdevelopment (Arafat 1991). The historical evidence of the last twenty years suggests the need to reconsider such views. Various models of a positive correlation between democracy and development have been shown. Ikouo Kabashima argues for the possibility of a positive correlation. From the Japanese case he draws the model of supportive participation in development (1983). He summarized it as follows:

1. The greater the supportive participation by less privileged groups, the more continuity and stability in government;
2. The greater the continuity and stability in government, the greater the economic development if other factors are held constant;
3. The greater the economic development, the greater the opportunity for re-distributing income from the more privileged to the less privileged;
4. The greater the re-distribution, the more supportive participation and stability in government. (1983: 335).

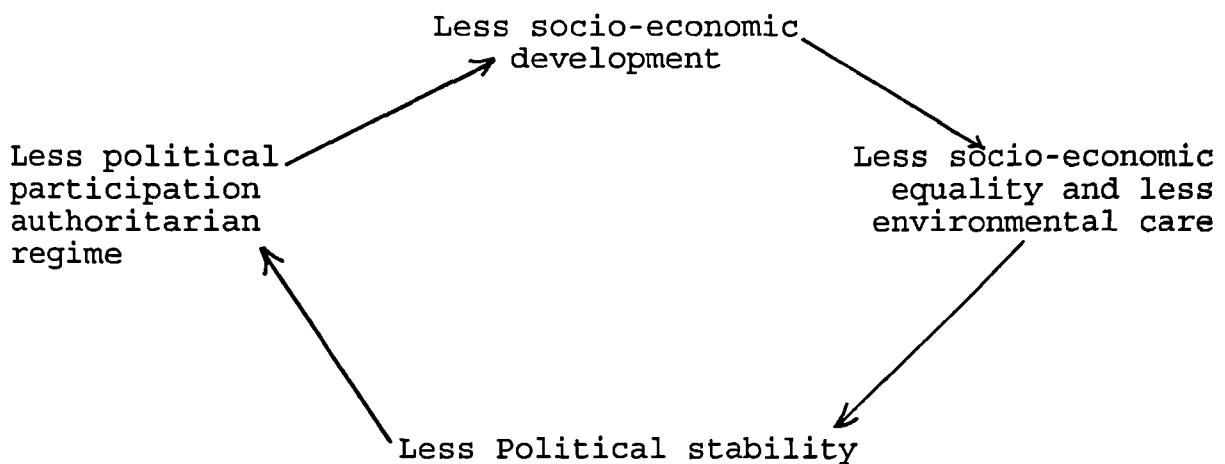
This optimistic view is, however, debated. Huntington and Nelson argue that it is economic development which establishes the conditions for democracy, moreover political participation should be limited during the first stages of development. They argue that there is a trade-off between democracy and development (Huntington and Nelson 1976). This model has been experienced by the newly industrialised countries including South Korea and Singapore whose regimes were authoritarian during their period of rapid economic growth in the 1970s and early 1980s. Munslow and Ekoko, taking the specific case of Africa and Latin America up to the late 80s, argue that the situation in these two

continents has often evolved in a rather different way:

1. Less political participation has led to less socio-economic development;
2. Less economic development has led to less socio-economic equality and increasing environmental depletion;
3. Less economic equality has led to less political stability, which in its turn has led to the strengthening of authoritarian regimes.

They call this model, the absolute vicious circle of the underdevelopment (see figure 8).

Figure 8: The absolute "vicious circle" of the underdevelopment model".



Source: Munslow and Ekoko 1995:165

By the mid-eighties, neo-liberal thinking began to encompass the environment and SD debate. Neo-liberal thinkers based their ideas around the market economy and their model suggests a link between political participation, conservation and development (WB, 1992). It involves state disengagement from the economy, economic valuation of the environment and people's participation.

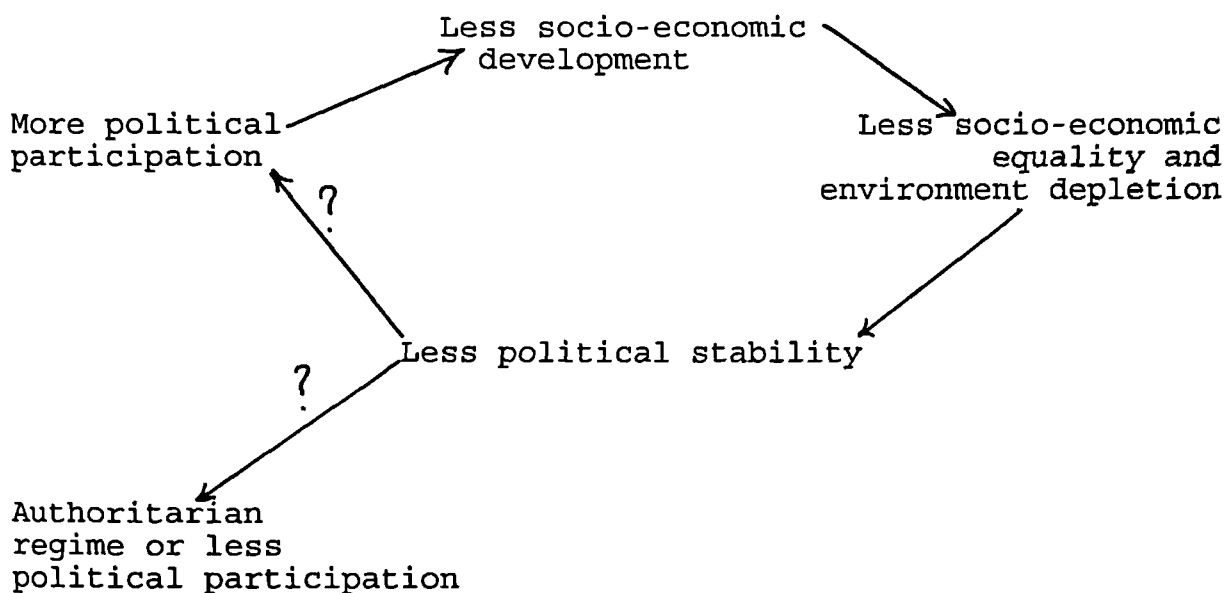
The World Bank in addition to its SAP prescribed:

"To work, common property management requires local responsibility, effective ways of resolving disputes and national political support. A key to success appears to be political entrepreneurship" (WB, 1992: 142).

Hence, there is a positive correlation between democracy conservation and SD. This WB view has entered mainstream thinking; Western liberal democracies have also changed their doctrine of aid to "aid for Democracy" e.g. La Baule's doctrine in 1990 in France and Hurd's doctrine in UK (Riley, 1992).

Observing the practice of democracy in many African countries such as Zambia and Mali, Munslow and Ekoko express a degree of scepticism. They argue that uncertainties surround such a link:

Figure 9: The hypothetical "vicious circle" of the neo-liberal economic model



Source: Munslow and Ekoko 1995: 166

They summarize their argument as follows:

1. Apparent political participation, which gives the illusion of democracy, or genuine political participation in some cases;

2. Less socio-economic development and less environmental protection;
3. Less political stability;
4. A return to less political participation and authoritarian regimes or traumas in the efforts to sustain democracy. They call this pathology the vicious circle of the neo-liberal economic model.

The existence of various conflicting models of the potential causal relationships suggests that there is no easy answer. To which model does Cameroon belong? Is there any correlation between democracy, forest protection and people-centred-development in Cameroon? Is democracy itself achievable in a highly complex and economically underdeveloped society?

We argue the uncertainties of the positive correlation between democracy, conservation and SD. In Cameroon each of these is a major challenge on its own and each develops its own politics. The bridging of all these will depend on other complex elements of Cameroon society including the realities of social structures, ethnic politics, culture and belief systems.

VIII.2.1. REPRESENTATIVE DEMOCRACY, FOREST PROTECTION AND SD

Defining the concept of democracy is highly contentious in political science, especially when it comes to being applied in African societies. Universalist views presenting democracy as a common value, confront regionalist views which prioritize the specificity and culture of each group. Even when a consensus is reached, further problems related to the content and the nature of democracy emerge; for instance, liberal democracy versus

popular democracy, or representative democracy versus participatory democracy. Broadly, scholars and politicians in liberal democracies associate democracy with free elections, a multi-party system, a politically independent judiciary, a free press, a good record in the field of human rights and to some extent a market economy and the rule of law. Sandbrook captures this idea:

"A political system characterized by regular and free elections in which politicians organised into parties. compete to form the government, by the right of virtually all adult citizens to vote and by guarantees of a range of familiar political and civil rights" (Sandbrook, 1988:2).

Generally speaking such a definition refers to representative democracy. Cameroon's second attempt at bringing about democracy (after the early failure in the 1960s) should be seen in the light of trying to build representative democracy. The 1960 attempt failed as the priority set by Ahidjo, the first president, was national unity based on a modern state.

The idea of democracy to promote forest conservation and SD faces a triple challenge. The first is the very acceptance of the idea of democratising the political life of Cameroon and the meaning of democracy to the rulers. The second deals with the implications and the consequences of democracy as it affects the vital issue of the survival of the nation-state, national unity and national integration. The final challenge is the effectiveness of democracy for those rural and forest people who need to protect their natural resource-base and alleviate poverty. We argue that democratisation in the rulers' view was meant neither for poor people, nor for forest conservation and SD, therefore they will hardly benefit from it. Three arguments

underpin this view.

1. The core of the ruling class was obliged to accept democratization; most were reluctant and resisted the move by any means succeeding in imposing a minimalist view of democracy.
2. The moral duty of any President is to keep Cameroon and Cameroonians together. The issue of the survival of Cameroon as one state is vital and any political threat to it will be rejected by the President even if this means employing non-democratic means. Ahidjo did this in the 1960s and 1970s, Biya will certainly do it.
3. The minimalist view of democracy adopted by the Cameroon rulers does not give rural, forest or poor people the political, legal or financial means by which they may become full players in the democratic political game.

Resisting democracy or adopting the minimalist view of democracy is a common feature in French speaking countries of Africa (Riley, 1992). Cameroon's case is original in that both presidents acknowledged democracy then rejected it. Ahidjo was forced to do this in the 1960s. President Biya has been consistent in advocating a minimalist meaning of democracy for years. In 1987 he wrote:

"The promotion of a democratic society presupposes the rule of law ... An authentic democracy requires the development of civic awareness ... The government should endeavour to get as close as possible to the people ... A major decentralisation of decision making in favour of local authorities will be undertaken in order to make the people in the said localities aware of their responsibilities and develop their sense of participation." (Biya, 1987:127-128).

To some extent there are elements of democratisation in his

thought, though in practice he did not implement these ideas. Moreover, he failed to embrace the whole democratic panoply of a free press, multi-party elections, independence of the judiciary. He justified his stand thus:

"The present phase of the history of Cameroon does not permit the institution of a multiparty system. Our party is, therefore, responsible for the reduction of the existing ethno-cultural divisions in order to promote national integration which is the pre-requisite for the institution of a pluralistic democracy." (Biya, 1987:127).

The reluctance to promote a pluralistic democracy is said to lie in the imperative of national integration and the threat of ethnic divisions. In Cameroon political discussions, it is often argued that the president has never rejected the idea of democracy (PRC, 1992), rather a one party system has been imposed on him by circumstances. In practice President Biya has proved to be resistant to the promotion of democracy. His first move in 1987 was to operate what is known as a "Democratic opening-up". It consisted of permitting competing candidacies within the existing party. People had to choose between various candidates of the single party during the municipal and legislative elections. When claims for democracy first broke out, President Biya reinforced the idea of the "one party democracy" system. Though he made concessions in June 1990 and again in August 1991, by allowing a multiparty system as a result of both internal and external pressure, he continued to stick to his minimalist idea of democracy. This first strategy was to present the multiparty system per se as constituting democracy. He eventually succeeded. The USA, Canada, Germany, Great Britain and to some extent France, who were pressing for democracy, felt satisfied

when President Biya announced the re-introduction of the multiparty system, and so new parties were founded and old ones authorised to function. This announcement took place without any constitutional reform. Such a major change should have involved significant constitutional reform. There was a need to guarantee the existence of the parties, a legal framework for their activities, their access to the media, a free press and political independence of the judiciary. Only the existence of multiple political parties was mentioned in the constitution. National activists and foreign governments over-reached themselves. They believed the multiparty system was simply the first step and the rest would follow. Their inability to maintain the pressure for full constitutional reform turned out to be detrimental to the installation of democracy in Cameroon. Instead the US ambassador, most probably in good faith believing that President Biya would carry out the other reforms, arranged a meeting in October 1991 in Washington between President Bush and President Biya. The meeting had serious consequences. For President Biya, it provided an acknowledgement of his commitment to democracy and that what had been changed in Cameroon was already enough to warrant a meeting with the US president. The meeting proved to be an effective political weapon in the hands of the Cameroon president. The meeting was resented by the opposition who saw it as a shift of US policy in Cameroon and giving the seal of approval by the Bush administration to the incumbent president. The President's second strategy to establish his minimalist view of democracy and to maintain a firm grip on power, was to use existing rifts and the divergent interests of external actors.

President Biya used France's economic interests and cultural ties with Cameroon to gain her support in this power struggle. The USA and other European countries were portrayed as supporters of the opposition parties. This split among external actors reinforced President Biya's grip on power. For instance, when Biya was isolated by the international community after the contested results of the Presidential elections, France gave him the political and financial support that he needed (Africa Confidential Vol.35. No 8, 1994). By so doing, France helped reinforce the idea of "minimalist democracy". The third strategy used by President Biya was the idea of the government of national unity. After the 1992 presidential elections, Biya proposed to form a government with representatives of all the major political parties. The proposal was seen as a manoeuvre to break the political stalemate, and also to avoid a civil war or secession of the English speaking part of Cameroon. History was just repeating itself. President Ahidjo in his time (the early to mid 1960s) used the same strategy to bring an end to democracy in Cameroon (Bayart, 1979). He then succeeded in 1966 when the main opposition parties (the moderate branch of UPC led by Mayi Matip and the leaders of Southern Cameroons) agreed to join the government or to merge with the UC (Ahidjo's party) in the National Assembly (Bayart 1979). President Biya was less successful but managed to gain acceptance for the minimalist view of democracy, whereby the press is not completely free, the judiciary remains dependent on the government, human rights are ill protected and the rule of law is unequal for all citizens. An optimistic view would suggest that the idea or practice of the

minimalist democracy is just a transitory phenomenon. Indeed there are some serious changes. Half-way democratisation in process is having some positive political outcome in rural and forest areas. People's input in the overall political system has evolved. For instance, democratic elections have led to the defeat of CPDM (the President's party) in the Boumba division an important forest area. Equally members of parliament partly defeated the government on some provisions of the new forest law. Yet Bakas did not contribute as they are outside of the economic and political life of the country. There is an uncertain correlation between democracy, forest conservation and SD. The fundamental issue is still, to determine the extent to which partial democratisation has benefited rural and forest people. One indicator of the lack of benefits to people, is the rising phenomenon of violence related to forest exploitation. These have even broken out in areas where the main government party was defeated. Such violence could be interpreted as an attempt to make their input into the decision-making process as no other practical and effective legal channel existed. When some space is opened for free expression of views, as in the case of this "minimalist democracy", yet democratic channels remain congested, blocked or non-existent, violence tends to become people's last resource. However, only some rural people, mainly the young, have been forced into violent means of political expression. Forest people's apathy is legendary. During field research interviews, to the question: "what will be your reaction if the government decides to clear this forest" 100% replied that they would be upset. And to the question "will you complain" All of

the interviewees replied yes. "To whom will you complain", those Bakas involved in the Bosquet Project invariably replied that they will complain to the "sisters" (the religious order managing the project). The "nomad" Bakas' answers expressed their powerlessness. Two thirds were speechless and shook their shoulders. One fifth said they will complain to us (visitors) and the remainder envisaged moving further into the forest. Such powerlessness suggests that even a full democracy will not be enough to protect Bakas' interests and livelihoods. Specific legal structures are needed if their forest is to be protected, and their livelihoods be secured. Such measures go beyond party politics, power struggles and financial interests. To some extent even minimalist democracy can achieve these goals as long as there is a political will and commitment.

VIII.2.2: PARTICIPATORY DEMOCRACY, FOREST PROTECTION AND SD.

The recent revival of the idea of participatory democracy has brought people and the practice of democracy to the forefront of development concerns. The concept of participatory democracy is being associated with people's empowerment (Friedman 1992). Yet this concept is highly debated. Elitist democratic theorists dismiss the practicality of participatory democracy. Democracy in practice leaves people no choice other than to select from within various groups of the ruling elite (Dahl 1971, 1989 and Schumpeter 1987). Other scholars acknowledge the difficulty of implementing direct democracy. The size of countries and populations, the complexity of domestic and world affairs are obstacles to participatory or direct democracy (Thomson 1966).

Hadenius sees such a concept as being a mirage (1992).

There are other impediments to participatory democracy associated with people's empowerment. The most fundamental obstacle could be the very foundation of the power struggle and power game based on the principle of a winner and a loser (Kpundeh, 1991:17). Empowerment necessarily leads to a "non zero sum" game. Empowering people means disempowering the ruling elite and other interest groups. These groups will fight back in an attempt to protect their share of power. Hence people's empowerment gives rise to a power struggle. Other obstacles which relate to the social structure of each society may render participatory democracy unachievable. Ethnic politics is one of these obstacles in Cameroon (Ndiva, 1986). The history of people must also be considered. For instance, people's capability for solidarity, organisation, and their sense of discipline could depend on the individual history of each ethnic group e.g. people from West Cameroon, Bamilekes or Bamoun and Fulbes of North Cameroon tend to be more disciplined and organised than ethnic groups from forest areas. The tradition of a strong chiefdom and kingdom in the north or west regions and the exposure of these groups to wars in the past have created a character that groups from forest areas with a tradition of weak chiefdoms have not developed (Bayart, 1979).

The well-organised, disciplined groups are likely to develop a great deal of solidarity as in the case of Bamilekes of West Cameroon, which is necessary for lobbying activities and the defense of group interests.

Technical obstacles to participatory democracy also exist.

Interaction between politicians and people is simply unachievable because of the lack of appropriate technology, means of communications and the level of education of people. About two thirds of Cameroonians live in rural areas (IFAD,1992) and means of information, communication and transportation available are insufficient (UNDP, 1993). Participatory democracy through people's empowerment, is in these conditions unachievable. At best, urban people and the ruling elite will use democracy to share power or for the defense of their own interests. However, attempts at empowering people at grassroots level are being made through local associations and development organisations. Unlike Chipko movements or Green Belt movements who proved to be efficient and successful to some degree (Ekins 1990), grassroots movements in Cameroon are entangled in politics. Cameroon's associations (especially local NGOs) flourished in the late 1980s and early 1990s. A detailed study of NGOs suggests that apart from international NGOs operating in Cameroon, none of the Cameroonian NGOs is truly nationally based (Atanga-Ada and Tanjong 1991). The study classifies the NGOs according to ecological zones. In 1991, there were 70 NGOs in Cameroon including 15 international NGOs and 5 governmental bodies with NGO status. Though the existence of NGOs dates from the independence period (e.g. Catholic Relief service in 1960) or (Dutch National voluntary service in 1963) the phenomenon of local NGOs is quite recent. Most of the Cameroonian NGOs were founded from 1989 onward, when political reform started. In this respect, they are the first signs of the emergence of a "civil society" and the first outcome of political opening-up. The

record of Cameroon NGOs in promoting environmental awareness or development is quite limited. Enviro-Protect, a Yaounde based NGO organised a couple of meetings and film projections in 1992 before the Rio summit. Some NGOs have a better record: e.g. Centre de Development des Communautés villageoises (CDCV) has been the implementing body for UNICEF in West Cameroon. Yet Cameroon NGOs are carrying the reputation of being ethnically biased and opportunist. Their poor performance is attributed to the lack of a related-development motive for action, and to their hidden agendas. Such criticisms are often made by the CPDM staff.

Indeed almost half of the existing NGOs were founded between 1990 and 1991 (Atanga-Ada & Tanjong 1991), a period of political turmoil as various organisations, groups and people were pressurizing the Government to organise a national conference. The Congo and Benin experiences of a national conference show that such meetings turn out to be a civilian coup d'Etat whereby the government is deposed by delegates of civil society. Yet the civil society is made up of these associations including NGOs. From this perspective, the national conference is a power struggle battlefield where the hidden goal of some players was to seize power. Their strategy is based on manipulating the number of the delegates. The group with the highest number of delegates is likely to play a key-role in the outcome of the power struggle. The boom of associations and NGOs in 1990 and 1991 can partly be analyzed in this light. Cameroon's diluted version of a national conference called the "tripartite", took place in September 1991. There were expectations that its power

could be reinforced and its mandate extended so as to become a constitutional body. Creating new associations and NGOs considered to be elements of civil society, was part of the preparation for the power struggle of 1990 and 1991. A detailed analysis of the names of founders or chairmen of these associations and NGOs reveals that most of the names are mainly from two ethnic groups: the Bamilekes and the Betis. The Bamilekes are depicted as being against the current regime and they are accused of having an ambition to seize political power. The Betis-Bulu is the ethnic group associated with President Biya. These two groups experienced tension from 1988 onwards. In 1990-1991, the power struggle arena was the national conference with a background of ethnic politics and the use of civil society as a cover for individual ambitions.

Financial gains could also be the second motive for founding NGOs. The international donors' shift to support NGOs was an opportunity for some individuals to make money. Arguably the political reform and the half-way-democratisation process has resulted to the emergence of new players competing for both power and financial gains rather than addressing people's environmental and developmental problems. Yet it is suggested that associations could be more efficient if their focus is local development (Ekins, 1990). Ideas of ethnic-based-development have recently been brought back onto the agenda. Development could better be served if it is promoted by local people. Using decentralisation on ethnic lines could be the best way to prepare people's participation and interest in their region (Mbome 1992). From another angle, the failure of the nation-state and a single-

party system to create a culture of national unity has propelled the need for the institutionalisation of the ethnic politics. Kpundeh argues that ethnicity should be considered as an important part of African politics and political arrangements should clearly take ethnicity into account (1991). Though these views are well thought out, they do not propose mechanisms by which deeper constraints to people's empowerment, such as the iron law of oligarchy or the tragedy of the commons can be overcome. Equally, these ideas if put into practice can undermine the very existence of pluri-ethnic states. In Cameroon, the threat to ethnic-division and the break up of the state is the very argument or motive used by the different presidents to turn back democracy. Voices from the former West Cameroon state -English speaking areas- are already going beyond devolution: they call for federalism or the partition of Cameroon. Linking democracy, conservation and sustainable development (either by representation or participatory democracy) turns out to be highly complex when it comes to implementing the idea.

CONCLUSION

The multiple uses and roles of forests (economic, financial, ecological and cultural) place forests at the heart of politics in Cameroon. Controlling the forest is controlling natural resources, wealth and power. This results in power struggles among various players (internal and external). The struggle for power supposes that actors or players have the means to fight, awareness of their strength and the will to fight. Various

categories of players or actors such as decision-makers, local elites, logging companies, the ruling elite, foreign states and recently some rural people do have both the means and the will to carry on the game. Other groups, the bulk of rural people, forest people, urban poor ignore all the rules of the game and in some cases they simply ignore the very existence of the game and the power struggle: that indeed is the problem. Ignorance is the first enemy of people. It makes them de facto losers. Forest conservation or natural resources exploitation involves politics thus competition to have access to resources. From this perspective, democracy could be useful if it implies transparency, accountability and political education for everyone. Yet we have argued that democracy has its own limitations. Representative democracy is at best about choosing among "the fragmented elite" or ruling class (Dahl, 1971). Participatory democracy is unachievable (Hadenuis, 1992) and devolution with its ethnic flavour in Cameroon, is potentially harmful for the very existence of Cameroon (Biya, 1987). Other mechanisms could be tested or have been tested in the past, without success. Authoritarian regimes for instance, have not necessarily been more successful in encouraging development or conservation (Munslow and Ekoko 1995). Yet some people are talking of reinventing the practice of politics in Africa (Kpundeh, 1991). This supposes the shift from the classical "the winner-takes-all" model to power sharing. But can "power sharing" promote conservation and SD? Could it overcome the tendency of elites to highjack the benefits of such sharing? Cameroon has about 220 tribes of unequal importance in terms of

size. How can the sharing procedure be implemented given that some of the minority groups are living or possess the richest lands or natural resource areas (as in the case of the Bakas)? Forest protection, use of natural resources and sustainable development issues need more than a political arena set up by democracy.

IX.

CONCLUDING CHAPTER

Policies and Politics should be the lifeblood of Cameroon's development. Thus far, they are the core cause of its misfortune. On the one hand, ill-designed policies, a low rate of implementation of existing policies, misunderstanding of the social structure and the people or oversimplification of the complexity of the social realities, a failure in assessing people's expectations and respecting their choices have together rendered development and environment protection unachievable. On the other hand, politics in its cynical expression of the struggle for power, prestige and for interest (political, financial, economic or ethnic) has diverted valuable resources (natural, human and financial) from the main challenges that Cameroon faces.

Beyond the debates and discussions largely developed in the core of the thesis, this conclusion aims to provide an alternative view and set of policy proposals.

IX.1 TECHNICAL OPTIONS FOR SD AND FOREST PROTECTION.

Fresh thinking can be useful in the areas of:

- assessment of people's practices and the kind of assistance they need,
- understanding the social structure.
- conventional solutions to problems.

Assessing people's practices and the kind of assistance that they need.

Improving agricultural inputs and outputs.

Traditional knowledge and practices in some cases could be

revived and enriched by modern knowledge or new simple, adaptable and affordable technology. As far as agroforestry is concerned, it is a common practice in many rural areas, especially intercropping (Munslow, 1988). Assistance in this area could help suggest better combinations of crops which are likely to increase yields and protect the soil. In East-Cameroon, Kaka peasants tended to repeat the same combination of crops for generations. New varieties of crops more resistant to diseases, can also be introduced in specific areas, taking into account social and cultural variables such as diet. In this case, free distribution, possibly at the expense of the state, or other actors (internal or external) should be the rule. In remote rural areas, peasants have restricted access to money and when they get it, they tend to have other priorities rather than buying new crops. Peasants are at times very cautious about novelty.

It is also possible to suggest to peasant farmers techniques which have worked in other regions, as long as these do not conflict with their cultural beliefs or disturb the balance of the social structure. For instance, the technique in the Far-North province of using trees as fences to provide shelter and stop the spread of sand carried by the wind, could be extended in other regions for other purposes. In the Far-North province itself, people could be encouraged to use fruit trees with large branches and abundant leaves, such as mangoes-trees. In addition to meeting the traditional functions of fences, this would provide people with free and easy access to fuelwood, mangoes-tree branches dry easily and when there are strong winds the dry

ones break and readily fall. It will also provide people with fresh fruits during the dry season. In the Far North and the North provinces, and the west highlands where there is a threat of fuelwood shortage, and the highest rate of the clearance of forest reserve, a programme of social forestry should be launched as soon as possible, and an independent body consisting of government, NGOs and local people's representatives should be set to monitor the situation and to make proposals in order to tackle the problem.

Improved energy use for environmental care.

A number of initiatives can be taken. They range from more efficient use of existing sources of renewable energy to the regeneration of these sources of energy. Solar energy used in the Far-North and North provinces can be gradually spread to other regions. Some meals are dried under the sun as a way of conserving or cooking them e.g. cow meat dried in the sun is so tasty, as the Afrikaners know so well with their biltong in South Africa. But in this case some extra precautions should be taken in order to avoid parasites transported by flies, reaching the meat or fish. The Baka practice of using a ground oven can also be suggested to other groups. New, more energy saving stoves may be suitable for the urban poor, as they need less charcoal or fuelwood. New ways of cooking meals can also be promoted as long as the taste acceptability is not impaired. Traditionally, cassava and other roots are prepared with a pot full of water. Generally they are cooked without the evaporation of all the water, especially cassava, with the rest of the water being thrown away. This is also a waste of energy. Cassava needs

little water to cook, thus less energy is required. However, in south Cameroon the greatest waste of energy is the logs which are felled and abandoned in the rainforest by the logging companies. It is estimated that 40% of trees felled were wrongly identified for cutting and abandoned in the forest. Legislation can make it compulsory for the logging companies to take these trees out of the rainforest, to the rural areas. All the expenses related to the transportation of these abandoned logs should be paid by the logging companies which have failed to identify properly the specie of tree they intended to fell. The transportation of these trees to the villages could also be seen as part of foresters' contribution to forest conservation. Villagers could take the opportunity to use this wood for their energy needs, to burn it for charcoal and eventually to sell it in markets, rather than to cut other trees. Charcoal producers could also burn these logs, produce their charcoal without felling or burning new trees. Finally there is a whole sector which could be developed: the sawdust coming from the processed wood, furniture-making companies and sawmills. The sawdust is abundant in Douala, Yaoundé and Mbalmayo. It is already available in urban areas and should be considered by processed wood industries as an extra source of cash. Sawdust is more economical than charcoal and fuelwood. It is also cheaper and safer than the other wood-related source of energy. In July 1994, an experiment was carried out as part of this research in Yaoundé. The aim was to determine the cost-effectiveness of the main source of energy used by poor rural and urban households. For only 20p (£0.20) it is possible to cook three times half a kilogramme of rice with

sawdust. One and a half the same amount of rice, with (£0.20) of charcoal, and just one time with fuelwood. However, the result depends very much on the type of wood used to produce charcoal, or used as fuelwood. Equally, the amount of smoke tends to depend on the type of tree from which the wood originated. The correlation between the type of wood (the tree species), and the quantity of the smoke released into the atmosphere by households in the Third World countries could become an area of research as the international community seeks ways to curb down the quantity of gas release in the atmosphere.

Finally agroforestry as the combination of crops and trees could be helpful in re-creating the stock of fuelwood available. In the specific case of North Cameroon where tensions exist between farmers and herders, or where administrative authorities complain about the destruction of forest reserves by cattle and peasants, new solutions could be suggested. The abundant weeds in the south of the country could be regularly cut and sold as fodder at very low prices (subsidies in the form of low railway fares for the transportation of these weeds can be granted to people involved in these activities) to herders in the North. This is likely to reduce their encroachment on peasant's farms or in the forest reserves. Government can also make a deal with villagers living in the border of reserves. It could consist of allowing them to fetch an amount of wood once a week provided that they plant 20 young trees in another part of the forest reserve. Young seedlings and seeds would be supplied by the government, and people's representatives and NGOs could monitor and police these areas. However useful these practical measures

could be to lower the pressure on the rainforest, and to improve the capacity of people to meet their needs, they could not solve the core problem. Better policies are required.

Understanding the social structure to devise better policies. A number of projects fail each year because of the misunderstanding of social structure and the fragile balance within the groups. Some have failed because of the gender issue; affirmative action has pushed men to withdraw from projects, e.g. the phase B of the PAFSAT project in the North-West province. In some cases, fear of natives being deprived of their livelihoods by outsiders has made them reluctant to engage in projects based upon sustainable use of their forest such as the Mount Cameroon Mountain Project in the South-West province. In other cases, ignorance or prejudice of people's management of the seasons was the cause of a failure of a tree plantation project in North Cameroon; and misunderstanding of the inner social networks of relations and power between individuals, groups and ethnic groups e.g. the failure of the FIMAC and PRODEC projects.

Designing projects and policies in the future should be preceded by a social structure assessment of the group whose future or livelihoods is at stake. Equally the implementation of these projects and policies should be flexible enough in order to adapt to new situations.

IX.2 ECONOMIC AND POLITICAL OPTIONS FOR SUSTAINABILITY:

Beyond Conventions and Dogma, More Imagination and Creativity.

Technological, social, economic and environmental conditions

evolve and change faster than ever before. These changes require flexibility, creativity and imagination. Cameroon is still being governed, managed and run with the same intellectual tools, methods and models of the 1970s and 1980s. In this respect it suffers from the lag factor. This is partly due to the education system, the static nature of the elite in the decision-making positions and misuse of talented and educated young people whose upward mobility is impaired. The consequence is, a certain kind of conservatism, a lack of imagination and sticking to obsolete conventions. This has to change. A climate, an environment of constant renewal, permanent regeneration should be created. New opportunities (economic, financial even diplomatic) have been missed as a result of this intellectual immobility. New opportunities such as eco-tourism are still under exploited. Flower exports could be another avenue of growth. Fruit exports other than banana and pineapples can be envisaged. New industries and manufactures processing local crops or raw material can be promoted under joint-venture schemes. New markets can be explored. The Government can re-organise the role of the diplomatic services, in order to give it a greater economic function such as providing Cameroonians with information, trade and business opportunities abroad.

A better use can be made of NGOs as they are becoming more influential in the international arena. For instance, the rainforest has not got the publicity it deserves. Indigenous people's knowledge of plants is not used to attract scientific research. Cameroon, despite being a rainforest country has not benefitted from the debt for nature-swap mechanism, partly

because the case was not properly put. International NGOs could be very instrumental in this regard. Education is another key-area. It is vital to reform the education system by adapting it to the new and future needs of industry, tourism, agriculture and fisheries, and for self-employment. Equally education should be directed towards the awareness of new challenges, including environment, inter-group tolerance, preventive medical care, how to be inventive, and work discipline. Without discipline nothing can be achieved. Anarchy could easily replace the former community authoritarian system whereby the harmony of the community was the upmost priority and justified a number of abuses to individual liberties.

As far as policies are concerned two major areas have to change. Policy-makers should stop running the country on a daily basis without providing any vision of the future for the people. There must be long term objectives, a broad framework for action. This does not mean a rigid five-year plan. Secondly, Cameroon should adopt the principle of integrated policies. Sector based policies should only be designed exceptionally. Also co-ordinating bodies of inter-ministerial policy and activities should be efficient, effective and possess real authority and power. For instance biomass energy related to the use of forest should be removed from the competence of the Ministry of Mines and Energy and be given to the Ministry of Environment and Forests. This would allow the Ministry of Environment to have a more integrated policy for the multiple uses of forest and greater concern for the total forest ecology. Forest policy should be designed in harmony with environment policy.

Finally the economic policy of Cameroon should be revised. Logs from non-managed forest to be exported should be expressed in terms of volume not in percentage. The volume system has the advantage to indicate clearly the quantity of logs to export; and it deters logging companies who may be tempted to cheat by felling more trees and exporting more, while pretending that their quota is not yet reached.

Firstly, Cameroon should have a more integrative approach to development and environment. Thus far the utmost priority is economic growth at any price. This could be abandoned (despite the attendant outcry from the WB and IMF) for an economic policy which makes environment and people the essential engines of development. To do so, Cameroon should design an economic policy which revolves around a vibrant public sector. In certain areas parastatals have achieved very good results, as in the case of CDC which made profits in 1994 thanks to its tea, rubber and palm oil exports. Other strategic parastatals such as water, education, health and energy could remain within the state portfolio. In a developing country where clean water from public taps remain a luxury that only 20% of people can afford, or where less than 10% of people have access to electricity, how can a foreign private company which aim is to make profit, invest for the welfare of rural people whose basic needs have to be met? The foundations of development such as main infrastructure should be laid by the state. Even the World Bank's viewpoint is changing on this issue (WB, WDR 1994). Of course, the private sector should have an important place (but not the only place) in this economic structure. Finally, people organised in local co-

operatives should also have a share in the system. This "Three partners-pattern" economy is particularly suitable for activities involving the use of common land, natural resources and forests. For instance, the Banana Corporation sold to foreign companies at knockdown prices was suitable for this "three partners-pattern". The parastatal would have kept 15% of the shares, natives of the area where the bananas are grown and workers would have bought 35% and the private companies, national and international would have taken the remaining 50%. This three-partner system has not yet been experimented anywhere. Yet a number of advantages for the state, people and workers can be mentioned. Natives of the area would have returned to their villages and escaped from the poverty circle of the urban areas. Workers would become more committed as their gains depend upon their work, and they are shareholders in the company. The state would have more taxes from the natives and workers. And the rural economy would have received a real boost. This formula could also be used for logging activities or mineral extraction. This is a better way to redistribute wealth, spread the risks and encourage people to work, to stay in their local regions and to care about and conserve the natural-resource base as it is their wealth - provider. However the question could be, how are people in the villages going to buy their shares? The government would take a loan from the financial market, then lend it to people in the form of shares in the companies. People will pay back their loans as all these businesses are very profitable. Good ideas alone will not solve the problems; decisive political support from the top is necessary to back the ideas. Here lies

the major obstacle. It is the lack of political will, which has to be overcome, otherwise there will be no fundamental change. At best good ideas will help prevent further impoverishment of Cameroonians, and slow down slightly the rate of deforestation. Revisiting the Practice of Politics.

Conserving forests and promoting SD are viewed from three different perspectives. These are: the resourcist view, the middle-way view and the eco-centric view. These views confront each other and each view has its own internal contradictions. Uprooting the Contradictions of each "View".

The resourcist view, shared by the Cameroon government, influential multilateral organisations (WB, IMF, FAO, ITTO and to some extent UNDP) and bilateral partners raises a serious problem. This problem is the personal interests and agendas of the members of the group or organisations that they represent. Such fragmentation of interests and agendas distract key actors from the main issues. Neither national policy-makers, nor international partners have elevated forest protection and SD to the status of high politics. Only when such status is conferred on issues, do they attract serious attention. Attempts are being made internationally to promote environment and social development to this status through the concept of Global Security. The aim is to link the security problems of the post cold war era (terrorism, civil wars, religious extremism, drugs) to the appalling social conditions of more than a billion people, both in developed and developing countries which include poverty, social exclusion, and desperation (Boutros-Ghali 1995; Mahbub ul Haq 1995). Thus far the major players in the

international arena have resisted such pressures to elevate the status of environmental and social problems.

The middle-way view is characterised by the attempt to promote growth by exporting natural resources combined with the understanding of the need to protect the life support system. The middle class in SSA is the group par excellence likely to support this perspective. Yet there is often a contradiction between the modernisation dream of these groups symbolised by the accumulation process of western goods and their claim for environmental conservation. To acquire imported goods, there is a need for money. Salaries are low and only an additional employment or corruption can provide the extra cash needed. Often the extra activity will be the production and export of commercial crops. This implies deforestation. Individuals within the middle class group also pursue their own agenda and interests. Members of this group fail to be consistent; they advocate or at least acknowledge the need to preserve the environment but have a lifestyle or pursue activities which are environment unfriendly. Such contradictions weaken the case of forest conservation and the alliance for environment conservation in SSA.

The eco-centric view, symbolised by people in the remote rural areas and the indigenous people is also confronted with a serious problem. It is environmentally friendly and sustainable. However, how can these groups maintain their lifestyle, their livelihoods, their dwelling place without using the outsiders means of struggle? Because of the pressure from external forces, the state, international organisations and logging companies,

their survival depends upon their ability to use the "modern" tools. These are law, politics (lobbying and elections) and the media to raise awareness concerning the potential violation of their rights. Could they do this without giving up a great deal of their basic lifestyle which is the essential element in their friendly attitude to the forest and the sustainability of their kind of community welfare system?

There is no easy solution for any of the actors. Each one has his own challenges to address. The situation is made more complex by the inter-relations among the actors.

Balancing actors' power.

Between the groups and their different views, there is a vertical divide. Groups defending the resourcist view are decision-makers on the top. The fate of the rainforest is mainly determined by their economic, financial and political interests.

Groups trapped in the middle-way view have a subordinate position in this hierarchy. They are attracted by modern goods and influential social and political positions. In general they seek alliances with members of the first group. Within this second group (middle-way view), there is a sub-group which is very harmful to the forests. The members of this sub-group are people excluded, rejected by the modern system as the consequences of economic crisis and SAP. They tend to pursue anarchic exploitation of the natural resource-base, mainly the forest. Their survival strategies are tolerated by the government. There is a tacit pact between decision-makers and this sub-group. Such a tacit pact is equally detrimental to the environment and people's future. However, this sub-group is

unpredictable. For a time they may have a tactical but limited alliance with the elite. On another occasion they can play a leading role in opposing the government both in rural and in urban areas as is the case of riots in cities and violence against logging companies in villages.

The bottom position in the hierarchy belongs to the groups with traditional beliefs. These groups are not homogenous. They are made up of two main sub-groups: people living in remote rural areas and indigenous people. The first sub-group is often manipulated both by the local elite and rural elite made up of educated "sons of the country" (country means village, in their jargon).

Because they are vulnerable to demagoguery, their strength is being reduced. Their support to government tends to be firmer when one of the sons is a member of the government. The second sub-group is made up of indigenous people. In general they identify themselves with the forest not with the states or national boundaries. They are living outside of any national community, at least those who still preserve their nomadic lifestyle. No political input or support can be expected from them.

This description of the vertical and horizontal patterns of relationships suggests an imbalance in the distribution of power. Hence a new balance of power is needed. Such a shift can only occur if groups 2 and 3 merge or join forces. Unfortunately, this is unlikely to happen. Lack of homogeneity among the groups, the existence of different agendas and interests, the dividing strategies put in place by members of the first group

and ethnicity undermine the potential for such a development. Thus other options have to be contemplated.

Utopia or Death! Ethical Politics vs Power Politics.

Beyond the common and repeated argument of the primacy of the international community input (financial and political) to tackle development and forest problems in Cameroon, we argue the contingency of foreign aid in the case of Cameroon. It can be helpful and would still be appreciated. However, it should be complementary and secondary. In some cases, foreign input in the form of aid and political interference were revealed to be harmful to the solution of problems. For Cameroon two options of unequal weight can be explored.

The first refers to ethics and self-pride. The second deals with real-politics. The ethical option concerns elite behaviour and the leadership issue. It takes democracy neither as the prerequisite for development, nor does it dismiss its value and its potential to contribute to sound development. It is instead based on the assumption that a nationalistic, honest and committed elite and effective leadership could establish an enabling environment for more equitable and better development, and sound management of the environment. Unlike many other countries, Cameroon has the principal assets for development: human and natural resources. The missing factor at this stage of the setting of an enabling environment for sustainable development is that national and people interests and pride should be placed above the elite's interests (political and

financial). External constraints do exist. However, the complexity of the current international arena gives paradoxically, room to manoeuvre. For instance NGOs can be used to neutralise the agendas of some states or IO. A political consensus from within Cameroon and among Cameroonians on the objectives to achieve can also be a deterrent to any external unfriendly interference and a strength to design and implement SD policies.

The second option is rather cynical. It is designed from the chaos scenario. The threat of growing internal disorders, instability and the disintegration of Cameroon would force the main actors to reconsider their actions and revise their political behaviour. From this would emerge a new consensus over a new model of society, more integrative and balanced for both people and the environment. This option is however risky as nobody can bet on the ability of actors to behave in the best interest of the state. The Ghost town events of 1991 were meant to reach this objective. They failed to do so. The status quo and the slow decay of Cameroon continues with a half-way process of democratisation. A possible third option would involve sub-regional, then regional and finally continental economic and political integration. But this is unlikely as many other African Countries are still in internal, political, military, economic and ethnic turmoil.

History does not move forward in a straight line. Anything can happen at anytime. Leaders can remodel themselves as was the

case in Benin in 1990-91. New leaders and elites can emerge, as was the case in Libya in 1969. There is evidence that self worth, consciousness and idealism can overcome the politics of the belly even for a short period of time.

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b- Structured.

- Bakas
- Civil servants (Ministry of External Relations).
- Charcoal producers and retailers
- Fuelwood producers and retailers
- Kakas

APPENDIX

QUESTIONNAIRE FOR PYGMIES

Name or code of the interviewee.....
Village or area.....
Date of the interview.....
Gender.....

1- Do you clear the forest? Yes No
if yes, why?
if no, why not?

2- Do you practice agriculture? Yes No
if yes, why?
if no, why not?

3-Has anyone ever suggested that you do some farming?
Yes No
if yes, who?

4- Has anyone ever suggested that you change your lifestyle?
Yes No
if yes, who?
If yes to question 4, continue with question 5.
If no to question 4, continue with question 6.

5- What was your reaction to the suggestion that you change your lifestyle?

6- If the government displaces you from the forest to a managed area, what will be your reaction?
Why will you react in this way?

7- Have you ever tried to live anywhere else than in the forest?
Yes No
If yes, Why and where? Why did you decide to go back to the forest?
If no, why not?

8-If the government or any other body decides to clear this forest, what will be your reaction?
Complain
Resist
Campaign
Approve
Other, please specify

if complain, to whom will you complain?
if campaign, how will you do that?
if resist, how will you organise this?

Why do you oppose the idea of clearing the forest?

9- Who do you meet inside the forest?

10- Who do you meet outside the forest?

11- Have you ever been visited by government officials?

Yes NO

if yes, who was he/she? and what was the reason for his/her visit?

12- Would you like to see any change in this forest?

Yes No

if yes, what change?

if no, why not?

Thank you for your collaboration.

QUESTIONNAIRE FOR THE FIRST GENERATION OF MIGRANTS IN THE FOREST
(Kakas)

Name or code of the interviewee.....
Village or area of the interview.....
Date of the interview.....
Gender.....

1- In your family who used to supply fuelwood?

2- Was the wood used for cooking:
fresh..... dry..... very dry..... other, please specify.

3- Do you fallow your land? yes..... no.....
If yes, why?
If no, why not?

4- Do you practice intercropping? yes.... no.....
If yes, why? and what are the combination of crops? how did you
learn about this or these combinations?
If no, why not?

5- Do you fell trees? yes.... no.....
If yes, why? and how (which tool do you use to fell a tree)?
If no, why not?
If other answer, please comment

6- How many farms do you have?

7- What is the size of your farm or of each of them?

8- What other products do you harvest in the forest?

9-What do you do when your crop production is low?
Do you abandon that land for good?..... temporarily?.....
Do you use fertilizer? if yes which type? chemical....
organic....
Other, please specify.

10- If someone teaches you new combinations that enable you to
produce better yields, will you abandon the shifting cultivation
techniques?
yes..... no.....
If yes, why?
If no, why not?

11- Have you got any relationship with the Bakas?
If yes, what is their nature?
If no, why not?

Thank you for your collaboration.

QUESTIONNAIRE FOR FUELWOOD AND CHARCOAL PRODUCERS AND RETAILERS.

Name or code of the interviewee.....
Village or area of the interview.....
Date of the interview.....
Gender.....

1- What was your last occupation?

2- Have you ever worked in the formal sector?
If yes, what was your last job in the formal sector?

3- Why did you leave your job?
Resigned.... Sacked.... Retired..... Other please, specify.
If resigned, please give the reasons of your resignation.

4- Are you satisfied with your new activities? yes... no....
If yes, why?
If no, why not?

5- Are you currently seeking a job in the formal sector?
yes.... no....
If yes, why?
If no, why not?

6- If you find employment in the formal sector or another activity, will you abandon this energy-related activity?
yes.... no....
If yes, why?
If no, why not?

Questions 7 & 8 are for retailers only

7- How many charcoal bags of 10 kgs do you sell per week (on average)

8- What is your daily earning in selling: charcoal.....?
fuelwood.....?

Question 9 onwards is for producers only.

9- How many retailers do you supply each week (on average)?

10- What are the best species for the production of:
a- charcoal
b- firewood
c- sawn timber

11- How many bags of charcoal do you produce every week (on average)

12- How many trees do you fell each week to produce fuelwood (on average)

What is your daily earning (on average)?

for charcoal producer.... for fuelwood producer.....

13- Have you ever planted a tree?

14- Have Cameroon authorities encouraged or pressed you to replant trees every time you fell or burn one?
yes.... no.... other, please specify.....

15- Have you ever been subjected to harrassement when you were carrying out your activities? yes.... no....
If yes, who harrassed you? and Why?

16- Do you pay any special taxes, fees or financial rights to the forestry administration or to the ONADEF for felling or burning trees.

Thank you for your collaboration.

QUESTIONNAIRE FOR CIVIL SERVANTS

Name or code of the interviewee.....
City.....
Department.....
Date of the interview.....
Gender.....

- 1- When did you start working with this department?
- 2- By what percentage was your salary reduced since 1991?....
- 3- Do you have any other income source than your monthly salary?
yes.... no....
If yes, please specify
- 4- Since 1991, has your purchasing power
a- increased.....
b- decreased.....
c- been maintained.....
d- other, please specify
- 5- If your purchasing power has decreased, what line of your budget have you changed or cancelled?.....
- 6- What kind of energy do you use to cook your meal?
a- Fuelwood.....
b- Charcoal.....
c- Paraffin.....
d- Butane Gas.....
e- Electricity.....
f- Other, please specify.....
- 7- Have you ever used fuelwood or charcoal to cook your meal?
yes... no....
If yes, why?
If no, why not?
- 8- Do you have a farm in your village? yes... no.....
If yes, why?
If no, why not?
- 9- Do you have a chain saw? yes... no.....
If yes, who uses it?..... and for what purpose?
If no, why not?
- 10- If the government decides to sack you, how will you make your living?

Thank you for your collaboration.

APPENDIX 1

Table 2: Details of licences for forest exploitation issued by the Administration

Nom ou raison sociale	Numero de licence	Superficie en hectares	Date d'octroi ou dernier renouvellement	Date d'expiration	Superficie totale en hectares	Arrondissement	Observations
AEK (CFK)	1761	47 860	20.10.1985	19.10.1990	47 860	AMBAM	Renouvellement en cours CTN 16.4.90
ABEGA Jean Baptiste BP 8225 Douala	1816	16 000	24.03.1992	23.02.1997	16 000	MBALMAYO ENDOM	
AKEM Peter BP 02 KUMBA		21 420				MUNDEMBE EKONDO-TITI	Octroi en cours CTN 19.09.86
ALPICAM BP 2130 Douala	1800	30 520	25.01.1990	24.01.1995	93 520	MBANG	Octroi en cours CTN 19.06.1991
		63 000				YOKADOUMA	
AMOUGOU Pierre	1685	10 088	21.08.1976	20.08.1981	22 888	DZENG	Retrait propose CTN 30.10. et 22.11.1987
	1765	12 800	25.03.1986	24.08.1991		DZENG	Renouvellement non sollicite
AYOLO Moise et Fils BP 249 Sangmelima		66 400			66 400	DJOUR SANGMELIMA	Octroi CTN 18.10.84 Motif, Retard et Egarement du Dossier Soucne lors du Demenagement de la Direction des Forets
BEKOL Cameroun BP 33 Kribi	1695	37 875	22.05.1982	21.05.1987	64 515	KRIBI AKOM II	Renouvellement sollicite CTN 30.10. et 02.11.87
	1772	26 640	09.03.1987	08.03.1992		LOLODORF	Renouvellement non sollicite
CBBT BP 1877 Douala	1803	58 280	23.05.1990	22.05.1995	58 280	ABONG-MBANG	Renouvellement non sollicite
CFA	1748	33 880	24.11.1987	23.11.1992	33 880	NKONGSAMBA LOUM	
CFE	1822	42 060	14.10.1992	13.10.1997	42 060	YOKADOUMA	
CELLUCAM BP 22 Edea	1731	100 000	13.08.1980	12.08.1985	100 000	EDEA	Societe dissoute
CFC	1823	87 540	08.10.1992	07.10.1997	87 540	YOKADOUMA	
CCIF BP 1207 Yaounde	1536	16 055	24.02.1986	23.02.1991	33 055	MATOMB	Renouvellement non sollicite
	1649	14 000	19.02.1986	18.02.1991		MATOMB	Renouvellement non sollicite
CIF BP 443 Douala	1794	36 400	28.08.1989	27.08.1994	36 400	MANFE AKWAYA	
COCAM BP 154 Mbalmayo	1691	119 800	25.01.1977	24.01.1982	119 800	EBOLOWA MVANGAN	Renouvellement en cours CTN 19.09.86 Instance pour cause de discussion sur clauses du cahier des charges
CONAC BP 237 EDEA	1709	20 800	06.10.1978	05.10.1983	20 800	MESSONDO	Renouvellement sollicite CTN du 30.10. et 02.11.87 Instance pour cause de taxes impayees
CTL BP 1440 Douala	1669	26 800	16.06.1981	15.06.1986	94 920	NGUTI	
	1753	68 120	05.11.1982	04.11.1987		MAMFE	
EFC BP 877	1477	13 160	27.05.1971	26.05.1976	138 740	SANGMELIMA	Instance pour taxes impayees

	1554	82 280	20.12.1984	19.12.1989		BATOURI	Renouvellement non sollicité
	1784	43 300	24.01.1989	23.01.1994		MBANG	
EFIN BP 2372 Yaounde	1807	47 728	04.12.1990	03.12.1995	47 728	NDELELE YOKADOUMA	
EGONO ESSAME BP 437 Sangmelima	1777	52 000	06.11.1986	05.11.1991	52 000	DJOUM SANGMELIMA	Renouvellement non sollicité
EKO EBONGUE BP 6346 Yaounde		52 816			52 816	AKONOLINGA ENDOM	Avis favorable pour l'octroi CTN du 30.10. et 02.11.87
EYIA Pierre BP 10037 Yaounde		38 125			38 125	BENGBIS	Octroi en cours mais instance pour taxes
EGTF-RC CORON BP 136 Yaounde	1779	53 700	03.10.1988	02.10.1993	92 450	AKONOLINGA	
	1809	38 750	16.01.1991	15.01.1996		NANGA-EBOKO	
FANDJO Samuel BP 1207 Yaounde		22 350			22 350	NANGA-EBOKO	Octroi encours CTN du 06.09.92
FIFE BP 125 Kumba	1703	51 920	11.03.1978	10.03.1983	51 920	KUMBA-EKONDO TITI	Renouvellement en instance pour cause de taxes impayées et révision du cahier de charges
FORESTIERE DE CAMPO BP 1314 Douala	1465/ 1473	158 217			237 090	CAMPO	En convention avec le gouvernement
	1702	13 600					
	1590	65 273					
GAD BP	175	15 440	03.05.1983	02.05.1988	15 440	NGOMEDZAP	Renouvellement sollicité mais CTN a demandé le retrait de la licence le 16.04.90
GRUMCAM BP 1959 Douala	1562	80 000	20.12.1984	19.12.1989	134 000	NDELELE	Certificat transformé
		54 000				YOKADOUMA	Octroi en cours CTN 06.09.1991
KARAYANNIS Dimitros Nicolas BP 100 Ebolowa	1636	49 320	21.04.1972	20.04.1977	90 620	EBLOWA	Pas de renouvellement
	1801	41 300	09.05.1990	08.05.1995		EBLOWA	
KEDI Jean BP 19 Mbal Mayo	1721	16 160	04.12.1979	23.04.1984	66 660	NGOMEDZAP	Renouvellement sollicité dossier instance le 16.04.90 defaut de taxe et caution
	1802	50 500	17.04.1990	16.04.1995		MAKAK NGOMEDZAP	
KHOURY Miquel BP 326 Yaounde	1572	38 600				YOKO	Retrait propose CTN 25.05.86
	1598	48 800				NTUI	Retrait propose CTN 25.05.86
	1612- 1613 et 1614	157 420	07.06.1971	06.06.1976		NTUI	Renouvellement sollicité
KHOURY Paul BP 1201 Yaounde	1652	31 600	22.12.1974	21.12.1979	31 600	NANGA-EBOKO	Renouvellement non sollicité
MANGA Michel BP 1723 Yaounde	1788	9 987	22.05.1989	21.05.1994	9 987	MBANKOMO NGOUMOU	

MBELLEY Felix BP 145 Bertoua	1749	13 200	04.01.1988	03.01.1993	13 200	BELABO	
MPL BP 01 Kumba	1724	114 650	08.03.1980	07.03.1985	114 650	MAMFE-NGUTI	Renouvellement en cours CTN le 16.04.90
MPOUMA Blaise BP 5359 Douala							
MVONGO NDE Philbert BP 12 Minta	1817	83 400	04.05.1992	03.05.1997	83 400	NANGA-EBOKO MINTA	
R.PALLISCO SARL BP 4171 Yaounde	1818	78 160	28.04.1992	27.04.1997	78 160	MESSAMENA	
OWONA Luc- Marie BP 292 Mbalmayo	1603	3 800	31.03.1986	30.03.1991	18 100	NGOULE MAKONG	Renouvellement non sollicite
	1785	14 300	01.02.1989	31.01.1994		MBALMAYO NGOULE MAKONG	
FAKO Timber BP 17 Limbe		23 690			23 690	KUMBA	Octroi en cours CTN du 19.06.91
FANDJO Dunclair		22 350			22 350	NANGA-EBOKO	Octroi en cours
PRENANT compagnie BP 1772 Douala	1787	43 540	28.02.1989	27.02.1994	104 196	NKONDJOCK YINGUI MAKENENE	
	1812	60 656	21.11.1991	20.11.1996		ABONG-MBANG	
ROS Trade BP 4539 Yaounde		35 500			35 500	MAKAK MATOMB NGOG MAPUBI	Octroi en cours CTN du 21.07.88
SAB BP 89 Yaounde	1331	34 300	26.09.1969	25.09.1974	153 497	DZENG YOKADOUMA	Renouvellement sollicite CTN du 18.01.1989
	1767	28 200	31.03.1986	30.03.1991		AWAE-MFOU	Renouvellement sollicite
	1809	39 917	22.05.1991	21.05.1996		NANGA-EBOKO	
SABM BP 326 Yaounde	1596	49 800	23.09.1975	22.09.1980	67 870	NTUI	Renouvellement sollicite
	1619	6 500	07.06.1971	06.06.1976		NTUI	CTN du 25.06 85
	1699	11 570	03.10.1977	02.10.1982		NTUI	
SABE BP 68 Yaounde		74 312			74 312	ABONG MBANG	Octroi en cours CTN du 25.06.85
SEFMA	1726	39 700	17.07.1990	16.07.1995	39 700	YOKO	Transferee par arrete No.323/cab/pr du 28.06.91
SEBC BP 2004 Douala	1578	91 325	13.04.1985	12.04.1990	192 055	ABONG-MBANG	Renouvellement sollicite
	1805	38 650	08.10.1990	07.10.1995		ABONG-MBANG	
		62 080				BATOURI	En cours d'octroi CTN du 19.06.91
SEBAC	1825	86 980	14.10.1992	13.10.1997	86 980	YOKADOUMA	
SEFAC BP 942 Douala	1582	99 500	13.04.1990	12.04.1995	131 860	MOLOUNDOU	
	1806	32 360	04.10.1990	03.10.1995		MOLOUNDOU	
SEFE BP 9 Eseka	1693	16 500	01.03.1977	30.03.1982	57 000	ESEKA	Retrait
	1734	24 500	30.06.1980	29.06.1985		MESSONDO	
	1762	16 000	04.01.1986	03.01.1991		MESSONDO	Renouvellement sollicite
SEFN BP 130 Foumban	1797	56 900	05.09.1989	04.09.1994	56 900	BAFIA-NTUI YOKO	
SEFHN BP 263 Bafang	1585	8 635	09.05.1970	08.05.1975	73 515	YABASSI	Retrait
	1696	9 800	13.06.1977	12.06.1982		MBANGA TOMBEL	Retrait

	1736	55 080	30.06.1980	29.06.1985		MBANGA TOMBEL	Retrait
SEPT BP 1207 Yaounde	1682	38 415	04.10.1975	03.10.1980	164 665	AKONOLINGA AYOS	Renouvellement sollicite
	1728	44 300	13.08.1980	12.08.1985		AKONOLINGA	Renouvellement sollicite
	1764	81 950	05.03.1986	04.03.1991		NDIKINIMEKI	Renouvellement sollicite
SFS BP 681 Douala	1773	20 880	18.05.1987	17.05.1992	20 880	NKODJOCK LOUM	Renouvellement sollicite
SFH BP 5980 Douala	1813	98 853	08.01.1992	07.01.1997	98 853	YOKO	
SCIB BP 6353 Yaounde	1799	24 400	25.01.1990	24.01.1995	24 400	SNAGMELIMA MEYOMESSALA	
SCTB BP 77 Loum	1789	35 560	14.11.1989	13.11.1994	35 500	YABASSI-LOUM NKONGSAMBA	
SFACS BP 24 Eeeka	1653	16 000	27.12.1974	26.12.1979	16 000	ESEKA MAKAK	Renouvellement sollicite
SFDL	905/906	5 000	23.09.1968	22.09.1973	150 559	ZOETELE	Renouvellement sollicite
	1487/ 1491	59 439	05.05.1972	04.05.1977		SANGMELIMA	Renouvellement sollicite
	1579	86 120	13.04.1970	12.04.1975		EBOLOWA	Instanca pour complement d'informations
SFID BP 1343 Douala	1781	54 360	12.10.1988	11.10.1993	170 760	BATOURI	
	1804	60 000	27.09.1990	26.09.1995		ABONG-MBANG	
	1824	56 400	05.11.1992	04.11.1997		YOKADOUMA	
SFIL BP 1605 Douala	1814	38 246	05.02.1992	04.02.1997	38 246	YOKADOUMA	
SFOC BP 2325 Yaounde	1712	34 200	21.02.1979	20.02.1984	76 160	MVENGUE MAKAK	Renouvellement en instance pour comlement de caution
	1782	41 960	12.10.1988	11.10.1993		EBOLOWA MUENGUE MAKAK	
SFIS BP 1469 Douala	1537	93 000	11.06.1984	10.06.1989	147 760	MOLOUNDOU	Renouvellement sollicite
		54 760				YOKADOUMA	Octroi en instance pour taxes
SIBAF BP 376 Douala	1780	79 420	30.09.1988	29.10.1993	89 420	YOKADOUMA (KIKI)	
		10 000				YOKADOUMA (KIKI)	Octroi en cours CTN du 14.02.92
SIMPEX BP		80 800			80 800	ESEKA	Octroi en cours CTN du 25.06.85
SICAB BP 262 Nkongsamba	1643	7 540	28.03.1973	27.03.1976	28 035		Renouvellement ajourne
	1738	11 120	28.10.1985	27.10.1990			Renouvellement sollicite
	1654	9 375	14.03.1980	13.03.1990			Renouvellement sollicite
SNFSC BP 681 Douala	1793	34 380	24.07.1989	23.07.1994	34 380	NGAMBE	
SNF		60 040			60 040	YOKADOUMA	Octroi en cours CTN du 19.06.1991
SOCAFI BP 39 Bertoua	1714	25 450	13.03.1979	22.03.1984	132 490	BERTOUA, YOKO	Renouvellement sollicite
	1766	107 040	05.04.1986	04.04.1991		YOKO, BERTOUA	Renouvellement sollicite
SOCAFOR BP 12445 Douala	1771	13 250	19.02.1987	18.02.1992	13 250	EDEA	Renouvellement sollicite
SOCIB	1791	69 160	13.06.1989	12.06.1994	69 160	DJOURM	

SOFIBEL BP 1762 Yaounde	1698	210 000	26.08.1977	25.08.1982	210 000	BERTOUA	Renouvele 3 fois
SOFOCA BP 1652 Douala	1742	21 840	14.09.1986	13.09.1991	58 000	YABASSI	Renouvellement sollicite
	1774	36 160	21.12.1987	20.12.1992		NKONDJOCK	Renouvellement sollicite
SOFICA BP 1184 Yaounde	1783	32 800	11.11.1988	10.11.1993	32 800	OKOLA	
SOFOREL BP 2 Mbalmayo	1765	58 305	26.03.1986	25.03.1991	58 305	LOLODORF KRIBI MESSONDO	Renouvellement sollicite
SOTRANSCO- FER	1756	24 640	10.09.1984	09.09.1989	38 140	YABASSI	Renouvellement encours TCN du 16.04.1990
	1694	13 500	12.04.1977	11.04.1982		DIBOMBARI YABASSI	Retrait de licence propose CTN du 19.09.86
SOTREF BP 1605 Douala	1796	98 040	05.09.1989	04.09.1994	135 100	MOLOUNDOU	
	1815	37 060	12.11.1991	11.11.1996		YOKADOUMA	
TIC BP 173 Kumba	1676	5 600	25.08.1978	24.08.1983	136 040	KUMBA	Renouvellement sollicite mais instance pour taxes impayees CTN du 21.07.88
	1677	76 440	25.08.1978	24.08.1983		KUMBA	
	1678	54 000	25.08.1978	24.08.1983		KUMBA	
TCHUISSE Mathieu BP 1752 Douala	1770	25 050	04.11.1986	03.11.1991	25 050	YABASSI	Renouvellement en cours mais caution a fournir pour 91-96 CTN du 14.02.92
UTC BP 909 Yaounde		55 620			55 620	AMBAM MA'AN	
WIJMA BP 1616 Yaounde	1790	90 000	13.06.1989	12.06.1994	90 000	AKOM II EBOLWA	
YOMBA Paul BP 50 Edea	1531	7 000	06.12.1973	05.12.1979	32 800		Retrait propose
	1722	14 280	06.03.1980	05.03.1985			Retrait propose
		11 520					Octroi en cours CTN 30.10. et 02.11.87

