Introduction and overview

Overcoming poverty and inequality is still one of the biggest development challenges facing economists and politicians both in developing and developed countries. It is universally acknowledged that success can only be guaranteed by a mix of national and multinational contributions. It is for this reason that at the Millennium Summit held in September 2000 in New York, USA, 191 countries with Cameroon present adopted the Millennium Declaration. The declaration which focussed on issues of peace, security and development and covered areas including environment, human rights and the sound management of public affairs was worked out into eight major goals and eighteen quantitative targets to be achieved before 2015 and now popularly known as the Millennium Development Goals (UNDP, 2002). Among the eight goals, three of them (eradication of extreme poverty and hunger, achieving universal primary education and promoting gender equality and empowerment) occupy a central part in this dissertation either as important factors determining Cameroons progress in meeting up the MDGs or as the goals per se under analysis.

Soon after adoption, monitoring of progress towards the MDGs is being carried out at global and country level. In the context of Cameroon, much has been reported on the trend of poverty and inequality (see INS (2002, 2003 and 2004); Fambon and Baye (2002); Baye (2004); Emini et al.; (2005)) but more is still to be done empirically on issues concerning poverty and inequality as well as particular sectors of the economy. Because appropriate understanding based on proper empirical analysis of country or group specific determinants of poverty and inequality, gender bias and employment issues is required for the formulation of policies needed to attain the MDGs. Besides poverty and inequality analysis carried out in this dissertation, I also look at issues related to the formal and informal sector and gender in agriculture because of the pivotal role they assume in Cameroons economic growth and development process.

This dissertation therefore goes beyond estimating poverty and inequality rates by addressing issues related to the formal and informal sector because of the discrepancy in poverty and inequality related issues between both sectors. Poverty rates estimated in this study corroborate perfectly with those estimated by the NIS (2004), confirming a reduction in poverty of 13 percent between 1996 and 2001. Despite this reduction in poverty, inequality remained constant between 1996 and 2001. Therefore the average growth of 4.5% experienced by Cameroon during this period contributed to a reduction of the national poverty rate but the benefits from growth did not contribute to a reduction of inequality. To better understand the issue of inequality in Cameroon, consumption
inequality and gender constraints in agriculture are further issues analysed in this dissertation with the hope of informing policy makers on the causes, effects and consequences of some of the policies applied.

For the purpose of this dissertation, I make use of the most recent data surveys for Cameroon collected by the Statistics and National Accounts Department in Cameroon (ECAM II and EESI 2005) as well as a field study carried out in the cocoa growing regions of Southern Cameroon.

**Geography and demography**

Geographically, Cameroon is located in Central Africa and is the meeting point of Equatorial Africa to the south and Tropical Africa to the north. Cameroon is bordered by Nigeria to the West, Chad to the North-East, Central African Republic to the East, Congo, Gabon and Equatorial Guinea to the South. Cameroon covers a total surface area of 475, 650 Km$^2$ with a 402 Km long coastline bordering the Gulf of Guinea (UNDP, 2002).

Demographically, Cameroon has a relatively young population with about 71% of its inhabitants being younger than 30 years. Since independence, Cameroon’s population moved from 5 million in 1963 to 7.6 million in 1976, 10.5 million in 1987 and 13 million in 1995. Cameroons population growth is better appraised when emphasis is rather laid on the average annual population growth which stood at 2.9% between 1976 and 1987 whereas during the same period, the world population was growing at an average annual rate of 1.7% (Kobou et al., 2002). The rapid growth in population was also accompanied by rapid rural-urban migration. At the time of independence (1960) and the years thereafter, the Cameroonian population was essentially rural since 84% of individuals resided in agglomerations of less than 5000 inhabitants, excluding administrative centres. In 1963, only 16% of the population lived in urban areas and this later on moved to 29.6% in 1976 and reached 38.6% in 1987. In 2000 it was about 50% and will be around 70% in the year 2020 if nothing is done (Kobou et al., 2002). This rapid growth in urban population is accompanied by the emergence of new problems, magnified by the economic crisis of the mid eighties and the in ability of public institutions in playing its role.

**The economy**

Since obtaining its independence, Cameroon’s real GDP per capita between 1960 and 2000 evolved at an average annual rate of 1.1%. This rate is more than 2.5 times the evolution rate of Sub-Saharan African countries but three

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1 1976 is the year of the first general population census while the second took place in 1987.
times less than that registered by South-East Asian countries² (O’Connell and Ndulu, 2000). The evolution has not been regular and there are contrasts between the four major periods that best characterise Cameroon’s growth process. The period from 1960-1975 marked the first phase of growth with an average annual per capita GDP of 1.2 %. This period was marked by the organisation of the productive structures of the economy. The discovery and exploitation of petroleum in the mid seventies introduced the second growth phase which lasted until 1985. During this period, the average annual GDP per capita was about 7 %. From 1985-1995, it is the third phase also known as the decline phase of the GDP per capita. During this period, Cameroon experienced an unprecedented economic crisis blamed on poor macro-economic performance, occasioned, at least in part, by a slump in world market prices of its export commodities (petroleum, cocoa, coffee, rubber and timber) that exposed the structural deficiencies of the country, and by overvaluation of the CFA franc against the dollar – a currency in which most of Cameroon’s exports are quoted (Baye, 2004). The devaluation of the CFA franc³ in 1994 put Cameroon back on the path of growth and ushered in the fourth phase starting 1995. The Cameroon economy is now relatively well balanced between three traditional sectors, namely agriculture, industry and services. Since the return to growth in 1994/1995, the primary sector, industry and services have regularly contributed respectively 23 to 25 %, 26 to 30 % and 40 to 45 % to GDP.

Before the return to growth, the economic crisis had taken a heavy toll on the economy with the main symptoms being: drastic declines in incomes, economic and social infrastructure, in the supply of social services and loss of jobs. Restructuring of public and para-public enterprises, a freeze on recruitment to the public service and staff redundancies created a surge in unemployment which affected most of all women and young people.

In a joint effort with international donors, the government of Cameroon applied a combination of policies to put the economy back on the path of growth. Since signing the First Triennial Programme with the IMF in 1997 which was supported by an Enhanced Structural Adjustment Facility (ESAF), growth became perceptible. Positive economic performances have been noticed at the macro-economic level and at the structural and sectoral reform levels. GDP in real terms has grown at an average rate of 4.5 % and inflation has been held at less than 4 % (UNDP, 2002; UNICEF, 2006). The progress recorded later on qualified Cameroon for eligibility for the Heavily Indebted Poor Country (HIPC) initiative in October 2000. Cameroon’s admission enabled it to sign a second program with the IMF supported by a Facility for Poverty Reduction and

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² The average annual growth rate of per capita product is 0.4 % between 1960 and 1997 for all sub-Saharan African countries; it is 3.86 % for South-East Asian countries during the same period

³ On the 12 January 1994, the CFA franc was devaluated by 50 % in relation to the French franc (FF)
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Growth (FPRG). This was to allow Cameroon to embark on a poverty reduction strategy before reaching the point of completion at the end of the program. At the point of completion, attained in 2006, Cameroon benefitted from the full implementation of the HIPC and Multilateral Debt Relief Initiative (MDRI) Initiatives which reduced Cameroon’s stock of debt (in net present value terms) from US$5.7 billion in 2005 to US$525 million 2006. In 2006 alone, debt service relief was estimated at US$128 million. Resources freed up by debt relief where expected to be used in accordance with a clear and well-defined strategy in line with the government’s poverty reduction strategy (IMF, 2006).

Although stabilization and structural adjustment programs have perceptibly improved GDP growth and strengthened macro-economic balances in recent years, this has not stopped them from being the target of much criticism owing to the fact that they paid more attention on economic efficiency to the detriment of equity considerations. In 1996, the poverty rate of Cameroon was estimated at 53.3 % and dropped to 40.2 % in 2001 indicating a reduction in the average incidence of poverty in monetary terms at the national level (DSCN, 2002). This means that the impact of the economic recovery on the living conditions of the population has been slight. Recent figures for 2007 published by the National Institute of Statistics of Cameroon indicate that the poverty rate has remained constant at 39.9 % (NIS, 2008). The indicators of access to basic social services and of the level of incomes are still very low. In the labour market, there is still chronic unemployment with the majority of the active population in the informal sector.

This stagnation in Cameroon’s progress towards attaining the MDGs fortifies the argument in favour of a more disintegrated analysis of the economy. Because disparities in poverty rates between and within provinces as well as rural and urban areas are masked by the progress registered in poverty reduction at the national level in Cameroon. Secondly, the dangers of operating in the informal sector as well as the nuisance it poses to the government by eroding a sizeable portion of its tax base is blurred by its increasing importance to the Cameroonian economy. Finally, gender discrepancies and its harm to the Cameroonian economy and impacts on poverty reduction cannot be properly established by looking only at national poverty figures. This dissertation answers this request by addressing four different topics sub-divided into four different papers summarised below.

**Profile and determinants of poverty and inequality in Cameroon**

Since the adoption of the MDGs, economic development has witnessed an increasing interest on issues of poverty and inequality. At the centre of interest have been issues of counting the poor, reducing the inequality and poverty reduction strategies in order to meet the MDG of halving the proportion of people living in extreme poverty by 2015. Growth has been the most
recommended approach but whether growth is “pro-poor” depends on the impact of growth on inequality and on how much it affects poverty. Growth, inequality and poverty put together form one of the most contentious issues of development economics with regards to their links to one another. Between 1990 and 2005, approximately two thirds of the countries experienced an increase in income inequality. That is, the incomes of richer households have increased relative to those of the middle class and poorer households. In about the same period, the World Bank says that the number of people in extreme poverty (living on an income of less than US$1 a day in Purchasing-Power-Parity terms) has fallen from 1.4 billion in 1980 to 1.2 billion in 1998 (Wolfensohn, 2002). If one focuses solely on the same period, there are signs that a positive correlation exist between rising inequality and economic growth. It should remain clear that absolute poverty and inequality are two different concepts. Poverty referring to the fraction of the population, or the number of people, whose income falls below a designated amount intended to reflect some minimally acceptable standard of living. To be meaningful, the standard must remain fixed over time; two common ones are thresholds of $1 or $2 per day (in 1985 dollars). Inequality on the other hand refers to the gap between the rich and the poor people in a region, country or the entire world. Statisticians have come up with many ways to measure income inequality (see Salai-i-Martin, 2006). This paper focuses on poverty and inequality in Cameroon. Following Sen (1976); Forster et al. (1984); Atkinson (1987) and Bourguignon (1979) a poverty and an inequality profile for Cameroon is constructed that captures several concepts of poverty and satisfies various poverty and inequality axioms. That is, beyond the head-count index, the poverty gap and severity of poverty are presented in the profile and estimations made on the amount required to close the poverty gap. The profile is established across the national territory by provinces, sector of employment (formal, informal and agricultural) and urban, semi-urban and rural demarcations. Using the estimation of the head-count index, a poverty map for Cameroon is also developed. Estimations from the profile indicate that there exist a link between the extent of poverty and the level of inequality in Cameroon. There is an inverse relationship which seems to exist between poverty and inequality in Cameroon. That is, the lower the degree of poverty, the higher the level of inequality. With this in mind, the question of an existing trade-off between poverty and inequality cannot be ignored. I precede the standard Gini decomposition in the later section of the paper with an approach to inequality decomposition that is based on simple regression analysis. This approach provides a flexible and efficient way of quantifying the roles of different determinants of expenditure, such as land possession, sex, age and level of education of household head and other variables on the level of expenditure inequality. That is, instead of speculating on the historical, cultural and economic causes of inequality, this approach answers the question of how much a given determinant of expenditure contributes to expenditure inequality, given a certain level of inequality.
I conclude the paper by postulating that Cameroon derailed from the track of growth and development when the crisis struck in the mid 80s. And that despite improvements in growth due to measures put in place by the government with the assistance of donor nations and institutions, poverty remains a household word in the country and the gap between the poor and the non-poor is still very wide. This is not to say the government and the international community got it all wrong in their endeavours to reduce poverty and inequality, but a hint to pause and revise certain issues as well as re-enforce existing ones. This work provides a base for such analysis and policy development.

**Understanding expenditure inequality in Cameroon**

Knowledge on overall inequality as well as within and between group inequalities in Cameroon as presented in ‘paper 1’ is important to policy makers but this may be insufficient to properly target public policies. Policies may have very differentiated impacts on different expenditure or income sources. This therefore makes the case for the splitting of overall inequality among different expenditure or income sources. Therefore as a follow up to the first paper, I explore the sources of inequality using the Lerman and Yitzhaki (1984, 1985; Yitzhaki, 1983) covariance method for decomposing the Gini coefficient by sources of expenditure. This method has been applied previously to study income inequality by income source in the U.S. (Lerman and Yitzhaki, 1985) and to assess the progressivity of commodity taxation in Israel (Yitzhaki, 1990). Garner (1993) used this same method to examine inequality in U.S. consumption expenditures while Lazaridis (2000) used it to examine the effects of 16 food items on the overall food expenditure inequality in Greece. Empirically, this is a widely accepted method in estimating the sources of inequality as well as evaluating the impact of policy measures (taxes or subsidies) put in place to redistribute income.

Using the 2001 household survey data for Cameroon (ECAM II), I disintegrate total expenditure into ten sources in order to estimate the driving sources of expenditure inequality in Cameroon. Beyond the national decomposition by source, I also do decomposition by income groups and across regional demarcations’ (urban, semi urban and rural). This is because expenditure on particular sources is determined to a great extent by location and ones purchasing power. This implies that, different groups of people will contribute differently to total inequality via their expenditure outlets.

I continue the paper by estimating a complete system of demand equations making full use of the theoretical model based on the Klein-Rubin Linear Expenditure System (LES) which was first estimated by Stone (1954). LES yields for each income group the proportion of supernumerary income devoted to supernumerary expenditure of each of a variety of commodity groups, along with the amount of committed expenditure on each commodity group. Unlike most of the usual demand systems, it is advantageous in that it is able to
replicate the complex variation in the expenditure weights of various commodity groups as income (total expenditure) varies. The estimated LES parameters are used to compute expenditure and own-price elasticity. Using the estimated LES parameters and the calculated elasticities, urban and rural households are expected to show different reactions to unit increases or decreases in household income via taxes or subsidies. I conclude the paper by simulating some changes in tax and subsidy.

It is observed in the early section of the paper that overall inequality in Cameroon is driven by expenditure on four major components: food, transport and communication, housing and health. The overall Gini based on household total expenditure for Cameroon is 0.46. The relative marginal effects obtained from the decomposition identified some components as inequality decreasing when expenditure on them increased. The findings in the later section of the paper reveal that rural households generally allocate the largest share of supernumerary income on food meanwhile urban households allocate the largest share of their supernumerary income on transport and communication. Committed expenditure is higher for all commodity groups in urban areas as compared to rural areas and roughly follows the same pattern set by the average budget shares. The difference in impact and consequence of certain policies (e.g. food price reduction) in rural and urban households shows that, certain areas or sectors will require separate consideration of policy interventions.

The informal and formal sector in Cameroon

The informal sector has suffered a lot of prejudices and was stigmatised in the past as mainly marginal, a transient phenomenon, a modern day nuisance and consisting of people uninterested in being law-abiding citizens. Beyond this stigmatisation, many were of the opinion that a large informal sector has serious consequences for private sector activity, economic growth and the consolidation of democracy. It weakens democracy, hinders necessary reforms and contributes to misguided policies due to the illegality of the ‘informals’ preventing them from voicing their concerns to government officials and holding them accountable. Therefore, reforms that would increase private sector activity and growth are not implemented. Because informal activities are not reported, policy makers do not have the necessary information to make adequate decisions. The supporters of this view have now revised their positions as it has been proven that this is not always the case as not all who work in the informal sector are poor and miserable, not all will rather be somewhere else and not all are barely educated.

Hope was that the informal sector will disappear as growth improves but contrary to this expectation, the informal sector is not only persisting in Cameroon but has actually grown over the years in which Cameroon has experienced growth by dominating the economy in terms of employment. The informal sector employs more than 50% of the active population in Cameroon.
and its contribution to growth is becoming more and more significant (Merceron et al. (2007) and Becker, (2004)). Despite the increase in importance and acceptance of the informal sector as a composite sector of the economy, working and employment conditions within the sector are poor and insecure to the detriment of its participants and governments continue to complain of a shrinking tax base resulting from an expansion of this sector. Whether we appreciate or dislike the existence of the informal sector, given its growing importance in developing countries and Cameroon in particular, the scale seems to be tipping in favour of its maintenance. Effective co-existence of the informal sector alongside the formal sector can only be achieved if the right answers are found to the following questions.

- What is exactly the informal sector and how do we define it?
- How is it related or linked to the formal sector - symbiotic or parasitic?
- How does it function and what do we do with it - formalise or maintain it the way it is?

The heterogeneity of the informal sector between and within countries makes it difficult to find universal responses to these questions. In this paper, I address the first two questions by dividing the work into two chapters.

In the first chapter of this paper (3), I argue that the use of different definitions most often leads to differences in measurement and size thus raising important questions about the comparability of informal sectors when they are defined and measured differently. So the main purpose of this chapter of the paper is to show using the same method like Henley et al. (2006) that the precise definition of informality matters and this intends affect the size of the informal sector. Furthermore, a descriptive investigation of the different definitions as well as a multivariate analysis will be carried out to reveal which characteristics are more strongly associated with which definition and measure of informality.

In the second chapter (4) of the paper, I address the issue of linkages by attempting to find answers as to how the informal and formal sectors are linked to one another in Cameroon. Identification of linkages between both sectors and their magnitude is important because it determines the nature and scope for intervention either to influence the informal sector or to attain other objectives like poverty reduction or increase tax revenue. I limit myself to analysing only forward and backward linkages and argue that the informal and formal sector in urban Cameroon are linked to one another and that these linkages are in certain cases “symbiotic”- mutual benefit between both sectors and in some cases “parasitic”- one sector exploiting the other. The analysis in the paper is based on the same concept used by Grimm and Günther (2006) to estimate informal and formal sector linkages for urban Burkina Faso.

Using three distinct definitions of informality, results indicated variations in size of the informal sector thus buttressing the view that in any study dealing with informality, the definition matters and should assume a central role with regards to the subsequent analysis. Magnitudes obtained for factors contributing to
informality from the multivariate analyses, indicate that the likelihood of informal sector earnings are in many ways related to informal sector earnings, occupational status and sector of employment of other household members. The magnitudes of the links via earnings are relatively low (less than one) but those of intra-household linkages show a higher magnitude as compared to the inter-household magnitudes. Using selected informal business units in place of households, the magnitude of the results corroborated perfectly with the argument made that the informal business units are strongly linked to the formal sector in their quest for raw materials but weakly linked to the formal sector as a market for their finished products. The quality of the link (symbiotic or parasitic) is determined by the sector of the informal business unit’s main client and main supplier.

**Opportunities and constraints in agriculture: a gendered analysis of cocoa production in Southern Cameroon**

The argument for addressing gender inequality is not simply that it is sizable in Cameroon but that it has negative consequences for efforts to promote growth and poverty reduction. It is now common knowledge that men and women both play substantial – though different – economic roles in African economies; and that gender inequality in education and employment directly and indirectly limits economic growth in Africa (Klasen (2002); Klasen and Lamanna (2008); World Bank (2001); Blackden et al, (2007)). Therefore if Cameroon is to meet up with its objective of halving the proportion of people living in extreme poverty and eliminating gender disparity in education as well as other sectors of the economy, it will have to properly analyse the issues of gender bias. According to Zuckerman (2002), gender inequalities have been insufficiently captured in conventional poverty analyses, designs and monitoring systems, thus weakening the chances of success of poverty reduction interventions. The issue of gender equality therefore needs to be at the centre of development policies - both at the national and international level. Just because gender inequality is inextricably linked to societal norms, religion or cultural traditions, it should not be either a deterrent or an excuse to gender sensitive development planning.

In a bid to support government effort in reducing the gap between males and females which appear to be stifling all efforts aimed at fostering growth and reducing poverty, this dissertation also devotes a section to the opportunities and constraints women face in agriculture in Cameroon. The choice of the

* Based on joint work with H. Bisseleua and S. Klasen
agricultural sector and cocoa in particular to measure the impact of gender inequality on growth is due to its importance in the Cameroonian economy. The agricultural sector takes the front stage when one examines the economic and poverty situation in Cameroon. The main cash crops providing about 40 percent of Cameroon’s exports are cocoa (Cameroon is the world’s fifth-largest producer), coffee and cotton. Before Cameroon began exporting oil in 1977, cocoa and coffee was the mainstay of the economy, contributing about 80% of the country's GDP (Amin, 2001).

In this paper, we draw on results from a 2007 survey of male and female cocoa producers in Southern Cameroon to investigate to what extent there are gender differences in access to land, inputs, extension services, productivity, and control of proceeds. Using gender as an analytical approach, that is, viewing resources and benefits as being distributed within society and its institutions, including the family, market and the government on the basis of gender (roles, relations), the specific objectives of this paper is to:

a) identify the influence of gender in different aspects of cocoa production,
b) assess the impact that gender disparities have on productivity,
c) study gender differential in cocoa marketing and control over proceeds,
in order to arrive at recommendations for promoting a more gender-equitable “pro-poor growth” in the agricultural sector.

We find that women farmers have access to land (of similar size to men), but through different mechanisms than men. They are strongly disadvantaged when it comes to access to extension services and marketing and control of proceeds. Despite these disadvantages, the productivity in terms of output per unit of land is similar to that of their male colleagues. Productivity analyses suggest that a slight disadvantage in productivity on female plots turns into a slight advantage when controlling for all the factors affecting productivity.