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Ekambi Emmanuel Ekambi

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MEMBERS OF THE EXAMINING COMMITTEE

Dr. Geske Dijkstra
Dr. Bridget O'Laughlin

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Enquiries:

Postal Address:
Institute of Social Studies
P.O. Box 29776
2502 LT, The Hague
The Netherlands

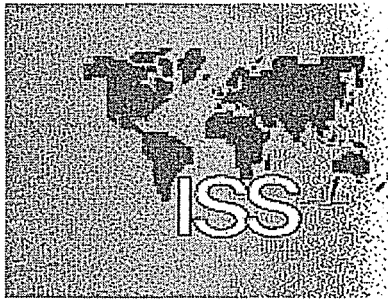Telephone: -31-70-4260 460
Cables: SOCINST
Telex: 31491 ISS NL
Telefax: -31-7--4260 799
e-mail: postmaster@iss.nl

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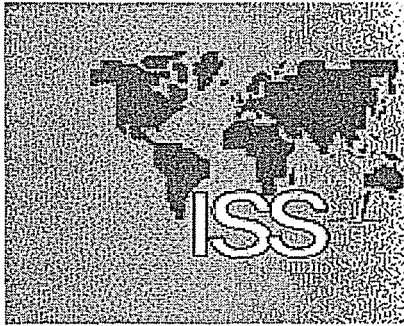
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Dedication

To all the poor in this world of plenty

Acknowledgements

List of abbreviations and acronyms

ADR: African Development Review

CHS: Cameroon Household Survey

CPM: Capability Poverty Measure

GDP: Gross Domestic Product

HPI: Human Poverty Index

HDR: Human Development Report

ROC: Republic of Cameroon

SEMRY: Societe d'Extention et de Maintenance de la Riziculture de Yagoua

SSA: Sub-Saharan Africa

UNDP: United Nations Development Programme

UNVDA: Upper Noun Valley Development Authority

WB: World Bank

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Chapter 1 - General Introduction

1.1 – Introduction

During the 1950s and 1960s when formerly colonised countries embarked on the path of development upon political independence, the main concern was economic growth, seen as the most appropriate way to raise the general standard of living and reduce poverty in the Third World. Poverty reduction or eradication was not a direct and immediate objective of these development models. Rather it was assumed that benefits of economic growth would trickle down to all segments of the population, create employment, raise living standards and reduce poverty (Brohman, 1995: 200).

As the decade of the 1960s elapsed away, evidence was accumulating that the "trickle–down" development models were ineffective in achieving social welfare. Instead, processes of expropriation of resources by the powerful across and within nations accompanied these models (Sen, 1994:64). In many countries economic growth was accompanied by declining living standard and decreased access to productive resources for large numbers of people (Brohman, 1995:202). Hopes of the 1950s and early 1960s gradually faded away as inequality increased between and within nations and the reduction of poverty failed to materialise.

Attention will subsequently be shifted from economic growth to equity in income distribution, poverty alleviation and basic needs provision (Sen, 1994; Brohman, 1995). The approach coined by the World Bank as redistribution with growth treated redistribution and economic growth as complementary rather than contradictory elements of development. Hence redistribution of income toward the poor remained essentially tied to economic growth (Brohman, 1995:205). Consequently poverty alleviation was not tackled adequately as fundamental changes in macro-economic policies were not undertaken.

Economic austerity programmes implemented in the 1980s in many countries led to increased poverty, declining living standards and decreased access to social services for a vast majority of people in the developing world. The 1990s will see yet another and increased attention to poverty alleviation. Poverty reduction became a priority issue for international agencies (WB, UNDP) and national governments (Hanmer L. et al, 1997; White, 1998; UNDP, 1997). This regain of interest stems from the modest gains made in poverty reduction and the increasing inequality

between the poor and the rich. Overall poverty incidence is estimated to have fallen from 30% to 29% between 1987 and 1993 but the number of people living on less than one dollar a day increased (WB, 1996:9).

Despite the efforts made poverty remains pervasive and about a quarter of the world's population is in severe poverty (UNDP, 1997:2ff). There are marked differences between and within regions and countries. Such differences indicate that while prospects for reducing poverty exist in some areas, other regions are threatened by increased poverty. This is the case for SSA. The region has the highest proportion of poor people and the fastest growth in human poverty (UNDP, 1997:3) and yet one of the lowest rates of economic growth. Its people are the poorest of the world (WB, 1996:8). Tremendous efforts are therefore required to reduce poverty in SSA. In effect it will warrant that poverty reduction should become the leitmotiv of development. Hence, the necessity to develop appropriate strategies to arrest poverty.

1.2 - Background

Cameroon, situated at the "heart" of Africa, embraces a vast ecological and climatic diversity and is exceptionally rich in bio-diversity (WB, 1995:1). Associated to these is a cultural and linguistic diversity that together makes Cameroon best qualified as "Africa in miniature".

Cameroon embarked resolutely on the path of development following her independence in 1960. The economy grew very fast averaging an annual growth rate of about 10% between 1975 and 1984. After this continuous growth the economy contracted at an average annual rate of 4% between 1985 and 1995. External factors such as the decline in oil prices and the depressed cocoa and coffee markets account for the crisis (ADR, 1997:40). Internal factors including inadequate policies, inappropriate management of resources and lack of political will played an important role in rendering the economy vulnerable to internal and external shocks. Consequently, per capita GDP declined by 30% between 1984 and 1995 (ROC, 1997:6). The share of private consumption in GDP decreased to 57% in 1985 and increased to its 1975 level (about 72%) in 1995 (ADR, 1997:41).

Cameroon signed her first structural adjustment programme in 1988. Measures taken to implement the programme and subsequent ones contributed to erode the capacity of the formal sector to create new jobs. The informal sector thus expanded

absorbing some of the retrenched salaried workers from formal employment and new school graduates. Households' purchasing powers declined and average per capita consumption collapsed by over 40% between 1985 and 1993 (WB, 1995:2). It is estimated that about 51% of a population size of 13 million were poor in 1996 and some 52% of the female population were living in poor households (ROC, 1997:11).

Cameroon stands out of the picture of overall poverty reduction during recent years. The 1983/84 household budget survey estimated that poor and very poor households accounted for 20% and 8% respectively of total consumption and were concentrated in rural areas. Some signs indicate that from the mid-1980s overall poverty increased. Although poverty is still largely spread in rural Cameroon, urban poverty has increased in the past years. From less than 1% in Yaounde and Douala in 1983 it reached 30% and 20% in 1996 respectively (ROC, 1997:57).

Poverty reduction appears to be more than a priority issue for Cameroon. More than any other priority it should be the most urgent task of the government, local communities, NGOs and the international community. With more than half its population in poverty Cameroon may be rightly qualified as poor. In that context its development should focus on poverty eradication.

It appears that by existing measures, poverty has declined in Douala while it has increased in Yaounde between 1993 and 1996[1]. Yaounde is situated deep in the equatorial forest at about 250km north of the coast. The town has extended to become the Mfoundi division with a surface area of about 622.5km2. Its relief culminates at 750m and is essentially comprised of hills separated by valleys. This altitude confers mild climate with two rainy seasons and two dry seasons that have changed in recent years probably because of deforestation.

The Germans established "Yaounde Station" in 1887 for strategic reasons. Due to intense commercial activities and the densely populated villages around, the military post expanded very fast and surrounding villages soon became quarters of Yaounde. In 1921, the French transferred the capital of East Cameroon from Douala to Yaounde. When East Cameroon and Southern Cameroons reunited in 1961 Yaounde became the capital of the newly born Federal Republic of Cameroon. Yaounde is also

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[1] It is estimated that the poverty incidence was more than 20% in Yaounde and 30% in Douala in 1993 (WB, 1995:27).

the chief town of the Centre Province and the Mfoundi Division in addition to its functions as national capital. These political and administrative functions generated substantial migration streams towards the town, facilitated by its situation at the centre of a national road and railway network that links the capital to most of the administrative chief towns of the country (Ekambi, 1993: 19).

Yaounde was the only university town and main centre for tertiary education until 1992 when universities were created elsewhere in the country. However, two of the six government universities, the lone polytechnic and university teaching hospital and a host of other institutions of tertiary education are still in the town. The first private universities were established in Yaounde that also hosts a good number of primary and secondary government and private schools. The town has one of the highest school enrolment rates in Cameroon.

The 1996 CHS estimates the population of Yaounde to be 929065 persons of which 51% were female. It is a young population with about 41% of inhabitants being less than 15 years old while the elderly (60 years and above) constitute only 1% of the total population. Migrants represent more than 50% of the population and their diverse origins give the town a unique diversified cultural environment similar to the country itself (Ekambi, 1993: 19). In effect, nearly all the more than 200 linguistic groups are represented in Yaounde.

1.3 - Statement of the problem

Poverty alleviation policies and strategies are generally based on a situational analysis. This in turn depends on the methodology used to identify the poor and particularly how the poverty line is defined. The widespread of poverty in Cameroon today seems to portray the fact that development policies have not been specifically directed towards poverty alleviation and if they exist such anti-poverty policies have failed to effectively reach the poor because the latter were not identified appropriately. Therefore methodologies used to identify the poor are thus to be questioned.

In effect poverty measurement and analysis in Cameroon has been based on either income or consumption (WB, 1995; ROC, 1997). The 1995 poverty assessment devised a poverty index based on housing, illiteracy and malnutrition. A possession index is also used to examine the association between possession of assets and malnutrition. Such indicators give an indication of some aspects of poverty but fail to

identify the poor as distinct from the non-poor. Both indices fail to capture the multidimensional aspect of poverty and fail to underscore the fact that the different aspects of poverty overlap in a variety of complex ways. Despite these attempts, there is no conceptual methodology providing an understanding of the different ways people experience poverty.

Poverty or opulence results from real complexities of human life. Unless these complexities are considered in a somewhat global perspective measures to arrest poverty will remain elusive. The recent adoption of a poverty reduction strategy is an indication of the government's commitment to that cause[2]. However, such a national strategy needs to be translated into specific and concrete actions to be implemented. This requires specific studies to identify the poor and evaluate the extent of the task to be carried out.

1.4 - Research question

This study is primarily designed to identify the poor in Yaounde. *Who are the poor in Yaounde?* is the main question the study will attempt to answer. Subsidiary to this question is the extent and depth of poverty in Yaounde. The answer to this question should provide different poverty measures as well as the socio-economic groups that are the most stricken by poverty. This should lead to recommendations for anti-poverty policies for the specific context of Yaounde and a springboard for research in other areas.

1.5 - Objective

These questions are designed to lead towards a better understanding of the poverty situation in Yaounde and eventually guide the formulation of adequate anti-poverty policies. The identification of the poor in Yaounde will be done using a multidimensional approach. Four specific objectives guide the development of the study.

1 - Make a detailed outline of the approach used to identify the poor.

2 - Construct a profile of poor households in Yaounde.

3 - Identify socio-economic groups that poverty affects the most in Yaounde.

4 - Suggest policy recommendations for poverty alleviation.

1.6 - Justification

The increase in poverty in Cameroon makes poverty reduction a development priority issue as well as an urgent task. Reducing or eradicating poverty entails fundamentally two basic issues: identifying the poor and getting to know the causes of poverty. These will lay the foundation for formulating policies and strategies on how to go about it. This study focuses on the identification of the poor.

Identifying the poor is very crucial for targeted poverty alleviation strategies. Such strategies help to transfer incomes to the poor and improve their nutritional status despite the difficulties involved in targeted schemes. A continuous identification of the poor enables to monitor changes in well being related to shifts in policy or macro-economic change as well as the social evolution of the community as a whole. It also contributes to the evaluation of the impact of development processes and direct effects of aid programmes explicitly targeted at poverty alleviation. This is consistent with the view that the process of development is judged by both the advances made by all groups as well as the way the poor and deprived fare (UNDP, 1997:15). This is particularly important for Cameroon that has been experiencing positive economic growth after a long recession and undergoing various structural reforms such as the decentralisation of the health system. Identifying the poor is fundamental to understanding and delineating the causes of poverty as well as the differences between social groups or sectors. It is therefore important for policy design as well.

The novelty of this study is its methodology. Poverty measurement in Cameroon has previously been based on income and consumption that fail to incorporate the multiple dimensions of poverty. The main idea is to unravel the complexities of life that contribute to the poverty status of individuals or households. It is also an attempt to illustrate how households face shortfalls in many overlapping areas of their existence and appreciate the various ways in which the poor are excluded or restricted in their lives in a multicultural community such as Yaounde. It is therefore recognition of the relevance of different dimensions of poverty. This would provide the basis for revision of opinions of who the poor are, why they are poor and what can or should be done to eradicate poverty (White, 1996:84).

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[2] How strongly or weakly related is this strategy to development policy?

Although other studies in Cameroon have attempted such a multidimensional approach, this study is a first attempt to incorporate other dimensions such as shelter, assets and access to basic facilities in poverty measurement and analysis. It is also the first to combine both metric and non-metric measures into one index of poverty at the household level. Such an index has the potential to give an overall picture of the poverty situation and an idea of the efforts required to solving the problem. Partial components of poverty should not be minimised nor taken to represent overall poverty. A composite index also acknowledges that different aspects of poverty may overlap or not in real life situation.

A comprehensive methodology for identifying the poor is required if measures to arrest poverty are to reach their goal. This paper aims to contribute to the development of such a methodology. The recent adoption of a poverty alleviation strategy warrants studies that will inform policy on the implementation of the strategy.

The focus on Yaounde is quite straightforward. Yaounde as the capital is viewed as the torchbearer of a developing and modernising Cameroon. The government has been making efforts to achieve this goal. However, poverty according to existing measures is increasing in all urban areas and the increase is higher for Yaounde than Douala and other urban areas. Reducing and eradicating poverty in Yaounde as in the whole country is therefore not only a social goal by itself but also a political priority of the government. In addition, Yaounde appears to be a melting pot of most of what Cameroon has as diverse resources, problems and constraints. Therefore such a study will set the basis for understanding the poverty problem in a multicultural context. Another reason for choosing Yaounde is the availability of data. Although the 1996 CHS was national, only Yaounde and Douala had fairly representative sub samples.

1.7 – Methodology

The research will develop a multidimensional approach to the measurement and analysis of poverty. This approach examines different aspects of poverty then attempts to put all of them together in overall poverty. Such an approach will be applied to Yaounde. Therefore the study will provide a comprehensive conceptual framework for measuring and analysing poverty in specific contexts and use household survey data to apply the approach for Yaounde.

In the conceptual framework, the concept of poverty and related concepts are defined. Relationships between the concepts are identified as well. It further specifies how the different dimensions of poverty and other concepts are operationalised and provides the methodology for identifying the poor for each dimension as well as for overall poverty. Eventual hypotheses to be tested are also stated here.

1.8 - Sources of data

The study will mainly use data from the 1996 CHS. This survey was a national study with three specific objectives. It aims to "identify household and population groups most affected by the crisis and characterise the groups of persons below the poverty line". It also seeks to "register strategies developed by households to cope with the difficulties they encounter in meeting their needs". Finally it was to "produce an approximate distribution of income and necessary inputs for updating coefficients of household consumer price indices"[3] (ROC, 1996:5). Yaounde and Douala were given priority in the selection of the sample. Both had respectively 363 and 381 households out of 1724 households successfully canvassed. The Yaounde sample contained 2036 individuals successfully interviewed. A long questionnaire consisting of 11 sections was used to collect information.

The unit of analysis for poverty is the household. This is not to down play the fact that individual people experience poverty. It is rather to recognise that most individuals live with other individuals in families or households where they pool their resources to some extent and share their wealth or poverty with other family or household members (Alcock, 1997:99). However, extension to individuals and the whole population will be made when possible and appropriate. Material from the WB Poverty Assessment of 1995 for Cameroon will be of great importance in an attempt to compare some similar results.

1.9 – Limitations of the study

Analysis is based on primary (raw) data that were however collected without the view of measuring and analysing poverty as a multidimensional phenomenon. Therefore dimensions such as political freedom and security, community participation, autonomy and dignity and human rights will not be included in the

analyses because of lack of data. A comprehensive poverty analysis requires that voices of the poor be heard particularly in determining what it means to be poor. Unfortunately this will not be done in this study due to lack of resources and time constraint. Finally, the concept of household and household head conceal many differences among individuals members of same household and such differences are necessary to understand the poverty status of individuals and households. Again it is impossible for this study to go beyond the household level.

1.10 - Organisation of the study

The paper is organised into five chapters. Chapter one, the introduction presents the problem to be addressed. It also discusses the justification, objectives as well as the methodology of the study. Chapter two discusses the different concepts of poverty and proposes a definition that derives from a more broad way of looking at poverty. It presents the conceptual framework used to identify the poor. This conceptual framework tries to unravel some of the complex relationships that are associated with poverty. It provides the opportunity to explain the methodology of the multidimensional approach adopted and the dimensions of poverty selected for Yaounde. The third chapter focuses on the measurement and analysis of poverty in Yaounde. Different indices of poverty are used to identify the poor and evaluate the extent and depth of poverty. Chapter four is devoted to assessing how adequately the proposed methodology helps to identify the poor. Here basic need requirements are compared with what is included in the measures. A sensitivity analysis of the poverty line is presented and the relationships between the different dimensions of poverty are studied. The final chapter presents a summary of the results and some suggestions for policy and further research.

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[3] My translation from original French version.

Chapter 2 - Conceptual Framework and Application

2.1 - Introduction

Human life involves real complexities that determine both the poverty of some individuals and opulence of others. It is when these complexities are fully appreciated and clarified that actions to reduce poverty or create wealth can be efficient. A broader understanding of the processes that result in poverty is attempted in this chapter. Different approaches to poverty are reviewed in order to elucidate some gaps of such approaches so that a more broad perspective of poverty is outlined. Some international and specific approaches to poverty are reviewed in section two. This sets the stage for placing the concept of poverty in a broad perspective so that a more comprehensive definition is derived. This is the purpose of section three presenting the conceptual framework. Related concepts are given more precise definitions and the relations between the concepts are specified more clearly in the specific context of Yaounde in section four. This section also gives an outline of the methodology for determining the poverty line both for the different dimensions identified and for overall poverty. Section five presents a critical assessment of the methodology developed in the previous section.

2.2 - Approaches to poverty

Approach to poverty here refers to how poverty is defined and measured and how the poor are distinguished from the non-poor. The complexity of poverty, the desire to understand it and the willingness to eradicate it have generated varied approaches to poverty. Some of these relate to global poverty and make attempts to compare and aggregate different countries and regions of the world while others are country-specific.

2.2.1 - International approaches

The focus will be on the WB and Human Development approaches as well as some views of "professionals". In its 1990 World Development Report the WB defined poverty as the inability to attain a minimal standard of living. It suggested that the poverty line could comprise two elements: the expenditures necessary to buy a minimum standard of nutrition and other basic necessities and a further amount varying from country to country reflecting the cost of participating in the everyday

life of society (WB, 1990:26). A universal consumption-based poverty line was established at US$370 per person per year for cross-country comparisons and aggregation. This approach has been heavily criticised for its inability to capture the many facets of poverty. Lack of income is an important dimension of poverty that gives only a partial picture of the many ways human beings suffer (UNDP, 1997:16). In addition studies have shown that income can rank very low among the priorities of the poor[4]. Such criticisms probably induced the UNDP to introduce in 1996 the CPM with the ambition of designing "a more people-centred measure of poverty that recognises that human deprivation occurs in a number of critical dimensions" (UNDP, 1996:109). The multidimensional poverty index proposed is based on three indicators that reflect the percentage of the population with capability shortfalls in three basic dimensions of human development. These are living a healthy, well-nourished life, having the capability of safe and healthy reproduction and being literate and knowledgeable (ibid). The index appears to be consistent with monitoring progress in social development. Although the CPM focuses on "foundational capabilities", it fails to account for other dimensions of poverty such as the lack of assets and adequate housing. Technically it is more appropriate for cross-country or region analysis and comparisons. It does not appear to be adaptable to household or individual poverty measurement and analysis.

The 1997 HDR was devoted to poverty eradication as a follow up of the 1995 Copenhagen World Summit for Social Development. It defines poverty from a human development perspective as a denial of opportunities and choices most basic to human development. These include to lead a long, healthy, creative life and to enjoy a decent standard of living, freedom, dignity, self-esteem and the respect for others (UNDP, 1997:5). This more inclusive definition recognises that poverty can mean more than a lack of what is necessary for material well being and the necessity to address poverty in all its dimensions. However the derived HPI fails to capture the totality of human poverty as it combines only the most basic dimensions of human deprivation: a short life, lack of basic education and lack of access to public and private resources. But it

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[4] For example, a study by Johda in Rajasthan (India) revealed that poor people considered themselves better off as they gained freedom from dependence and humiliation even though their incomes had declined (Bernstein, 1992:18).

represents an improvement of the CPM recognising the importance of access to resources and the immaterial dimensions of life.

Both the WB and UNDP have developed definitions that portray the multidimensional nature of poverty. Proposed measurements have however remained partial or restricted to some aspects of poverty for operational comparison and aggregation.

White's typology of poverty concepts, adapted from Hanmer et al (1997) includes basic needs, income/consumption, assets and human rights (White, 1998:2). This seems to be consistent with what Chambers considers as the priority of the poor: adequate incomes and consumption, security and independence and self-respect (in Bernstein) even though he defines poverty as the lack of physical necessities, assets and income (Chambers, 1995:19). Toye's (1998:55) approach goes beyond material conditions to include networks of social obligation that constitute additional sources of consumption during hard times.

2.2.2 - Poverty approaches in Cameroon

The 1983/84 Household Budget Survey appears to be the first opportunity for devising a national poverty approach in Cameroon. An explicit definition of poverty is not provided then. However a poor household is one "whose per capita consumption was at or below that of the 40th percentile of income distribution". This corresponded to a consumption level of CFAF 78000 or US\$205 in 1983 prices (WB, 1995:14). The national poverty incidence was estimated thus at 40%. Contrarily to popular belief poverty appeared to be more spread in the south than in the north. About 41% of the rural population were poor in the north compared to 50% in the south. Poverty was more than twice high in the urban south as in the urban north. Douala and Yaounde barely had any poor households.

Such a measurement seems to be misleading. In effect, "even in 1983/84 at the height of the oil boom, some households in Yaounde and Douala were not able to meet their basic needs and thus fell below the absolute poverty line" (p 15). Also in the 1980s and even today, some of the most luxurious and adequate housing conditions of Cameroon are found in Douala and Yaounde alongside ramshackle old cottages in which people live. Likewise many households did not have access to basic facilities such as potable water and electricity in 1983/84. In addition high inequality

in income or consumption distribution is often associated with poverty. The same survey revealed that inequality in consumption was greatest in Yaounde that portrayed no existence of poverty. Using the same poverty line, it was estimated that about 20% of households were poor in Yaounde and 30% in Douala in 1993.

One problem with per capita consumption as basis for drawing a poverty line is related to household size and structure. This approach suggests that households are homogenous in size, age and sex structure. However households have different consumption requirements because of different sizes, age and sex structure and individual activities. Another problem with income/consumption measures is that they treat lack of basic facilities such as drinking water and electricity as outcome of poverty or the consequence of lack of income. They fail to point out that households may have high incomes but have no access to drinking water because the company failed to bring pipe borne water to their doorsteps. This is what is going on in many parts of Yaounde and other towns where the water and electricity corporations have been unable to follow up and match the rapid expansion of the city with the provision of this commodity. Thus identifying the poor in basic facilities is also a way to gauge how adequately or not the government has been faring in social provisioning.

Another approach to poverty designed during the 1995 poverty assessment relies on the construction of a composite index based on housing, illiteracy and malnutrition. A household is classified as poor if its housing is made of non-durable materials. The illiteracy indicator combines the percentage of children aged 6 to 14 years not attending school and the percentage of adults 11 years or older who are illiterate. The malnutrition indicator combines the percentage of children underweight and stunted. Weights of 20% for housing, 40% for illiteracy and malnutrition were used to obtain the composite poverty index. Estimated poverty incidences were 28% for national poverty, 16% and 35% for urban and rural poverty respectively. This approach also revealed that poverty incidence increases as one moves from the south to the north (p 30). Although these indices are for 1993, they yield a somewhat different picture compared to consumption based poverty measures that seemed to suggest that poverty is relatively higher in the southern part of the country. Despite its consistency with popular thinking and some social indicators this approach fails to consider such dimensions of poverty as the lack of assets and basic facilities.

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A possession index is further presented as a proxy for wealth. It indicates the availability of electricity in a household and its ownership of a radio, television, refrigerator and/or cooker. A five-point scale is used with 0 indicating the poorest households while 4-5 indicates the wealthiest households. On this basis, 30% of households are classified as poorest and another 30% as poor with only one of the assets.

In 1997 a poverty line was established at CFAF 148000 per year per adult equivalent using a minimal standard nutritional requirement and other basic necessities. This is an improvement that recognises that different age groups have different requirements for food and other basic needs. Estimates of poverty show that more than half of the population is poor and poverty is more spread in the rural forest area (64%) than in the rural north (57%). Yaounde stands out with 30% poverty incidence among all urban areas compared to Douala (20%) and other urban areas (21%) (ROC, 1997:58).

All these attempts have been to circumscribe the multifaceted nature of poverty. They have however remained partial and have not been able to portray the fact that all these dimensions of poverty overlap in different combinations and degrees.

2.3 - Conceptual framework

The conceptual framework discusses definition and measurement of poverty and associated concepts. In this framework possession and availability of commodities largely determine poverty (figure 1).

Possession and availability of commodities depend on government policies, distributive mechanisms, power relations and capabilities both individually and through their interactions.

Figure 1: Conceptual framework for poverty measurement and analysis[5]
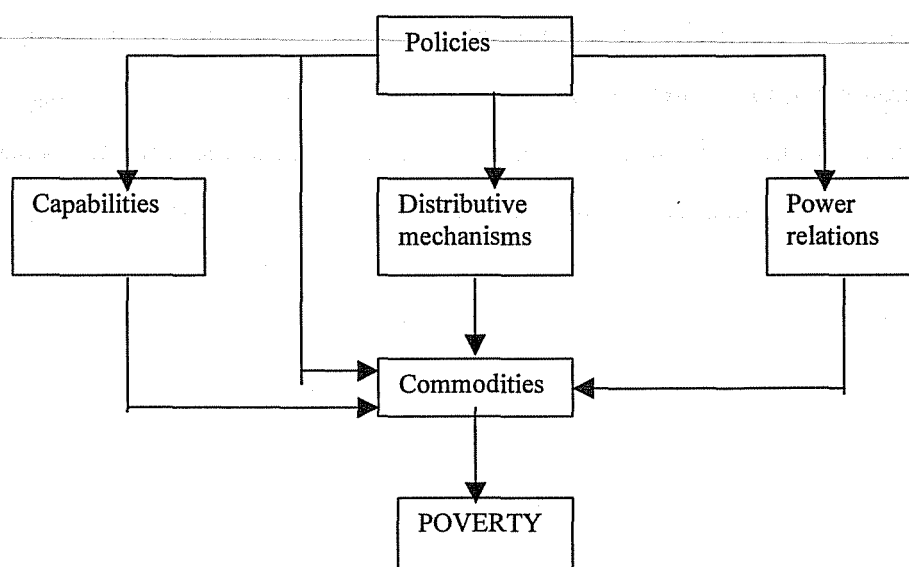
2.3.1 - The concept of poverty

The concern here is to highlight the fact that today in Cameroon and in Yaounde particularly, many people struggle daily with a lot of energy and ingenuity to secure a living. Poverty in this study is thus a state in which people lack the necessary commodities to lead a decent and acceptable life in their community. This definition is consistent with Chambers' lack of physical necessities, assets and income (1995:175) and the Bank's minimum standard of living. It goes beyond Chambers' and other professionals' physical materials and the Bank's costs of participation in everyday life to include social networks that play an important role in individual and collective resilience. It stresses the importance of the benefits people derive from being members of local, regional or national communities as it includes commodities such as social assets, community and state provided commodities (defined later). The definition has the potential to portray the material conditions of the social existence of some groups of people we call poor. It also means that people lack the resources to obtain the types of diets, participate in the activities and have the living conditions and amenities which are customary or at least widely encouraged and approved in the society to which they belong (Townsend, cited in Bernstein, 1992:17).

The measurement of poverty thus follows from the dimensions identified in its definition and relevant for the particular context. An index is calculated for each

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[5] Only mechanisms leading to poverty have been presented. Interactions between various components have a bearing on poverty as well but they are far too complicated for the scope of this paper.

dimension and a poverty line is determined from the index. The dimensions will then be stacked together in an index for which households will assume values corresponding to a simple average of the values recorded for the different indices because there is no adequate information to decide on the weights to be attributed to the different dimensions. A poverty line is thus determined using this overall index. Different measures of poverty (incidence, gap, and severity) are then calculated and analysed for different socio-economic groups.

In addition, the different dummy variables of poverty are stacked together in an overall poverty measure for which households assume values according to the dimensions in which they are poor. That is the number of dimensions in which a household is poor determines the depth of poverty of that household[6].

The dimensions of poverty are derived from the many aspects that play an important role in the lives of individuals. They are thus determined according to the specific context of the study. However in this framework they are related to the categories of commodities outlined below.

2.3.2 - Commodities

For the sake of this paper a commodity is any useful and valuable thing and commodities are divided into three categories:

i – Private commodities: These include income, material assets such as land, livestock, consumer durable goods, other productive assets. Material assets are those assets that an individual or household can sell or exchange for other assets such as food in times of difficulties. Basic facilities are also considered as commodities in this study and refer to water, light, fuel and sanitation.

ii – Common property resources and social assets: Common property resources would include common grazing lands, forests, fishing grounds that still constitute important parts of household revenue and consumption in many developing countries. Also included in this category are community provided commodities such as educational and health services, road infrastructure and other services that are increasingly becoming the responsibility of communities as the State is shrinking. Social assets are

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[6] The advantages of such an index include: focusing exclusively on the welfare of the poor so that any improvement in the index is an indication of improvement of the welfare of the poorest; it is also a continuous variable giving more weight to the less well-off.

systems of mutual obligations existing mostly in rural communities. Such systems allow community members who have a shortfall of resources due to a bad harvest for instance to call on part of the surplus in the hands of other community members.

iii – State provided commodities: these include services of education, health, and other social infrastructure. Also included in this group are human rights, political freedom, autonomy and security. They are a social dividend paid by the State to its citizens and factors modifying people's ability to transform other commodities into capabilities (Toye, 1998:54).

A shortfall in any of these categories of commodities would imply poverty of some individuals or households or the community as a whole. It should be noted here that these commodities exist in differing degrees in different communities within the same nation. Within the same community different households and individuals have different access, power and control over such commodities. Hence the necessity to determine those that are important in capturing poverty and distinguishing the poor from the non-poor. For example, common property resources and social assets are very important in the lives of rural dwellers of many developing countries, but are most of the time absent in urban areas.

Other aspects of human life that play an important role in determining poverty depend largely on these commodities. Such aspects include dignity, self-respect and self-esteem. These are not considered as important poverty differentiating issues.

The type of commodity determines a measurement approach. Some are measured in terms of actual possession while it is access or accessibility that is important for others.

2.3.3 - Distributive mechanisms

Distributive mechanisms are those procedures and methods used to share commodities (household, communal, and state provided) among individuals or social groups. Such mechanisms determine who has access and/or control of what. Access to and control of private household commodities play a very important role in determining the poor. A household might possess enough commodities for its members to lead a decent and acceptable life in the community but differentiation by age, sex in the distribution of household resources and responsibilities may render some members poor. Likewise differentiation by age, caste, class, ethnicity, origin

(e.g. indigenous versus non-indigenous), sex and nationality may render some social groups poor even if the community has large stocks of common property and social assets. For example in some societies women have access to common property resources only through men (a brother, father or husband). In case a woman fails to have any male connection she will probably be poor particularly in cases where common resources constitute a reasonable size of private consumption. These differentiations can be discriminatory (in favour or against some individuals or social groups) or equitable (more resources to those having more needs).

2.3.4 - Power relations

One aspect of power is the ability for an individual to make personal decisions and choices. However power relations are mediated through interaction between individuals or social groups. Hence power relations are more likely to be determined by two related perspectives. One is participation in decision-making and the other control over resources. These are the aspects that are of importance in this paper.

2.3.5 - Policies

Policies are purposive actions by State government or other institutions (such as voluntary associations) with avowed public objectives. Policies affect distribution of commodities, individual capabilities and power relations.

2.3.6 - The concept of household

The definition of household is the one used for the 1996 CHS. A household was defined as[7] a "group of persons (having or not blood or marriage relations), living in the same dwelling unit, taking most often their meals together, generally pooling their resources to meet current expenditure and generally acknowledging the authority of only one person as household head" (ROC, 1997:80). The concept of household head is not defined explicitly, allowing respondents to decide who is the household head. This hinges on how the concept is translated into different languages. Since household is not known in many local languages, the term family head is generally used in its place. There is therefore a tendency to consider the oldest person as the household head. However, the oldest adult man in the house is generally considered as

head even though other members are older. This definition excludes females and younger males from being household head even if they earn more income than the de-facto household head and are thus the major provider of resources. It also means that the household head is not necessarily the major resource provider and that female-headed households would generally have no male adults.

2.4 - Application to Yaounde

As most urban areas, common property resources and social assets play just a marginal role in the lives of inhabitants of Yaounde. However, communal educational and health services play an important role in people's lives in Yaounde today. Poverty in Yaounde therefore largely depends on private and state or community provided commodities. Each of these aspects has one or more dimensions that will be identified subsequently.

2.4.1 - Operationalisation of poverty

2.4.1.1 - Dimensions of poverty for private commodities

These are (i) inadequate consumption requirements, (ii) inadequate possession of assets, (iii) inadequate housing conditions, and (iv) inadequate access to basic facilities (water, light, fuel, and sanitation).

Inability to meet consumption requirements indicates the absence of adequate resources to obtain a minimum bundle of basic goods and services to satisfy a minimum set of needs that generate a basic set of capabilities (Vos, 1999:4). Hence the lack of resources to meet consumption requirements can be adequately captured by the inability to attain a certain minimum consumption considered nutritionally essential and indispensable. The minimum consumption, expressed in monetary terms will constitute the poverty line for this dimension.

Housing conditions are readily visible signs of poverty or wealth. In addition, lack of adequate housing exposes household members to disease and illness, adverse climatic conditions that contribute to render the household vulnerable.

Absence of assets means people are vulnerable and unable to have leisure and be informed of things happening around them. They are isolated. It also means people are unable to offset risks, ease shocks and face or cope with contingencies. This would

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[7] Author's translation from original French version.

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mean that they are humiliated and have lost self-esteem. But it also means they have lost membership to social networks and other social welfare organisations and thus entering an irreversible process of impoverishment and vulnerability.

The existence of these conditions seriously restricts opportunities and choices. For example, in cases where an individual is incapable to assist the neighbour or relative during difficult moments, s(h)e would not receive any assistance in return.

2.4.1.2 - Inadequate access to state provided commodities

State provided commodities may be restricted to educational and health services since it is very difficult to get adequate data on others such as human rights, political freedom and security. Access to these services should be assessed in terms of private costs incurred by individuals to have such access. Private costs should include aspects of distance, means used to get to the service (on foot, public transport, private transport) and other monetary costs (e.g. consultation, school fees, opportunity costs).

2.4.1.3 - Inadequate access to community provided commodities

These may also be restricted to educational, health and social services and access could be determined in a similar way as for state provided educational and health services.

Both state provided and community provided commodities are not included in the analysis due to lack of adequate data.

2.4.2 - Consumption poverty

Consumption poverty refers to inadequate consumption requirements. A minimum food consumption is calculated based on nutritional requirements for an adult (15 years or above). It is estimated that an adult requires 2400 calories per day as a vital minimum nutritional intake. An adult also requires about half of their food consumption for non-food necessities. Thus the total consumption requirement for an adult can be divided into 67% for food consumption and 33% for non-food consumption. Using maize flour, peanuts and fish (makerel), the most common foods in Yaounde, a consumption poverty line was established at 148000 CFAF[8] per adult per year. A poor household is therefore one whose annual consumption per adult-

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[8] In 1996, US$1 was 550 CFA.F.

equivalent[9] is less than CFAF 148000. Consumption levels were captured through household expenditure on nutrition (food, drinks, & tobacco), clothing, health, education, transport, leisure, house maintenance and rents.

Consumption poverty thus reveals the presence of hunger, fewer meals a day, nutritionally inadequate diets and malnutrition. It also portrays inadequate spending on health, education, clothing and leisure and thus a high probability of the presence of illness and children not attending school. Consumption poverty therefore gives for example an indication on how the nutritional status of the population has deteriorated and the food security system is eroded. It also identifies households requiring immediate or regular food subsidies.

2.4.3 - Asset poverty

Possession of assets in Cameroon is still regarded as an indication of a high social status. Hence assets give a picture of social differentiation. However asset poverty is important in understanding vulnerability and the potential to resist impoverishment. The asset index is obtained through a scoring system that assigns a certain value to a household for the possession of an asset. This value depends on the proportion of households that possess the asset (see table 1 in appendices). For instance, if 30% of households possess a radio set, then the value 70 (100 – 30) will be assigned to any household that possesses a radio set. Zero is assigned to households that do not possess the asset. This value, 70, can be interpreted as the distance between households having a radio set and those that do not have. The higher the value, the more scarce the asset in the community, the more its possession makes a difference.

Assets are divided into productive and consumer assets according to the potential exchange value the asset would have in the market. A productive asset is considered to have twice the value of any consumer asset. A partial index is constructed for productive and consumer assets separately by summing up the values obtained for the different assets and using the following formula: (asset score - minimum score)/(maximum score - minimum score)*100.

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[9] The number of adult-equivalent for the household is obtained by assigning 0.5 to members below 15 years and 1 to others.

The asset index for a particular household is obtained through a weighted average (2/3 for productive asset index and 1/3 for consumer asset index). This yields an index that varies from 0 to 100. All households with an index of less than 40 will be considered poor. Asset poverty therefore identifies vulnerable households exposed to shocks, stress and risk and lacking the resources to cope without damaging loss. It is crucial in understanding vulnerability.

One important asset that will not be considered in this study is livestock. Livestock plays a very important nutritional, economic and social role in the lives of many Cameroonians. However, the lack of data impedes its inclusion in poverty measurement and analysis of this paper.

2.4.4 - Housing poverty

Housing poverty identifies households whose members are exposed to adverse and changing climatic conditions, environmental hazards and vulnerable to diseases. It is thus also important in understanding the vulnerability of households.

The housing index is based on materials used for the walls, floor and roof. Scores are assigned to different categories of each variable (wall, floor and roof). These scores are to reflect as much as possible the differences in the costs of the materials. Hence a smaller score is assigned to a material considered less expensive (see table 2 in appendices). For example 3 is assigned to a floor made of tiles while 2 is assigned to a cemented floor since tiles are more expensive than cement. The scores are then summed to get the housing score. The housing poverty index is constructed as follows: (housing score - minimum score)/(maximum score - minimum score)*100 and varies between 0 and 100. A value of 0 indicates the worst housing conditions while 100 corresponds to the best housing conditions. Households with indices less than 40 are poor in housing.

2.4.5 - Basic facility poverty

Basic facilities included for the purpose of this study are water, light, fuel and toilet. Here both the access and the way people have access are important factors in determining differences and portraying difficulties people encounter in acquiring access. Values are assigned to the different ways households have access to each facility (see table 3 in appendices). The score for basic facilities is the total of values

scored for each facility. The facility index is obtained in the same way as the housing index. A value of less than 40 indicates that the household has inadequate access to basic facilities therefore poor in basic facilities. Basic facility poverty is important in understanding the different ways people are deprived of social goods and appreciate how they struggle to secure the provision of such goods.

2.4.6 - Overall Poverty

The overall poverty index is a simple arithmetic average of the four partial indices corresponding to the four dimensions of poverty discussed earlier. To be consistent with the other dimensions, consumption poverty is standardised in such a way that the poverty line of 148000 CFAF corresponds to a 40 poverty line. All other consumption levels are adjusted proportionally. This yields values for the consumption levels of households that are then used to obtain the overall index. The overall poverty line is set at 40. The different poverty measures (incidence, gap, and severity) are thus fully determined once the poverty line is determined.

A multidimensional poverty measure is also computed as a summation of the four dummy poverty variables. This assigns to each household a value corresponding to the number of dimensions in which the household is poor.

Poverty measures obtained from the overall poverty index are analysed in relation to some socio-economic characteristics including household head's sex, age, educational level, occupational category, sector of occupation, income, activity status and duration of residence and the family structure of the household. In Yaounde though social networks are important they play a minimal role in the poverty status of individual households compared to the amount of resources a household has at its disposal. The above variables thus determine the poverty status of households through their influence on the amount of resources available to the household.

2.4.6.1 - Sex of household head

Employment opportunities have declined in Cameroon over the past decade. In Yaounde unemployment is higher among women than among men (ROC, 1997:48). This means that in Yaounde women continue to face more difficulties than men to get into jobs. They are therefore pushed into low-paying activities in the informal sector. They also have more difficulties in getting control over assets such as land. Thus in general, women in Yaounde continue to have control over fewer resources. Of such

the households they head probably have access to fewer resources compared to other households and thus expected to be less well off.

2.4.6.2 – Age of household head

Young people have generally worked for a shorter period and thus tend to have fewer resources and assets. They also have less experience and thus command smaller incomes particularly in the public service[10]. The shrinking of formal employment warrants young school graduates to strive for a livelihood in the informal sector. Hence young household heads would generally have fewer resources.

2.4.6.3 – Education of household head

High levels of education generally command higher incomes. Thus households with highly educated heads would have access to relatively abundant resources that might enable them escape poverty. The probability for a household to be consumption poor was twice as high when the head had primary education compared to when the head had secondary education (ROC, 1997:58). But university graduates find it more and more difficult to get highly paid jobs. Thus some households whose heads are highly educated might really be poor.

2.4.6.4 - Activity status of household head

In Yaounde where most people are engaged in wage employment. Being unemployed can be equated to being poor since entitlements to social networks and community resources are not substantial enough at individual household level. Thus households with unemployed heads are systematically doomed to be poor.

2.4.6.5 - Sector of main occupation of household head

Some sectors with highly educated persons tend to be better off because such persons generally command large incomes. This is the case of the public service and some private businesses. Incomes in sectors such as agriculture are so low that households whose heads are engaged in such sectors would have a high probability of being poor.

2.4.6.6 – Income of household head

Generally high income would enable households and individuals to escape poverty. However the management of income and how it is acquired are also related to the probability for a household to be poor. For instance in recent years the military and police earned substantially higher incomes than other civil servants. However the former appeared to squander the money for their personal enjoyment (drinking, smoking, and gambling) rather than for the interest of all members of their

households. This might be true for other household heads as well. It would therefore not be surprising if some households with high incomes appear among the poor.

2.4.6.7 - Duration of residence of household head

Many people leave their villages and other towns to look for a better living in Yaounde. They are generally less well equipped to directly integrate into the social and economic networks of the city. In fact entrance into the informal sector is not so free as alleged in many instances. For example to have a stall in Mokolo market one has to negotiate with the "enciens". Hence households headed by recent migrants would have a tendency to own fewer resources and thus a high probability to be poor.

2.4.6.8 - Household family structure

Households that have many workers and few dependants generally have access to resources that would enable them to escape poverty. In contrast households with one breadwinner and many 'inactive' persons would be more vulnerable to poverty. The family structure also involves issues of power and gender roles. Where gender roles are still very strong they might hinder the possibility of exploring alternatives sources of income such as allowing a wife to take up paid work. Thus a household that would otherwise escape poverty would be really poor.

2.5 - Exploring the adequacy of the methodology

Assessing how accurately the poor can be identified using this methodology will be done in three complementary stages. First the methodology is examined in terms of its adequacy in capturing basic human needs and other requirements for a decent life. Then poverty measures resulting from different poverty lines are examined in relation to how the households are classified in the different scenarios. This is to evaluate the sensitivity of the proposed poverty line and the robustness of the findings. Finally the relationships between the different dimensions included in the overall index are examined to make sure that different aspects of poverty are effectively identified.

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[10] Salaries are supposed to be upgraded every two years for each civil servant.

Chapter 3 - Identifying the poor of Yaounde

3.1 - Introduction

Identifying the poor entails providing clear answers to the following questions. What is the extent and severity of poverty? What are the socio-economic groups that poverty affects the most? This chapter is devoted to answering these questions in the context of Yaounde using the 1996 CHS. Each poverty dimension is tackled separately. Sections two to five deal respectively with consumption, housing, asset and basic facility poverty. The analysis is based on the sex and age of household heads as well as the whole population. Section six deals with overall poverty. Sex and age are examined as well as other characteristics (e.g. education, occupational categories, income, household family structure and household size).

Poverty measures used are incidence, gap and severity. The poverty incidence gives the percentage of households that are below the poverty line. It is used to estimate the extent of poverty. The poverty gap gives an idea on the average amount of resources required to lift every poor household to the poverty line while severity of poverty is an indication of the position of the poorest households below the poverty line. Both are used to estimate the depth of poverty.

Table 3.1: Poverty dimensions and measures for households and individuals

Poverty Dimension	Incidence (%)		Gap (%)		Severity (%)	
	Households	Individuals	Households	Individuals	Households	Individuals
Consumption	17	29	3	6	1	2
Housing	57	61	36	41	24	27
Asset	75	65	43	34	30	22
Basic facility	29	38	13	17	8	10
Overall	36	49	10	14	4	5

3.2 - Consumption poverty

Consumption seems to be a priority for households in Yaounde. Fifty-two of the 363 households successfully canvassed had consumption below the required levels. This yields about 17% (table 3.1) of consumption poor households in Yaounde in 1996. About 29% of the population were living in such households. It is estimated,

using same data and consumption poverty line that an additional 32% of households were vulnerable (with consumption level lower than two times the required minimum) to impoverishment in consumption (ROC, 1997:58).

All consumption poverty measures were more than twice as high for male-headed households (figure 3.1) compared to female-headed households. This means that many more male-headed households are poor in consumption and many male-headed households are among the poorest households in consumption.

Figure 3.1: Consumption poverty indices (%) by sex of household head
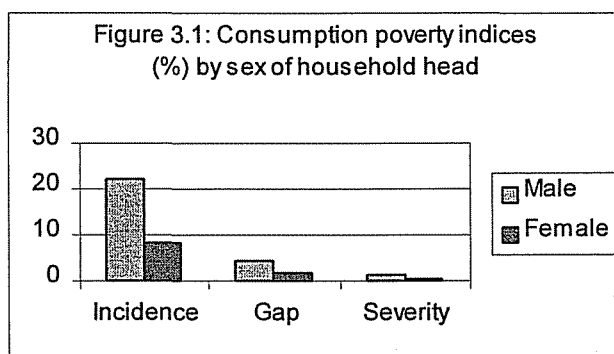
Although average consumption levels are higher for female-headed households the poorest households in consumption (about 1% of all poor households) are headed by women. On the upper end, the "richest" households among the poor (about 11% of all poor households) are headed by men. In addition the distribution of consumption levels among poor female-headed households is more unequal than among poor male-headed households.

The poverty incidence is similar for the male and female populations (29%, table 8 in appendices). However, the depth of consumption poverty is higher for females. This means that although consumption poor men might outnumber their female counterparts, poor women tend to live in households whose consumption levels are lowest among all households.

The age of household heads also apparently plays an important role in consumption poverty. All measures tend to increase with the age of the household head (table 4 in appendices). The extent of consumption poverty is lowest for households whose head is less than 30 years old. A sharp decline is observed between 40 and 60 years when the incidence resumes its upward move. Consumption poverty appears to be more severe among households whose heads are elderly. It is also seems to be more severe among the elderly than the young and adult populations. The adult population seems to be the most well off with the smallest poverty measures.

3.3 - Housing poverty

Shelter appears to be a neglected aspect of well being in the life of inhabitants of Yaounde. Of the 363 households successfully canvassed 218 are poor in housing conditions. This yields an estimate of 57% (table 3.1) of households poor in housing in Yaounde in 1996. It is estimated that about 61% of the population were living in such households (table 9 in appendices). This means that although the housing standard in Yaounde appears to be high compared with other towns in Cameroon about two out of every three citizens of Yaounde live in inadequate housing conditions. In addition the depth is higher for housing poverty than for consumption poverty. It would require more resources to bring people out of housing poverty than for consumption poverty. It would appear that while people make tremendous efforts to feed themselves they pay less attention to their housing conditions. This is probably due to the fact that many inhabitants of Yaounde consider it as a second home, a stop over that they will eventually leave one day. This is particularly true for the southerners (Franqueville, cited in Ekambi, 1993: 20). As such very few invest in housing particularly those who come from surrounding villages. When people build a house they use local material without any transformation to improve on the quality. At times the same individuals have higher quality houses in their provinces of origin. This does not cancel the high costs involved in building a house of high quality in Yaounde.

Housing poverty also appears to be more spread and severe among male-headed households (figure 3.2). However the difference is smaller compared to consumption poverty. This would imply that inequality in housing conditions is less

Figure 3.2: Housing poverty indices (%) by sex of household head
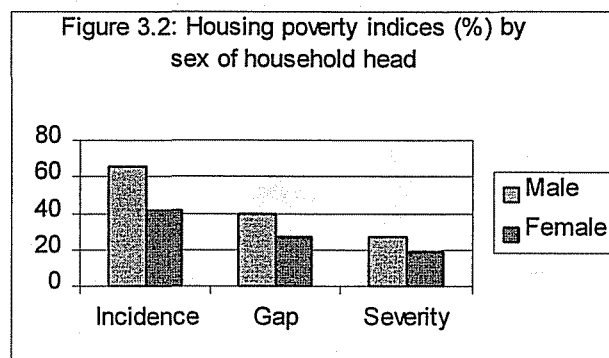
pronounced compared to inequality in consumption. It is however an indication of a social reality. Female heads generally rent a house while their male counterparts

would live in self-constructed houses. In effect 63% of female heads were renting their houses compared to 50% male heads. Since rented houses are for commercial purposes and built by people having more resources they tend to be of better quality than houses constructed for self-use.

Differences are also observed for the entire population (table 9 in appendices). Many more men than women live in poor housing conditions and tend to live in the poorest among poor housing conditions.

All poverty measures tend to increase with the age of the household head (table 9 in appendices). This means that as with consumption poverty, households headed by the elderly tend to have the worst housing conditions. However, not only the elderly live in poor housing although they appear to live in the worst housing conditions. Many more young people live in inadequate housing conditions.

3.4 - Asset poverty

The accumulation of assets does not seem to be a priority for most households in Yaounde. Asset poverty affects 271 sample households. This means that about 75% (table 3.1) of households in Yaounde were poor in assets in 1996. About 65% of the population lived in such households (table 11 in appendices). Hence nearly two thirds of the population were vulnerable to risks and shocks and in a situation not conducive to coping with contingencies.

Contrary to consumption and housing poverty, asset poverty appears to be more spread and severe among female-headed households even though the male-female differential in asset poverty does not seem to be very large (figure 3.3). This is

Figure 3.3: Asset poverty indices (%) by sex of household head
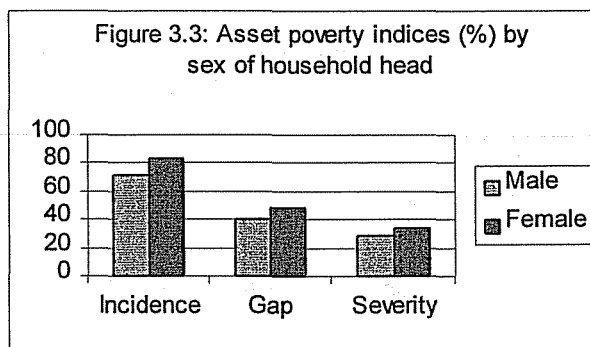
not very surprising since income earners of such households are by definition females who generally have fewer assets and limited access to land and other resources (ILO, 1995:9). The fact that female-headed households are poorer in assets than male-

headed households might be an indicator that female household heads have a tendency to take consumption as a basic priority to be fulfilled before resources are allocated for other things. Male household heads might have different priorities such as accumulating assets whose possession is indication of high social status and would probably allocate their resources accordingly. This also means that female-headed households are less predisposed to cope with risks and shocks and thus more vulnerable to impoverishment than male-headed households. Male individuals tend to live more in households poor in assets as well as among the poorest of the poor in assets (table 11 in appendices).

Households headed by young people appear to be the poorest in assets (table 7). This is not surprising since some of these heads have just begun their active life and are still in the process of constituting their stock of assets. Adult heads, having been active for a longer period, have the best off households. The increase registered by elderly household heads might be due to effective absence of assets because they have been sold (coping mechanism[11]), stolen or taken away by children or out of service.

Children and young adults tend to live more in asset poor households (table 11 in appendices). Although asset poverty appears to be relatively widespread among the elderly, they tend to live in households with less severe shortages of assets.

3.5 - Basic Facility poverty

It seems that inhabitants of Yaounde pay more attention to having access to basic facilities than accumulating assets and improving on their housing conditions. Access to basic facilities was found to be inadequate for 98 sample households yielding an estimate of 29% (table 3.1) of the households of Yaounde being poor in basic facilities in 1996. About 38% of the population thus lived in these households (table 10 in appendices).

The relatively high extent and depth of basic facility poverty in Yaounde is an indication that accessibility to basic facilities has not really been a priority of government policy. Efforts made tend to focus more on the less needy and fail to

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[11] One coping mechanism adopted by the majority of those interviewed is voluntary impoundment or outright sale of movable assets such as cars, refrigerators and furniture (Cameroon, 1995:43).

reach those who lack these resources. For example high government officials such as ministers and directors abundantly have electricity and water that are scarce in some areas of Yaounde.

The extent and depth of basic facility poverty is more than twice among male-headed households as among female-headed households (see figure 3.4).

Figure 3.4: Basic facility poverty indices (%) by sex of household head
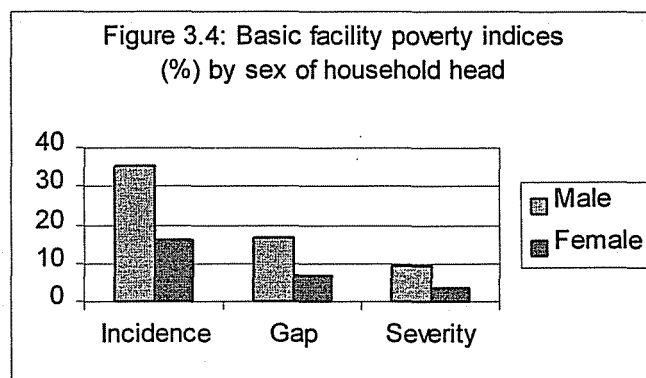
Hence not only do poor male-headed households in basic facilities outnumber poor female-headed households they also appear to be the poorest among the poor households in basic facilities. This would mean that those members of male-headed households who are in charge of collecting fuel wood and fetching potable water (generally women and children) will tend to have a heavier burden than their counterparts in female-headed households.

Basic facility poverty is slightly more widespread and severe among the female population (table 10 in appendices) that also tends to be over-represented among the poor in basic facilities. Basic facility poverty also appears to be more widespread and severe among households headed by the elderly. But its extent among elderly individuals is not as high as among the youth although the elderly tend to live in households having a higher severe shortfall in basic facilities.

3.6 - Overall poverty

The overall poverty index used in this section was obtained from a simple arithmetic average of the four partial indices, and the poverty line set at 40. Out of the 363 households included in the survey, 135 were below this poverty line yielding an incidence of 36% (table 3.1) for all households in Yaounde. About 49% of all Yaounde inhabitants could thus be classified as poor in 1996.

3.6.1 - Sex and Age

The male head-female head divide among households in poverty appears to be very outstanding in Yaounde. All poverty measures are higher for male-headed households (figure 3.5). Although female-headed households constitute about 33% of all

Figure 3.5: Poverty indices (%) by sex of household head
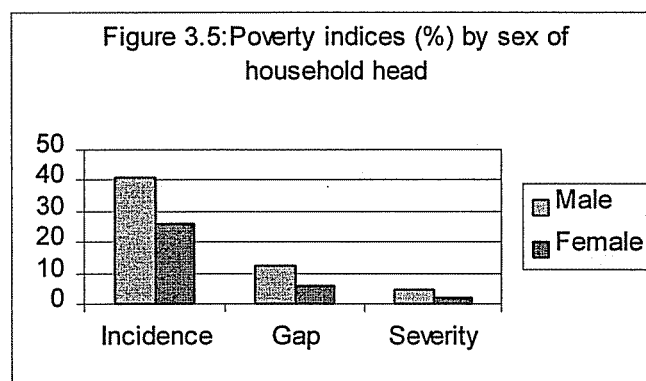
households in Yaounde, they contribute about 24% to poverty incidence, 18% to poverty gap and 15% to severity of poverty (table 12 in appendices). This suggests that poverty in Yaounde is both more widespread and severe among individuals living in male-headed households compared to individuals living in female-headed households. It also suggests that households headed by men are over-represented among the poorest of the poor. In fact, the bottom 5% of poor households are headed by men while women head the top 2%. This is contrary to what has been observed elsewhere where female-headed households were found to be poorer than male-headed households (Buvinic, 1995:137). Women do not seem to be over-represented among the poor in Yaounde, as both the extent and depth of poverty appear to be of same magnitude among both the female and male populations (table 13 in appendices). Young household heads show lower poverty than their elderly counterparts. This would mean that poverty in Yaounde is both more widespread and severe among households headed by elderly people. Households headed by adults have slightly higher poverty values than those headed by young people and appear to be far better off than those headed by the elderly.

3.6.2 - Education of household head

Education plays a very important role in the reduction of poverty in Yaounde. Poverty was both more widespread and severe among households headed by persons

Figure 3.6: Poverty indices (%) by level of education of household head
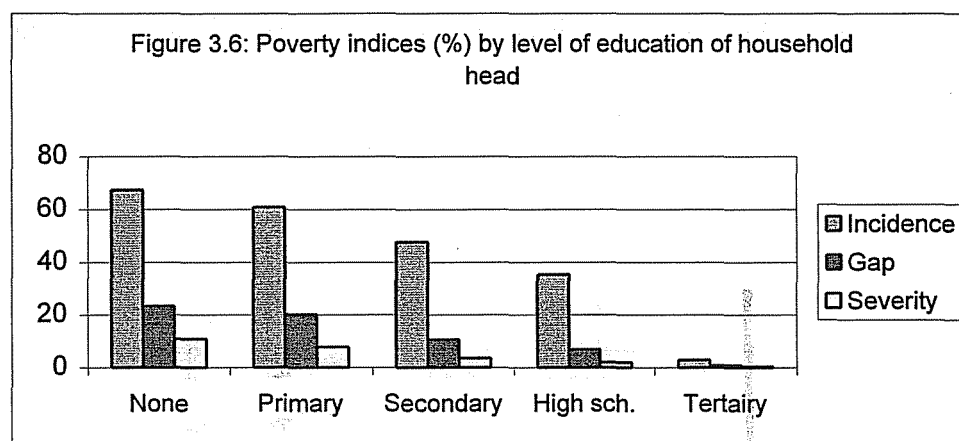
who had no education (figure 3.6). Such households also appear to be over-represented among the poorest. This is also the case with households headed by primary school leavers that contribute 43%, 51% and 53% to poverty incidence, gap and severity respectively even though they constitute just one quarter of all households. Surprisingly, a certain number of households headed by university graduates are below the poverty line although such households are marginally represented among the poorest of the poor.

3.6.3 - Activity status of household head

Wage employment plays a fundamental role in the lives of most inhabitants of Yaounde and consequently has a bearing on the poverty status of households and individuals. Household heads were divided into three categories of activity status. Inactive persons are students, housewives or women occupied exclusively in household work and not paid, the elderly, retired persons, disabled and idlers. The unemployed are those who had lost their jobs or looking for their first employment and the occupied are people working in the production of marketable goods and services (ROC, 1992:35ff). This status refers to the one-year period prior to the survey. Households whose head was unemployed had the highest extent and depth of poverty, with about 50% of them being poor (table 12 in appendices). These households also appear to be over-represented among the poorest of the poor. Over-representation among the poor is also observed for households whose head was

occupied although such households are better off compared to households headed by unemployed persons. This means that although employment is important in poverty reduction it is not sufficient. The type of work and more importantly the amount of resources one gets out of their job are very crucial in determining poverty status. Households headed by the inactive appear to the best off group among the three. This might appear surprising. Some of these households have as heads students or persons receiving transfers and remittances from parents and other relatives. They might be rightly considered as extensions of different households scattered all over the national territory and abroad. It would have been more appropriate to attach them to households providing the greatest share of transfers to be able to correctly assess their poverty status. Others have inherited large portions of land that they sell and do not worry to do something else while some probably have relatively wealthy daughters and sons who provide resources for the households. It might also be that those inactive persons are people engaged in activities difficult to describe and characterise. Such persons often consider themselves as inactive. These include students and some 'house wives' who most of the time have many activities with a main activity not classified as generator of income. In such cases people say "je me debrouille".

3.6.4 - Occupational category of household head

As mentioned earlier it does not suffice to work to be spared from the grim day to day struggle for survival. This is clearly portrayed by occupational category. Poverty is both more widespread and severe among households whose head was a domestic worker (table 12). These households also appear to be over represented among the poorest of the poor. The extent and depth of poverty is also high among households headed by self-employed persons and these households constitute the majority (57%) of poor households. Households that retired workers head come next in the ranking according to extent and depth of poverty although the severity of poverty seems to be low among these households compared to other poor households. This is probably because retired workers of the formal sector must have taken advantage of the high salaries prior to the crisis to acquire and preserve a good amount of wealth and assets. It may also be due to the effects of the salary cuts of 1993 that resulted in many pensioners earning more than current workers especially public sector employees.

Households headed by employees and other workers appear to be the best off with the lowest extent and depth of poverty and do not seem to be over-represented among poor households.

3.6.5 - Sector of occupation of household head

The sector of occupation has five broad categories: agriculture, industry, commerce, private services and public services. Industrial activities include food industries, textiles, clothing and shoes, wood, chemical (plastic and rubber treatment), construction materials (cement, tiles) and mechanical metals and repairs, housing and public works. Private services are formal services that fall under the private sector such as hotels, insurance companies, and banks. The public service refers to all civil servants and the commercial sector to all trading activities.

The extent of poverty is highest (more than 50%) for households whose head worked in the agricultural or industrial sector (table 12 in appendices). But households of industrialists tend to be more over represented among the poorest of the poor and have greater shortfall to the poverty line and inequality among the poor. This is probably because most workers in the so-called industrial sector are actually in precarious employment and income activities that impede acquisition of resources. In addition, with the crisis, their products are less demanded as households reduced their expenditure in all areas but more substantially for household equipment, transport and leisure (ROC, 1997: 74). As household expenditure shrinks so does revenue for those working in those sectors. The agricultural sector seems to have received a boaster due to the liberalisation process and the fact that people spend more money on consumption than on other articles. Foodstuff agriculture is buoyant with high prices in Yaounde and other big towns creating an opportunity for high revenue. Farmers in Yaounde tend to specialise in foodstuffs and thus tend to have higher revenues compared to people working in other informal activities.

Households headed by traders appear to be better off than those headed by agriculturists and industrialists but are less well off than those headed by public and private sector employees. This could be due to the momentum trade has gained in recent years in Yaounde that was hitherto a political and administrative town. The selling of cooked food has particularly developed since the change from the two shifts

working system to the one shift that warrants many more workers to take their lunch at job site. Households headed by civil servants are less represented among the poorest of the poor. While in the public sector regulations concerning salaries and related advantages are clearer and efforts being made to implement them in the private sector such regulations have become less meaningful with the liberalisation of activities. For instance no one respects the minimum wage set by government since there is a reserve pool from which employers can always draw employees for any wage.

3.6.6 - Household family structure

The family structure of the household greatly influences the poverty status of households in Yaounde. Nuclear family households, with more than 53% below the poverty line have the highest extent and depth of poverty and tend to be over represented among the poorest of the poor. This is probably because such households tend to have only one income earner, the breadwinner, whose incomes have seriously decreased in recent years. In fact such households are those "traditional" households in which the woman is a housewife and not allowed going into any economic activity, particularly outside the home. Until recently it was a pride for a man to keep his wife at home while he is in paid work. Most women enjoyed and envied this situation particularly those in towns. It was thus the dream of young rural girls to get married to an urban dweller. The crisis appears to have driven town women out of their kitchens and now they are found in all types of jobs even those hitherto reserved for men such as the filling station. However it would appear many women still find difficulties in getting a job in Cameroon either because of lack of experience, required professional training or the biased and segmented labour market. Others find themselves in informal activities with low and fluctuating incomes and precarious opportunities. Extended family households with the highest depth of poverty and second highest extent of poverty are also over represented among the poorest households. This situation could be attributed to the fact that such households have many dependants: students, unemployed school graduates in search for jobs and retired workers "chasing files" and in the ever long process of waiting for their pensions to start flowing.

Single parent households are better off than the two previous groups but worse off than single person households and extended family households. They are not over represented among the poorest households. This may be because female-headed households constitute more than 85% of such households and it has been already established that female-headed households fare relatively better than male-headed households. However the fact that single parent households are proportionally represented among the poorest might be a pointer to their high vulnerability to impoverishment if living conditions deteriorate.

Other extended households such as polygamous families have one of the lowest extent and depth of poverty (table 12 in appendices). In effect most of these households can be rightly considered as conglomerations of smaller households. Generally the amount of competition that exists between different wives and children from different mothers creates a situation where these smaller units depend less on a single breadwinner. Each small unit creates its own mechanisms for survival. In some cases children have to help the mother in her economic activities before and after school. In other cases, the children stop going to school in order to engage in a trade as early as possible.

Single person households have the lowest poverty measures and appear the most well off group of households (table 12 in appendices). These are probably student households who receive transfers and remittances from other households. Individuals living alone might also be part of this group. One is tempted to say that the revenue they generate is enough for them to live a decent life in Yaounde. However, such households might be vulnerable to impoverishment once their size increases and their family structure changes.

3.6.7 - Household income (Generated by household head[12])

As would be expected, both the extent and depth of poverty decrease as the income of the household head increases. Interestingly, some households whose head earned two million CFAF or more annually were unable to escape poverty. Such a situation might be related to the widespread of poverty in the city.

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[12] As mentioned earlier, the household head might not be the only income earner nor the major provider of household resources. The data does not allow for computation of total household income.

The above results suggest that income is very important in the fight against poverty. It also points to the fact that the use of household head's income for the well being of all household members is very crucial in determining the poverty status of households. However the fact that some high income-earner households are poor points out clearly that poverty is more than, and should not be equated to, lack of income.

3.6.8 - Duration of residence of household head in Yaounde

Migrants generally take some to time to get integrated into the socio-economic

Figure 3.7 Duration of residence in Yaounde of household head
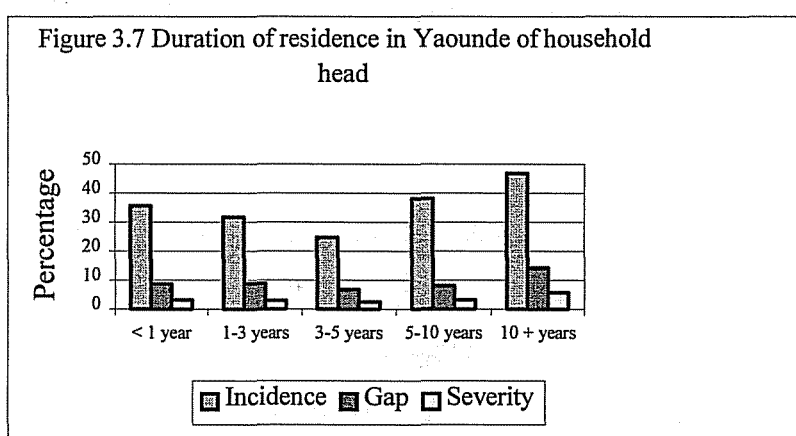
networks of their new homes. This seems to be consistent with the case of Yaounde. Households whose head has been there for less than one year are worse off than households whose head had stayed for one to five years. They are however better off than the ones whose head has been in the city for more than five years. The extent and severity of poverty are lowest among households whose head has been in Yaounde for three to five years and highest among those whose head has stayed in the city for ten years or more (figure 3.7).

Inhabitants of Yaounde are essentially wage earners. New migrants need some time to understand and enter the social networks that enable people to easily get some employment. They therefore will initially engaged in low paying jobs in the informal sector and would subsequently make some progress as they get into the social networks.

It would appear that sex and age play a determinant role in the situation of poverty. In effect more than 23% of female household heads have resided in Yaounde for three to five years compared to barely 13% for male heads. Also as many as 32%

of male heads have been in the city for ten years or more as compared to 23% for female heads. The majority of heads who have been in Yaounde for ten years or more are forty years old and above with the age group sixty and above constituting about 12% of this group. Other factors such as the changing household size and structure probably play important roles as well.

3.6.9 - Household Size

Population size has always been accused for generating poverty. It would appear that in the case of Yaounde high household sizes are associated with high poverty status. In effect the extent and depth of poverty tend to increase with the size of the household (fig. 3.8). However it is important to realise that some groups of large household sizes exhibit similar or lower poverty status as groups of small household sizes. In addition some small sized households failed to escape from poverty. This means that household size in itself is not a determinant of poverty. It might be a facilitating factor working through other factors such as the availability of resources. In fact in some cases, large household sizes have proven to be an asset instead of a liability. This may be why extended and polygamous households do not

Figure 3.8 Poverty indices by household size
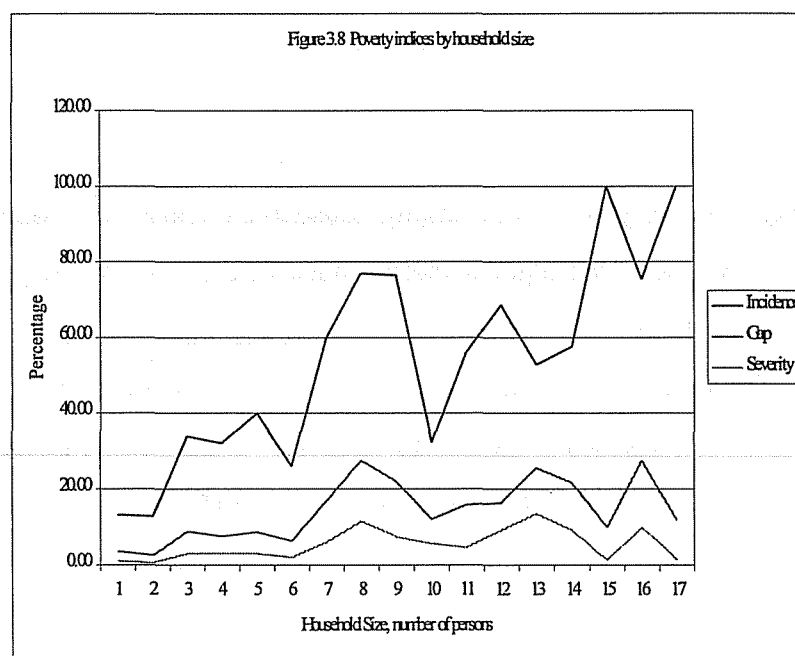
have the highest extent and depth of poverty although they on average have the highest household sizes.

Chapter 4 - Adequacy of the Methodology

4.1 - Introduction

In chapter three the sex and age of household heads and individuals were used to analyse the extent and severity of the different dimensions of poverty. Some characteristics of household heads were examined to estimate the extent and depth of overall poverty and identify the socio-economic groups that it affects most.

This chapter is devoted to examining how adequately the proposed methodology enables us to identify the poor. It has five sections of which three (sections 2, 3 and 4) are interrelated. Section two assesses how accurately basic needs are reflected in the methodology. Section three examines poverty measures resulting from different poverty lines in relation to how households are classified in the different scenarios. Finally section four examines the relationships between the different dimensions of poverty while section five presents a comparison of results from this methodology and some previous measures of poverty.

4.2 - Poverty and requirements for a decent life

The basic needs approach holds that poverty is first of all a lack of what is necessary for material well being. According to ILO, basic needs are defined as 'the minimum requirements of a family for private consumption 'especially food, clothing and shelter, as well as 'essential services provided by and for the community at large such as drinking water, sanitation, public transport, and health and education facilities'. These are also divided into core needs (food, water, clothing and shelter) and other needs (Brohman, 1995:209).

Basic needs according to this approach are therefore largely reflected in the different dimensions as well as overall poverty. Food, clothing, health care, leisure and education and training are directly reflected in consumption poverty. However, only expenditure on health care, leisure and education and training were taken into account in consumption poverty. It was not possible to incorporate access and accessibility to these services that are very important in determining who has a shortfall or not. Sanitation and clean water are directly reflected in basic facility poverty even though one aspect of sanitation (waste disposal) is not covered. Shelter is directly captured in housing poverty.

Another approach to basic needs gives priority to less tangible needs such as protection, affection, understanding, participation, leisure, creation, identity and freedom. This approach concentrates on broader needs and desires that make life meaningful to people within particular historical contexts (Brohman, 1996:209). It therefore rightly regards the poor as people who fight daily for survival and make a meaningful living under serious constraints. However these needs are lofty goals that do not generally discriminate between groups of individuals who have a shortfall and those who do not. It becomes thus difficult to use them both as indicator of poverty and means to target the poor.

So the proposed methodology captures the aspects of basic needs that are most important in distinguishing the poor from the non-poor.

4.3 - Sensitivity of changes in poverty measures

Changes in poverty measures arising from different poverty lines are assessed to evaluate the sensitivity of the poverty line; that is, how households are distributed around the poverty line. The robustness of the findings will be assessed through an examination of the ranking of socio-economic groups for the different poverty lines. The same percentage change (in both directions) is performed for all poverty dimensions and overall poverty.

4.3.1 - Consumption poverty

Consumption poverty in Yaounde appears to be very sensitive to changes in the poverty line. When the poverty line is reduced by 25% the extent and depth of poverty decline by more than 72%. An increase of the same percentage generates an increase in poverty measures of 42%, 98% and 139% for poverty incidence, gap and severity respectively (table 17 in appendices). In addition classification of households based on age and sex of household heads remains the same for the three scenarios suggesting that the findings that households headed by men and the elderly have a higher probability of being poor in consumption are robust.

The above results suggest that many households are around the suggested line for consumption poverty. It also means that modest transfer of resources to the poorest households in order to increase their consumption would substantially reduce

consumption poverty in Yaounde. However further deterioration of the households' resource base would be catastrophic.

4.3.2 - Housing poverty

Housing poverty appears to be less sensitive to change. A 25% decline in the poverty line has no effect on the incidence of poverty. It however induces a 20% and 26% reduction in extent and depth of housing poverty (table 17 in appendices). On the other hand an increase in the poverty line generates proportionally smaller increases in housing poverty measures.

It thus appears that very few households are around the housing poverty line. This also means that small improvements in housing conditions would have just marginal effect on the extent of housing poverty and some substantial effect on the severity of housing poverty. Thus significant improvements in housing conditions would require more than a transfer of resources. More wealth needs to be created in addition to means of instituting more equality particularly because changes in the poverty line do not alter the ranking based on sex and age of household heads.

4.3.3 - Asset poverty

Just like housing poverty, asset poverty seems to be resistant to small changes in the poverty line. A change in the asset poverty line yields a less proportionate change in asset poverty measures. When the line is set 25% below the suggested level the extent of asset poverty decreases just by 11% while the depth declines by about 22%. Likewise an increase in the poverty line generates a 17% increase in the incidence, 18% in gap and 20% in severity of asset poverty (table 17 in appendices).

This indicates that possession of assets is generally low in Yaounde and many households are vulnerable. Thus a transfer of resources to the poorest would have no real impact on asset poverty in Yaounde. It requires, as for housing poverty that additional resources be created for substantial reduction in asset poverty to materialise.

4.3.4 - Basic facility poverty

As with consumption poverty, changes in the poverty line yield proportionately higher changes in basic facility poverty measures. The extent of basic

facility poverty declines by about 45% (respectively increase by 51%) while the depth declines by more than 35% (respectively increase by 43%) following a 25% decrease (respectively increase) in the poverty line (table 17 in appendices).

It suggests that a transfer of basic resources (drinking water and light) from those who use drinking water for example to water flowers and plants to those who lack would substantially reduce poverty in basic facilities.

4.3.5 - Overall poverty

Overall poverty seems to be influenced by consumption and basic facility poverty (see variances in appendices table 19). Percentage changes in the poverty measures as presented in table 4.1 below are proportionally higher than percentage change in the poverty line.

Table 4.1 Percentage changes in poverty indices according to poverty line changes

	Incidence		Gap		Severity	
	Household	Individual	Household	Individual	Household	Individual
Low line (30%)	- 44	- 40	- 61	- 59	- 70	- 68
High line (50%)	+ 42	+ 29	+ 67	+ 59	+ 95	+ 87

Source: Calculations based on table 16.

This implies that many households are around the poverty line. Hence modest transfers of resources in favour of the poor would likely reduce both the extent and depth of poverty in Yaounde. However since overall poverty includes housing and asset poverty that appear to be less sensitive to modest transfers of resources it is important to realise that it would require creation of additional wealth in conjunction with reducing iequality in order to reduce poverty in Yaounde.

An examination of characteristics of household heads reveals that the rankings are the same for all the three scenarios (tables 14 and 15 in appendices). It would therefore appear that the findings presented in section 3.6 are robust.

4.4 - Relationship between dimensions of poverty

The relationship between the different dimensions of poverty is examined in two ways. First chi-square tests are performed between the different dichotomous variables of poverty status. Then a correlation matrix is derived for the different poverty indices corresponding to the poverty dimensions.

The different poverty dimensions appear to be in general related to each other. Results of the chi-square tests of association indicate that there is an association between basic facility poverty and the other three dimensions of poverty (asset: $\chi^2(1)$ = 4.54, p=0.03; consumption: $\chi^2(1)$ = 32.76, p<0.0001; housing: $\chi^2(1)$ = 21.36, p<0.0001). A relationship is also observed between housing poverty and asset and consumption poverty (asset: $\chi^2(1)$ = 18.06, p<0.0001; consumption: $\chi^2(1)$ = 4.29, p = 0.04). No association appears to exist between consumption and asset poverty ($\chi^2(1)$ = 3.18, p = 0.07).

However, these associations are very weak as the Cramer's V is within the range of 0.11 - 0.30 (Diamantopoulos & Schlegelmich, 1997:199). The correlation matrix (between the indices of the poverty dimensions) below confirms this weak association.

Table 4.2 Pearman's Correlation coefficients between different poverty dimensions

Poverty Dimension	Basic Facility	Housing	Asset	Consumption
Basic Facility	1			
Housing	0.57*	1		
Asset	0.38*	0.23*	1	
Consumption	0.49*	0.44*	0.33*	1

* Correlation coefficient is significant at the 0.01 level (2-tailed).
Source: Calculations based on 1996 CHS

The correlation coefficients vary from 0.23 to 0.57. This indicates a weak association. In addition the amount of variation in one poverty dimension explained by another dimension (square of correlation coefficient) varies from 5% to 32%. This means that these poverty dimensions relate to the same issue, poverty, but portray different aspects of the phenomenon. Therefore there is no realistic possibility of identifying poor households in one dimension using another dimension. It thus appears necessary to unravel all aspects of poverty to be able to identify the poor.

The lack of strong association between these poverty dimensions also indicates that the extent and severity of poverty can be gauged in terms of the number of dimensions

in which a household is poor. Of the 363 households successfully canvassed 48 were non-poor (that is poor in no dimension), 101 were poor in one dimension, 122 in two dimensions, 74 in three and 18 in all four dimensions. Accordingly 11% of all households were non-poor and about 15% of Yaounde's inhabitants in 1996 were living in such households (table 18 in appendices). On the other end of the spectrum 7% of all households were poor in the four dimensions and such households were inhabited by 12% of all the individuals.

The number of dimensions in which a household is poor appears to make a clear demarcation between female and male headed households. The percentage of non-poor female-headed households is twice as high as the corresponding percentage for

Figure 4.1: Households by number of poverty dimensions and sex of household head
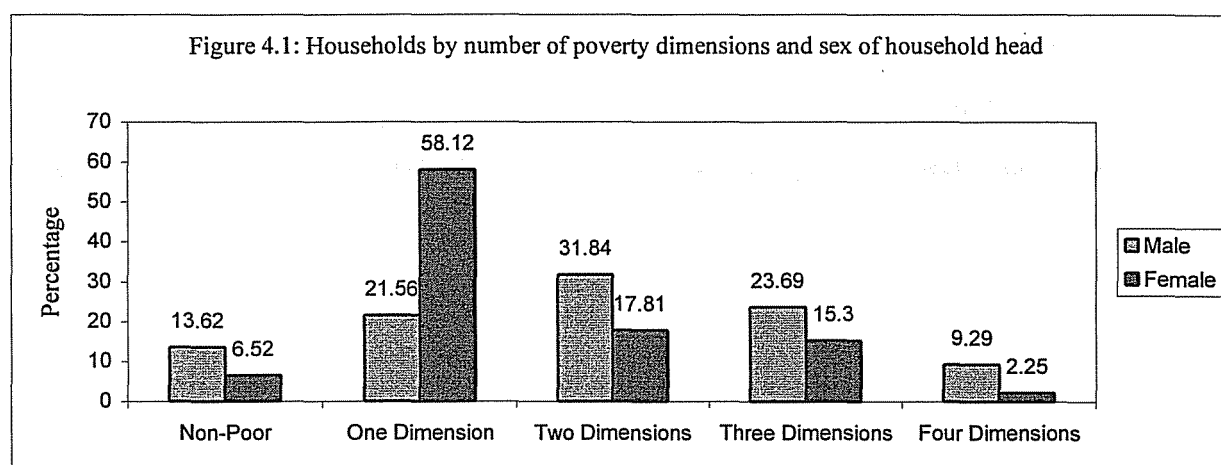
male-headed households (figure 4.1).

Likewise the percentage of male-headed households poor in four dimensions is more than four times that of corresponding female-headed households. Female-headed households are instead over represented among households poor in one dimension.

This again shows that both the extent and depth of poverty in Yaounde are higher for male-headed households.

4.5 - Comparison with some previous measures of poverty

An attempt is pursued in this section to evaluate some of the differences between the proposed methodology and previous measures of poverty. The comparison will be made essentially with consumption and income poverty.

Consumption poverty has previously been measured in two ways. The first one considers per capita consumption. It was criticised for assuming that households

are similar in size, structure and composition. This does not therefore constitute an element of consideration in this paper. The second approach introduced a weighting system of household members depending on their age. According to this last method 17% of all households in Yaounde were poor in 1996. About 29% of all inhabitants of Yaounde were living in such households (table 3.1, page 28). Corresponding figures resulting from the proposed methodology are 36% and 49% respectively. In addition to the large differences between the poverty incidence there is also a substantial difference between the poverty gap and severity.

It thus appears that consumption poverty fails to take account of other aspects of poverty and might underestimate the real extent and depth of poverty. This is particularly serious, as actions taken to fight against poverty are likely to fail to meet the objective because underestimated.

The threshold for income poverty proposed by the World Bank in 1990 was $370 per person per year. In the case of Yaounde this corresponds to CFAF 203500 in 1996. Multiplying each household size by 203500 yields the required minimum amount of income for the household to escape poverty. This estimates that about 40% of all households of Yaounde (about 62% of household heads who declared[13] their income) were poor in 1996. Such poor households were home to about 51% of all inhabitants of Yaounde in 1996. Compared to the proposed methodology these appear to be overestimated. The overestimation may come from different sources. First people are generally reluctant to declare their income particularly since the official declaration of the economic crisis in Cameroon[14]. For example, of the 363 household heads successfully interviewed during the 1996 CHS, only 73 declared not having worked in the year prior to the survey while 102 failed to report their income. In income poverty such households would automatically be classified as poor while households with high incomes would be non-poor. Secondly, even when respondents report their income they have a tendency to understate the value and report only income from their official and legal activities avoiding to incorporate income from other sources. Another problem with income is that income is not necessary spent for the well being of all household members. Thus high incomes that apparently put the

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[13] 102 out of the 363 household heads declared their income.
[14] The head of state officially declared that Cameroon was in crisis in 1988.

household above the poverty line might not be able to do so because the money is spent for other purposes.

Another measure is the poverty index constructed in the poverty assessment report. It is based on illiteracy, malnutrition and housing. Measures are indicated at provincial level. The Centre province of which Yaounde is part was attributed an incidence of 16% for the total population, the lowest among the ten provinces in Cameroon (WB, 1995:30). This average of 16% is distributed into 11% for the urban areas and 21% for the rural areas of the province. Yaounde is the most urbanised region of the Centre province. It can thus be expected to have a poverty incidence of roughly 11%. This again appears to be an underestimation compared to the results yielded by the methodology developed in this study. Such an underestimation might result from the way the index was conceived. Priority is given to illiteracy and malnutrition - weighted 40% each - (page 29) although these are not adequate in differentiating the poor from the non-poor in a city like Yaounde with very high levels of school attendance and consumption.

Conclusion: The methodology captures the aspects of basic needs that are most important in disguishing the poor from the non-poor. Although identified dimensions relate to the same issue, poverty, they portray, each, a different aspect of this phenomenon. In addition, the findings appear to be robust. The methodology is therefore probably adequate for identifying the poor.

Chapter 5 - Summary, Conclusion and Recommendations

5.1 - Introduction

This chapter comprises of four sections. Section two summarises the major findings of the study and presents a brief discussion while section three concludes the paper. Section four suggests some recommendations.

5.2 - Summary and discussion

5.2.1 - Summary

The main objective of this study was to identify the socio-economic groups that poverty affects most in Yaounde. This identification is necessary for laying the foundation for targeted poverty alleviation strategies, getting to know the causes of poverty and understanding the processes that create, recreate and restructure poverty. It is thus a prerequisite for policy formulation and implementation for poverty alleviation or eradication. In this process a multidimensional approach was developed since methodologies used so far appear to be inadequate in identifying the poor.

5.2.1.1 - The multidimensional approach

This approach recognises that people experience poverty in different and varying ways that may overlap or not. An attempt is made to come to grips with those aspects of human life in which people are unable to acquire a minimum required standard. Poverty is therefore defined as a state in which people lack the necessary commodities to lead a decent and acceptable life in their community. Commodities are divided into three groups to cover the whole range of human life: private, state provided and community provided commodities. Four aspects of human life are identified and constitute the four dimensions of poverty in private commodities: consumption, housing conditions, availability of assets and access to basic facilities. A poverty line is defined for each dimension. The overall poverty in private commodities is derived in two ways:

- An overall index which is a simple arithmetic average of the partial indices is calculated for each household and a poverty line is defined to distinguish the poor from the non-poor;

- The definition of a poverty line for each dimension yields dummy variables (1 for poor and 0 for non-poor) that are summed up to obtain the number of dimensions in which a household is poor.

Poverty measures (incidence, gap and severity) are then used to estimate the extent and depth of poverty and identify the socio-economic groups that it affects the most.

5.2.1.2 - Major findings

Asset and housing poverty are more widespread and severe compared to consumption and basic facility poverty. Consumption, housing and basic facility poverty are both more widespread and severe among households headed by men and the elderly. Asset poverty is on the contrary more widespread and severe among households headed by women and young people. Female individuals and the elderly tend to be over represented among the poor in consumption and basic facilities while men and children tend to be over represented among people who live in poor housing conditions.

Using the overall index, it is estimated that 36% of all households of Yaounde in 1996 were poor and some 49% of all inhabitants of the city lived in such households. Such an extent of poverty is estimated to be high for Yaounde that apparently has the highest standard of living in Cameroon. Patterns observed for consumption, housing and basic facilities in relation to the sex and age of household head were found to be the same for overall poverty. In addition households headed by highly educated persons and high-income earners were less likely to be poor although some households whose head was a university graduate or was earning a fairly high income were poor. Household with high sizes had a higher probability of being poor. However some households with small sizes were poor. Households headed by unemployed persons were, as expected more likely to be poor so were households whose head worked in agriculture and industry. Households with domestic workers and self-employed persons as head were also more likely to be poor. Surprisingly households with a nuclear family structure exhibited the highest probability of poverty compared to other household family structures. Likewise single parent households fared better than households with a nuclear or extended family structure.

Many households were probably found around the poverty line. This was also observed for consumption and basic facility poverty.

The identified dimensions were found to represent different aspects of poverty but none could be expected to represent poverty all alone. They also capture the different aspects of basic needs that are most important in distinguishing the poor from the non-poor.

5.2.2 - Discussion

The above results put to bare some issues for which tentative explanations given below constitute the core material for this section.

1 - In Yaounde consumption and basic facility poverty are both less widespread and less severe than housing and asset poverty. Particularly consumption poverty affects less than 20% of all households. This is probably an indication that people's resources are so few that they are more preoccupied with their consumption and other basic needs than with other aspects of life such the accumulation of assets. Hence people tend to live on a day-to-day basis with no possibility of thinking about the future. How can they think of saving for example when it is under hard struggle that they get to the end of the day alive? This is consistent with the idea that during moments of poverty most people lack the 'time horizon' to think of the future. It also means that households are unable to save and firms will have difficulties in getting capital to invest. This is probably the reason for the substantial slow down of public works and housing activities in Yaounde and the country as a whole during the early 1990s when the economy experienced negative or no growth. The situation is also detrimental to the economy as firms are unable to expand their businesses and create new jobs for young school graduates. Hence the high probability for many households to remain in poverty or even sink down the scale.

2 - Poverty is both less widespread and less severe among female-headed households than among male-headed households. This result is consistent with what was observed in Ghana (Moore, 1994:9). It is also similar to the situation in Latin America where it was observed that it is male-headed households that more often than not are over-represented among the urban poor (Marcoux, 1998:133). However this is contrary to what was observed in other studies (Buvinic, 1995:137) and to the general belief that female-headed households are poorer than male-headed households. This result points out two main issues. On the one hand it does not substantiate what is often said about

the poverty of female-headed households and of women in general. The above results suggest that assumptions and statements made about the poverty of individuals, households or communities need to be researched and backed by evidence. On the other hand there is a clear indication that when women have primary economic responsibility they would generally spend their money for basic necessities and the welfare of household members putting aside personal and individual pleasures that would be priorities for some male heads. This could be one of the reasons for female-headed households faring less well in asset poverty, making them vulnerable as they tend to have fewer assets whose possession is still very much related to social status than basic necessity. It is also an indication that women are better managers of resources particularly in a context where such resources are scarce. One is thus tempted to say that the poverty situation in Cameroon would have been more serious if women did not come out forcefully to supplement the diminishing incomes of 'traditional breadwinners'.

These results could also be an indication of another social reality. While men would be socially forced to set up their own households, particularly when they get married, even without enough resources, women would begin their own households only when they can afford to provide for basic necessities. Otherwise, women would continue to stay with parents, husbands, families-in-law, brothers or sisters even though they might be unhappy.

Another reason for female-headed households to be better off is the buoyancy of the food industry in Yaounde and the phenomenon of "bayam-sellam". Bayam-sellams are generally women who buy food stuffs from farmers and resell them to urban dwellers. It is believed that these bayam-sellam make a lot of money as the margin between farmer and consumer prices is sometimes very large. Related to the buoyancy of food industry in Yaounde is the trade of cooked food. This has gained momentum in recent years particularly in Yaounde with the change from the two-swift to one-swift working systems in french speaking provinces. The one-swift system warrants workers to take their lunch at job site.

Female-headed households might also appear to fare better because of the methodology focussing on material private commodities. Fundamentally, more

research is required to uncover the causes of poverty and the reasons for some households being poorer than others.

3 - Although high levels of education are associated with low poverty, some households whose head had had university education were found to be poor. This means that university education does not in itself make the household to escape poverty. The educational system and the national economy are to be questioned as well as social and economic policies. It would appear that the educational system fails to provide people with basic skills necessary for starting a professional career or business on their own.

Likewise high incomes failed to make some households escape poverty. This might be related to the way resources are managed and hence the consistency with the idea that Cameroon in a whole is suffering from a management problem rather than lack of resources.

4 - Households with nuclear family structures had a higher probability of being poor while single parent households had a tendency to be better off. One way through which people have tried to cope with the substantial reduction in incomes during these years of crisis is to diversify their sources of revenue. The same person takes up more than one activity or different household members engage in income generating activities or a mixture of both. At household level such strategies require taking decisions that affect the lives and welfare of household members and they hinge on conflicting interest and personality, social and cultural organisation and values and thus involve power relations and gender roles. One way this manifests itself is a husband refusing his wife to take up paid work or any income generating activity.

The above findings seem to indicate that this situation might have occurred in many households with a nuclear family structure. Hence gender roles and gender relations appear to be still very strong in Yaounde contrary to popular thinking that it is a *laisser faire* city for women. This seems to partly explain the high extent and depth of poverty among nuclear family structured households.

Other factor could as well inhibit women's participation in paid work and income generating activities. These include household chores, caring and nurturing children, the elderly and the sick. However, these seem to be less important since women would often prefer to stetch their working hours and energy, particularly in situations of lack

of resources, instead of letting their children die of hunger. In addition, it is very common to see women in various market and activity booming places carrying children on their backs or just having them by the corner.

5.3 - Conclusion

Poverty is probably more widespread and severe in Yaounde and Cameroon than alleged by consumption measures most prominent in studies done so far in Cameroon. Female-headed households have a lower probability of being poor but a higher probability to vulnerability. High income and education certainly play important roles in poverty reduction. They are however not sufficient to eradicate or alleviate poverty. High household sizes also increase the probability of a household being poor although a small household size does not guarantee the escape from poverty. Likewise the nuclear family structure does not appear to be a way of escaping poverty.

The methodology appears to be adequate for identifying the poor but needs further development and refinement.

5.4 - Recommendations

1 - The widespread of poverty in Yaounde and probably the whole country[15] renders targeting the poor per se difficult to manage and probably inefficient as it would generate a lot of leakage because of a deficient information system. However one of the priorities outlined in the population policy is food security. Since consumption poverty highly reflects food insecurity and it is relatively less widespread, targeted food programmes can be designed to transfer incomes and resources to some households particularly those with a nuclear family structure and those headed by the unemployed. Food stamps maybe made available particularly for rice that is still produced at very high costs by SEMRY, UNVDA and some local farmers. More resources should be created in the city and probably the whole country. Economic growth and the creation of new job opportunities that respond to people's aspirations might be the way out. The recent economic recovery is therefore an indication of a good start. However, a favourable environment for investment and small and medium

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[15] Owing to the fact that economic and social policies have often favoured towns and Yaounde particularly.

size enterprises and industries must be created to enable the creation of new jobs and the improvement of existing ones.

2 - The reduction of poverty in Yaounde and probably the whole country might also require a transfer of resources to the poor. Such a transfer hinges on politics. Many high government officials talk of poverty but no attempt has been made to discover whether, and if so how much such people could be prepared to pay or give up so that poverty is reduced or eradicated. A real open dialogue on poverty needs therefore to be created.

3 - Productivity and management capacity of micro-enterprises and businesses should be improved through special credit schemes and short and regular training courses.

4- Education plays a fundamental role in people's lives and in the reduction of poverty. While fostering education the system should be revised to include real needs of people and impart skills to address such needs and particular problems of the poor. Girls still need special attention as female education is also still trailing behind male education particularly at secondary and university levels.

5 - People generally want to live a long, fulfilling and satisfying life. This entails material as well as immaterial aspects. Focus in this paper was mainly on material conditions. The immaterial part could not be handled because of lack of adequate information and data that survey research is generally unable to provide. In addition, poverty is a result of policies and social organisation that hinge on distributive mechanisms, power relations and individual behaviour. Such issues are not generally tackled in survey research. For example the intra-household distribution of resources was not considered in the 1996 CHS that sought to characterise the poor.

This attempt to come to grips with poverty is however useful because as Chambers (1997:163) puts it "[I]f the reality of the poor is to count more, we have to dare to try to know it better". However its usefulness depends on further development of the methodology. The multidimensional approach developed in this paper needs to be extended and completed to include intangible commodities and complementary information gathered through other methods (focus group discussions, observation, participatory assessments). This requires a more inclusive process of public participation in determining poverty. Researchers would then come together with poor people and the non-poor to identify the different dimensions and causes of poverty.

This would yield a strong foundation for designing policy aimed at poverty eradication.

The approach in this paper also wants to be dynamic so as to produce continually changing pictures of poverty consistent with the social evolution of the community. Such pictures will be mixtures of various forms of deprivation rather than any clear and simple income line (Alcock, 1997:84). There is thus need for continuous poverty studies that will find the causes and explain the phenomenon. This might require the setting up of a poverty-monitoring unit.

APPENDICES

Table 1: Selected assets and percentage of households possessing each asset

Productive Assets (weight = 2)		Consumer Assets (weight = 1)	
Asset	%	Asset	%
Buildings (dwellings)	49.6	Radio	82.0
Land for construction	36.9	Television	46.6
Materials for the firm	14.4	Cooker	43.5
Car/Truck	12.7	Fridge	35.0
Buying a house	9.4	Fan	21.5

Source: Author's calculations based on 1996 Cameroon Household Survey.

Table 2: Materials used for building houses and their scores

Materials for the floor		Materials for the walls		Materials for the roof	
Material	Score	Material	Score	Material	Score
Tiles	3	Cement blocks	5	Cement***	2
Cement	2	Wood (plank)*	4	Aluminium sheets	1
Bare soil	1	Wood (carabotte)**	3	///	///
///	///	Earth blocks	2	///	///
///	///	Rammed earth	1	///	///

Source: Values assigned by author

* wood of superior quality ** wood of inferior quality *** Decking

Table 3: Basic facilities and scores assigned to different processes of access

Water		Light		Fuel		Toilet	
Category	Score	Category	Score	Category	Score	Category	Score
Private tap	4	Ind. Elect. meter	4	Gas	4	Flush toilet	3
Common tap	3	Col. Elect. Meter	3	Kerosene	3	Latrine	2
Water retailer	2	Elect. Neighbour	2	Charcoal	2	Open fields	1
Public pump	2	Kerosene	1	Firewood	1		
Well	1	Other sources	1	Other	1		
River, spring	1						
Other sources	1						

Source: Values assigned by author

Table 4:

Consumption poverty indices by sex and age of household head

CHARACTERISTIC	Category	Household Share (%)	Poverty incidence Mean	Poverty incidence Share (%)	Poverty gap Mean	Poverty gap Share (%)	Severity of poverty Mean	Severity of poverty Share (%)
Sex of HH	Male	67	0.2204	85	0.0424	84	0.0129	82
	Female	33	0.0814	15	0.0168	16	0.0059	18
Group Total		100	0.1749	100	0.0341	100	0.0106	100
Age-group of HH	< 30	32	0.0504	9	0.0067	6	0.0015	5
	30 - 39	34	0.2470	48	0.0359	36	0.0091	29
	40 - 49	18	0.2097	22	0.0491	26	0.0177	30
	50 - 59	12	0.1813	12	0.0521	18	0.0199	23
	60 & +	4	0.3696	9	0.1095	14	0.0350	14
Group Total		100	0.1749	100	0.0341	100	0.0106	100
Table Total		100	0.1749	100	0.0341	100	0.0106	100

Table 5:

Housing poverty indices by sex and age of household head

CHARACTERISTIC	Category	Household Share (%)	Poverty incidence Mean	Poverty incidence Share (%)	Poverty gap Mean	Poverty gap Share (%)	Severity of poverty Mean	Severity of poverty Share (%)
Sex of HH	Male	67	0.6517	76	0.3998	75	0.2733	75
	Female	33	0.4173	24	0.2726	25	0.1860	25
Group Total		100	0.5749	100	0.3581	100	0.2447	100
Age-group of HH	< 30	32	0.4695	26	0.2305	21	0.1329	17
	30 - 39	34	0.6202	37	0.4203	40	0.3048	42
	40 - 49	18	0.5726	18	0.3798	19	0.2667	20
	50 - 59	12	0.6426	13	0.4272	14	0.2902	14
	60 & +	4	0.8230	6	0.5346	6	0.3833	7
Group Total		100	0.5749	100	0.3581	100	0.2447	100
Table Total		100	0.5749	100	0.3581	100	0.2447	100

Table 6:			Basic facility poverty indices by sex and age of household head						
		Household	Poverty incidence		Poverty gap		Severity of poverty		
CHARACTE RISTIC	Category	Share (%)	Mean	Share (%)	Mean	Share (%)	Mean	Share (%)
Sex of HH	Male	67	0.3521	82	0.1654	83	0.0960	85
	Female	33	0.1625	18	0.0678	17	0.0359	15
Group Total		100	0.2899	100	0.1334	100	0.0763	100
Age-group of HH	< 30	32	0.2091	23	0.0928	22	0.0493	21
	30 - 39	34	0.3827	45	0.1577	40	0.0812	36
	40 - 49	18	0.2587	16	0.1354	18	0.0857	20
	50 - 59	12	0.2357	10	0.0960	9	0.0469	7
	60 & +	4	0.4455	7	0.3427	11	0.2852	16
Group Total		100	0.2899	100	0.1334	100	0.0763	100
Table Total		100	0.2899	100	0.1334	100	0.0763	100

Table 7:			Asset poverty indices by sex and age of household head						
		Household	Poverty incidence		Poverty gap		Severity of poverty		
CHARACTE RISTIC	Category	Share (%)	Mean	Share (%)	Mean	Share (%)	Mean	Share (%)
Sex of HH	Male	67	0.7106	64	0.4063	63	0.2882	64
	Female	33	0.8254	36	0.4857	37	0.3352	36
Group Total		100	0.7482	100	0.4323	100	0.3036	100
Age-group of HH	< 30	32	0.9514	41	0.6221	46	0.4659	49
	30 - 39	34	0.7151	32	0.3907	31	0.2746	31
	40 - 49	18	0.5667	14	0.3124	13	0.2019	12
	50 - 59	12	0.5444	9	0.2389	7	0.1395	6
	60 & +	4	0.8320	5	0.3934	4	0.2101	3
Group Total		100	0.7482	100	0.4323	100	0.3036	100
Table Total		100	0.7482	100	0.4323	100	0.3036	100

Table 8: **Consumption poverty indices by sex and age of individuals**

CHARACTERISTIC	Category	Population Share (%)	Poverty incidence Mean	Poverty incidence Share (%)	Poverty gap Mean	Poverty gap Share (%)	Severity of poverty Mean	Severity of poverty Share (%)
Sex	Male	49	0.2940	50	0.0547	48	0.0165	47
	Female	51	0.2904	50	0.0577	52	0.0179	53
Group Total		100	0.2922	100	0.0562	100	0.0172	100
Age groups	0 - 9	27	0.3549	33	0.0599	29	0.0169	27
	10 - 19	25	0.3340	29	0.0671	30	0.0203	30
	20 - 29	25	0.2157	18	0.0467	21	0.0155	23
	30 - 39	13	0.2691	12	0.0409	9	0.0119	9
	40 - 49	5	0.2405	4	0.0579	6	0.0193	6
	50 - 59	3	0.2113	2	0.0614	3	0.0225	4
	60 +	1	0.2685	1	0.0812	2	0.0260	2
Group Total		100	0.2922	100	0.0562	100	0.0172	100
Table Total		100	0.2922	100	0.0562	100	0.0172	100

Table 9: **Housing poverty indices by sex and age of individuals**

CHARACTERISTIC	Category	Population Share (%)	Poverty incidence Mean	Poverty incidence Share (%)	Poverty gap Mean	Poverty gap Share (%)	Severity of poverty Mean	Severity of poverty Share (%)
Sex	Male	49	0.6340	51	0.4141	50	0.2910	50
	Female	51	0.5891	49	0.3969	50	0.2862	50
Group Total		100	0.6112	100	0.4054	100	0.2886	100
Age groups	0 - 9	27	0.6663	30	0.4576	31	0.3361	32
	10 - 19	25	0.6338	26	0.4245	26	0.3038	27
	20 - 29	25	0.5424	22	0.3370	21	0.2292	20
	30 - 39	13	0.5868	12	0.3913	12	0.2775	12
	40 - 49	5	0.5436	5	0.3613	5	0.2545	5
	50 - 59	3	0.6771	3	0.4538	3	0.3115	3
	60 +	1	0.7107	2	0.4671	2	0.3365	2
Group Total		100	0.6112	100	0.4054	100	0.2886	100
Table Total		100	0.6112	100	0.4054	100	0.2886	100

Table 10:   Basic facility poverty indices by sex and age of individuals

CHARACTE RISTIC	Category	Population Share (%)	Poverty incidence		Poverty gap		Severity of poverty	
			Mean	Share (%)	Mean	Share (%)	Mean	Share (%)
Sex	Male	49	0.3651	48	0.1670	47	0.0961	46
	Female	51	0.3863	52	0.1821	53	0.1082	54
Group Total		100	0.3758	100	0.1747	100	0.1022	100
Age groups	0 - 9	27	0.4655	30	0.2077	32	0.1169	31
	10 - 19	25	0.4201	27	0.2040	29	0.1257	31
	20 - 29	25	0.2722	21	0.1265	18	0.0721	18
	30 - 39	13	0.3759	12	0.1613	12	0.0873	11
	40 - 49	5	0.2742	5	0.1342	4	0.0809	4
	50 - 59	3	0.2310	3	0.1027	2	0.0542	2
	60 +	1	0.3883	1	0.2927	2	0.2503	4
Group Total		100	0.3758	100	0.1747	100	0.1022	100
Table Total		100	0.3758	100	0.1747	100	0.1022	100

Table 11:   Asset poverty indices by sex and age of individuals

CHARACTE RISTIC	Category	Population Share (%)	Poverty incidence		Poverty gap		Severity of poverty	
			Mean	Share (%)	Mean	Share (%)	Mean	Share (%)
Sex	Male	49	0.6609	50	0.3474	50	0.2276	50
	Female	51	0.6349	50	0.3352	50	0.2188	50
Group Total		100	0.6477	100	0.3412	100	0.2231	100
Age groups	0 - 9	27	0.6251	26	0.3341	27	0.2226	27
	10 - 19	25	0.6064	24	0.3097	23	0.1970	22
	20 - 29	25	0.7306	28	0.4077	30	0.2754	31
	30 - 39	13	0.6643	13	0.3391	13	0.2219	13
	40 - 49	5	0.5703	5	0.2914	5	0.1785	4
	50 - 59	3	0.5787	3	0.2512	2	0.1407	2
	60 +	1	0.6421	1	0.26241	1	0.1301	1
Group Total		100	0.6477	100	0.3412	100	0.2231	100
Table Total		100	0.6477	100	0.3412	100	0.2231	100

Table 12:			Poverty profile, all households					
		Household	Poverty incidence		Poverty gap		Severity of poverty	
CHARACTE RISTIC	Category	Share (%)	Mean	Share (%)	Mean	Share (%)	Mean	Share (%)
Sex of HH	Male	67	0.4081	76	0.1213	82	0.0466	85
	Female	33	0.2623	24	0.0554	18	0.0169	15
Group Total		100	0.3603	100	0.0997	100	0.0369	100
Age-group of HH	< 30	32	0.2167	19	0.0448	14	0.0144	12
	30 - 39	34	0.4247	40	0.1230	42	0.0425	39
	40 - 49	18	0.4258	21	0.1237	22	0.0481	23
	50 - 59	12	0.3425	11	0.0938	11	0.0374	12
	60 & +	4	0.6997	8	0.2416	10	0.1116	13
Group Total		100	0.3603	100	0.0997	100	0.0369	100
Activity status of HH	Inactive	19	0.1737	9	0.0413	8	0.0135	7
	Unemployed	14	0.4987	20	0.1304	19	0.0492	19
	Occupied	67	0.3840	71	0.1098	73	0.0409	74
Group Total		100	0.3603	100	0.0997	100	0.0369	100
Education levels	None	5	0.6739	9	0.2327	12	0.1078	14
	Primary school	25	0.6088	43	0.2012	51	0.0771	53
	Secondary school	21	0.4769	28	0.1055	22	0.0348	20
	High school	18	0.3538	18	0.0679	12	0.0196	10
	Tertiary education	30	0.0290	2	0.0091	3	0.0038	3
Group Total		100	0.3617	100	0.1001	100	0.0370	100
Family structure	Single person	20	0.1314	7	0.0353	7	0.0119	7
	Single parent	8	0.3821	8	0.1015	8	0.0353	7
	Nuclear	21	0.5327	31	0.1553	33	0.0563	32
	Extended	32	0.4463	40	0.1301	42	0.0514	45
	Other	19	0.2596	13	0.0545	10	0.0181	9
Group Total		100	0.3603	100	0.0997	100	0.0369	100
Table Total		100	0.3603	100	0.0997	100	0.0369	100

Table 12 (Continued):			Poverty profile, all households					
		Household	Poverty incidence		Poverty gap		Severity of poverty	
Characteristic	Category	Share (%)	Mean	Share (%)	Mean	Share (%)	Mean	Share (%)
Sector of occupat.	Agriculture	5	0.6135	8	0.1261	6	0.0448	6
	Industry	18	0.5265	24	0.1525	24	0.0574	24
	Private services	32	0.3082	25	0.0995	28	0.0403	31
	Public sector	22	0.2985	17	0.0901	18	0.0319	17
	Commerce	23	0.4475	26	0.1173	24	0.0399	22
Group Total		100	0.3925	100	0.1123	100	0.0416	100
Occupat. Category	Self-Employed	44	0.4992	57	0.1317	53	0.0456	51
	Employee	38	0.2871	28	0.0874	31	0.0326	32
	Domestic Worker	2	0.6761	4	0.2769	5	0.1218	6
	Retired Worker	7	0.3299	6	0.0632	4	0.0209	4
	Other Worker	9	0.2065	5	0.0762	7	0.0316	7
Group Total		100	0.3829	100	0.1077	100	0.0392	100
Durat. of residence	< 1 yr	16	0.3562	16	0.0870	14	0.0308	13
	1-3 yrs	30	0.3178	26	0.0895	26	0.0299	24
	3-5 yrs	16	0.2474	11	0.0687	11	0.0248	11
	5-10 yrs	9	0.3823	9	0.0827	7	0.0316	8
	10 yrs & +	29	0.4681	38	0.1428	42	0.0568	45
Group Total		100	0.3624	100	0.1008	100	0.0373	100
Annual Income in 1000 CFAF	< 200	14	0.6916	26	0.1901	26	0.0673	25
	200-500	35	0.5225	48	0.1678	55	0.0648	57
	500-1000	21	0.3161	18	0.0762	15	0.0287	15
	1000-2000	17	0.1361	6	0.0227	4	0.0056	2
	2000 & +	13	0.0547	2	0.0103	1	0.0026	1
Group Total		100	0.3788	100	0.1073	100	0.0397	100
Table Total		100	0.3603	100	0.0997	100	0.0369	100

Table 14:			Lower poverty profile, all households						
		Household	Poverty incidence		Poverty gap		Severity of poverty		
CHARACTE RISTIC	Category	Share (%)	Mean	Share (%)	Mean	Share (%)	Mean	Share (%)	
Sex of HH	Male	67	0.2561	85	0.0502	88	0.0147	90	
	Female	33	0.0930	15	0.0143	12	0.0033	10	
Group Total		100	0.2027	100	0.0384	100	0.0110	100	
Age-group of HH	< 30	32	0.0672	11	0.0131	11	0.0036	10	
	30 - 39	34	0.2882	48	0.0423	37	0.0093	28	
	40 - 49	18	0.2283	20	0.0541	25	0.0160	26	
	50 - 59	12	0.1601	10	0.0384	12	0.0148	16	
	60 & +	4	0.5517	12	0.1319	15	0.0484	19	
Group Total		100	0.2027	100	0.0384	100	0.0110	100	
Activity status of HH	Inactive	19	0.0691	7	0.0130	6	0.0030	5	
	Unemployed	14	0.2889	20	0.0521	19	0.0157	21	
	Occupied	67	0.2224	73	0.0428	74	0.0123	74	
Group Total		100	0.2027	100	0.0384	100	0.0110	100	
Education levels	None	5	0.3963	10	0.1223	16	0.0499	22	
	Primary school	25	0.4951	62	0.0846	56	0.0217	50	
	Secondary school	21	0.1608	17	0.0333	18	0.0093	18	
	High school	18	0.1085	10	0.0145	7	0.0034	6	
	Tertiary education	30	0.0140	2	0.0045	4	0.0015	4	
Group Total		100	0.2034	100	0.0386	100	0.0110	100	
Family structure	Single person	20	0.0678	7	0.0125	7	0.0027	5	
	Single parent	8	0.1761	7	0.0374	8	0.0087	6	
	Nuclear	21	0.3486	36	0.0582	32	0.0149	29	
	Extended	32	0.2610	41	0.0555	46	0.0180	52	
	Other	19	0.0966	9	0.0158	8	0.0047	8	
Group Total		100	0.2027	100	0.0384	100	0.0110	100	
Table Total		100	0.2027	100	0.0384	100	0.0110	100	

Table 14
(Continued): **Lower poverty profile, all households**

CHARACTE RISTIC	Category	Household Share (%)	Poverty incidence		Poverty gap		Severity of poverty	
			Mean	Share (%)	Mean	Share (%)	Mean	Share (%)
Sector of occupat.	Agriculture	5	0.1923	4	0.0449	5	0.0150	6
	Industry	18	0.3379	26	0.0591	24	0.0181	26
	Private services	32	0.1931	27	0.0449	33	0.0143	38
	Public sector	22	0.2423	23	0.0322	16	0.0071	13
	Commerce	23	0.2062	20	0.0396	21	0.0089	17
Group Total		100	0.2327	100	0.0434	100	0.0122	100
Occupat. Category	Self-Employed	44	0.2480	47	0.0445	48	0.0114	47
	Employee	38	0.2087	35	0.0356	33	0.0088	32
	Domestic Worker	2	0.6761	6	0.1439	7	0.0455	9
	Retired Worker	7	0.1328	4	0.0223	4	0.0038	3
	Other Worker	9	0.1993	8	0.0342	8	0.0111	10
Group Total		100	0.2290	100	0.0406	100	0.0106	100
Durat. of residence	< 1 yr	16	0.1600	12	0.0308	13	0.0086	12
	1-3 yrs	30	0.2020	29	0.0263	20	0.0066	18
	3-5 yrs	16	0.1097	9	0.0261	11	0.0072	11
	5-10 yrs	9	0.1547	7	0.0364	8	0.0102	8
	10 yrs & +	29	0.3026	43	0.0636	48	0.0193	51
Group Total		100	0.2056	100	0.0388	100	0.0111	100
Annual Income in 1000 CFAF	< 200	14	0.3892	26	0.0655	23	0.0178	22
	200-500	35	0.3565	57	0.0701	59	0.0192	58
	500-1000	21	0.1326	13	0.0306	16	0.0106	19
	1000-2000	17	0.0421	3	0.0046	2	0.0005	1
	2000 & +	13	0.0350	2	0.0009	0	0.0000	0
Group Total		100	0.2203	100	0.0413	100	0.0116	100
Table Total		100	0.2027	100	0.0384	100	0.0110	100

CHARACTERISTIC	Category	Household Share (%)	Poverty incidence Mean	Share (%)	Poverty gap Mean	Share (%)	Severity of poverty Mean	Share (%)
Table 15:			**Upper poverty profile, all households**					
Sex of HH	Male	67	0.5866	77	0.1963	79	0.0872	82
	Female	33	0.3540	23	0.1061	21	0.0401	18
Group Total		100	0.5104	100	0.1667	100	0.0718	100
Age-group of HH	< 30	32	0.3803	24	0.0997	19	0.0351	16
	30 - 39	34	0.5579	37	0.1943	39	0.0848	40
	40 - 49	18	0.5842	21	0.1996	22	0.0893	22
	50 - 59	12	0.5025	12	0.1564	11	0.0689	12
	60 & +	4	0.8189	7	0.3420	9	0.1776	10
Group Total		100	0.5104	100	0.1667	100	0.0718	100
Activity status of HH	Inactive	19	0.4104	15	0.0950	11	0.0323	9
	Unemployed	14	0.6657	19	0.2214	19	0.0953	19
	Occupied	67	0.5056	66	0.1755	70	0.0780	72
Group Total		100	0.5104	100	0.1667	100	0.0718	100
Education levels	None	5	0.7709	7	0.3294	10	0.1716	12
	Primary school	25	0.7362	37	0.2939	45	0.1393	49
	Secondary school	21	0.6611	27	0.1976	25	0.0774	23
	High school	18	0.5632	20	0.1474	16	0.0513	13
	Tertiary education	30	0.1498	9	0.0261	5	0.0082	3
Group Total		100	0.5123	100	0.1674	100	0.0720	100
Family structure	Single person	20	0.3173	13	0.0778	10	0.0273	8
	Single parent	8	0.4262	6	0.1635	8	0.0711	8
	Nuclear	21	0.6610	27	0.2417	31	0.1083	32
	Extended	32	0.6197	39	0.2091	40	0.0941	42
	Other	19	0.3993	15	0.1081	12	0.0411	11
Group Total		100	0.5104	100	0.1667	100	0.0718	100
Table Total		100	0.5104	100	0.1667	100	0.0718	100

Table 15 (Continued): CHARACTE RISTIC	Category	Household Share (%)	Poverty incidence Mean	Poverty incidence Share (%)	Poverty gap Mean	Poverty gap Share (%)	Severity of poverty Mean	Severity of poverty Share (%)
Sector of occupat.	Agriculture	5	0.7492	7	0.2304	7	0.0941	6
	Industry	18	0.7658	26	0.2487	24	0.1091	24
	Private services	32	0.3868	23	0.1473	26	0.0706	28
	Public sector	22	0.4672	20	0.1487	18	0.0631	18
	Commerce	23	0.5572	24	0.1944	25	0.0825	24
Group Total		100	0.5297	100	0.1807	100	0.0797	100
Occupat. Category	Self-Employed	44	0.6025	52	0.2136	53	0.0923	53
	Employee	38	0.4651	35	0.1432	31	0.0621	31
	Domestic Worker	2	0.6761	3	0.3568	4	0.1936	5
	Retired Worker	7	0.4622	7	0.1290	5	0.0480	5
	Other Worker	9	0.2505	5	0.1090	6	0.0539	7
Group Total		100	0.5090	100	0.1740	100	0.0761	100
Durat. of residence	< 1 yr	16	0.4927	15	0.1535	15	0.0635	14
	1-3 yrs	30	0.4974	29	0.1561	28	0.0634	26
	3-5 yrs	16	0.3889	12	0.1187	11	0.0496	11
	5-10 yrs	9	0.5545	10	0.1526	8	0.0628	8
	10 yrs & +	29	0.5881	34	0.2192	38	0.1020	41
Group Total		100	0.5108	100	0.1678	100	0.0724	100
Annual Income in 1000 CFAF	< 200	14	0.7048	20	0.2905	24	0.1316	25
	200-500	35	0.6558	46	0.2510	51	0.1176	54
	500-1000	21	0.4935	21	0.1419	17	0.0576	16
	1000-2000	17	0.3213	11	0.0621	6	0.0181	4
	2000 & +	13	0.1082	3	0.0208	2	0.0072	1
Group Total		100	0.5024	100	0.1726	100	0.0762	100
Table Total		100	0.5104	100	0.1667	100	0.0718	100

Table 15 (Continued):   Upper poverty profile, all households

Table 13: CHARACTE RISTIC	Category	Population Share (%)	Poverty incidence Mean	Poverty incidence Share (%)	Poverty gap Mean	Poverty gap Share (%)	Severity of poverty Mean	Severity of poverty Share (%)
Sex	Male	49	0.4942	50	0.1424	50	0.0538	50
	Female	51	0.4824	50	0.1374	50	0.0531	50
Age group	0 - 9	27	0.5693	32	0.1654	32	0.0623	32
	10 - 19	25	0.5343	28	0.1605	29	0.0627	30
	20 - 29	25	0.3893	20	0.1017	18	0.0392	18
	30 - 39	13	0.4497	12	0.1283	12	0.0468	11
	40 - 49	5	0.4487	5	0.1229	5	0.0451	5
	50 - 59	3	0.3894	2	0.1110	2	0.0438	2
	60 +	1	0.5591	2	0.1799	2	0.0830	2
Table Total		100	0.4882	100	0.1398	100	0.0535	100

Table 13:   Poverty indices by sex and age of individuals

Table 16 :Changes in overall poverty line and measures

Cut off Point (line)	Poverty Incidence (%)		Poverty Gap (%)		Severity of Poverty (%)	
	Households	Individuals	Households	Individuals	Households	Individuals
Normal (40%)	36	49	10	14	4	5
Low (30%)	20	29	4	6	1	2
High (50%)	51	63	17	22	7	10

Source: Calculations based on the 1996 CHS.

Table 17: Percentage change in poverty measures following changes in poverty line

Poverty Dimension	Poverty measure	Lower line (30%)	Upper line (50%)
Consumption	Incidence	-72	+42
	Gap	-74	+98
	Severity	-73	+139
Housing	Incidence	0	+5
	Gap	-20	+13
	Severity	-26	+20
Asset	Incidence	-11	+17
	Gap	-22	+18
	Severity	-22	+20
Basic Facility	Incidence	-45	+51
	Gap	-39	+46
	Severity	-35	+43

Source: Authors calculations based on the 1996 CHS

Table 18: Poverty status of households and individuals in Yaounde in 1996

Poverty status	Households (%)	Individuals (%)
Non-Poor	11	15
One dimension	34	25
Two dimensions	27	24
Three dimensions	21	24
Four dimensions	7	12
Total	100	100

Source: Calculations based on the 1996 CHS.

Table 19: Variance of indices of poverty dimensions

Poverty dimension	Variance
Consumption poverty index	13305.02
Asset poverty index	407.73
Housing poverty index	833.73
Basic facility poverty index	680.44
Overall poverty index	1509.61

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