

**WOMEN AND CHANGE IN GHANA:
THE IMPACT OF ENVIRONMENTAL CHANGE
AND ECONOMIC CRISIS ON RURAL WOMEN'S TIME
USE**

BY

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**A Thesis submitted in Accordance with the Requirements of the
University of Newcastle Upon Tyne for the Award of the Degree of Doctor
of Philosophy (Ph.D.)**

DEDICATED TO MY FAMILY

ABSTRACT

In the last decade, Ghana, in common with several other African countries has adopted a Structural Adjustment Programme (SAP) in response to economic crisis. Widespread concern has been expressed about the deterioration of living standards and the severe erosion of both the human and natural resource base of the economy following the implementation of these adjustment policies. Periods of drought and irregular rainfall patterns have exacerbated these problems in the savannah region of Ghana. At the household and community level, macro economic policies have often had a differential impact on women and men. This thesis delineates the link between the effect of the adjustment policies, deteriorating environmental conditions and the feminisation of poverty in Ghana through a comparative analysis of women's time use in 1984 and 1991.

A case study from a small savannah village in northern Ghana illustrates how the micro-level impact of adjustment has combined with environmental degradation to make women more vulnerable to impoverishment. The study finds a visible process of impoverishment, with a deterioration in living conditions of most households and an intensification of women's workloads. It looks at the household strategies adopted by women as prices rise and as farm yields decline from a deteriorating resource base. Women are increasingly working harder but with diminishing returns as they struggle to ensure the basic survival of their households. Gender inequalities in access to production resources and inequalities in gender relations are examined. It is argued that these have been exacerbated by the crisis brought about by environmental degradation and adjustment policies, so that women have borne a greater share of the burden.

The thesis urges the need for policies which recognise not only women's productive roles, as the current adjustment programme does, but also their reproductive and community managing roles, and for action which would empower women to take more control over their own lives.

ACKNOWLEDGEMENTS

During the period over which this study was conducted, I have benefited immensely from various sources. First I must thank my Supervisor, Professor Janet Momsen, for the valuable guidance and encouragement provided throughout my period of study. My deepest gratitude also goes to Dr Janet Townsend, who jointly provided supervision. My thanks to Dr Lewis Hanna, my Associate Supervisor, for valuable comments and for support on matters of personal welfare.

I would also like to express my appreciation to Dr Parvati Raghuram and Nina Laurie, for their comments on an earlier draft. Nina has been a constant source of support and companionship during my sometimes "lonely times" in Newcastle. Dave Passmore, Anne Rooke and Simon Fialor provided assistance with the illustrations for which I am grateful. My deepest appreciation to Dr David Surtees and Martin Charlton for assistance with computing and statistical analysis, and to Brian Allaker for his help at various stages of the thesis. I further acknowledge the invaluable contribution of my Field Assistants especially Bugri Nachinaba during my period of field work. My colleagues Data and Harnit have contributed at various stages in spite of their own commitments.

I owe a great debt of gratitude to my Sponsors, the Commonwealth Scholarship Commission in the United Kingdom and the Ghana Government for financial assistance, and to the Canadian Universities in Service Overseas (CUSO) for funding the fieldwork.

I would also like to thank my parents for their constant support, prayers and encouragement. My deepest gratitude must go to my husband, and my children, for enduring almost four years of disruptions in their family lives. Their generous support, patience and understanding enabled me complete a task that sometimes seemed endless.

Finally, I must thank the women of Zorse who received me into their homes, for their participation and co-operation, without which this thesis would not have been possible.

Mariama Awumbila
Newcastle Upon Tyne
May, 1994.

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GLOSSARY

BEWDA	Bawku East Women's Development Association
CIDA	Canadian International Development Agency
CUSO	Canadian Universities in Service Overseas
DAWN	Development Alternatives With Women for a New Era.
ERP	Economic Recovery Programme
GDP	Gross Domestic Product
GAD	Gender and Development
GNP	Gross National Product
IMF	International Monetary Fund
ILO	International Labour Organisation
NCWD	National Council on Women and Development
NGO	Non-Governmental Organisation
ODI	Overseas Development Institute, London
PAMSCAD	Programme of Actions to Mitigate the Social Costs of Adjustment
PNDC	Provisional National Defence Council
PPP	Purchasing Power Parity (conversion)
SAL	Structural Adjustment Loan
SAP	Structural Adjustment Programme
SOE	State Owned enterprise
SPSS	Statistical Package for the Social Sciences
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
WAD	Women and Development

WED **Women, Environment and Development**

WID **Women in Development**

Currency Conversions (approximate)

Value of the Cedi in 1982, 5.50 = 1 Pound Sterling

Value of the Cedi in 1991, 500 = 1 Pound Sterling

Value of the Cedi in 1994, 1,300 = 1 Pound Sterling

CHAPTER ONE

1.0 INTRODUCTION

1.1 THE PROBLEM

The last decade has been marked by rising awareness of the importance of women's contribution to the economy of many Developing Countries. Several studies have documented the predominant contribution of women to the basic productivity of their communities and have called for recognition of their work as producers of goods and services and as reproducers of human resources. Yet this substantial contribution is often undertaken with limited resources as a result of inequalities generated by the gender division of labour, the double burden of reproductive and productive work, and also due to inequalities in access to resources required to improve the productivity of their efforts. Recent global developments are not only maintaining the status quo, but are resulting in the intensification of the existing burden of women.

One of the emerging themes from this literature indicates that development is leading to increasing demands on rural women resulting in intensification of their workloads. This study examines the effect of a specific development policy, stabilisation and structural adjustment policies (SAPs) on rural women's work and time use in Ghana.

The severity of economic conditions in Sub-Saharan Africa during the 1980's resulted in many African countries adopting adjustment policies in an effort to remove the distorted "macro prices" and invigorate their stagnating economies. In the short term however, some of the policies adopted have worsened conditions for the most vulnerable groups in the population.

Widespread concern now exists about the deteriorating standards of living and the severe erosion of the “human resource” base of the economy following the economic crisis and resulting adjustment (Cornia et al, 1987, 1988). A more recent debate however centres around how the crisis has been experienced by different members of the household and how SAPs have a differential impact on women vis a vis men (Commonwealth Secretariat, 1989).

Development policies such as SAPs are often presented in a gender blind or supposedly gender neutral language and as a result, their impact is also assumed to be gender neutral. The literature reviewed in Chapter Two will show how the development policies of the 1960’s and 1970’s, by ignoring the needs of women as producers and directing resources to men, resulted in the marginalisation of women and the intensification of their work loads. Similarly, recent research is showing that SAPs, even if unintentionally, have a gender differentiated impact which is often biased against women in the sense that they tend to work to the benefit of men rather than to the benefit of women. This gender bias stems from failure to take into account the asymmetry of gender relations and the fact that women as a gender are socially subordinated to men as a gender through both social structures and individual practices. If women’s contributions have been neglected in previous development policies, current SAP policies appear to over- estimate the ability of women to take up the slack and compensate for the effects of SAPs. Indeed the former underestimation of women’s work in previous development approaches, and now over expectation and the accompanying assumption that women have time and energy to spare, has resulted in a failure to appreciate the problems caused by the intensification of

women's burdens as they have to work harder as prices rise with the removal of subsidies and price controls and as payment is increasingly required for services formerly provided free or almost free by the state.

By being too macro economic in scope, SAPs have ignored the reality of life at the micro-level where the impact is most strongly felt in terms of both spatial and gender differences. There is therefore the need for micro studies which link macro level data with intensive research (Townsend, 1991). This study attempts to provide a link between macro economic SAP policies and their micro level impact with a gendered focus.

Research is also showing that the short term objectives of SAPs are exacerbating the trend towards environmental degradation as people struggle to survive on an increasingly deteriorating resource base (MacNeil et al, 1989; Mackenzie, 1993). This study examines the micro level impact of adjustment on a savannah village in Northeast Ghana, an area already marginalised by previous development policies and subject to environmental degradation. The savannah zone in Ghana is characterised by limited and erratic rainfall in a single rainy season, degradation of plant and soil resources, a rapidly growing population, increasing population pressure on the land and annual food shortages which have become increasingly more severe in the last decade. In addition, partly due to the environmental conditions and partly to past development policies, the savannah zone produces mainly subsistence non-tradeable crops. These factors have made the savannah region, and Northeast Ghana in particular, more vulnerable to the effects of the economic crisis generated by the adjustment policies. The study therefore examines the impact not only of the economic

crisis, but also analyses how this combines with environmental changes to worsen the impact on rural women. It also examines the gender inequalities in access to production resources and argues that gender inequalities are usually compounded through crises such as environmental changes and economic policies.

By focusing on women, the aim is not to examine the impact on women as victims of adjustment, or as vulnerable groups as advocated by UNICEF (1987), or even for equity reasons alone, but rather because women play an important role in the rural economy as food producers, in marketing and other informal sectors of the economy, as well as reproducers and maintainers of human resources. Thus for efficiency as well as equity reasons, it is important to understand and consider the impact of adjustment and environmental change on women. Hence the need for this study.

1.2 OBJECTIVES OF STUDY

Broadly, the objectives of this study are:

1. To examine the impact of macro economic SAP policies at the micro level with a particular focus on rural women in Ghana
2. To identify ways in which the economic crisis generated by adjustment policies combines with environmental change to make women more vulnerable to its impact.
3. To establish that just as the underestimation of women's work in previous development policies led to heavy time demands on women, SAPs, by over

estimating women's potential contribution and time flexibility, have also resulted in increasing demands on women's time and energy, thus making women bear a greater burden of the adjustment process.

1.3 STRUCTURE OF THE THESIS

Chapter One is a general introduction to the thesis. It addresses the research problem and justifies the need for a gender aggregated micro study of the impact of macro economic structural adjustment policies.

Chapter Two provides a recapitulation of the key aspects of the literature on development policy approaches towards the "Third World" and "Third World" rural women¹. It highlights the main themes in the literature and is intended mainly as background against which the substantive discussions of later chapters will be staged.

In Chapter Three, the focus shifts to Ghana and provides an overview of Ghana's socio-economic development. It sets Northeast Ghana within the country's development pattern and examines the factors which have contributed to the underlying spatial differences between the north and south.

Chapter Four justifies the scope and methodology of the study. This chapter is fairly detailed as I believe that a detailed knowledge of the mode of data collection is important to afford the reader the chance to evaluate the broader interpretations I make from the data. Gender studies often take the researcher into peoples' private lives and the researcher's role in this process is therefore

¹See Chapter Two for the context within which the term "Third World" is used.

important. I therefore provide an overview of my personal experience of data collection among women.

Chapter Five sets Northeast Ghana and the village of Zorse in particular, in their environmental context. It describes the increasing irregularity of rainfall and increasing degradation of the soil and vegetative resources. It also examines the inter-relationship between the environment and the availability of resources and the incidence of diseases in Northeast Ghana. This is intended as background to the discussion in subsequent Chapters, on the inter-relationship between the economic crisis, environmental change and their impact on rural women.

Chapter Six traces Ghana's economic crisis and the resulting adoption of stabilisation and adjustment policies. It analyses the conceptual issues in the design of SAPs which have resulted in a gender differentiated impact and examines the impact on women in their triple roles. Chapters Five and Six thus set the background of environmental change and economic crisis at the national and regional levels.

The next two Chapters are devoted to examining the impact of the crisis caused by adjustment and environmental change at the micro level using Zorse in Northeast Ghana as a case study. Chapter Seven examines rural women's work and time use in Zorse in 1991. The aim is to establish the important contributions of women to the local economy and their responsibility for household production and reproduction. Gender divisions of labour and gender inequalities in access to resources are examined and their implications discussed. Women's time allocations and the factors affecting time use are analysed and

the strategies adopted to cope with their workloads are examined. Chapter Eight focuses on the micro level impact of the changes generated by the economic crisis and environmental degradation on women in Zorse. It provides a comparative analysis of the changes in socio-demographic characteristics, health and nutritional status, educational status, reproductive and productive work and time use changes among women in Zorse between 1984 and 1991. These changes all point to a process of impoverishment taking place in Zorse. It concludes by discussing the implications for gender relations in Zorse.

Chapter Nine, the conclusion to the thesis, summarises the findings and draws out the theoretical arguments raised by the study. It also discusses the survival strategies adopted by women and their adequacy in offsetting the effects of adjustment and environmental change. Policy implications of the findings are highlighted and possible areas for future research are suggested.

CHAPTER TWO

2.0 THEORETICAL CONTEXT

2.1 INTRODUCTION

This Chapter outlines development policy approaches in the Developing World over the last four decades and their impact on rural women in Africa. It draws out the main issues in the Gender and development debate and their implications for women in Ghana.

2.2 DEFINING DEVELOPMENT

The concept of development is an ambiguous term which is difficult to define and even harder to measure because it embraces values, standards and goals which differ in emphasis among individuals and between groups and nations. Development is therefore a normative concept, but in simple terms it is synonymous with change, often for the better.

In the 1950s and 1960s, development was viewed almost exclusively in terms of economic growth with little regard to the beneficiaries of growth or to the composition of output (Wilson and Woods, 1982). The process of development was thus seen as consisting of a movement away from traditional society, through a series of stages of development similar to those already experienced by the "advanced" countries, to "modernity" (Rostow, 1960). The means by which "modernity" was to be achieved was growth. The means to achieving growth varied from savings and investment as the source of growth (Todaro, 1989), through using surplus or rural labour for industrialisation, to

the "trickle down effects" of the benefits of development to the population at large. In all these means to achieve growth, the emphasis was on capital accumulation, the primacy of investment and per capita gross national product growth rates as the key indicators of development. The dominant measure of development was therefore the per capita gross national product of a country or region, with the assumption that the well-being of individuals would follow automatically from economic growth. Thus income was used as a measure of production and as the sole measure of welfare in its per capita form.

By the end of the 1960's however, it became apparent that many Third World countries were not "taking off", nor were the supposed "trickle down" effects taking place. While the theory predicted that through "trickle down" effects, all social strata would benefit from economic growth fostered by modernisation and industrialisation, in reality, the development-as-growth paradigm was accompanied by the economic and social marginalization of large sectors of the populations of the Third World.

The late 1960's and 1970's, saw a shift away from development as economic growth towards an emphasis on redistribution with growth. Development therefore came to be seen as a multi-dimensional process involving changes in structures, attitudes and institutions, the reduction of inequality and the eradication of absolute poverty (Todaro, 1989). Seers (1969, 1979) argued that development should be seen not only as economic growth but as entailing the conditions for the realisation of the potential of human needs. He identified the most important indicators of a country's development as the reduction of poverty, unemployment and inequality (Seers, 1979:12). Growth

with employment was viewed as the principal means of spreading the benefits of economic growth more equitably throughout the economy, with the International Labour Organisation being one of the major proponents of this view (ILO, 1977). The 1970's also saw a re-orientation of development policy towards an emphasis on human needs such as the eradication of poverty and the satisfaction of the basic needs of the poor (ILO, 1977). Development policy in the 1970's thus emphasised a heavy reliance on the State to re-orientate the economy, just as in the 1960's it had been required to create the conditions for growth.

The period also saw the emergence of an alternative explanation of the continued subordinate position of many Third World countries, the dependency school, which viewed underdevelopment not as caused by low productivity and poverty, but as "an historical condition of blocked, distorted and dependent development" (Furtado, 1964; Frank, 1967).

By the 1980's, the failure of many developing countries to grow led to criticisms against the development policies of the 1970's and indeed against development economics itself. Several publications re-defining the role of the state (Bauer, 1981; Little, 1982; Balassa, 1982; Lal, 1983) and changing opinion at the World Bank (World Bank, 1981) led to a change in development thinking in the 1980's which has been labelled the "counter revolution" in development thinking (Toye, 1993). Neo-liberalism became the dominant view of development and state interference with the market mechanism was considered ineffective, counterproductive and basically inconsistent (Schuurman, 1993). The way to develop was to limit the role of the state, to

allow free market forces to operate and to introduce a strict monetary policy usually according to the guidelines of the International Monetary Fund and the World Bank. Under this neo-liberal ideology, many developing countries adopted structural adjustment programmes which increasingly are being seen as the cause of rather than the solution to the economic problems experienced in the Third World in the 1980's.²

Thus in the 1980's, economic growth was once again the central issue, with the withdrawal of the state and the free play of market forces being the major aim of development. Alternative readings of what was needed for developing countries were largely silenced. Now after the "lost decade" of the 1980's, the neo-liberal ideologies of the period are being questioned. The negative experiences of the 1970's and 1980's have led to a reassessment of development thinking in the 1990's. As Chambers (1989) points out, the solution to rural poverty in the 1970's was not less government, but more, and in the 1980's, the solution to the problems of development was not more government but less (Chambers, 1989). Thus both ideologies and both sets of prescriptions

"embody a planners core, centre-outwards, top-down view of rural development. They start with economies not people, with the macro not the micro, with the view from the office not the view from the field and in consequence their prescriptions tend to be uniform, standard and for universal application" (Chambers, 1989:6).

Booth (1993) argues that the impasse in development thinking of the 1980s was a result of the highly generalised and economistic explanatory frameworks

² See Chapter Six for a discussion of the impact of the structural adjustment programme in Ghana

that dominated social development theory in the 1970's which failed to reflect and were incapable of explaining the diversity and complexity of the real world of development. The 1990's have therefore seen a re-constitution of social development research along more productive and challenging lines towards the investigation and explanation of diversity at macro, meso and micro levels. (Booth, 1993:69).

Radical definitions of development in the 1990's emphasise self reliance and the well being of the majority of people. The South Commission (1990), for example, defines development as the achievement of

"a people-centred development, a form of development that is self-reliant, equitable, participatory and sustained.....a process of development achieved through the active participation of the people, in their own interests as they see them, relying primarily on their own resources and carried out under their own control" (South Commission, Overview and Summary, 1990:8).

Development, I would argue, must therefore be about people and not merely about production or productive capacity. It must be seen as a process for enlarging peoples choices and enabling them to take part in reaching a consensus about the goals and processes of change. Development is therefore a significant process that has potential for improving the lot of developing countries, without discrimination on the basis of race, class or gender.

Given these various definitions over the years, it is not surprising that there has been no single policy approach to Third World development. Modernisation policies of accelerated growth, have given way to basic needs strategies

associated with redistribution with growth, and to the more recent compensatory measures associated with economic stabilisation and adjustment policies.

However, what is striking about these definitions and approaches to development is that they have little or no place for women. While cleavages of class were considered, differentiation between groups of people within a given class, or the likelihood of these groups having different interests and priorities was given little importance. No attempts were made to distinguish between the interests and concerns of different groups of people and particularly between women and men. Women's needs were considered to be taken care of by the "family", conceived as a corporate unit headed by a male household head who exercised benevolent authority over its members and resources (Young, 1993). Any benefit directed at the family head would automatically "trickle down" to all its members. Women were thus ignored altogether, or at best, were considered as adjuncts to their husbands, or as daughters or mothers, with the assumption that women's position would improve with the economic prosperity of their husbands. This assumption has been criticised as failing to take into account the widespread structures of patriarchy which keep women in subordinate positions (Brydon and Chant, 1989). Thus conventional development strategies have been criticised as being patriarchal and failing to take into account the needs, perceptions and strengths of women (Momsen and Townsend, 1987).

2.3 WOMEN IN DEVELOPMENT

In this section, the historical origins of the "women in development" debate will be traced focusing on the major issues that have been of concern to rural women in Africa.

Since the 1970's, there has been much serious discussion of the role of women in national development, pioneered by Boserup's (1970) study, and further highlighted by the United Nations year and decade for women, 1975 to 1985. Boserup's seminal work portrayed "Third World Women"³ as victims of development by arguing that colonialism and initial development efforts undermined the traditional positions of women and increased their economic marginalization in the modern sector. Boserup's work set out to document the decline in social and economic status of many women as a result of the commoditization of subsistence economies in developing countries. Since then a considerable body of literature particularly in the 1970s and early 1980's, has focused on the role of women in development, arguing that women have remained marginal to the development process and in some cases have been disadvantaged by it (Tinker and Bramson, 1976; Nelson, 1981; Buvinic et al, 1983).

Boserup's findings were further corroborated by many reports on the status of women prepared by Governments for the United Nations conference on women in Mexico in 1975. As a consequence, the world population plan of

³The term "Third World Women", has been the subject of much debate. Mohanty (1988), argues that the term obscures and fails to contest and indeed reinforces reductive similarities between and among women from countries labelled as developing or developed. It therefore produces or reproduces a composite, singular, oppressed object for analysis. Nevertheless, for lack of an adequate alternative, I use the term in this study in parenthesis to question its validity.

action presented by this conference demanded that Governments make substantial efforts to remedy the situation and to "integrate women in development". Since then, the United Nations, the World Bank and Non-Governmental Organisations have set up women in development (WID) programmes and "put women firmly on the agenda". Studies on the role of women in development have come up with some dominant themes.

2.3.1 MARGINALIZATION OF WOMEN IN DEVELOPMENT

Earlier work, particularly in the 1970's, showed that economic development had not had the same effect on both genders in the "Third World". The sexual division of labour in different production contexts has been documented and shows the differential effect of modernisation on men and women (Boserup, 1970; Etienne and Leacock, 1980; Wellesley Committee, 1977; Palmer, 1977). Often men's activities have been modernised, streamlined, intensified and monetised, while women's activities have been relatively less affected. With development, men often moved into advantageous positions as illustrated by the introduction of cash crop farming in Africa. Commercial crops were introduced to men and grown and marketed by men, leaving women dependent on subsistence agriculture using traditional methods. Dey (1981) cites an example from the Gambia where the intensification of groundnut production for export benefited only males. In a study of rural women in Ghana, Bukh (1979) demonstrated that cash crop production was concentrated in the hands of men who tended to take over the best land for this purpose thereby denying women access to income from cash crops. Thus while cash cropping was being

promoted for men, subsistence crops already were or became the domain of women, but they were offered few of the incentives to increase production that their male counterparts received. Studies such as that by Staudt (1985), showed that agricultural extension workers, who were mostly male, rarely gave women subsistence crop farmers the same degree of attention and care as male cash crop farmers were given.

Thus the development of cash cropping and new farming methods and the shifting of food processing outside the home brought changes in the rural sexual division of labour, often creating financially profitable activities for men and segregating women into the less productive activities (Boserup, 1970; Palmer, 1977, 1978; Bukh, 1979; Roberts, 1979; Rogers, 1980). Tinker and Bramson (1976), in a documentation of development projects that had widened the gap between men and women, argued that development planners were "unable to deal with the fact that women must perform two roles in society whereas men perform only one" (Tinker and Bramson, 1976:22). They attributed the adverse impact of development on women to three types of planning errors: errors of omission or failure to acknowledge and utilise women's productive roles, errors that reinforce values restricting women to childbearing and child caring work, and errors of inappropriate application of western values regarding women's work.

Since then, Boserup's work and much of the earlier work on women in development, has been criticised as being essentially empirical and descriptive, lacking a clearly defined theoretical framework and for taking as given, a unique model of development that characterises capitalist economies (Tinker, 1990;

Beneria and Sen, 1982). In a series of articles, Beneria and Sen (1979,1981,1982) criticised Boserup for accepting the market model. In their view, the problem is not as Boserup implies, that women are not sufficiently involved in an essentially beneficial modernisation process, but that modernisation under capitalism has itself deepened women's oppression. The economic marginalisation of rural women, they argued, results not from women's exclusion from productive labour, but from the exploitation of their labour in a global system of capitalist labour relations in which women are forced by their poverty to participate in

"a system that generates and intensifies inequalities and makes use of gender hierarchies to place women in subordinate positions at each different level of interaction between class and gender" (1981:290).

In their view, giving women access to productive resources within capitalism, is like "treating cancer with a band aid" (1981:287). Most important of all, by concentrating on the sphere of production outside the household and ignoring the role of women in reproduction, Boserup's work failed to locate the basis of the subordination of women and thus fails to explain the social relations among household members in determining women's role in economic development.

Boserup (1970) and much of the earlier work reviewed, is also criticised for overstating the extent of female labour in African farming systems and underestimating their involvement in the modern sector. The view that African agriculture exhibited a dualism based on gender, that is a cash crop sector in which men predominate, and a food crop sector in which women use traditional

methods to produce food for families has thus been criticised as being too simplistic for the African situation (Whitehead, 1991). Men have long grown and continue to grow food crops for consumption and women also grow cash crops and are engaged in market production. This issue is discussed further in relation to Zorse, the study area, in Section 7.4.2.

Despite these shortcomings, Boserup's work represented a comprehensive and pioneering effort to provide an overview of women's role in the development process. It also emphasised gender as a basic factor in the division of labour and allocation of resources which was prevalent across countries and recognised regional differences in gender roles.

2.3.2 DEVELOPMENT AND THE TRIPLE ROLE OF WOMEN

A much longer lived theme emerging from studies on women in the "Third World" particularly in Africa, which has continued to the 1990's, is that development is leading to a significant increase in the workloads of women. An analysis of the sexual division of labour documents women's increasing work burden as men move into more technologically advanced activities, leaving women with the labour intensive work of subsistence living. (Beneria, 1982; Kandiyoti, 1985, Palmer, 1985). Agricultural development projects introduced to improve farming practices often resulted in women having to increase their labour input in order to weed the expanded acreages and harvest and process the increased output (Dey, 1981, Palmer, 1985). Thus while the workloads of men remained constant or reduced, that of women became heavier.

Opening employment opportunities and income generating activities to women, which was instituted in the wake of the revolution on "women in development", in the near universal absence of domestic role sharing, also doubled women's workloads. Much of what women saw of development did not bring benefits, but introduced new stresses while removing old sources of security (Newland, 1991). In this view, the role of women in development as it had evolved was to perform all of their traditional functions and many new ones under ever more difficult circumstances.

Thus women are working harder and their time is becoming a commodity in short supply (Momsen and Townsend, 1987). Several studies have shown the double and triple workloads of rural women in Africa involving a long working day. (Carr, 1983; Spiro, 1987; McCall, 1987; Barrett and Browne, 1989). They not only perform demanding tasks as wives and mothers, but are also engaged in productive and community managing roles (Commonwealth Secretariat, 1990). Mair (1984) in a study of a Gambian village reported that women worked on the average 6.8 hours as against 5.6 hours for men in farming, and worked for 159 days as against 103 days for men. In addition to this, women spent four hours per day on household maintenance and child care. In parts of East Africa, women work 16 hours a day (Buvinic et al, 1983), while in Burkina Faso women have only 1.3 hours free time in a fourteen hour day (McSweeney, 1979).

Not only do women have a double and triple workload, but the duties they perform are carried out in a traditional way with no labour or time saving devices, so that their daily tasks consume a great deal of time and energy.

Roberts et al (1982) in a study of a rural Gambian village, classified much of women's work as hard to moderate, with the high energy demanding jobs of food preparation involving pounding grains and rice, and washing clothes, taking up large proportions of women's time.

Furthermore women's time and energy is consumed not just by laborious work, but also by having to walk long distances to collect fuel wood and water, to attend markets and to work on farms. Carr (1983) reports that on the average, African women spend sixty to ninety minutes a day walking to their fields and carrying tools and produce. As drought and deforestation become more widespread in Africa, women are having to walk longer distances to collect and carry the vital resources of fuel wood and water (Barrett and Browne, 1989). In a study in Tanzania, it was observed that women walk up to five kilometres to collect fuel wood and carry head loads of up to sixty kilograms (McCall, 1987). In Ghana, rural women in households in the savannah area are having to walk further in search of fuel wood now than they did ten years ago (Ardayfio-Schandorf, 1993) and have been reported to carry head loads of water of up to sixty pounds weight (Date-Bah, 1981). Thus travelling necessitates a substantial use of women's energy and time which is essentially non-productive.

As their workload increases, women are having to make trade-offs in order to balance their productive activities with demands on reproductive and community managing roles. This is usually at a cost to women and to the family's welfare. Studies reveal that rural women in the "Third World" are having to decrease the number of meals cooked per day or cook less nutritious

meals in order to save time. They have also been found to reduce hours of leisure and sleep in order to have time for their activities .

2.3.3 DEVELOPMENT AND WOMEN'S TIME USE

In spite of evidence which shows that "development" is leading to an increase in women's workloads and time demands, recent economic policies in the "Third World" continue to be presented as being gender neutral. Elson (1989, 1991) sees this apparent gender neutrality as hiding a deeper male bias implicit in the conceptual framework underlying the structural adjustment programmes of the 1980's. She identifies these as male bias concerning the sexual division of labour, bias against the unpaid domestic work necessary for producing and maintaining human resources, and male bias concerning the household which is taken as the basic unit of which the economy is composed. These conceptual biases have several practical consequences.⁴ One of the most important is the assumption that women's unpaid labour will continue regardless of the way in which resources are re-allocated. Women's unpaid labour is thus regarded as infinitely elastic, able to stretch to make up any shortfall in other resources for the reproduction and maintenance of human resources.

Moser (1992), however, notes that women's labour is not infinitely elastic. Breakpoints may be reached with the result that women's capacity to reproduce and maintain human resources may collapse, or the aims of macro-economic policy may be achieved at the cost of a longer and harder day for many women.

⁴Chapter Six discusses the conceptual bias in structural adjustment programmes and how these affect women in Ghana.

In a study in Ecuador, she identifies the issue of the increase in demand on women's time, as being that of changes in the balancing of time as well as in the elasticity of time. (Moser, 1992).

A review of the literature therefore shows that rural women's workload is increasing and taking up more of their time. Time budget studies have proved a particularly useful mechanism for identifying the amount and types of activity undertaken and they show that real limits in women's time constitute a major constraint to rural development. Time is therefore becoming a desperately scarce resource for rural women in the "Third World" and unless this is recognised and given due consideration, it could constrain women from participating in and benefiting from rural development efforts.

2.3.4 INVISIBILITY OF WOMEN'S WORK

In order to consider women's varied roles and needs in rural development, there is the need to re-evaluate women's work. Although rural women perform 60 to 80% of agricultural production in Africa, and are involved in the informal sector, in addition to their household tasks, their work is often unnoticed and has a low value attached to it. Beneria (1982), attributes this invisibility to two factors: the ideological factor which tends to regard women's work as secondary and subordinate to men's, because much of it is unpaid, and secondly, the gross underestimation of women's participation in economic activity in the labour force.

Statistics on economically active population depend primarily on population censuses which often define active labour to cover only measurable commoditised activity (ILO, 1977), thus excluding goods and services not exchanged on the market, usually subsistence production. Thus much of women's work is made invisible. In a survey in the Andean region, it was found that the proportion of women participating in agricultural work was 21% instead of the 3% reported in the census. (Deere and Leon de Leal, 1979). In Africa, the extent of under reporting is often much higher. This under-estimation, which is common in agricultural areas in many countries, differs according to class background and affects women from the poorer strata to a greater degree, as they perform more agricultural work (Deere and Leon de Leal, 1979; Dixon-Mueller, 1985)

To remedy this situation, the importance and significance of non-commodity production and its role within the economic system needs to be considered in any definition of women's work. It is argued that active labour should be defined in relation to its contribution to the production of goods and services for the satisfaction of human needs, thereby taking into account both commodity and non-commodity production (Beneria, 1982). Supporting this argument, Leon (1984) suggests that work should be defined in terms of the contribution that the activity makes to the survival of the family group.

Studies of the role of women in production have established the important role that rural women play in "Third World" development. It is now generally accepted that women have always been integrated in development but that their varied roles and needs were overlooked in development programmes in the past.

To this end, Moser (1989) argues that since men and women play different roles in society, they often have different needs and therefore when identifying and implementing planning needs, it is important to deconstruct communities, households and families on the basis of gender. Unless the roles, views and values of both men and women are taken into consideration, development policies and programmes would only serve to increase the inequalities which exist between women and men. She thus advocates the need for a gendered planning approach based on the identification of women's triple role and taking into account women's practical and strategic gender needs (Moser, 1989,1993).⁵

The themes discussed above have been mainly those of the 1970's and early 1980's. Newer themes that have emerged since the mid 1980's are discussed in subsequent sections.

2.4 POLICY APPROACHES TO WOMEN IN THE “THIRD WORLD”

As a result of Boserup's (1970) work, and reinforced by the United Nations year and decade for women, which played a significant role in highlighting the important but often invisible role of women in the social and economic development of "Third World" countries and communities, many Governments, Development Planners and Agencies became involved with "integrating women into the development process". The underlying rationale was that " women are key actors in the economic system, yet their neglect in development has left untapped a potentially large contribution" (Overholt et al, 1985:3).

⁵Women's practical and strategic gender needs are discussed in section 2.7.1.

Development processes would therefore proceed much better if women were fully incorporated into them.

As a result, there was a proliferation of policies, programmes and projects designed in theory, to assist low income women in the “Third World” and thus “integrate” them into the development process. These different interventions follow the dominant paradigms in development theory and reflect the changes in macro-level economic and social policy approaches to “Third World” development briefly discussed in Section 2.2.

Buvinic (1983, 1986) and later Moser (1989, 1993) have distinguished five historical policy approaches towards “Third World” women based on the perceptions of women's role implicit in these strategies, which are discussed below.

2.4 1 WELFARE APPROACH

The welfare approaches of the 1950's and 1960's and still practised by many development agencies, were based on the western model of female domesticity and male responsibility. The focus was on women's reproductive role and the main aim was to bring women into development as better mothers through welfare oriented activities. Women were therefore seen as passive beneficiaries of development.

2.4.2 EQUITY APPROACH

With the entry of the "Women In Development" (WID) Lobby⁶. between the mid 1970's and mid 1980's, which advocated for recognition that women were active not passive in development, and for their "integration in development", the focus shifted to obtaining equality for women through top-down legislation. Women's subordinate role was recognised and the equity approach was thus seen as threatening and therefore unpopular with many development agencies.

2.4.4 ANTI-POVERTY APPROACH

Anti-poverty approaches aimed at increasing women's productivity through meeting their practical gender needs to earn an income. Inequality between women and men was linked not to subordination, but to poverty, and thereby relations between women and men were not challenged and therefore social change was not threatened.

2.4.5 EFFICIENCY APPROACH

As a result of the economic crises of the 1980's, the focus shifted from poverty and meeting basic needs, towards utilising women more efficiently, which is now the predominant approach towards "Third World women". The main aim is to ensure that development is more effective by encouraging women's economic contributions and to increase equity and efficiency for women. In addition, efficiency approaches recognised the triple role of women

⁶The term WID, was first used by the women's committee of the Washington DC Chapter of the Society for International Development as part of a deliberate strategy to bring the new evidence generated by Boserup and others to the attention of American policy makers.

by focusing on the productive roles of women as an "under utilised resource" for development, by making use of women's "unpaid time" through the intensification of their reproductive and community managing roles (Goetz, 1991:139).

These last three approaches, equity, anti-poverty and efficiency approaches together constitute what is known as the "Women in Development" (WID) approach. They focus mainly on women in isolation, promoting measures such as access to credit and employment as the means by which women can be better "incorporated" into the development process.

Thus over the last three decades the analysis of women's role in development has shown shifts in the perception of the nature of the problem and its solutions. On the whole, these changing perceptions have gone with the grain of mainstream development thinking. To a large extent, they have addressed issues to do with women's material conditions or what Molyneux (1985) and later Moser (1989) have called practical gender needs, rather than their position in society relative to men.

2.4.6 EMPOWERMENT APPROACH

Now in the 1990's, with a growing number of women from both developed and developing countries questioning the meaning of development, the demand is for empowerment to enable women to take control over their own lives. This approach is however mainly evident in theory and in academic work.

The empowerment approach,⁷ which is still neither widely recognised nor documented, although its origins are by no means recent, aims at empowering women through greater self reliance. It differs from the equity approach in that it aims at women empowering themselves through a bottom-up approach, whereas the equity approach is a top-down approach (Moser, 1993). The empowerment approach acknowledges inequalities between men and women and the origins of women's subordination in the family. Women's subordination is seen not only as a problem of men, but also of colonial oppression. It emphasises the fact that women experience oppression differently according to race, class and colonial history and current position in the international economic order and questions the fundamental assumptions concerning the inter-relationship between power and development that underlie previous development approaches. By so doing, it differs significantly from all the other WID approaches.

The best known articulation of the empowerment approach has been by the DAWN (1987)⁸ Group. In a series of articles that became the starting point for the "Third World" perspective on WID, Sen and Grown (1985, 1987), and Beneria and Sen (1981,1982) argue for a reassessment of the ideas behind development strategies from "Third World" women's views, experiences and

⁷The word is used by protagonists of both Women and Development (WID) and Gender and Development (GAD) approaches and so it is discussed here although GAD will be discussed subsequently.

⁸DAWN stands for "Development Alternatives with Women for a New Era". It is a network of activists and researchers, largely in the "Third World", committed to attaining social and economic justice, peace and development free of all oppression by gender, class, race and nation.

activities with which DAWN wants to arrive at a new development paradigm.

Gender is linked with the general crisis of sustainability,

" a development process that shrinks and poisons the pie available to poor people, and then leaves women scrambling for a larger relative share, is not in women's interest" (Sen and Grown, 1987:64.)

Reviewing the women's decade, DAWN forms an analytical link between various crises by inter-linking the crises of debt, poverty, food shortage, environmental degradation, political conservatism and religious fundamentalism.

They envision the formation of an alternative future world in which

" inequality based on class, gender and race is absent from every country and from the relationships among countries.....a world where basic human needs become basic rights and where poverty and all forms of violence are eliminated. Each person will have the opportunity to develop her or his potential and creativity , and women's values of nurturance and solidarity will characterise human relationships..... only by sharpening the links between equality, development and peace, can we show that the "basic rights" of the poor and the transformations of the institutions that subordinate women are inextricably linked. They can be achieved together through the self-empowerment of women." (1987:80-82).

DAWN's perspective therefore aims to be holistic, linking social, economic, cultural, political and environmental factors, and grounded in an alternative paradigm of social change. It attempts to link household level experiences of poor women to macro-economic policies. DAWN therefore promotes a people-centred approach, equitable development based on co-operation, resistance to

hierarchies, sharing, accountability and commitment to peace (Van den Hombergh, 1993).

However, by emphasising the importance of self reliance and the rejection of IMF conditionalities, DAWN's analysis has been criticised as not fully addressing the difficult development choices that face countries in radical financial crises and deepening resource constraints (Goetz, 1991). Despite these criticisms, DAWN's analysis has broadened and deepened the debate on gender and development and has provided a more culturally meaningful approach to the question of difference and feminism.

In another historical overview of approaches to WID, Heyzer (1991), starts with the welfare approach as reviewed by Buvinic (1983) and Moser (1989,1993), but classifies the equity, anti-poverty and efficiency approaches all as "the integration approach" with the main aim of ensuring that women have a fair share in the benefits of development. This approach is then criticised as not questioning the direction of the development into which women are to be integrated. Women should be able to choose their own direction of development. Heyzer then classifies the empowerment approach as " building on women's capacities to overcome the pressures and problems of poverty and gender inequity" (Heyzer, 1991).

2.5 CRITIQUE OF WOMEN IN DEVELOPMENT APPROACH

The WID approaches⁹ reviewed above thus succeeded in making women visible and also in showing that women's experience of development and societal change often differed from that of men. It therefore institutionalised and made legitimate a focus specifically on women's experiences and perceptions. In spite of these achievements, the WID perspective has several inherent weaknesses.

Perhaps the greatest weakness of the WID approaches, is that they are based on an ongoing faith in the benefits of modernisation, into which women are to be integrated, with Boserup's (1970) work being very typical of this. With economic growth and modernisation, it is assumed that better living conditions, wages, education, et cetera, will benefit all, and that the patriarchal traditional systems will be dissolved by the more progressive attitudes brought by modern education. WID approaches are therefore based on an acceptance of existing social structures which "rather than examine why women fared less well from development strategies during the past decade,.....focused only on how women could be better integrated into the development process" (Rathgeber, 1990:491). Thus the sources and nature of women's subordination and oppression are not questioned and confrontation is avoided. Instead WID approaches focused on advocating for more equal participation in education, employment and other spheres of society.

Women were thus "integrated" into the old strategy of development, where their unpaid or low paid labour has been the basis of much economic change in developing countries, and where their labour has always subsidised the male

⁹It should be noted that the WID approach excludes the empowerment approach which is usually classified as a Gender and Development approach.

wage. Mies (1986) argues further that WID meant something more than "integrating" women into the old system of development. "Integrating" women in development meant in most cases

"getting women to work in some so-called income generating activities, that is to enter market oriented production..... (Thus it) does not necessarily expand their subsistence production, nor try to get them more control over the land and produce more for their own consumption...., rather it amounts to export or market oriented production, with women producing not what they need, but what others buy". (Mies, 1986).

The implication is that it reinforced the existing international economic system. Thus critics now point out that women have always been fully "integrated" into the development process, albeit infrequently in a subordinate mode, and that this call often meant incorporating women into more work often in worse conditions.

Another major criticism against the WID approach is that it tended to isolate women as a separate and homogeneous category and thus overlooked the impact and influence of class, race and culture (Rathgeber, 1990). This separation of the category "woman" as a self contained and often undifferentiated category has resulted in the isolation of the concerns of women from the mainstream of development activities. It has been suggested that the failure of development policy for women has stemmed from this initial segregation of seeing women as separate from men (Goetz, 1991). Women were thus seen as separate rather than central to the development process, and consequently have been added onto the development process at the margin (Goetz, 1991). WID has therefore been criticised as being essentially an "add on" approach to development often meeting some of women's practical needs

while increasing their work burden. Secondly, by focusing almost exclusively on women, WID gives little importance to understanding how gender relations actually work on the ground (Young, 1993). The effect of this has been that relations between men and women as well as women's varying identities and interests are ignored.

A third criticism of some WID approaches is that they tend to focus exclusively on the productive aspects of women's work, ignoring or minimising the reproductive roles of women. Thus WID projects have been typically income-generating activities, with welfare projects sometimes tagged on.¹⁰ The common assumption is that access to income will stimulate women to juggle their time so as to participate in yet another activity, often to be appropriated by men when it proves successful (Rathgeber, 1990). Thus the basic social relations of gender are not challenged in WID approaches. It is simply assumed that gender relations will change as women become full economic partners in development.

Lastly, the emphasis of WID approaches on poverty also had the effect of hiding the structures of gender inequality. Poverty, rather than oppressive male-centred social structures became the main cause of women's disadvantage (Young, 1993). Thus the relation between women's differential poverty and their subordination was not adequately analysed. The emphasis on poverty also helped to create a separation between the first world "feminist" demands and "Third World" development demands. WID became concerned with the needs

¹⁰Buvinic (1986) reviews some of these projects for "Third World" women.

of women "out there" in the developing world.¹¹ The poverty focus led to the assumption that the differences in the interests between "poor women" and "wealthier women" cannot be reconciled. Young (1993) therefore urges the need to create conditions for the forging of alliances between women of different social classes, ethnic or cultural backgrounds, so as to create a strong movement powerful enough to challenge the structures of inequality.

On the basis of the weaknesses of WID approaches, Mackintosh (1984) argues that the object of analysis in development planning should be not women and their role in social production, but the relations between men and women within the social process as a whole and the way in which those relations work to the detriment of women. Recent approaches to women and their role in development has therefore shifted from an emphasis on women to gender, and the relations between them. Thus the current emphasis is now on gender and development.

2.6 FROM WOMEN IN DEVELOPMENT (WID) TO GENDER AND DEVELOPMENT (GAD)

While WID is the predominant perspective on women especially among development agencies, it has not been the only approach to women in the "Third World". Rathgeber (1990) distinguishes three basic approaches and identifies them as WID, WAD and GAD. Although the three approaches do not share a common theoretical base or perspective, in practice, there is often considerable overlap between them.

¹¹Indeed development itself seems to concern only those "out there".

The Women and Development (WAD) approach, which is linked to the neo-marxist feminist approach, emerged in the second half of the 1970's and grew out of the concern with the limitations on modernisation theory. It draws some of its theoretical base from dependency theory. In essence, WAD differs from WID approaches in that they begin from the position that women have always been part of the development process through their work both inside and outside the household, but that this integration serves primarily to sustain existing international structures of inequality (Rathgeber, 1990). It thus concentrates more on the inequalities between the developed and developing countries within the development process and the nature of development itself as the prime determinants of women's poverty, marginalisation and inequality (Young, 1993). Pala (1977) for example, argues that this notion of "integrating women into development" was linked to the maintenance of the economic dependency of the "Third World" and especially of African countries on the developed world (Pala, 1977). Thus a WAD perspective focuses more on the relationship between women and development processes rather than just on strategies for the integration of women in development.

However, a major weakness of the WAD approach is that it focuses on the impact of class only at a theoretical level, and in practice gives little attention to the social relations of gender within classes. Consequently like WID approaches, it tends to group women together without taking note of the divisions among women (Young, 1993).

Secondly, although WAD offers a more critical view of women's position than WID, it fails to undertake a full analysis of the relationship between

patriarchy, differing modes of production and women's subordination and oppression (Rathgeber, 1990). Women's condition is seen primarily within the structure of international and class inequalities with the assumption that women's position will improve when internal structures become more equitable.

WAD approaches like WID, tend to focus on the productive roles of women to the exclusion of their reproductive roles. Therefore the two approaches tend to focus on the development of income-generating work for women without taking into account the time burdens that such strategies place on women.¹²

In summary, although WID and WAD have been a necessary stage in making gender relations visible in the development process, they have had severe limitations. The focus is now on approaches that emphasize gender relations.

2.7 GENDER AND DEVELOPMENT (GAD).

The main focus of a GAD approach which emerged in the 1980's, is the need to move away from an emphasis on women to looking at the relations between men and women which is assumed to be at the heart of the development problematic (Young, 1993). Thus GAD is not concerned with women per se, but the social construction of gender and the assignment of specific roles, responsibilities and expectations to men and women. Young (1979, 1987, 1993) identifies some of the key aspects of the GAD approach, the most important of which is that it is "holistic, looking at the totality of social

¹²See Section 2.3.3 for a review of the literature on development and women's time use.

organisations, economic and political life, in order to understand the shaping of particular aspects of society (Young, 1993:135). It also links the relations of production to the relations of reproduction and thus takes into account all aspects of women's lives and so differs significantly from a WID approach.

It recognises the importance of both class solidarities and class distinctions, but argues that the ideology of patriarchy operates within and across classes to oppress women and it tries to explore the contradictions of gender, class, race, ethnicity and development (Rathgeber, 1990). Thus a GAD approach goes much further than WID or WAD by questioning the underlying assumptions of the structures and processes that give rise to women's disadvantage and thus leads to a fundamental re-examination of social structures and institutions.

However, by demanding a degree of commitment to structural change and power shifts, including an examination of the social relations of gender, the GAD approach is not easy to integrate into ongoing development strategies and programmes and is therefore weak on practical application. (Rathgeber, 1990; Young, 1993).

Maguire (1984) in a review of publications of various development agencies that focused on women, noted that they tended to identify the constraints detrimental to the status of "Third World" women in a WID/WAD rather than a GAD perspective. Each of the problems identified was perceived to be solved through the application of a specific intervention strategy. None of the projects questioned the inequalities of an international system that perpetuates the dependency of the South on the North or the social construction of gender that has relegated women to the domestic realm in both north and south.

As noted, because GAD perspectives emphasize fundamental societal change, it is not a popular approach especially among mainstream development agencies. Rathgeber (1990) suggests that it may be easier to develop GAD projects in the realm of research rather than in development practice or implementation. Using examples from research projects currently being undertaken by researchers in Africa from a GAD perspective, She argues that such research could result in the documentation of women's knowledge and their translation into a language that will be familiar and acceptable to policy makers. She however acknowledges that the translation of such research findings into viable development plans and programmes will be difficult and calls for more effective communication and interaction between researchers and policy makers.

The empowerment perspective¹³ is an example of an approach which utilises a GAD perspective. However its potentially challenging nature makes it unpopular with national governments or development agencies except with a few NGO's.

2.7.1 CONCEPTUAL ISSUES IN GAD APPROACH

The transition of development approaches to "Third World" women from WID to GAD brings out certain key conceptual issues. The main one is that there has been a shift from a focus on women to gender, and gender relations. The main focus of a GAD approach is that to focus on women in isolation is to ignore the problem which remains women's subordinate status to men. Gender

¹³See Section, 2.4.6 for a review of the empowerment approach.

divisions of labour are identified as embodying and perpetuating female subordination.

A second issue in a GAD approach is the need to plan for gender needs in development planning. The rationale is that because men and women occupy different positions within the household and have different control over resources they often play different roles in society and have different needs. Moser (1989, 1993) following Molyneux(1985) argues that it is important to differentiate between women's strategic and practical gender needs when planning for low income women in the "Third World". She identifies strategic gender needs as the "needs women identify because of their subordinate position to men in their society" (Moser, 1993:39). Molyneux (1985) identifies some of these strategic gender needs as relating to gender divisions of labour, power and control over such issues as legal rights, domestic violence and women's control over their own bodies. Strategic gender needs are for women to obtain greater equality by changing existing gender roles and therefore challenging women's subordinate position. Practical gender needs on the other hand are those that are formulated from concrete conditions of women's experience in their socially accepted roles in society (Moser, 1993). They do not challenge the gender division of labour or women's subordinate position although they arise directly out of them (Molyneux, 1985:233). Thus strategic gender needs question women's roles rather than simply helping women perform better in those roles assigned them as in practical gender needs. Moser(1993) argues that gender needs differentiation can provide a useful tool for policy-makers and planners in

assisting them to adopt more "challenging" solutions to meeting women's gender needs.

2.8 GEOGRAPHY, GENDER AND DEVELOPMENT

Women have been invisible to geography for a long time. It was only in the 1980's , that "half the human in human geography" (Monk and Hanson, 1982) began to receive serious geographical attention. Much of the work of feminist geography since then has addressed three of the central concepts of the discipline, that is space, place and nature, and the ways in which these are implicated in the structure of gender divisions in different societies as well as being gendered itself (McDowell, 1993). Initially, feminist approaches to geography were from an analysis of gender differences in spatial behaviour and activity (Hanson and Monk, 1982; WGSG, 1984; Seager and Olson, 1986; Momsen and Townsend, 1987). Recently, the emphasis has moved towards a concern with the social construction of gendered beings in particular places (McDowell, 1993).

In Ghana, studies on women have been dominated by the work of Sociologists, Anthropologists, Educationists, and Home Economists (Goody, 1975; Oppong, 1975, 1983; Oppong and Abu, 1984, 1987; Bukh, 1979; Robertson, 1984; Brydon, 1985, 1987; Greenstreet, 1977, 1988).¹⁴ Geography has only made a limited and recent contribution (Bening and Nabila, 1978; Ardayfio-Schandorf, 1985, 1988, 1993). A geography of gender has barely been

¹⁴Ardayfio-Schandorf and Kwafo-Akoto (1990) have compiled a comprehensive annotated bibliography on studies done on women in Ghana.

addressed by Geographers in Ghana. There is therefore a need for more work in geography with a feminist perspective in Ghana. It is hoped that this thesis will contribute towards that need.

2.9 GENDER AND DEVELOPMENT IN GHANA

The fore-going sections have traced the development approaches to research on women in the “Third World” from a WID to a GAD perspective emphasising the importance of gender relations and empowering women to organise themselves for a more effective political voice. In this section the focus will relate these issues to women in Ghana.

Development policy approaches in Ghana have followed the main development policy shifts outlined in Section 2.1. Kudiabor (1986) reviews the main rural development approaches adopted by various governments in Ghana as the social amenity approach, the increased agricultural production approach, the accelerated project implementation approach and the growth pole strategy (Kudiabor, 1986). In short, development policy has mainly been of the modernisation approach. Currently the efficiency approaches of structural adjustment programmes are being implemented.

Until recently, there has been no coherent policy approach towards women in Ghana. Common approaches for planning women's programmes have tended to be ad hoc and highly sectoralized. In addition they are often symptom-oriented with emphasis on projects (Bortei-Doku, 1992). However, since colonial times, there has been a strong orientation towards welfare programmes.

With the United Nations Year and Decade for women, many of these programmes shifted to the poverty alleviation type. The adoption of the U.N resolutions on women led to the creation of a National Council on Women and Development (NCWD) in 1975. The Council was to advise Government on general issues affecting women and to formulate strategies for the "full integration of women" in national development at all decision making levels. Over the years the programmes of the NCWD together with many other women's groups have mainly been of the WID type.

Since the 1980's when policy approaches towards women shifted towards increasing women's productivity, many of the projects have been of the income generation type. Several NGO and governmental projects, under the programme of action to mitigate the social costs of adjustment, targeted at women, have a WID perspective, that is they aim to help women increase their productive roles. With the economic crisis, women have also formed several self help organisations, but these have predominantly been economic or social in function, meeting women's practical gender needs. There is a conspicuous lack of organised political concern and action to back up women's growing economic role or to meet their strategic gender needs. Attempts to involve women in the political process have mainly been by State sponsored women's organisations, such as the 31st December Women's Movement led by the wife of the President and other upper and middle class women often intent on increasing their own political representation. Their main concerns are often with the improvement of provision of services rather than on changing the consciousness of women (Heyzer, 1991). In relation to poor women in the rural areas, such organisations

appear to be re-asserting the “WID” language, that is addressing the need to maximise productivity by “integrating” women into the development process. There is a lack of feminist movements, that is movements that desire to transform the class or economic structures of society or question the subordinate position of women in society.

In the last few years, several voluntary organisations have been formed in work places predominantly in urban areas. These are mainly professional women's groups which organise seminars and workshops to educate women on certain issues such as laws affecting women, managing businesses etc. Perhaps the way forward would be for these groups to take on issues that would empower women to take control over their lives. By bringing women into communication with each other, such organisations, together with the state sponsored ones, can provide an arena of struggle within which poor and subordinated women can speak out and exert pressure on political leaders.

2.10 GENDER, ENVIRONMENT AND DEVELOPMENT

Since the 1980's, there has been growing interest in the connections between gender, the environment and development, particularly in the “Third World”. It is argued that women play a crucial role in the management of natural resources because of the sexual division of labour which makes women, especially poor rural women in the “Third World”, responsible for the collection of fuel wood, water and food production. This sexual division of labour implies that women and men have different knowledge, experiences and interests in the

use and management of natural resources, often with women's knowledge about the environment being more comprehensive because of the diversity of their tasks (Dankelman and Davidson, 1988).

The large body of literature on the relationship between women and the environment over the last decade tends to polarise between two approaches: a "Women and Environment", and an "ecofeminist" approach. The "Women and Environment" approach which grew out of the "WID" approach discussed in Sections 2.3 and 2.4, emphasises the importance of women in their role as environmental resource managers, their vulnerability to declines in the availability of resources, and the need to develop environmental programmes aimed at assisting women (Dankelman and Davidson, 1988). The ecofeminist approach has its origins in Europe and North America, and is based on a philosophy of women's close connection with nature, as opposed to the urge of western men to control and manipulate nature through the application of scientific method. The domination and oppression of women is seen by both approaches to be closely connected to the domination and exploitation of nature. It also emphasises the active initiatives displayed by women in defence of environmental resources (Mies, 1988; Shiva, 1989).

Although both approaches have drawn attention to women's activism and interest in environmental resources, they have inherent analytical weaknesses which have received much attention (Leach, 1991; Agarwal, 1992; Jackson, 1993). The main criticism is that they both have an inflexible and narrow conceptualisation of social relations and a limited appreciation of the complexities and interactions between the genders in their pursuit of livelihoods

(Joekes et al, 1994). The ecofeminist approach in particular is criticised as being a repressive and contradictory expression of feminism (Prentice, 1988). By proposing that the affinity between women and nature is biologically grounded, it denies the determining function of social relations in allocating different spheres and competence to the two genders and thus ignores the argument that women's general subordination is a consequence of that process. Ecofeminism therefore reinforces women's continued subordination and instead of "working to un-do gender, it actually reinforces it" (Prentice, 1988:10). The woman/nature connection also obscures the dynamic aspects of environmental degradation and how it affects different groups, women as well as men, over time (Braidotti et al, 1994). It therefore fails to differentiate among women and thus ignores forms of domination other than gender.

In the evolution of the debate on women, environment and development since the mid 1980's, there have been shifts in positions and political priorities, just as occurred in the "Women in Development" debate. Earlier emphasis was on women as victims of environmental degradation, often bearing the heaviest burden of environmental change, which has since shifted to an emphasis on their roles as efficient environmental managers within the development process in the "Third World". Rural women are now seen as solvers of environmental problems or key assets to be "harnessed" in resource conservation initiatives (Leach, 1991). But this view frequently takes no account of women's control over resources and decision making and the opportunity costs of their resource management activities and therefore tends to result in an addition of "environment" to the long list of women's caring roles (Leach, 1991). Like the

WID approach, a focus on “women’s roles” tends to focus on women as homogeneous groups sharing similar interests and opportunities in terms of the environment. Women appear to be operating in a vacuum, and their resource management activities are isolated from their relations with men and with each other.

It is now argued that there is a need for a gender perspective in the Women, Environment and Development (WED) debate, which would see the woman/nature link in a different way. Leach (1991) argues that a focus on gendered divisions of labour, responsibilities, rights and interests and how these come together would help in an understanding of resource management changes and what they mean to different people. This approach would allow for differences between groups of women as well as men. Agarwal (1992) develops an approach to gender, environment and development that encompasses many elements of the WED debate in a more holistic way. She argues that women are both victims of environmental degradation in gender-specific ways as well as active agents in environmental protection and regeneration. The woman/nature link is seen as socially and culturally constructed and not biologically determined. She suggests an alternative transformational approach to development, which would involve both the conceptualisation of gender relations and the relations between people and nature and how they are implemented in terms of the distribution of property, power and knowledge and in the formulation of development policies and programmes (Agarwal, 1992).

While women are thus particularly exposed to the negative consequences of environmental factors in rural Africa and may, in general, have a better

perception of the welfare costs of environmental change to themselves and their families as found in Kenya (Joekes et al, 1994), and in Sierra Leone (Leach, 1991), community actions against environmental change, as will be discussed in Chapters Eight and Nine, were not evident in Zorse, the study area. Although women in Zorse expressed concern about the degradation of the environment as they saw it, in terms of declining rainfall and farm yields, declining availability and increasing cost of fuel wood, there was no conscious intervention by women in Zorse to stop this degradation. Nor were women's perceptions of environmental change the subject of investigation. The vast amount of literature on gender, environment and development is therefore not addressed in this thesis in any detail.

2.11 SUMMARY

The growing debate on women and development has resulted in an increasing recognition of the role of "Third World" women as productive agents. This has resulted in a re-orientation of development policy and programmes directed at women from an emphasis on health and welfare, to those more directly related to economic production. In Ghana, the current SAP emphasises maximising women's productivity to ensure that development is more effective and efficient. There is the need to move beyond that to a GAD approach that will see women's subordination as an issue of both gender and class oppression. That is, a need to develop a clear understanding of gender

subordination and its relationship to other forms of social and economic oppression (Sen and Grown, 1987:90).

Development in the “Third World” is not merely about increased productivity and welfare, although these are important. Development, I would argue, is also about meeting the needs of those that are most in need, about increased participation and equality. It is therefore concerned with enabling people to take control of their own lives and to escape from poverty which arises not only from lack of productivity, but also from oppression and exploitation, both at the international and national levels. Rural women in Ghana suffer from a double exploitation and oppression: as members of a subordinate class and as women. In this situation, the problem is not only to enable women to be more productive which is important, but also to empower women to participate equally in the development process in order to achieve equal control over factors of production on an equal basis with men. By focusing on women and the articulation of gender in their relations, I hope to contribute to feminist geographical research on women which is particularly lacking in Ghana.

CHAPTER THREE

3.0 GHANA: A COUNTRY PROFILE

3.1 INTRODUCTION

Situated on the West African coast, Ghana covers an area of about 240,000 square miles, roughly the size of Great Britain, and accommodates a population of approximately 15 million people in 1993 (Ghana Statistical service, 1984). It is bounded to the south by the Atlantic Ocean and by the Francophone countries of Togo to the east, Burkina Faso to the north and La Côte D'Ivoire to the west.

There are two main climatic zones which have a south to north gradient, with a warm humid equatorial climate covering the southern half of the country and the hotter drier sahelian savannah climate to the north. Within the more humid southern Zone, a narrow strip along the south east coastline may be distinguished with drier conditions as in the northern savannah but with higher humidity. Similarly, the vegetation grades with latitude from an equatorial rain forest in the south, through semi-deciduous forest to the drier flatlands of the northern savannah. The closed forest covers about 35% of the country and the savannah about 60%.

Accra, the country's capital is located on the coast with a population of about one million inhabitants, representing 8% of the country's population.

3.2 POLITICAL HISTORY

The first European contact was established in the fifteenth century initially by Portuguese, later by Dutch, English, Danish and other European traders who

were attracted principally to the country's gold and slaves which they purchased, and in exchange sold manufactured goods, and built forts for protection against rivals. These later became the nuclei of new urban settlements. The Portuguese who were given a monopoly on African trade by the Pope were driven out in 1642 and Britain took over the monopoly of trade which gradually changed into political dominion over the Gold Coast.¹⁵ By the seventeenth century, the country's foreign trade had become re-oriented from its ancient trans-Saharan northern trade routes to oceanic commerce exporting mainly gold and slaves (Howard, 1978).

During the nineteenth century, an equal relationship between Europeans and the coastal peoples based on commerce changed gradually into a situation in which a single European power, Britain, exerted political dominion over an area much larger than the earlier sphere of commercial contacts (Fage, 1959). However, neither the geographical limits of this colony nor the relationship between Britain and the native authorities were defined. It was not until 1902, that Britain was moved by the development of French and German imperial ambitions in West Africa, to consolidate British territorial claims in the area, and the colonies of the Gold Coast, Ashanti and the Protectorate of the Northern Territories (now Northern Ghana) were formally constituted and defined (Rimmer, 1992).

¹⁵ It would appear that the first agreement to this effect was signed between the local chiefs and the British Government on 6th March, 1844. However, Britain did not actually assume full responsibility for government until 1901 (Great Britain, 1949).

Britain administered the Gold Coast¹⁶ like the rest of its African colonies through a system of indirect rule¹⁷ until 1957 when it became the first country in Sub-Saharan Africa to be granted political independence. Some analysts on Ghana point out that just as Ghana pioneered political independence from colonial masters in Africa, so also has it pioneered a set of self destructive economic policies which many more recently decolonised African countries have followed (Toye, 1991;151).In its brief history as a sovereign state, Ghana's political history has been marked by sharp fluctuations and growing uncertainty, having experienced nine different regimes, four of them military. As a result, two-thirds of its thirty-seven years as a sovereign state have been under military rule¹⁸.

The combination of so many coups and years of intolerant military rule has left Ghana in a position of political uncertainty (Rimmer, 1992; O'Connor, 1991; Pellow and Chazan, 1986), so that although labour is cheap, investment remains unattractive to the bulk of foreign entrepreneurs. What entrepreneurial activity exist is heavily biased towards short term investment, particularly trade.

Ghana entered its fourth Republic in January, 1993, after the present Head of State, after twelve years of military government, led a political party to become a civilian Head of State under constitutional rule.

¹⁶During its colonisation, Ghana was known as the Gold Coast, a name that reflects the country's economic history.

¹⁷Indirect rule entailed governing the native peoples through their already developed indigenous political institutions. In the Gold Coast, Britain pursued one type of indirect rule characterised as "laissez-faire" until the 1930's and after that another type which was more interventionist in approach (Apter, 1972).

¹⁸For example between 1971 and 1982, there were five changes of government, four of them through military coups d'etat.

3.3 THE ECONOMY

Ghana is well endowed with resources. Agriculture is the basis of the country's economy with an estimated 59% of the working population employed in that sector alone and contributing about 60% of the country's gross domestic product (Ghana, 1987; World Bank, 1991). Its importance has been recognised if not actively supported by every Government regime since independence.¹⁹

Ghana has three main farming zones which correspond with the climatic and vegetation zones. Agriculture is primarily the small scale production of food crops, with the bulk of production coming from small scale farms.²⁰ The main food crops produced in the southern forest zone are maize, cassava (manioc), cocoyams and plantains, while maize, yams, sorghum, guinea-corn, millet, rice, and legumes are produced in the north. As a result of the relatively heavy rainfall, longer growing season and more fertile soils, the productivity in food farming is higher in the southern forest zone than in the drier savannahs. Natural conditions and State promotion policies, have favoured tree cropping in the forest zone to supply export markets. Cocoa has been the predominant export crop since the early twentieth century, accounting for about 60% of the country's export earnings (Rothchild, 1991). Minor agricultural exports all cultivated in the forest zone are palm produce, rubber, coffee, cola-nuts, copra and timber. The mining of gold, diamonds, bauxite and manganese are similarly located in the south, and in 1966 contributed 25% of the country's export

¹⁹Despite encouraging rhetoric, the various regimes have not produced any significant increase in agricultural productivity, and the country is still not self sufficient in food production.

²⁰About 30% of all land holdings in Ghana are under two acres and 50% are under four acres (North et al, 1975:34-35).

earnings, but has since declined to about 15% in 1988 (Pellow and Chazan, 1986).

The harsher climate and poorer soils of the northern savannahs combined with the absence of mineral resources, distance from ports and the generally lower economic potential of the north as well as discriminatory policies have precluded export activity. Thus the north has remained an area of subsistence farming, while cash crop farming and other export activity are located in the south.

At independence in 1957, Ghana had a relatively high per capita income, indeed the highest in Africa, a high real rate of growth of GDP and a high investment rate. Between 1957 to 1965, the high investment rate was maintained, there was diversification into large scale manufacturing and service industries and the expansion of the public sector. The aim was to create "a modern, industrialised, planned and socialist economy" (Rimmer, 1992:69). By 1960, Ghana stood for steady rises in output, in investment, in education, in mass prosperity and social welfare. By the mid 1960's however, the collapse of world cocoa prices, population increase which outstripped food production and rising inflation among other factors led to a decline in the economy. An assessment of investment trends, industrial output, real income, GNP, and other basic economic indicators (Ghana Statistical Survey, 1970 to 1980; World Bank, 1970 to 1984; Rimmer, 1992; Pellow and Chazan, 1986) indicate that the economy from about the mid 1960's was in a state of patent recession and by the early 1980's was in serious crisis. There is no doubt that Ghanaians on the average became much poorer between 1974 and 1983. (Rimmer, 1992:177). In

1983, the Government which had taken over power in 1982, initiated a structural adjustment programme in an attempt to reverse the economic decline. Whether this objective has been achieved will be examined in Chapter Six, but currently, Ghana's economic statistics remain low with a GNP per capita of about US\$400 and GDP estimated by the UNDP (1991:123) at PPP\$970.²¹ In comparison, Sub-Saharan country averages are estimated at \$410 and PPP\$1180²².

3.3.1 COLONIAL POLICIES AND NORTHERN UNDERDEVELOPMENT

An important feature of the Ghanaian economy is the dichotomy between the southern forest zone with its more abundant rainfall, fertile soils, better endowment of resources and better infrastructure; and the northern savannah, covering about 60% of the country, with low and erratic rainfall conditions, fewer resources and underdeveloped infrastructural facilities.

This difference has been accentuated in the twentieth century by the concentration of investments and opportunities for economic development in the south where mining industries, cash crop farming and the growth of urban centres have attracted people and resources. The north, on the other hand has largely remained an area of subsistence agriculture, producing mainly subsistence crops which are undervalued and under priced in the national market, and has served as a reservoir of cheap unskilled labour to fuel the

²¹The PPP\$ is a "purchasing power parity" dollar, so called because it is weight adjusted to compensate for the subjectiveness of formal exchange rates and the differential costs of living across countries. This artificial currency unit therefore allows cross-country monetary data to be compared more accurately than would be possible with the more regular US dollar.

²²Developing country averages are estimated at US\$710 and PPP\$2170 (UNDP, 1991).

development of the south. The creation of large scale, capital intensive farms in the northern regions in the post independence period has not altered the subsistence orientation of savannah agriculture (Howard, 1978; Plange, 1976). As was observed even during the colonial period, the northern Territories showed "little signs of the vigorous economic activity characteristic of the more fortunate southern regions. The people were materially poorer and their standard of education lower" (Great Britain Colonial Office, 1949: Para 436).

A dominant view in recent times is that northern underdevelopment is not due to the lack of resources in the north, which led to the low investment in social services and general infrastructure, or the harsh physical environment, nor was it a result of lack of interest in the agricultural development of the north, but rather that it was a by product of the vital need for northern labour by the mining and cocoa interests in the south (Bening, 1971; Nabila, 1974; Songsore, 1992; Songsore and Denkabe, 1991). The different regions in the Colonial State were made to play different roles in the process of colonial economic extraction which emphasised the export of cash crops, timber and minerals. The general policy was one of using the least cost methods for the exploitation of these resources in order to generate a cheap raw material reserve for the manufacturing industries of Britain. As a result, soon after the annexation of northern Ghana into the Gold Coast, the Colonial State saw the resources in the north from the point of view of the needs and interests of capital already well located in mining and cocoa production in southern Ghana. Northern Ghana was designated a "labour reserve" for the supply of cheap labour to the export oriented economy of the south and the possibility of developing the country by

promoting trade between the north and south was neglected. The overall combination of policies²³ pursued by the British Colonial Government meant the subordination of interests of northern development to those of capital located in southern Ghana. Thus by the end of colonial period, the region was poorer in both the absolute and relative sense of the word than the south.²⁴

The policy of starving the north of development funds in order not to stem the flow of cheap labour from the north to the south had far reaching consequences for the development of health, education and other social infrastructure. Although succeeding Governments have tried to bridge the gap a north-south dichotomy still exists in levels of development with northern Ghana lagging behind all the other regions in almost every indicator, from the level of urbanisation and industrialisation to social indicators of development such as health and education (Table 3.1). Similarly as a result of colonial education policies, northern Ghana has both the highest levels of illiteracy and the lowest school enrolment rates (Report of the Education Commission, 1986).

²³The range of policies extended from forced labour migration policies, obstructing educational advancement, neglecting the development of infrastructure such as health, education, transport, to the neglect of the development of agricultural resources of the area (Thomas, 1973; Nabila, 1974; Bening, 1975).

²⁴The underdevelopment of the north has been a standing reproach to British colonial policy in the Gold Coast. This reproach was sometimes expressed by Colonial Administrators themselves.

TABLE 3.1
GHANA - INDEX OF LEVEL OF DEVELOPMENT (1984 - 1985)

REGION	URBAN POPULATION AS A % OF TOTAL POPULATION	MEDIUM/LARGE SCALE INDUSTRIES AS % OF TOTAL	DOCTOR/ POPULATION RATIO
ALL REGIONS	31.3	-	1:24,000
Southern Ghana			
Greater Accra	83.5	57.3	1:6,400
Eastern	26.7	5.1	1:65,000
Central	26.5	2.5	1:40,000
Western	22.8	10.7	1:27,000
Volta	20.7	-	1:34,000
Ashanti	32.1	20.3	1:18,000
Brong-Ahafo	26.6	2.0	1:79,000
Northern Ghana			
Northern	24.7	0.7	1:69,000
Upper East	8.5	0.6	1:110,000
Upper West	10.8	0.6	1:63,000

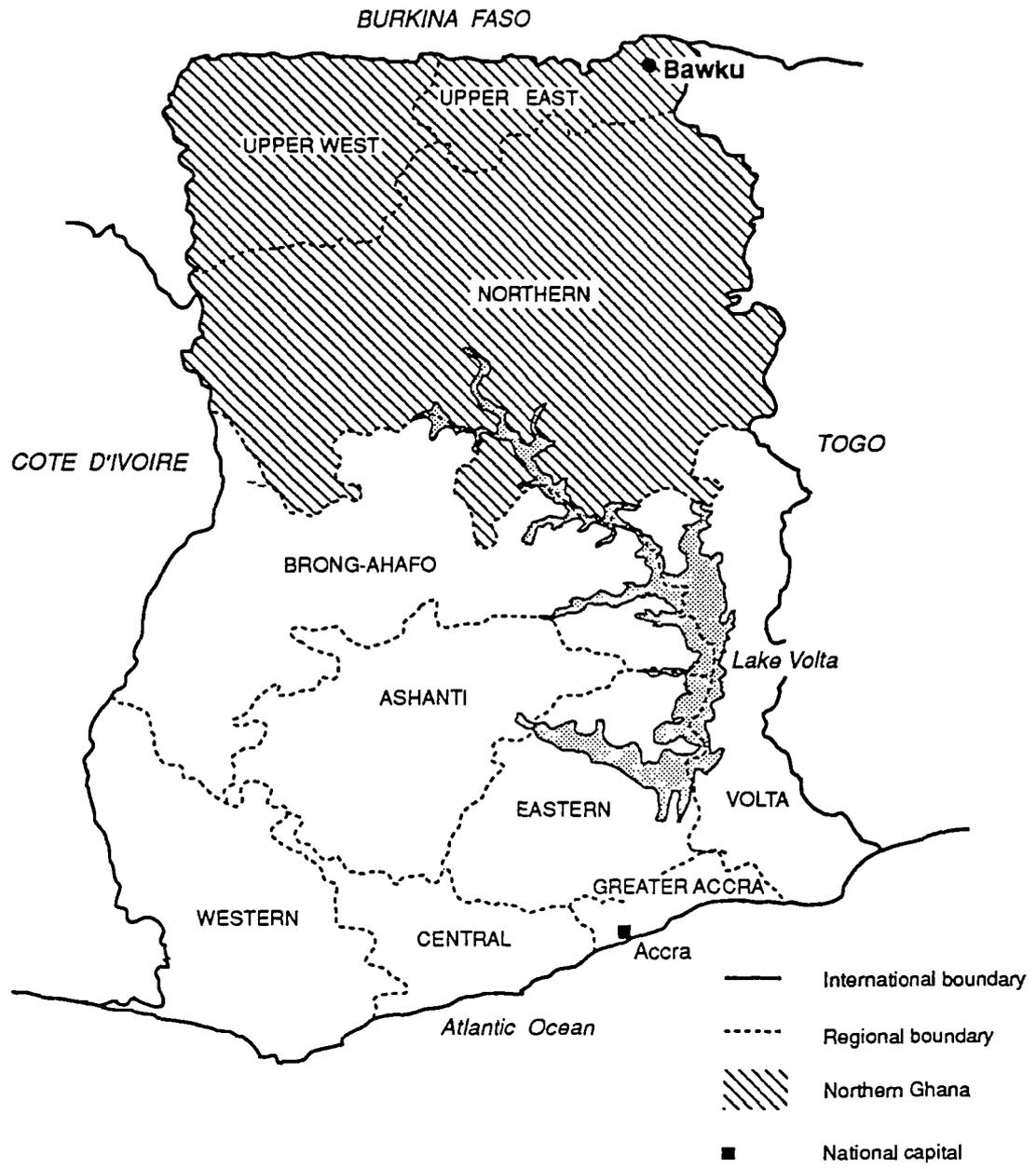
SOURCES: 1984 Population Census of Ghana, Total Country: 7
 Songsore, 1992:159-160

3.3.2 THE LOCAL ECONOMY

After the brief overview of the national economy and the history of northern underdevelopment, this section will focus on the Upper East Region, of which Zorse, the study area, forms a part. The aim is to present a profile of the human and natural resource base of the region as key factors in the development process.

The Upper East region as its name suggests is located at the north easternmost part of Ghana, with a population of 772,744 in 1984 (Ghana, 1987) (Fig. 3.1). Outside the capital region of Greater Accra, it has the second highest population density of 87 persons per square kilometre, with densities in the

FIG. 3.1 GHANA - ADMINISTRATIVE REGIONS.



cultivated areas of the Bawku District reaching 270 persons per square km.²⁵ Population density has been on the increase due to high fertility, land degradation, a reduced productive capacity of the land and increasingly inadequate food supplies (Cleveland, 1986). The region's population is mainly rural with only 8.5% urban population in 1984 (Ghana, 1987).

The economic base of the region, like that of the rest of Ghana is agricultural, employing 65% of the adult working population of which women's share is 41% (Ghana, 1987). As noted for much of Sub-Saharan Africa, women's involvement in agriculture is substantial, but this varies greatly by region and ethnic group. Women in southern Ghana have been observed to participate more heavily in agriculture than women in northern Ghana. Some writers have attributed this lower participation to the environmental conditions and the long amounts of time spent fetching water and gathering fuel wood for household consumption (Klingshirn, 1971; Rancoli, 1985). However, the share of women in agriculture in the north reflected in official statistics describes reality only to a limited extent, since almost all women are engaged in farming to various degrees²⁶. Modern industrial activity hardly exists and the Region had less than 1% of the medium scale industries in the country and contributes less than 0.2% of value added.

The Upper East Region, like the rest of northern Ghana, is predominantly a peasant economy, with subsistence food farming as the mainstay of the economy. Although there are differences in farming practices among the diverse

²⁵The study village, Zorse, forms part of the Bawku District (See Fig 4.1).

²⁶See Chapter Seven for a discussion of the role of women in agriculture in northern Ghana.

ethnic groups in the area, the common denominator is that the principal means of agricultural production are owned and controlled by men. Ownership of farmland and indeed property is usually by inheritance from father to son. Labour, and in particular female labour is owned and controlled by husband, father or father-in-law. Although much labour is devoted to food crop cultivation, the economy suffers from food deficits. Low soil fertility, irregular rainfall patterns and lack of credit facilities have been identified as some of the constraints on agricultural production in the Region (Benneh, 1970; Cleveland, 1980). These constraints on agricultural production are further exacerbated by the historical role of the northern economy in the national economy, outlined above, and consequently the low investment in the socio-economic development of the north. Thus low Government investment in the northern economy, coupled with deterioration in the environment have made the local economy, like the rest of northern Ghana, poverty stricken, with low incomes, high infant and child mortality rates, and high illiteracy rates. The overall picture is one of both absolute and relative poverty.

Ewusi (1984), using data from a household budget survey in the mid 1970's, estimated poverty²⁷ to be more prevalent in rural areas, in households headed by individuals whose primary occupation was agriculture, and in households headed by illiterates all of which have a higher incidence in northern Ghana. In addition poverty was higher (90%) in northern Ghana than in the capital region of Greater Accra (50%) (Ewusi, 1984).

²⁷Ewusi (1984) defined household income per head of less than US\$100 to be poverty and accordingly found poverty widespread in Ghana.

3.4 ROLE AND STATUS OF WOMEN IN THE UPPER EAST REGION

The society and family in the Upper East Region, as observed over most of Ghana, is structured with status being principally determined by sex and age, thus creating hierarchies headed by senior males. The woman's image and status in the society is viewed within her maternal role. Her prestige, security and the harmony of her family relationships are dependent on the number of children she bears and rears. Thus women's status in the family is subordinate to men's. The patrilineal kinship system of the area further accords women, particularly newly married women, a low position.

A popular conception held by many is that women in Ghana and over much of West Africa, are independent and have substantial power and influence in the society (Greenstreet, 1978). This view has been reinforced by the image of women that has been presented in the media both in Ghana and outside. In recent years, women have been regarded as the source of kalabule (trade malpractice's, hoarding and profiteering) and have been blamed for a host of other evils (Manuh, 1984). In reality, power and independence are possessed by only a small number of women mainly in southern Ghana, and even these women also suffer from traditional prejudices and beliefs. Among most ethnic groups in the Upper East Region, women are not considered the equals of men and this belief is reinforced by social practices and religious beliefs, such that women are under the control and authority of males throughout their lives. Also inheritance laws, preclude wives from inheriting their husband's property including land. The political system of the area also emphasises women's low status. Unlike in some parts of southern Ghana, where women can hold

leadership positions in the traditional political system, women in northern Ghana do not execute leadership roles under the traditional political system. Thus the society is in essence a male dominated one with women having unequal access to several resources compared to men.

This chapter has provided a brief overview of the national economy and the role of the local economy within it. With this background, the next chapter will develop a methodology for examining rural women's work

CHAPTER FOUR

4.0 RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter outlines the development of the research both theoretically and methodologically. Specific details of data collection are outlined because I believe they are important for the evaluation and comparison of the results and conclusions which I present in subsequent chapters.

The methodological approach of any particular research depends on the nature of the research problem. Social Scientists are deeply divided over what constitutes a proper approach to social research. Thus in any scientific discipline, it is important to justify the methods adopted in investigating a particular problem.

This research on environmental change, economic crisis and rural women's work is complex because it requires a study of the inter-relationship between variables at the macro level and their micro level impact. This wide perspective suggests that an intensive approach which examines some causal processes in a limited number of cases (Sayer, 1984) would be more appropriate than an extensive one. In the understanding of process and causality, intensive research is the more rewarding (Sayer, 1984). Intensive research has the potential for a more thorough understanding of the functional relationships at the micro level. This study therefore adopts an intensive approach using a specific case study of Zorse in northern Ghana to examine the impact of macro economic adjustment policies and environmental change on rural women in Ghana.

4.2 THE CHOICE OF ZORSE

I had originally planned to study two villages, one in southern Ghana and the other in Northern Ghana, in order to obtain a more representative view of the impact of structural adjustment policies on different environments in Ghana, but logistics problems made this approach untenable. I therefore decided to concentrate only on one area, and chose northern Ghana because comparatively less research has been focused on the area. Within northern Ghana, Zorse was selected because all the available information showed Zorse to be representative of the Bawku District and Northeast Ghana in general, both in terms of its population structure²⁸, its environment and culture. The main difference was its relative proximity to the District capital of Bawku.²⁹ However, there is constant travel and interaction throughout Northeast Ghana, especially on market days when people travel to respective markets and so this did not make Zorse outstanding in this respect.³⁰ A second difference is that even though the population density in the Bawku District is one of the highest in Ghana, the removal of land from Zorse for forest reserves in the 1940's has artificially increased population density in the village.

A second reason for selecting Zorse and northern Ghana is that there is a good background of ethnographic data and other studies carried out in Northeast Ghana by anthropologists (Lyn, 1937; Fortes, 1945, 1949; Hunter,

²⁸ Information from the 1970 and 1984 population censuses showed the age and sex structure of the population in Zorse to be similar to that of the Upper East Region.

²⁹Zorse is located about five miles from the town of Bawku.

³⁰Indeed at least 30% of the land in the area is within 10 km of one of the main centres of Bawku, Pusiga or Garu (Cleveland, 1980).

1967a; 1967b), by geographers (Benneh, 1970, 1972; Bening, 1971, 1975; Nabila, 1974), and other scientists (Haaf, 1967, Gordon, 1973, 1984, Rose Innes, 1977), which could provide the background information on the cultural and physical environment and could be used for the interpretation of the village data. However none of this work has focused on linking environmental to economic change and its gender impact and so this study is new in that respect.

Thirdly, the choice of Zorse was also influenced by logistic reasons and by my knowledge of the language and culture of the area. Considering the limited time for fieldwork and financial constraints, my knowledge of the language and culture was a great asset³¹.

4.3 THE STUDY POPULATION

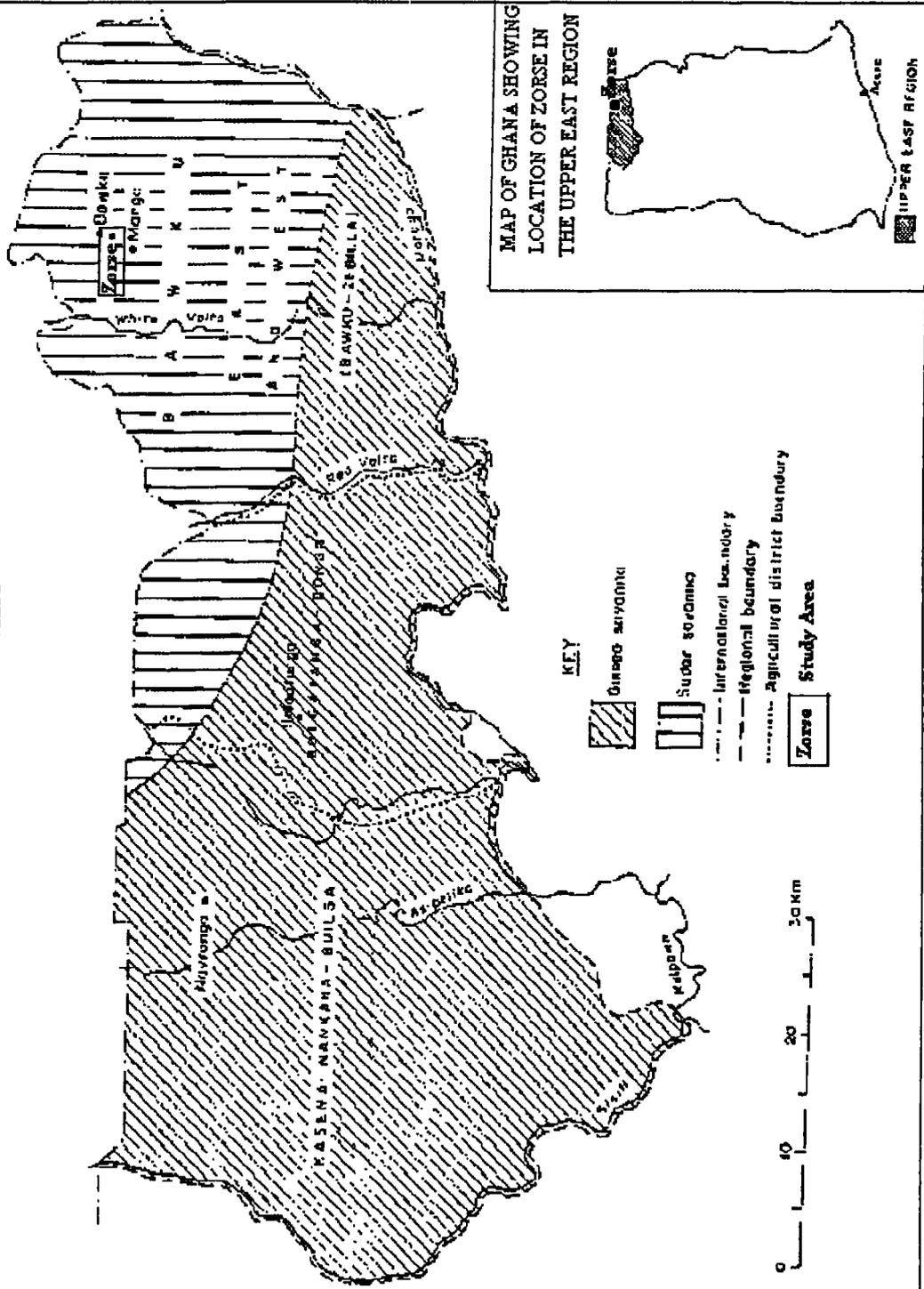
The study was carried out in Zorse,³² a village located in North East Ghana, with a population of about 2,000 (Ghana, 1987), dispersed over an area of between 5 and 12 kilometres outside the district capital of Bawku in the Upper East Region. (Fig. 4.1). Zorse is comprised of several small sub-sections, covering approximately 3 by 6 kilometres and bordered to the north and south west by hills and to the south east by a forest reserve (Fig. 4.2).

The people of Zorse belong to the Kusasi ethnic group, who are a group of about 250,000 people living mostly in the extreme north eastern corner of Ghana, with smaller numbers across the borders in Burkina Faso and Togo. A

³¹I was born in the neighbouring town of Bawku and even though I moved out with my parents when I was young, I have maintained regular links with the area. My husband also originates from Zorse and has a keen interest in the history and culture of the village.

³²The village is also sometimes spelt "Zawse".

FIG. 4.1 LOCATION MAP OF STUDY AREA



significant number have migrated further south in Ghana and can be found in cities and cocoa growing areas. Their language, kusaal, is one of the Mole-Dagbani group of languages which forms a culturally homogeneous area in northern Ghana and Burkina Faso. The village is situated at the foot of hills, with very little flat land surrounding it thus deriving its name from the word “Zors” in kusaal, meaning hills.

Most people in Zorse live in compounds made up of clusters of circular mud huts thatched with grass.³³ A mud wall about 1.5 meters high connects the outside rooms to form a continuous enclosure broken only by a narrow entrance way in the front of the compound. The size of each compound depends on the number of wives and adult sons in the household. The location of huts in the compound is according to one’s status in the household.

The main economic activity in Zorse, as in most parts of the region, is farming. Millet, sorghum, groundnuts, beans and vegetables are grown for consumption and for sale.

There were no public or private toilets in Zorse. Most inhabitants walk to the surrounding bushes in the scrubland beyond the outskirts of the village. In spite of this, the village looked comparatively clean with no visible rubbish heaps unlike in low income settlements in urban areas. Sanitation was however poor around bath houses and kitchens due to lack of drainage facilities resulting in pools of water building up. There were no taps or electricity in the village. Sources of water supply were a bore-hole, streams and wells (See Chapter Five and Fig 4.2).

³³The number of huts roofed with zinc had increased considerably when I returned in 1991.

4.4 THE MODE OF ENQUIRY

The problem of how an investigation should be carried out to provide reliable and informative material has received considerable debate. The controversy that exists between the positivists and interpretative qualitative methodologies has been debated in the literature. These two methods have their strengths and limitations in their application to human behaviour.

A quantitative approach is both valuable and desirable particularly for suggesting indicators of prevalence and affords the researcher multiple observations of situations and categories. Using a precise, unambiguous language, quantitative methods can extend our powers of deductive reasoning far beyond that of purely verbal methods. Furthermore, in social research, particularly those carried out in an environment of widespread public ignorance and prejudice, such as in the study of gender related issues, there is the need to present and convince those who see things differently, such as Policy Makers, with “reliable” quantitative data in simple and forceful ways (White, 1984a). It also often has a stronger impact on public opinion especially in developing countries and is thus more effective in affecting policy changes. In spite of these advantages, an attempt to understand complex findings, such as this research entails, through a quantitative mode alone could lead to inaccuracies. There is the need to be aware of its limited capacity for understanding and explaining social behaviour as pointed out by Brydon (1987), Sayer (1984), and Yin (1989). While laying claim to objectivity, a quantitative approach may be used to measure the wrong things in the wrong ways and to conceal all kinds of ambiguities and complexities behind a neat facade of tables, graphs and models,

which either distort or do not increase our understanding of peoples lives and problems. (White, 1984a:18). It could also be used to ascribe greater powers of “explanation” than is reasonable. In feminist research in particular, the use of quantitative techniques is seen by some as a way of denying the centrality of women’s experience and as a masculine way of discourse (Bowles and Duelli Klein, 1983). Most feminist researchers now advocate a more intensive research method which has an “integrative, trans-disciplinary approach to knowledge and which grounds theory contextually in the concrete realm of women’s every day lives” (Stacey, 1988:21). Mies (1983) for example is of the view that feminist methodology should go beyond conscientisation to formulate actions to change the status quo and thus form part of the struggle for liberation (Mies, 1983).

A qualitative mode of investigation, offers insights into meanings and values and brings out an understanding of the basic norms which would not be directly available through quantitative data (Bell, 1987). It can thus capture significant differences between the ways that men and women experience their work and other aspects of their lives (Stubbs, 1984). However, qualitative methods can be influenced by the preconceptions of either the researcher or the respondents. The subjectivity of the qualitative researcher could therefore interfere with the pursuit of the truth.

White (1984) argues, and I would agree, that the solution is not to “set the two approaches in opposition, but to find fruitful ways of combining them” (1984:18). The approach adopted in this study therefore draws upon both methods to enhance the quality of the formal analysis. Quantitative methods, and in particular structured questionnaire surveys, are employed to measure and

show how things conform to or differ from the conventional situation, and qualitative methods, in the form of in-depth interviews, focus group meetings and non-participant observations, are used to help explore and clarify the questions raised by the results of the measurements. Thus a combined approach which takes women's needs, interests and experiences into account would be used to provide an interpretation of changes in women's work and time use through the individual's own perspective. The aim is to make the research "for" women rather than research "on" women (Bowles and Duelli Klein, 1983).

4.5 DATA COLLECTION

The data for this study was collected between October and December, 1984 and between October and December, 1991. The descriptions of data collection and analysis that follows applies to both data sets, but differences are pointed out where necessary.

4.5.1 FIELD ENTRY

The mode of entry into a research area is especially crucial in traditional societies where academic enquiry is relatively unfamiliar. In such settings, a researcher's questions may not only threaten social harmony and the individual's privacy, but can easily sound silly especially if the researcher is native to a similar culture. However, acknowledging the traditional structure of authority and following customary practice can be extremely useful in gaining co-operation. Knowing the language and culture of the area proved useful in

initiating and facilitating entry into the village and made it possible to conduct intensive and time consuming interviews. My first contact was with one of the inhabitants of the village, who arranged with one of the village elders for an appointment with the chief of Zorse. On the appointed day, and with the requisite items,³⁴ I had a meeting with the Chief and his elders, all male, where I introduced myself formally, and the purpose of my research. The main aim of the meeting was to provide a forum for explaining the objectives of my research, for clarifying doubts on either side and for soliciting the permission and co-operation of the respondent community through the established hierarchy. The chief and elders were encouraged to express their inhibitions and indicate problem areas for discussion. Having sought and obtained the Chief's co-operation, I then met his senior wife, who was also the leader of two women's organisations in the village, who arranged a meeting with the women in the village. We held two such meetings, where I explained the objectives of my research and sought their co-operation. I told them that if they were selected as part of the sample, and did not wish to participate, it would not affect them in any way. I was careful to explain that I would only be passing on what they told me to Government Agencies and NGOs, who would then decide what to do with the information.³⁵ However in view of the involvement of NGOs in

³⁴The Kusasi custom requires the presentation of certain items to the Chief before consulting him. These included two bottles of schnapps, an alcoholic drink, some Kola-nuts and pots of pito which were shared out among the Chief and Elders.

³⁵The fieldwork in 1991 was partly sponsored by the Canadian Universities in Service Overseas (CUSO), who expressed interest in helping women in Zorse meet some of their needs. I therefore passed on the women's concerns in my report to CUSO, which is funded by CIDA. Unfortunately, in 1993, the "Women in Development" project in northern Ghana, under which this fieldwork was funded was scrapped as a result of budget cuts from CIDA. I also passed on the women's Concerns to the NCWD in Bawku.

development projects in surrounding villages, there was still the lingering belief that I had the power to help them directly or bring some development project to the village. Thus one of my biggest ethical problems was to avoid giving the impression that they were going to reap immediate and direct benefits from co-operating with me. On the other hand I required their co-operation.

4.6 THE SURVEY DESIGN

4.6.1 TRAINING OF FIELD ASSISTANTS

In view of time constraints during my period of field work, I employed four field assistants, one of whom participated in both field surveys.³⁶ My field assistants were all Kusasis, three of whom come from and reside in Zorse. They had all had experience with previous surveys in and outside the area³⁷. The field assistants were vital sources of direct information and data corroboration. However all in-depth interviews and focus group meetings where questions of a more private nature were asked, were conducted by myself. I also followed up on certain key issues that required clarifications from women who had been included in the questionnaire sample and also administered some structured questionnaires.

³⁶Although I made attempts to get the same assistants in 1991, I could only contact one of them. Therefore I had to employ three new assistants in 1991, one of whom came with me from Accra.

³⁷Three of the field assistants possessed a "teacher's certificate A". The fourth was a Senior Research Assistant from the Institute of African Studies of the University of Ghana, who had participated in several surveys in and outside Zorse. He provided invaluable help in re-designing forms, suitable interpretations of some words and phrases and transcriptions of tape recorded interviews. I am highly indebted to him.

In both 1984 and 1991, a week of intensive training sessions was undertaken in Zorse with the field assistants. This training was to introduce the field workers to the survey questionnaire and the mode of establishing rapport, entering answers on the questionnaire and checking answers by built-in internal consistency checks. We first began by reading through the whole questionnaire in English.³⁸ The use of basic concepts such as the household, work, reproductive and productive work and their meanings were discussed to find suitable meanings in the Kusaal language. Through these discussions we were able to arrive at fairly unambiguous questions that were translated consistently. The questionnaire was then translated into Kusaal.

Being a largely illiterate society, problems of determining ages, number of children and time use, all critical aspects of the study, were anticipated. Through discussion with the field assistants and Chiefs and other knowledgeable people, a historical calendar of events was drawn up. The problem of time use was also extensively discussed and a clock was drawn up to estimate time. Interviewers were trained to probe on time use since it was the main core of the research³⁹

Each field assistant was provided with a note-book and stationery in which to enter any field problems and observations. These problems were discussed

³⁸While all my field assistants and myself were reasonably competent with spoken Kusaal, only one of us had an adequate mastery of the written language. Indeed only a small percentage of Ghanaians can read and write their local languages. In any case even if the questionnaire was written in Kusaal, there would be the need to re-translate the responses into written English.

³⁹This often resulted in a lengthy period for the administration of each questionnaire, with an average of four hours per questionnaire.

individually with the assistant concerned and also formally with all field assistants when we met once a fortnight.⁴⁰

4.7 DEMARCATION OF THE SURVEY AREA AND SAMPLE DESIGN

4.7.1 1984 SURVEY

With my field assistants and a survey map drawn by Cleveland (1980), we walked around the boundaries of Zorse making a rough sketch of the physical features. Zorse is approximately 3 kilometres by 6 kilometres and surrounded to the north and south west by hills and a forest reserve to the east. (Figure 4.2). Moving from flatlands in the east, the land becomes more hilly and rocky towards the Northwest. I then compiled a list of the compounds in Zorse Natenga⁴¹ and the sub-areas by interviewing the heads of the sub-areas and sought confirmation from selected household heads from each of the sub areas. In this way a fairly accurate list of houses in Zorse was obtained. The total number of compound houses was about 180.

The houses were then numbered and a 50% sample of houses was chosen by selecting every other house within the demarcated area this gave a total of 89 compound houses. We then visited the selected houses and the names of

⁴⁰These fortnightly formal meetings were held on Bawku market days, when it was difficult to get people at home as most women attended the market either as buyers or sellers and were therefore not available for interviewing.

⁴¹Zorse Natenga is the most densely settled area of Zorse and the home of the original village inhabitants. The more rocky and hilly outlying areas are less densely settled and have a large proportion of inhabitants who are not of the founding clan.

household⁴² heads were elicited. Household heads were then asked to list all household members.⁴³

The resulting sample from the 89 houses was 123 households in 1984. The selected houses were then divided among the four assistants and myself.⁴⁴

All women aged 15 years and over in the selected houses and households were included in the sample and were administered with a structured questionnaire. This gave a resulting sample of 262 women, with a non response rate of 4.6% bringing the number of women interviewed to 250 in 1984.

4.7.2 1991 SURVEY

To enhance comparative analysis between the two data sets, the same survey design used in 1984 was adopted in 1991 with a few changes. In 1991, I walked again around the boundaries of Zorse to ascertain whether there were any changes in the boundaries. Important physical features were again noted for the sketch map (Figure 4.2). I drew up a list of houses in Zorse and tried to locate the 89 compound houses selected in 1984. All households in the 89 houses were included in the sample and all women aged 15 years and above were administered with the questionnaire regardless of whether they had been interviewed in 1984 or not. This resulted in a total of 126 households⁴⁵ with 235

⁴²See Section 4.13.5. for a definition of “household” employed in this study.

⁴³The number of households within each compound and its membership was again cross checked by asking respondents in the structured questionnaire the same questions.

⁴⁴In addition I undertook all the in-depth unstructured interviews and focus group meetings myself.

⁴⁵The number of households per compound was therefore about 1.4 in both 1984 and 1991.

women. With a non response rate of 3.8%⁴⁶ this reduced the number of women interviewed to 226. The questionnaires were administered in Kusaal in both years and women were usually alone or had their children with them during interviews. Sometimes other female household members would join in and express their views, resulting in broader discussions which sometimes necessitated another visit to complete the questionnaire.

4.8 THE QUESTIONNAIRE DESIGN

To enhance comparative analysis between the two data sets, efforts were made to keep the two questionnaires as similar as possible. In both years the structured questionnaire consisted of three main sections. Section one provided demographic characteristics such as age of respondents, characteristics of children, marital status and household membership. These provided useful background information. Section Two was on questions relating to reproductive and community managing roles, household decision making and individual contributions. Section Three dwelt on the productive work of women and time use.

In addition to these three sections, the 1991 questionnaire had a fourth section dealing with change in women's work and lives over the last seven years, migration and on women's formation of group activities in the village. It also had a supplementary questionnaire which was administered to women immediately after the main questionnaire. Questions dwelt mainly on women's

⁴⁶These nine women were constantly not available for interviews although they expressed interest in participating in the survey.

income earning activities. Many of the questions in 1991 were open ended to allow as much information as possible to be obtained.

The questionnaires were pre-tested on five households, giving a total of 13 women. These women were included in the sample. The pre-tested questionnaires were discussed at a meeting and were revised accordingly.

4.8.1 SUPERVISION OF FIELD ASSISTANTS

The questionnaires were edited mainly on Bawku market days, when most women were not easily available for interviewing. I checked all completed forms continually. When correct procedures were not being used, I reviewed them with the assistants concerned, and at the fortnightly meetings.

4.9 IN-DEPTH INTERVIEWS AND FOCUS GROUP MEETINGS

As stated earlier, this study adopted both quantitative and qualitative methods of data collection. Qualitative data⁴⁷ was obtained by selecting a number of women based on certain criteria⁴⁸ for in-depth interviewing as case studies on particular issues. This was to complement investigations of selected pre-defined issues for which more in-depth information was necessary. The interviews focused on attitudes and perceptions of women to their work, gender roles and relations, household income and decision making and their perceptions of changes in these, access to resources, and their hopes for the future. Though

⁴⁷The in-depth interviews were only undertaken in 1991. However observation of respondents was undertaken in both years.

⁴⁸Some of these criteria were age, marital status, number of children, stage in the household life cycle, income, type of income earning work etc.

the topics were pre-selected, I allowed some digression depending on the trend of the on-going discussion. These interviews, all conducted by me, were taped and later transcribed by one of the research assistants.

Heads of the various women's groups and associations in the village were also interviewed to ascertain the objectives, problems and needs of the associations. This was to find out the role of these organisations in helping women cope with changes brought on by economic crisis and environmental change.

Three men who were married to women in the sample, were interviewed on similar topics to those discussed with the women. The purpose was to obtain men's views about the internal dynamics of the household, women's work and gender roles and relations in a changing environment and to validate some of the data presented by the women.

In addition two focus group meetings⁴⁹ were held towards the end of the field survey. They were well attended by about 140 women. The discussions were guided but women were allowed to have their own agenda. Some topics discussed were the economic crisis and the resulting pressures on their work and time use, perceptions of gender role changes, attitudes of men, sanitation in the village, inequalities in access to resources and a general lack of resources in the village.

These in-depth interviews and focus group meetings were of immense value particularly in bringing out issues that were of concern to the women.

⁴⁹The focus group meetings were initially held because some women were unhappy about being excluded from the sample. As well as these formal meetings, sometimes spontaneous opportunities for chatting occurred when we were sitting on benches in the pito house or outside, but these discussions were mostly with men as few women had the time to sit and chat.

4.10 OBSERVATION METHOD

In addition to the in-depth interviews and focus group meetings, there were informal observations of some women. Information was recorded on the activity performed, its duration and location, with whom it was performed, and whether it was performed simultaneously with other activities. The purpose was to generate more precise and detailed information on women's activities and particularly on their time use. The observation method was very useful particularly in revealing the simultaneous nature of some activities and confirmed the difficulty in estimating time use.

In all, the fieldwork lasted six months in 1984 and eight months in 1991, including three months for data editing and processing in each year. Statistical analysis was by means of the statistical package for the social sciences (SPSS), and Minitab. Microsoft excel programme was used to generate graphs on rainfall conditions and to illustrate the relationship between the availability of resources and seasonality in Zorse.

4.11 OTHER SOURCES OF DATA

As the focus of this study is to examine the micro-level impact of economic and environmental changes on women's work and time use in Zorse between 1984 and 1991, comparisons had to be made with national level data. The study therefore draws on the 1984 Ghana Population Census Reports, and the 1988 Ghana Health and Demographic Survey Report which provide data on national level changes in health, socio-economic and demographic characteristics.

Documents from a number of Public Sector Institutions in Ghana, such as the Ministry of Health in the Upper East Region, the Nutrition Board, National Archives, the National Council on Women And Development, and NGOs such as Action Aid and CUSO offices and libraries in Bawku and Accra also provided invaluable sources of data to indicate national and regional level changes. Other publications by International bodies such as the UNDP, the World Bank and various publications provided data for the study, particularly on the impact of structural adjustment policies in Ghana.

Rainfall data from the Manga Meteorological Station near Bawku was obtained from the Ghana Meteorological Services Department in Accra and was used to indicate the trend of rainfall over a ten year period, 1981 to 1991. Other secondary data on environmental conditions in the Bawku area were also used to provide information on environmental degradation in the Bawku District.

Finally, pictures of the vegetation and the landscape and women at various types of work, were taken to illustrate some of the points made in the study.

4.12 LIMITATIONS OF THE DATA

4.12.1 ESTIMATION OF TIME USE

One of the main problems encountered in this study was on obtaining a reliable estimation of time use. Time use was the main focus of this study and its reliable estimation was of critical importance to the research. Studies have shown that the most reliable method of obtaining information on time use is by direct observation, that is following individuals throughout the day and

recording the nature and duration of their activities. Such studies are however quite rare⁵⁰ and limited to only a small coverage of either a very small sample or a small sample of days and also tend to be influenced by the observer's presence (White, 1984a). In view of time and financial constraints therefore, time use was obtained from the structured questionnaire method and a few observations were undertaken to check its reliability.

Various methods have been employed to obtain time use from questionnaires. The activity specific recall method was employed in this study. A list of activities was drawn up and respondents asked to recall the approximate time spent on each during the preceding month, and the frequency per day or week. This method has been observed to produce data that may not be of the highest reliability, since respondents are expected to recall and estimate average total time spent in activities from memory. In a largely illiterate society, where time by the clock has little meaning, this has been found to be of critical importance. In this respect, it has been observed that the accuracy of the data depends on the quality of the enumerators, their familiarity with the study area and the relationship between the enumerator and the respondents (Deere and Leon de Leal, 1979). For this reason, highly qualified interviewers who had participated in various surveys, lived in and were familiar with the area and the women were employed. Importance was placed on the estimation of time use during the training period and estimates were made in relation to the position of the sun. The aim was to obtain a rough estimation of time use.

⁵⁰Some examples are McSweeney (1979) in Burkina Faso and King and Evenson (1983) in the Philippines.

The length of the reference period,⁵¹ in this case one month, could also affect the reliability of the data. Studies in two western Javanese villages have shown that estimates of total labour time based on a one month reference period averaged 60 to 70% of those based on a one day or 24 hour reference period and were more reliable for regularly performed activities than for sporadic activities (Asia Society, 1978). They however concluded that when the purpose of research is to achieve a roughly usable picture of time allocation, the longer reference period (at least up to one month) would not lead to drastic errors in the conclusions (Wigna et al, 1980). This study therefore employs the activity specific method based on a one month reference period to provide a general picture of time use.

Recalling time use from survey data could also have been obtained from the sequential recall method whereby respondents are asked to remember every thing done on the preceding day, from waking up until retiring to bed. This method was not used as studies have shown that it is subject to a high measurement error due to the fact that respondents are liable to forget or withhold some activities or over/under estimate time or give “normative” times as a socially appropriate response (White, 1984a). This method also requires a fairly large sampling of days for each individual in order to obtain a comprehensive view. However, it has the advantage of providing not just total time use, but could reveal activities otherwise overlooked.

Another problem with time use was the problem of recording time spent on joint activities, that is when a single unit of time is used to produce two or more

⁵¹ Respondents were asked to estimate average time spent on an activity in the last one month. One month was therefore the reference period.

activities. If both activities are considered separately, it increases the total time use. This problem has been encountered in other studies on time use particularly in rural areas ⁵²and no consistent solution has been suggested yet. In this study all time use was added up and the observation method was useful in revealing activities that are usually performed simultaneously.

Weighing the advantages and disadvantages of the various methods of obtaining estimates of time use therefore, I decided to adopt the activity specific one month recall method with the full knowledge that there would be gains, losses and compromises. However complementing this method with some non-participant observations lessened the losses.

4.12.2 ESTIMATION OF AGE

Being a largely illiterate society, respondents had difficulty in estimating their ages and those of their children. Chronological age has no meaning in traditional Kusasi society. People are classified in seven developmental stages, which was useful in determining approximate ages but not adequate. Age was therefore estimated by means of a calendar of locally recognisable events developed by me from published sources and from enquiries in Bawku and Zorse. Women were asked what event occurred at the time of birth or marriage or other specific stage in their life. Where the respondent could not remember, as was the case for many old people, we suggested events that might have occurred at various stages of respondents lives. The year of occurrence of these events was then used to estimate the respondent's age. If this still did not

⁵²In a study in the Philippines, Jayme-Ho (1976) tackled this problem by considering only time devoted to primary activities defined as the activity to which more conscious attention was given by the respondent as against secondary activities.

produce any results, then the age of the first child and how long after marriage that birth occurred was used to estimate the age of the mother. These were resorted to only in cases where respondents could not remember their ages or any significant event in their lives. This allowed an estimation of ages at least accurately enough to place them in five year age intervals. For ages of children, their health cards⁵³ were used where available.

4.12.3 ESTIMATION OF INCOME

Income was also one of the most difficult features to estimate, particularly for farm produce. Respondents did not usually know how much they earned and estimates were therefore made depending on the number of bags, bowls or basins of crops harvested. These bowls were of different sizes which made estimation even more difficult. Furthermore, under-estimates of crop production were made due to the fear of taxation and the belief among the Kusasi, that it is bad to talk of your harvest especially if it is good, because this could lead to bad harvests in the future. As a result, it was difficult to standardise monetary income. But data obtained gave an indication of the generally low levels of income in the village.

⁵³The maternal and child welfare clinics provides all children with health cards on which the weight of children is charted every month. The graphic growth chart is then used to motivate mothers to feed their children better. This chart also provides information on the date of birth of the child and is a requirement for registration of children into primary schools.

4.13 DEFINITIONS OF TERMS AND CONCEPTS EMPLOYED

4.13.1 REPRODUCTIVE WORK

Reproduction is a “chaotic“ concept which involves not only biological reproduction but social reproduction as well. Women’s reproductive role comprises the child bearing and rearing responsibilities and domestic tasks necessary for the maintenance and reproduction of the labour force. which is both biological and social. For the purposes of this study however, “reproductive” work refers to social reproduction which comprises the unpaid domestic work necessary for reproducing and maintaining human resources. It therefore refers to the care, socialisation and maintenance of individuals throughout their lives to ensure a continuation of society to the next generation (Edholm et al, 1975).

4.13.2 PRODUCTIVE WORK

“Productive work” refers to the labour which generates exchange values, mostly cash incomes. In this study, it is defined as an activity which generates an income either in cash or kind.

4.13.3 SOCIAL DUTIES/COMMUNITY MANAGING ROLE

The community managing role of women comprises activities performed by women at the community level, as an extension of their reproductive roles, often to ensure the provision and maintenance of scarce resources and is often voluntary unpaid work undertaken in “free time” (Moser, 1993). However in Zorse, as in much of rural Africa, community or social management involves the

maintenance of kinship linkages and neighbourhood networks and the carrying out of religious, ceremonial and other social obligations in the community. Although this is a vital part of women's work, it is again supposed to be undertaken in women's "free time" and so was very difficult to separate from leisure time.

4.13.4 ECONOMIC ACTIVITY

Determination of the major economic activity of respondents also posed problems. A woman's main economic activity was defined in this study as that which occupied her for most part of the year or season and from which she obtained most of her income either in cash or kind. Farmers were defined as those who cultivated their own private plots, the produce of which they controlled.

4.13.5 HOUSEHOLD

The use of the household concept in this study differs from the definition adopted for censuses in Ghana which was considered inadequate in Zorse and among the Kusasi in general, as residence and consumption do not always coincide. A household was therefore defined for this study as

"a group of persons who live together in the same compound house, share common housekeeping arrangements, cultivate a common compound or household farm or farms and are fed from a common granary".

Emphasis was placed on the cultivation of a common household farm and a common source of obtaining grain supply for a major part of the year, since these are the features which distinguish households in the Kusasi area.⁵⁴

4.14 PERSONAL RESEARCH EXPERIENCE

Gender studies often take the researcher into peoples private lives and the researcher's role in this process is therefore of importance (Townsend, 1991). Cotterhill (1992) argues that in feminist research, the subjective experience of women researchers is vitally important and must be acknowledged. How they engage in interviews with other women and the personal relations which develop are also part of "putting the subjective in knowledge" and have implications for feminist research.

The advantages of going into a research area as an "outsider" or an "insider" has been subject to some debate in the literature. On my part, going into Zorse as someone who had a knowledge of the language and culture of the area had its definite advantages and disadvantages. As a result, co-operation from the women was very high, and we had some fruitful discussions. but this was not enough to overcome the social distance between us. There were some issues which I felt would have been discussed more openly if I were from a completely different culture.

Feminists have argued that often the power imbalance between women respondents and women researchers is in favour of the latter (Cotterhill, 1992).

⁵⁴See Chapter Seven for a discussion of the household and other farm types.

Some feminist writers (Oakley, 1981; Bowles and Duelli Klein, 1983) have advocated the adoption of a “participatory model” which aims at producing non-hierarchical, non-manipulative research relationships which have the potential to overcome the separation between the researcher and the researched thus making interviewing an interactive process. Oakley (1981) argues that the interviewer should invest her own personal identity in the research relationship by answering respondents questions, sharing knowledge and experience and giving support when asked. This could lead to long term relationships with respondents. In her view, intimate non-hierarchical relationships between feminist researchers and their female informants are best achieved by appealing to their common experiences as women. I found my experience as a mother of immense help in gaining the confidence and co-operation of women. I often began our interviews by asking about their children, and playing with young children where there were any in the household. They in turn asked about my children, sought advice about sick children etc. At the end of the survey, I formed friendships with some of the women, who gave me presents. But in spite of our common gender identity, the social hierarchical distance between us was still very evident as a result of my education and social status. Thus while women share important experiences as result of their gender, it is often not enough to override structural barriers of status, class, age or race and this can affect the research process.

Recent debate on feminist research has also focused on the appropriateness of remunerating respondents for taking up their time. I was touched by the extent of poverty in the village and tried to ease some of the problems the

respondents faced in a limited way. I gave out small sums of money to women who were really struggling to make ends meet and in a few instances for sick children to be sent to the hospital. But I was worried that this might give the impression that I was paying for the interviews and of favouritism and therefore influence the content of the interviews. However, I gave children present in the households I visited, some exercise books, pencils, sweets and paid school fees in a few cases when the children were threatened with expulsion for non payment of fees.

4.15 SUMMARY

This Chapter has described the method of approach adopted for studying the research problem outlined in Chapter One, the methods of data collection employed and justification for using those methods. The main aim is to adopt an approach that takes the experiences of women into account and to present an interpretation through the women's own perspective.

CHAPTER FIVE

5.0 THE ENVIRONMENT

5.1 INTRODUCTION

Chapter Two reviewed the development policy approaches towards “Third World” women over the last four decades and their impact on gender roles. Recent research is showing that macro-economic structural adjustment policies⁵⁵ are not only intensifying women’s work loads, but are exacerbating the trend towards environmental and specifically soil deterioration (MacNeil et al, 1989; Mackenzie, 1993). The focus in this chapter is therefore to set Northeast Ghana and Zorse in their environmental context and in particular to describe the environmental degradation taking place in terms of increasing rainfall irregularity and the degradation of soil and vegetative sources which combine to affect rural women's work. This will provide the background for later discussion on how environmental degradation combines with SAP policies, to add pressure to an already disadvantaged region.

Environmentally, climate is the most significant factor in Ghana. Ghana is covered by a north to south gradient of climatic conditions corresponding with the pattern of seasonal distribution of rainfall, which is reflected in vegetation zones and to some extent in soil types. Thus two main climatic types can be found in Ghana, the southern forest belt, characterised by comparatively lower temperatures, high humidity and rainfall concentrated in two wet seasons; and the northern

⁵⁵ See Chapter Six for a review of the structural adjustment programme (SAP) in Ghana and its gender impact.

savannah, characterised by higher temperatures and low levels of precipitation concentrated in a single rainfall season followed by a long dry season. Within the humid southern zone can be found a narrow strip along the south east coastline with two rainfall seasons, but with less rainfall and more marked dry seasons than in the forest belt (Fig 5.1). Overlying the dominant rainfall regimes are a number of physical and biotic factors such as temperature, wind, factors connected with topography and soil variety, and factors linked to human activity such as fire, cultivation and overgrazing which produce a wide variety of environments.

Environmentally, the northern savannah is much more vulnerable to degradation than the forest area and is also the region where most indigenous forms of intensive agriculture are found. (Dickson and Benneh, 1988). While quantitative longitudinal data on the environment in Northeast Ghana is limited, the picture that emerges from what is available, plus data on ethnographic information,⁵⁶ points to an increasing rate of environmental degradation, used in this study to mean a lowering of the productive capacity of the environment to support a human population.⁵⁷

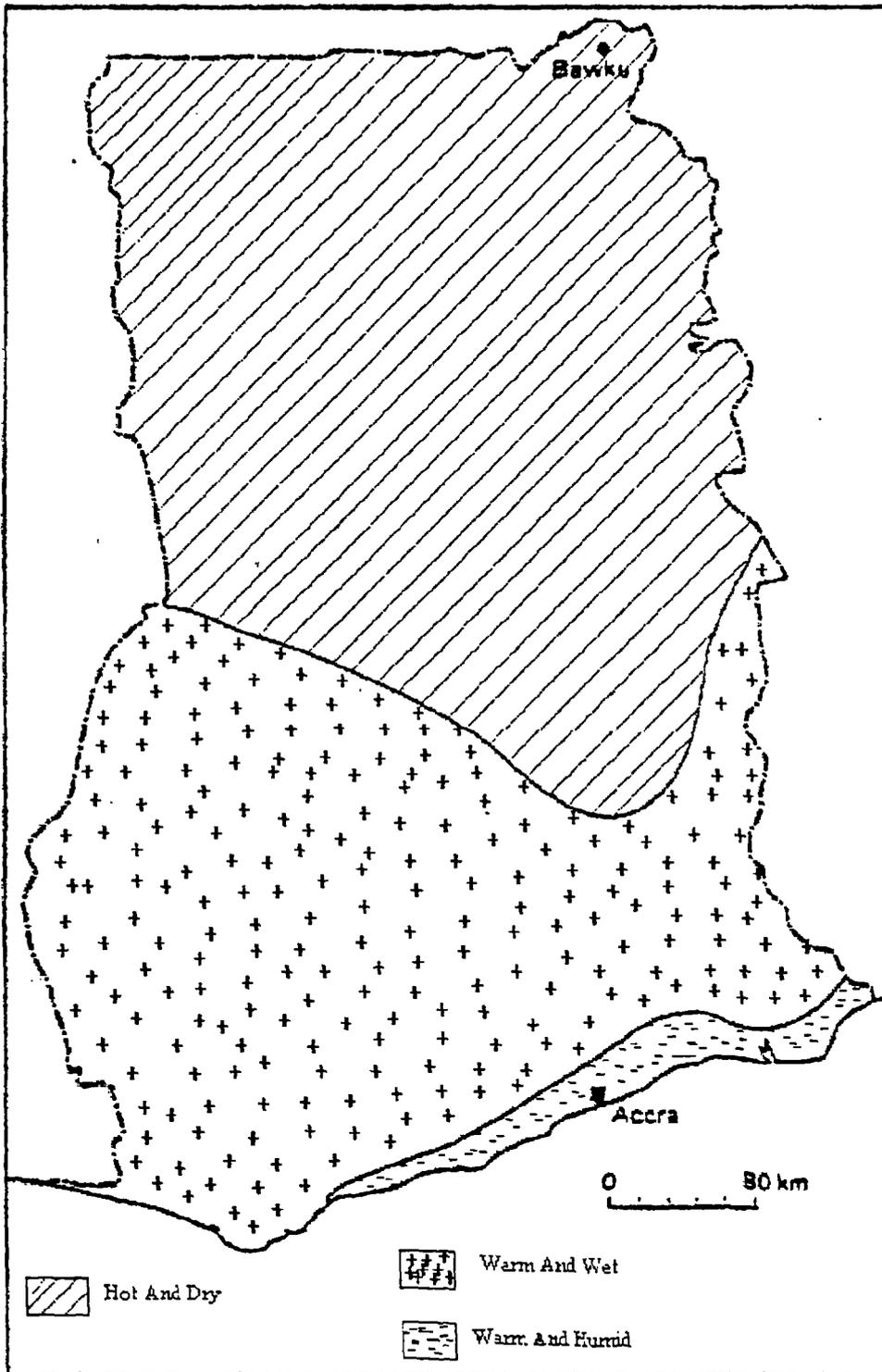
5.2 CLIMATE

As stated above, the northern savannah is characterised by high temperatures and low levels of rainfall in a single rainy season from about May to

⁵⁶See for example, Lyn (1937); Fortes (1945), Hunter (1967).

⁵⁷ Tiffen et al (1994) define environmental degradation as a degeneration of the natural resource base to a point where the costs of restoring to a level where it can support people at a reasonable standard of living become prohibitively high.

FIG. 5.1 GHANA: CLIMATIC ZONES



DICKSON AND BENNEH, 1988:27

September/October, followed by a prolonged dry season. The following sections will examine the factors that determine the climate in Northeast Ghana and how these in turn affect human activity in the area.

5.2.1 PRECIPITATION

Rainfall is undoubtedly the most significant climatic factor in Africa as a whole, as temperature has a relatively small annual range and wind is generally of low speed (Griffiths, 1972:7). Rainfall in Ghana and over much of West Africa is divided into distinct seasons. In the coastal areas, rainfall occurs in two seasons with a high peak in June and a smaller peak about October separated by two dry seasons of unequal length. Moving north along the climatic gradient however, the peaks draw steadily closer together until they merge into a single peak rainfall regime roughly between latitudes 8 and 9 degrees North (Rose Innes, 1977). This single rainfall regime which occurs between May and October with a peak in August/September dominates the climate from that point northwards and the long dry season severely tests the capacity of plants to survive.

Like most savannah farmers, the Kusasis depend on rainfall for growing most of their food supply but while annual distribution of rain is divided into a distinct wet and a dry season, the distribution within the wet season, in terms of incidence, length and amount of rainfall is highly variable from year to year. This uncertain rainfall, along with the high rates of evapo-transpiration produced by high temperatures make the farmers job risky and difficult.

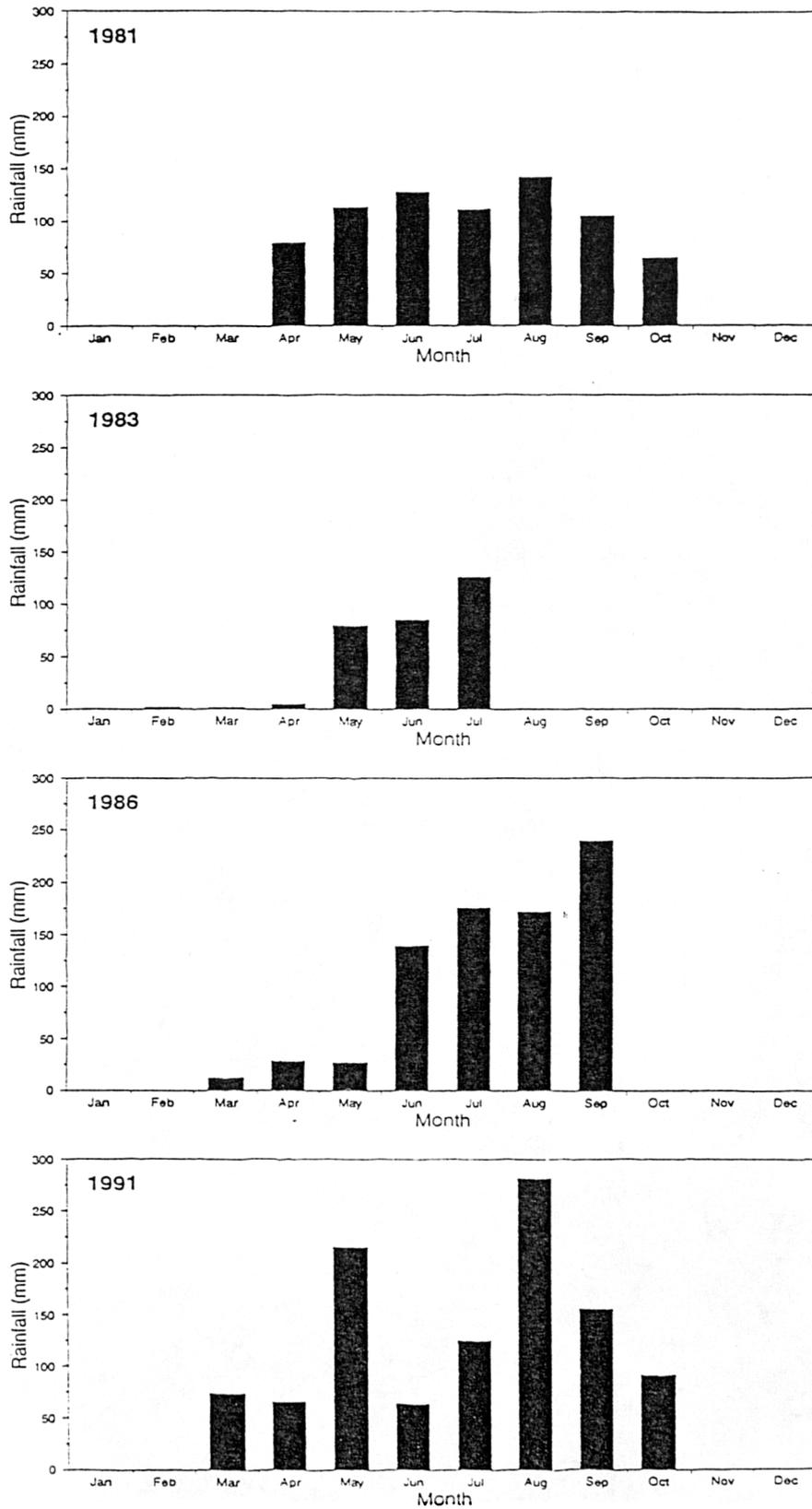
Rainfall in the savannah is produced by distinctive wet/dry belts associated with the movement of the inter-tropical convergence zone (ITCZ), so that rainfall decreases from south to north. Rains accompanying the ITCZ move north into the savannah in April/May, and retreat south out of the area around October, therefore rain occurs in this area roughly between May and October. The movement of the ITCZ is however not regular but follows a series of latitudinal steps and shows a wide deviation both daily and from year to year (Griffiths, 1972:171). Thus the beginning and end of the rainy season is marked by great irregularity.

The average annual rainfall in the Guinea savannah ranges from 1016 to 1270 mm (Rose Innes, 1977:12), but the length of the dry season increases northwards from four to six months. Within the Bawku District,⁵⁸ mean annual rainfall varies between 990 and 1090 mm. Records for thirty-six years at the Forestry station located at the southern boundary of Zorse, show an average of 1041 mm with a standard deviation of about 150 (Beer et al, 1979:12). Annual rainfall totals however vary from year to year. Between 1981 and 1991, rainfall totals at Manga Station, located near Zorse, varied from 296 mm in 1983 to 1074 mm in 1991 (Ghana Meteorological Services, 1981 to 1991).

Not only do annual totals vary, but monthly totals also vary from year to year. Fig. 5.2 shows monthly total rainfall in Manga, in four different years within a ten year time period (1981 to 1991). It indicates that although, traditionally, the months

⁵⁸Zorse forms part of the Bawku District and is located about five miles from the district capital, Bawku (See Fig. 4.1).

Fig. 5.2 Distribution of Total Monthly Rainfall at Manga-Bawku. 1981, 1983, 1986, 1991

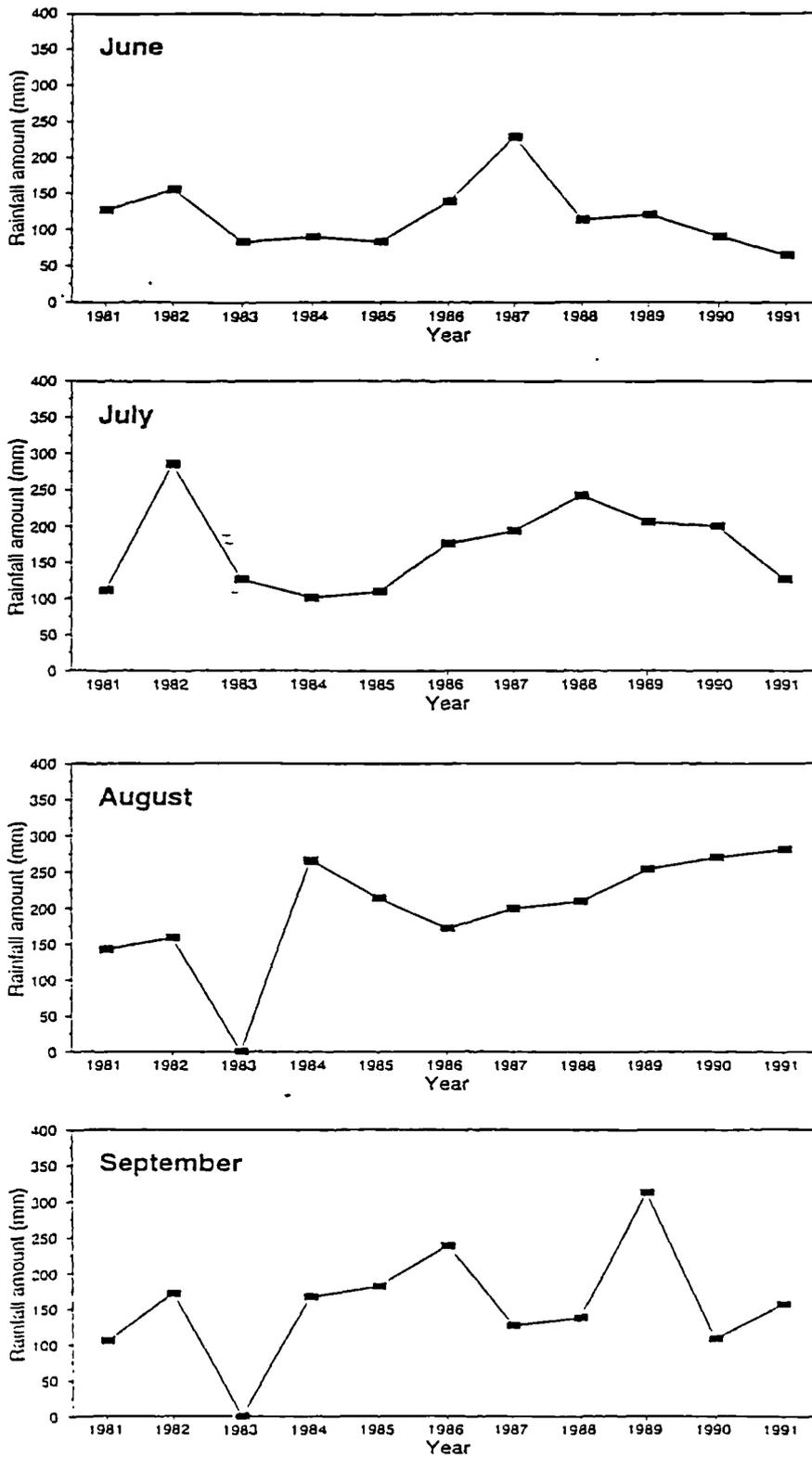


of heaviest rainfall throughout the savannah area are July, August and September, this varies from year to year. In 1983 during which there was a drought in Ghana, the months of heaviest rainfall were May, June and July, after which the rains ceased completely, while in 1991, the rains continued being heavy until October.

Thus the definition of 'wet' or 'growing' season and 'dry' season by monthly rainfall totals is difficult and varies with crop type and agricultural system. Dennet et al (1985) using data from two rainfall series in the southern sahel region of West Africa, found that annual rainfall between 1960 and 1984 was below the 1931 to 1960 average and that relatively dry conditions have persisted in the region since 1968. They attributed this to a decline in rainfall during August, the wettest month, rather than to differences at the beginning or end of the rainy season. In the Bawku District however, the rainfall data between 1981 and 1991 does not indicate a clear trend for any of the wet months, but rather points to increasing irregularity of monthly totals during the wet months of July, August and September (Fig. 5.3). The use of monthly values to define seasonal regimes is therefore suspect, not only because rainfall conditions during short time periods are critical for agriculture, but also because the onset and end of the wet season does not coincide with calendar months (Jackson, 1977 :57).

Not only do monthly totals vary from year to year, but the spatial distribution of rainfall is extremely variable even over small distances and from day to day. The distribution of daily rainfall is therefore as important as total amount for successful farming. Fig. 5.4 showing daily distribution of rainfall in 1981, 1983, 1986 and

FIG. 5.3
Rainfall in June-September, Manga-Bawku, 1981-1991

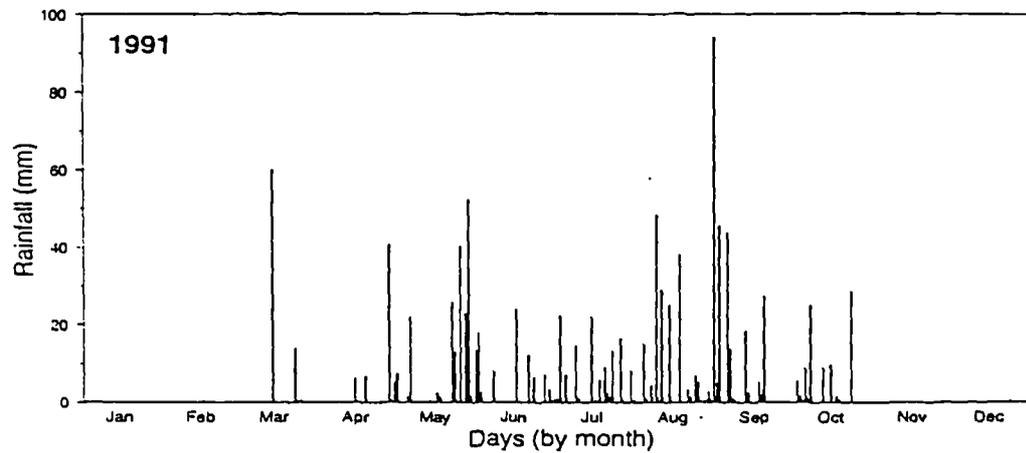
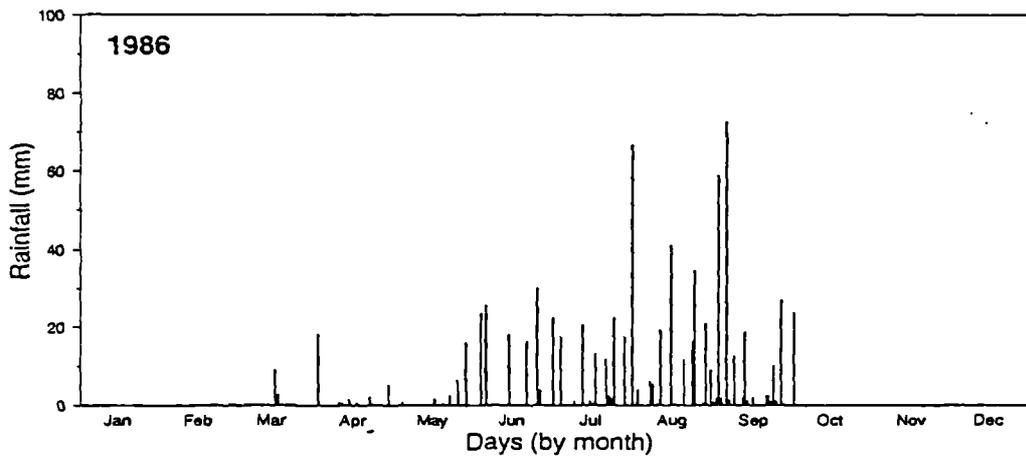
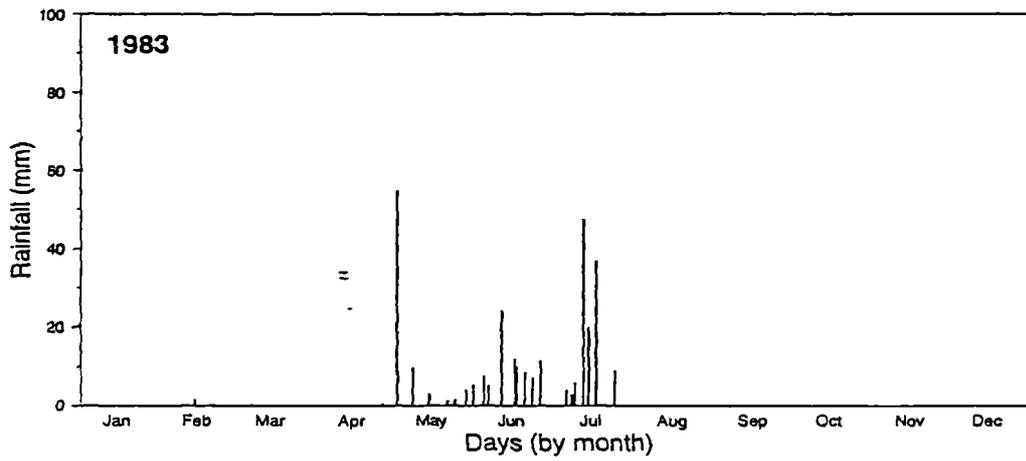
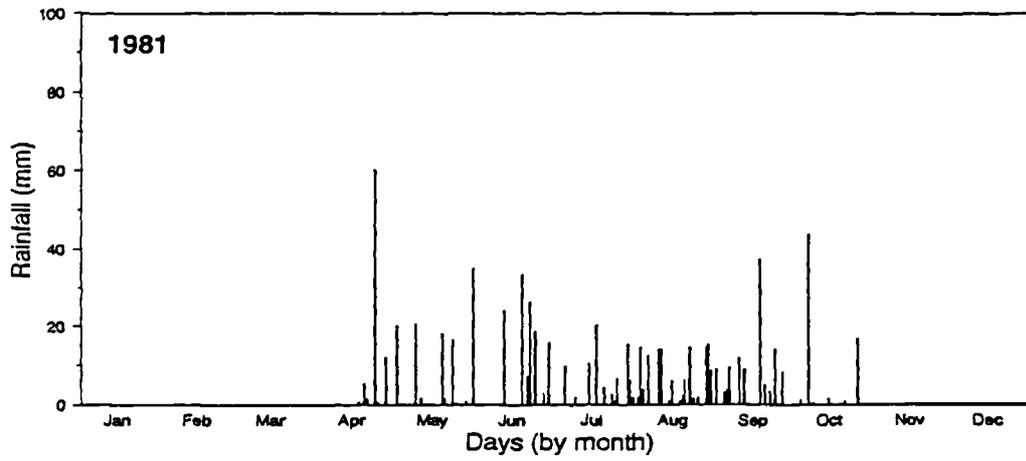


1991, further illustrates the magnitude of variability in the area. Even during the 'wet' months of July, August and September, dry spells occur and wet spells can occur in dry months such as February and March as in 1986 and 1991. This variability makes the prediction of the onset and the end of the rains (and therefore when to plant) very risky. Farmers must try not to plant until they think the rains will continue regularly, since sporadic rains at the beginning of the rainy season can mean re-planting or loss of crops, especially the more drought sensitive crops like early millet. At the end of the season, when late varieties of millet are yielding, sporadic or no rains can also affect yield. Through experience and observation, Kusasi farmers have tried to determine the approach of the wet season and to prepare their fields for sowing.⁵⁹ Planting is often done after the second rainfall in May, but some wait to sow after the third or fourth rains in June. Cleveland (1980), in a study of the agricultural system of the Kusasi area and Zorse in particular, observed that it is when there is heavier precipitation about once every three days that planting begins. Thus it is not the amount of total rainfall, but its regularity and intensity and therefore soil moisture which determines when planting begins.

In Zorse, although the rains started early in 1983 (Fig. 5.4), they suddenly terminated in July, when the millet were forming ears of grain, resulting in crop loss and severe famine in 1983, such that food aid had to be brought in to the area. 1991, which had one of the best rainfall distribution patterns and above average

⁵⁹Some of these observations which are believed to signal the approach of the rains are the flowering of the shea-nut tree, and the position of a cluster of stars known as "nonyaan ne o biis" (the hen and her chickens), *Pleiades* at night. When these stars are seen in the west by 7.00 PM, then the rainy season cannot be far off. (Benneh, 1970)

**Fig. 5.4 Daily Rainfall at Manga-Bawku.
1981, 1983, 1986, 1991**



rainfall total, however, also had a low crop yield. This was because the amount and regularity of rainfall at the end of the rainy season was too much for the crops, at a time when little or no rain was required. This resulted in crops rotting in the soil. Cleveland (1980) also reports of poor harvests in Zorse in 1976 from too little rain early in the season and too much late in the season. Thus in areas where farmers have little or no access to alternative varieties and no access to irrigation facilities, the period of occurrence of drought is of critical importance (Jackson, 1977 :67). But generally, greater variability of rain at the start and finish of rains is of more importance than in mid season, since soil moisture reserves might be able to cope with absence of rain for short periods.

5.2.2 RAINFALL TRENDS

Much of the West African savannah, including Northeast Ghana, has been affected by drought conditions since the late 1960's with rainfall being below the 1931 to 1960 average (Gregory, 1982; Nicholson, 1983, Dennet et al, 1985). Although rainfall remained low between the late 1960's and 1970's , the studies concluded that it did not indicate a changing climate (Bunting et al, 1976). Dennet et al (1984) using updated data from two rainfall series for the southern sahel region of West Africa also observed below average rainfall conditions between 1968 and 1984 which was attributed to a decline in rainfall during August the wettest month.

In Ghana, Beer et al (1979) working with rainfall records for thirty-four years up to 1979, show that the Tamne river basin in the Bawku District also experienced

declining rainfall in the lowest decile (ie drought) of annual distribution for four years, and rainfall in deciles 2 to 3 (below average) for seven years. They conclude as observed by Cleveland (1980), that drought or below average rainfall years in the Bawku District does not have the tendency to follow each other, but rather occur cyclically. Similarly, rainfall data for the 1980's, at the Manga station in the Bawku District, also indicates no particular trend. While 1983 was a drought year, 1981, 1984 to 1988 and 1990 had below average rainfall totals. 1989 and 1991 were average rainfall years (Ghana Meteorological Services, 1981 to 1991).

For Bawku District then, the evidence does not indicate a long term trend of declining rainfall, but rather a cyclical occurrence of drought or below average conditions. In the 1980's in particular, the issue appears to be one of irregularity of rainfall distribution rather than decline in rainfall totals. Rainfall monthly totals between 1981 and 1991 for July, August and September, the wettest months, indicate a marked irregularity especially after 1983, making the farmers job more risky (Fig. 5.3). As the distribution of rainfall is as important as the total amounts for successful farming, this increasing irregularity makes the farmers job more difficult. During formal and informal interviews, many people in Zorse pointed to the increasing irregularity of the rainfall as a major factor in declining farm yields. Similar evidence from Kenya (Tiffen et al, 1994) reveals no indication of a long term trend in rainfall decline, but rather clear evidence of inter-annual and within season variability.

5.2.3 TEMPERATURE

Temperatures in Ghana vary little with annual means of between 25 and 29 degrees Centigrade, which increases northwards (Dickson and Benneh, 1988:26). Highest temperatures occur in northern Ghana just prior to the rains in March and April with extremes of 36 to 37 degrees Centigrade. Lowest temperatures occur at the end of the rainy season with August being the coolest month. Thus at the beginning of the farming season in April/May, when most of the weeding and planting takes place, temperatures are very high and coupled with low humidity result in hot and dry weather which makes farm work very tiring. Farmers therefore leave for the farms as early as 5.00 am, so that they can put in maximum work before the sun gets too hot at about 12 noon.

In the rainy season in northern Ghana, there is still much sunshine as clouds disappear after rains. In-coming solar radiation and high temperatures lead to high rates of evapo-transpiration and high soil temperatures (Beer et al, 1979), which can stress crop plants and reduce yield. High temperatures and low humidity in the dry season also results in rapid loss of soil moisture and loss of organic matter through oxidation.

5.2.4 EVAPO-TRANSPIRATION

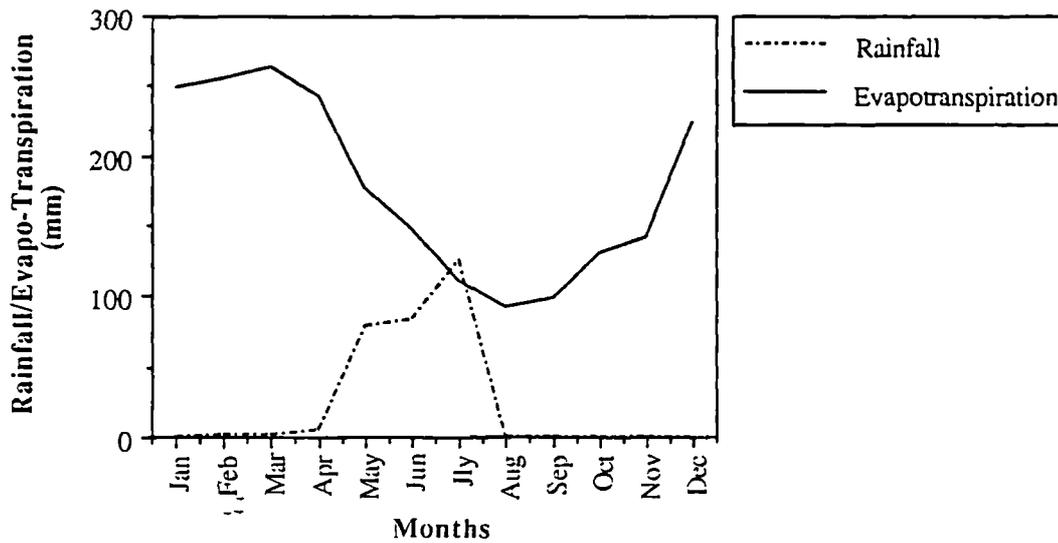
Although rainfall and temperature are important, evapo-transpiration also plays an important part in determining environmental conditions in the area. Conditions most affecting evapo-transpiration are solar radiation, air temperature, air humidity and wind speed. High temperatures in the savannah lead to annual potential evapo-

transpiration which is in excess of precipitation with ranges between 1600 and 2000 mm (Griffiths, 1972). In northern Ghana, soil water surplus occurs only during a short period towards the end of the rainy season (Benneh, 1973). Fig 5.5 shows rainfall, evapo-transpiration and runoff in the Bawku District during a dry year, 1983, and an average year, 1991. The important point to note is that the water balance is negative for all months in 1983, a drought year, while in 1991, (a year of average rainfall total), potential evapo-transpiration is exceeded by precipitation only in the months of May and August, with minimum deficits in July and September. Thus even in average rainfall years, a positive water balance occurs only in two or three months. This further illustrates the variability of the moist or growing period from year to year.

5.3 VEGETATION

West African vegetation is distributed in a number of distinct though never sharply defined geographical zones which lie more or less parallel to one another and to the east-west coastline. These bands of vegetation lie across the climatic gradient which passes through corresponding zones of increasing rainfall southwards (Fig. 5.6). Generally, the vegetation zones follow that of rainfall and emphasise the paramount importance of climate, especially rainfall in controlling the broad distribution of vegetation types. The vegetation is however, not only the product of the natural environmental factors but also of massive disturbance by human activity in the form of fire, overgrazing, cutting and cultivation which is now occurring on an increasing scale in Northeast Ghana (Rose Innes, 1977).

FIG. 5.5
Water Balance Diagram, Bawku
1983



1991

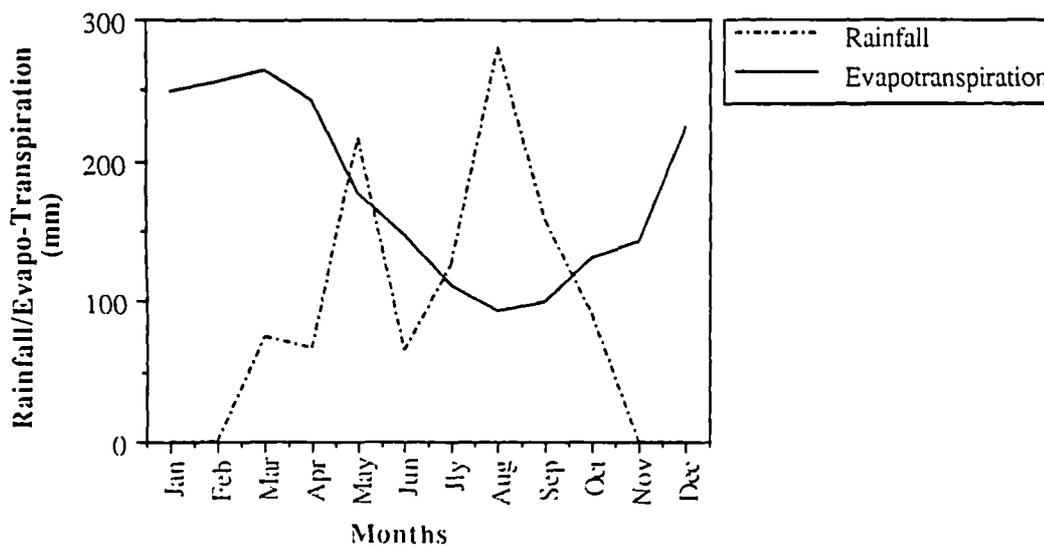
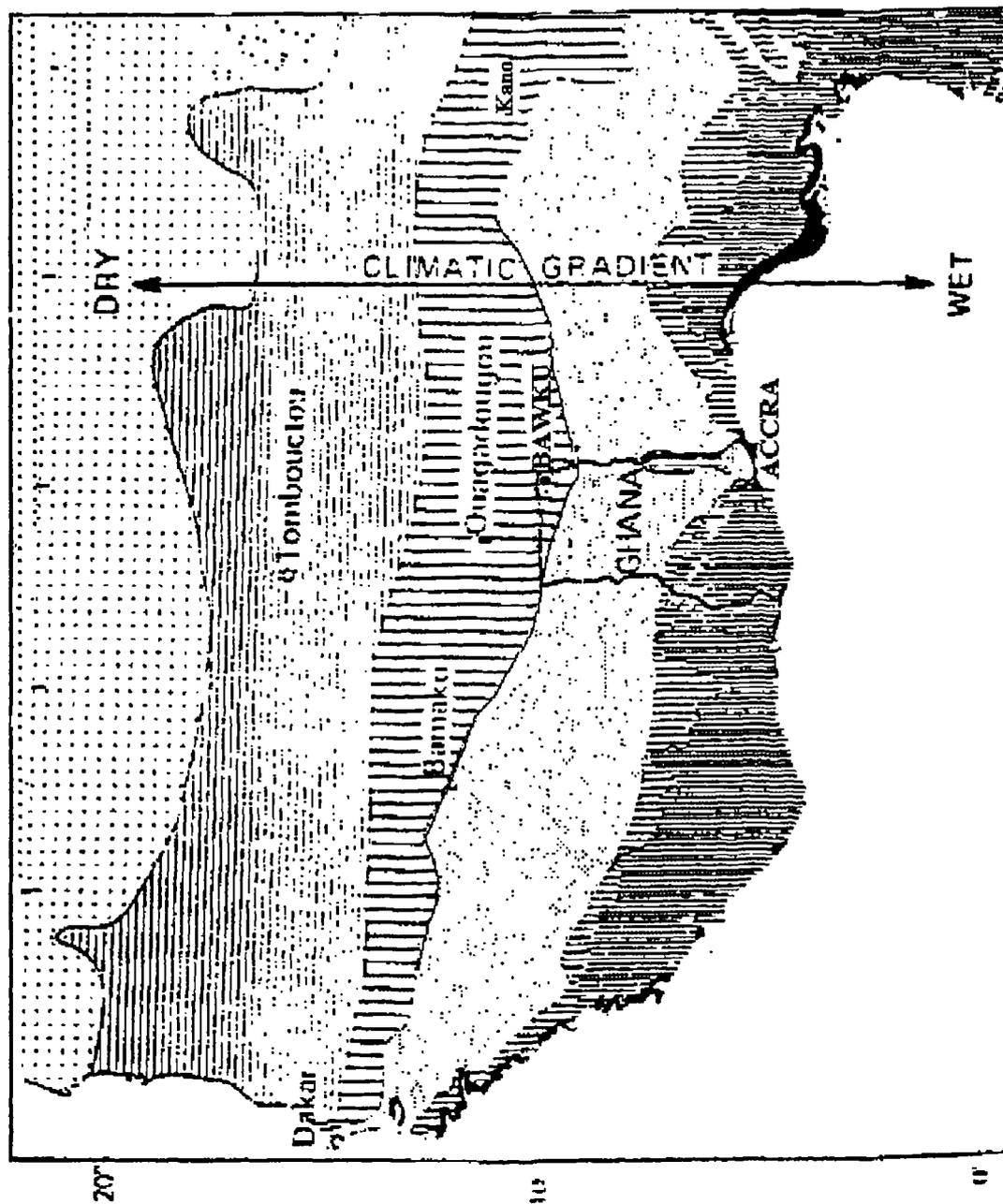


FIG. 5.6 VEGETATION ZONES OF WEST AFRICA



- Desert
- Sahel
- Sudan
- Guinea
- Derived Savannah
- Mangrove
- Forest

SOURCE: ROSE INNES, 1977:4

The climatic conditions described in Section. 5.2 are reflected in the vegetation and, to some extent, the soil types in Ghana. The south, with a wet equatorial climate is covered mainly by forest, while the dry savannah in the north has wooded savannah vegetation composed of tall grasses interspersed with a few scattered broad leafed deciduous trees. As one moves further north and with declining moisture availability, trees become more scattered. Plant life changes with the different seasons of the year, looking green with life in the wet season and parched and dry as trees shed their leaves and grasses die or look brown in the dry season. It is believed that the vegetation in the north is a fire-proclimax, the result of centuries of burning, grazing, and intense cultivation that prevent restoration of the "natural" climax consisting of closed woodland with little grass (Rose Innes, 1977:13; Dickson and Benneh, 1988).

5.3.1 DEGRADATION OF THE SAVANNAH VEGETATION

The savannahs contain abundant plant resources that have been used by the inhabitants over the centuries, many of which have been domesticated.⁶⁰ Under conditions of mounting population pressure, the relatively stable upland fire-proclimax vegetation has been subjected to increasing exploitation within the system of shifting cultivation and damage due to fire, cutting and cultivation. Rose Innes (1977) has described the process of change occurring in the stable fire-proclimax under increasing cultivation, for Northern Ghana. It begins with land

⁶⁰These include millet, sorghum, rice, cow-pea, bambara beans, groundnuts, sesame and hibiscus group (e.g. okra and kenaf).

clearing for shifting cultivation leaving only desirable trees which are selectively protected such as the shea nut tree (butyrospermum paradoxum), and dawadawa (parkia filicoides) trees which provide valuable edible oil for cooking, fuel in lamps and skin care, and edible seeds used as seasoning respectively. After about three years, declining soil fertility and increasing weed competition force the farmer to abandon the site and move to a new plot under a system of bush fallowing. The felled trees on the abandoned site then regenerate from surviving stumps and succession back to a fire-proclimax occurs within a period of about twenty years. After many decades of increasing exploitation and decreasing fallow periods however, none but the selected trees survive and emerge as the dominant feature in the resulting park-like landscape, with low status grasses, undergoing continual short rotation cultivation. At this point, land essential for the maintenance of shifting cultivation or mixed farming is no longer available and bush fallow no longer possible. Continued population pressure, mounting pressure on the land, and intense competition for fuel, introduce the final stage of degradation resulting in the development of a "super-mature" parkland, with even the desired species of trees being lopped off or felled, increasing soil exhaustion and resulting in extensive soil erosion. The "resulting treeless depauperate annual grassy disclimax on impoverished, eroding soil can be seen all over Bawku" (Rose Innes, 1977:20) in Northeast Ghana.

Thus the high population density in the Bawku District combined with an extensive farming system and the annual burning of all grasses has resulted in an

artificial parkland vegetation. Although the vegetation of the Bawku District is believed to form part of the Sudan Savannah (See Fig. 5.6), Rose Innes (1977) argues that the vegetation in this area has been altered by prolonged disturbance of human activities, so as to resemble the Sudan zone vegetation, but it belongs in fact to the Guinea savannah. He bases his conclusion on the characteristic vegetation of the protected "tingban" (earth shrine or fetish groves), where the protected vegetation consists of dense closed, canopy woodland to a height of 18 metres, which indicates that the area is "fully capable of supporting woodland or savannah woodland with a closed canopy at a height of about 18 metres and would do so if disturbance factors were excluded" (Rose Innes, 1977:13). Currently there is only a thin cover of trees and only trees of economic value either for food or medicine are left standing. These trees show a marked adaptation to the environment. Many are fire resistant and have thick barks and long roots to withstand the drought (Benneh, 1970:89).

That the area is capable of supporting a much denser tree population is also demonstrated by experimental controlled burning plots established in 1949 to 1950 in the Bolgatanga District, just south of the Bawku District. Complete protection and early burning as opposed to late burning led to increased spread and diversification of trees and shrubs and a decreased number and proportion of basal cover and grass species by 1960 (Ramsay and Rose Innes, 1963). Further evaluation of the plots in 1976 to 1977, showed the same trends continuing

(Brookeman-Amissah et al, 1978). The protected plot showed the greatest increase in tree growth and had the greatest number of trees and species.

In summary, research on the vegetation of Bawku District indicates degradation of pro-climax by over exploitation due to cultivation, grazing and burning. Human activity in the Bawku District has reduced the quantity as well as the quality of vegetation. The excessive removal of vegetation by overgrazing and intense cultivation without return of adequate organic matter has led to a loss of soil quality and a reduction in productive capacity. Even the fire-proclimax vegetation as seen on the early burning plots near the Red Volta is not an optimum either for agriculture or livestock protection.

5.4 SOILS

Classification of West African soils is primarily based on the extent of weathering and leaching of soils and so major soil groups are broadly related to climate and vegetation belts. The most common soils of the West African savannah are ferruginous tropical soils which have appreciable reserves of weathered minerals, but are fairly thin, and very susceptible to erosion. (D'Hoore, 1964, Ahn, 1970). In general, the savannah area is covered by soils which are thin and "particularly low in organic matter and may have poor structure, poor nutrient reserves and poor moisture storage properties" (Ahn, 1970:237). Again human activity and improper methods of cultivation have led to decreased organic content and the exposure of the soil surface to wind and water erosion and insulation.

The traditional method of maintaining soil fertility by shifting cultivation is to abandon fields when production has declined to a certain level thus allowing the fields to rejuvenate under natural fallow. However as noted in section 5.3.1, under increasing population pressure on the land, the fallow period has been drastically reduced or eliminated. Cultivation without replenishment of organic material has therefore led to loss of structure and porosity, which has made the soils susceptible to sheet and gully erosion and reduction of mineral content. The result is decreased production and an increase in weed and insect pests (Ahn, 1970:244-245).

The main types of soils in the Bawku area and particularly in Zorse are developed over intrusive granites which are not very fertile, but respond well to manure and fertiliser applications. They are shallow and under intense cultivation and grazing, may develop large, severely eroded areas in which the organic content is lacking as is found all over the Bawku area (Adu, 1969; Ahn, 1970). Thus the main soil types found in the Bawku district are subject to erosion and rapid decline in productive capacity when over cultivated as is presently the case.

Studies in Northeast Ghana have also shown the varying effects of no burning, early burning and late burning on the soil (Brookman-Amisshah et al, 1978). Experiments showed that the physical quality of the soils was poorest on the plots exposed to late burning and best on the plot protected from fire. The availability of organic matter in the top 5 cm of soil and nitrogen was also significantly higher in the protected plot than in either of the two plots where early or late burning took

place, showing the overall detrimental effects of burning (Brookman-Amisah et al, 1978).

Sheet and gully erosion are widespread in the Bawku District, especially in the most intensely farmed areas around Bawku. Adu (1969:4) estimates that over 40,000 hectares of the District's previously arable land has been lost to such erosion. This has involved the loss of most of the top soil and the formation of iron pan resulting in a lowered agricultural potential. Based on a 1965 estimate of suspended sediment in the Tamne River, near Bawku, and run off estimates for seven years between 1966 and 1977, it has been calculated that an average of 26 MT/KM /YR is transported by the river which drains the central part of eastern Bawku district (Beer et al, 1979:65). It is reported that most of the dams and reservoirs built in the late 1950's and early 1960's have also silted up.

Thus environmental conditions, high population densities and over cultivation coupled with little or no soil management have led to serious soil degradation.

5.5 WATER SOURCES

Three main river systems drain the West African savannah⁶¹, of which the Volta system drains the savannah in Ghana. The main river in the Bawku District is the White Volta, a tributary of the Volta river, the biggest river in Ghana. In the rainy season there are a number of streams flowing, but most of them are intermittent

⁶¹These are the Senegal, Niger and Volta River systems.

with little surface water in the dry season. The Tamne river in the Bawku District for example, is completely dry by January in most years (Beer et al, 1979:55).

Water for drinking and domestic use in Zorse is obtained from shallow wells, dam ponds or more recently, from deeper lined wells, and since the mid 1980's from a bore-hole sunk in the village ⁶². Small dams were built in the Bawku District in the late 1950's and early 1960's primarily to provide water for domestic and livestock needs (Beer et al, 1979). Very little use was made of the dams for irrigation. The Abush dam located on the southern fringes of Zorse (See Fig. 4.2) is one such example of a dam built for domestic use and livestock needs. Some use has however been made of the water from the Abush dam for irrigation, but this is estimated at only 10% of the total usage. Wells have long been a source of water supply in northern Ghana because of the relative scarcity and seasonality of surface water. However, many of them were shallow, unlined and had no mechanical water drawing device until modern times. Beer et al (1979:89), estimate that the traditional hand dug wells in Bawku district were only 8 to 10 metres deep and often dried up in the dry season. Some of the Farmers I interviewed said that they were now having to dig deeper to get to the water table. The two wells in Zorse were unlined and tended to collapse during the rainy season and had to be re-dug at the beginning of the dry season. A joint Ghanaian-Canadian well drilling project constructed 607 wells between 1974 and 1979 in the Bawku District. Cleveland (1980:78) estimated that these new wells in addition to existing ones, gave one well

⁶²See Fig. 4.2 for the location of water sources in Zorse and Fig. 7.1 showing women and girls collecting water from a borehole and an unlined well.

to 355 people in the Bawku District in 1980. In Zorse, a bore-hole with a mechanical device for drawing the water was sunk in 1985 and this has helped to solve some of the perennial water supply problems of the village. In the dry season, when most streams and the dam ponds are dry, there is an increasing use of the bore-hole for domestic use, but in the wet season, other sources of water supply such as the streams, ponds and rainwater are used. However, the introduction of fees for the use of the bore-hole as part of the structural adjustment policies have tended to reduce use of the bore-hole even in the dry season⁶³

Thus although water supply is seasonal, the construction of wells and bore-holes, though inadequate in number has helped to improve the situation. However water from shallow wells, streams and the dam pond are subject to heavy pollution and have led to the spread of diseases (see Section 5.6).

Some observations of the well fields in the Bawku District has shown a fall in water levels of 61 cms or less and in the Upper East Region, a drop of 131 to 348 cms during 1977 to 1978 (Cleveland, 1980:78). 92% of these wells were more than 15 metres deep, beyond the range of traditional well digging techniques. Although the granite derived soils of the Bawku area are often sandy, they are thin and are underlain by clayey decomposed rock material, that restricts infiltration of water (Beer et al, 1979:78). The surface layer therefore often becomes saturated and most rainwater is removed or lost by evaporation, transpiration, lateral movement or areas of seepage (Beer et al, op cit). Although currently the wells appear to ensure

⁶³See Chapters Seven and Eight for details of the impact of structural adjustment policies on sources of household water supply in Zorse.

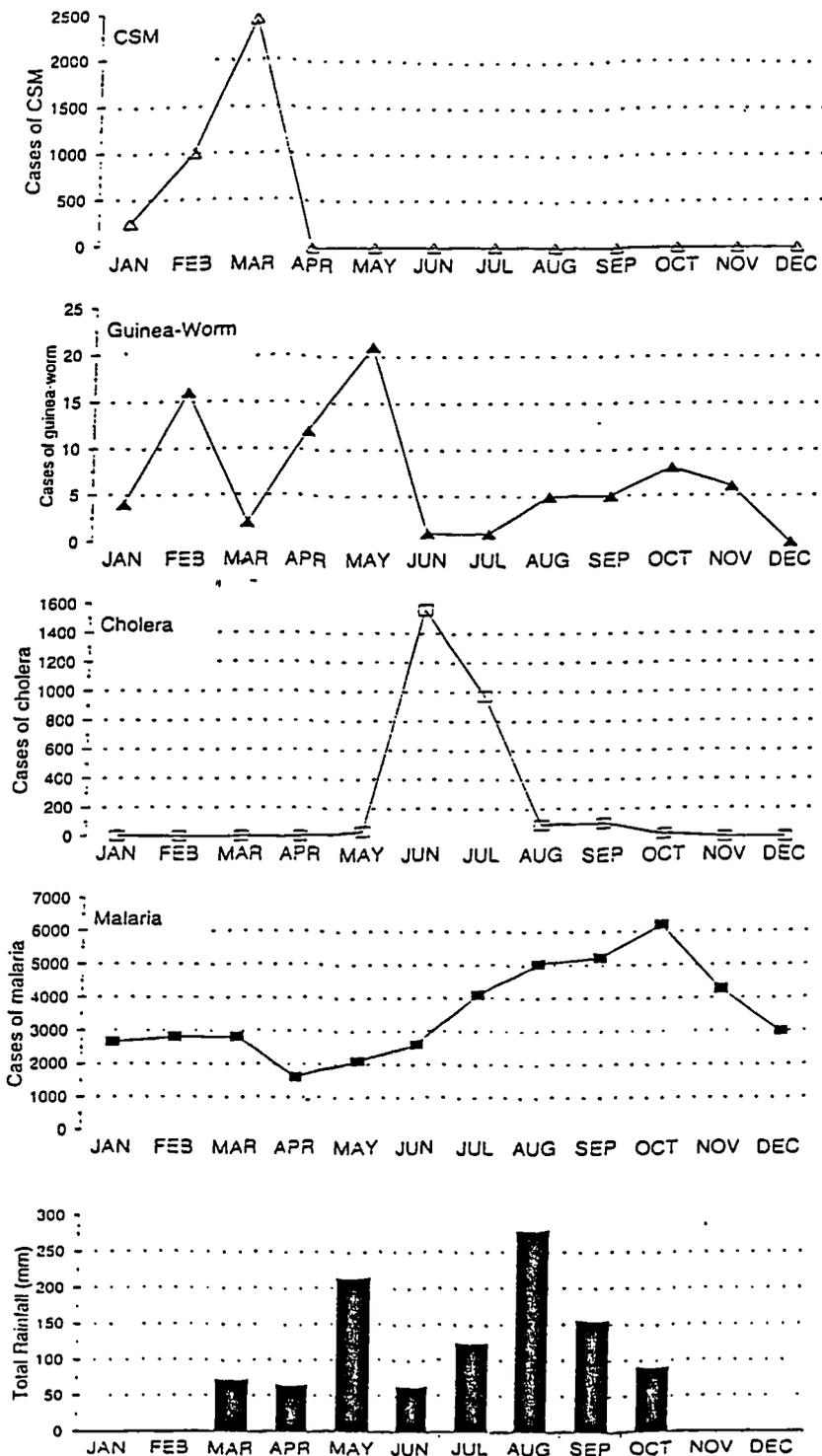
a good supply of water for present uses for some time to come, future increases in use for animal and crop production could deplete the ground water and soil and plant resources and reduce the overall productive potential of the environment. This has been observed to have occurred in some northern pastoralist areas of the savannahs.

5.6 DISEASES

The environment also has an influence on diseases in the Bawku area some of which are seasonal in nature. Although the wells and bore-holes drilled in the 1980's in the Bawku District have led to an improvement in the quality and convenience of water supply, poor sanitary conditions and lack of proper drainage facilities have made the rainy season a time of many diseases. In the wet season, as a result of inadequate drainage, several pools of water collect particularly around wells and bore-holes, bath-rooms and kitchens. These become breeding grounds for mosquitoes which transmit malaria. The wet season, particularly the time of the heaviest rainfall, between July to October, when farm labour is in highest demand, is the time of the highest incidence of malaria transmitted by the mosquito (Fig. 5.7).

Another serious water borne disease and one of the most infectious diseases in the Kusasi area and in much of the West African savannah is onchocerciasis (river blindness). The black fly (Simulium damnosum) which is the vector for the onchocerciasis breeds in fast flowing streams. Hence the disease is more common in the granitic and metamorphic areas such as in Bawku District, where steeper stream

Fig. 5.7 Distribution of Diseases by Month, Bawku District, 1991



SOURCE: MINISTRY OF HEALTH, GHANA, 1991.

profiles lead to the higher velocities producing the high oxygen content necessary for the black fly to breed (Hunter, 1967a). Filarial worms in the body migrate to the eyes causing blindness which often means that the affected persons' productivity is lowered and they may be reduced to dependent status. Apart from the blindness which is the acute effect, there are less acute effects of the infestation which are also debilitating. A survey of 16 villages in Northeast Ghana found 3.7% of the population blind, with the rate of infection with the parasite in the population aged over fifteen years being about 50% (Senker et al, 1973). However, since the late 1970's there have been attempts to control the disease by spraying the affected rivers and this has drastically reduced the rate of the disease.

The guinea-worm disease is another disease which is transmitted through infected water sources mainly streams and ponds. Its incidence is therefore higher in the dry season when water availability is low (Fig. 5.7). Since the sinking of bore-holes and lined wells in Zorse and in the region as a whole, its incidence has been drastically reduced. However with the increasing numbers of households who are returning to using streams and ponds particularly in the wet season as a result of the adjustment measures⁶⁴, guinea-worm infection rates may be on the increase again.

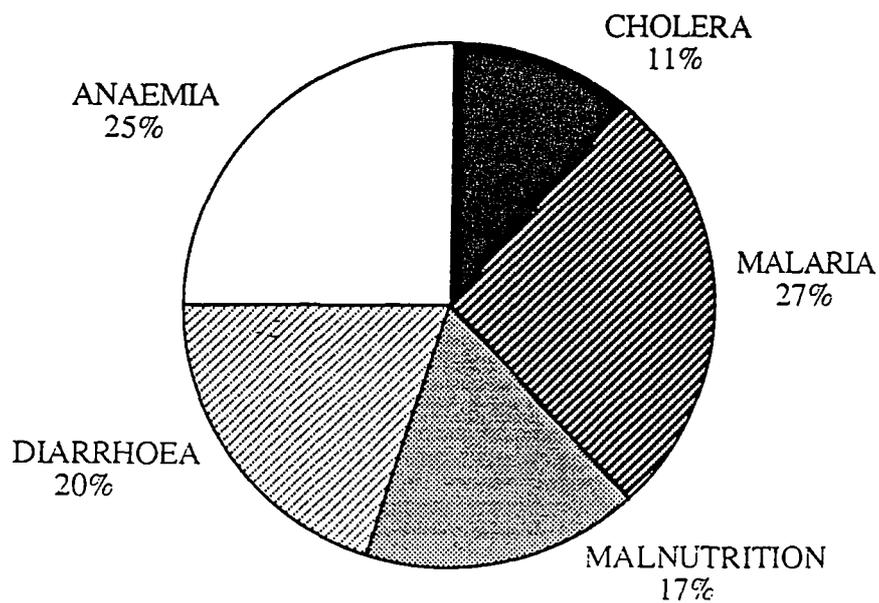
Other diseases which are not always water borne but are related to the environment are diseases such as diarrhoea, dysentery and cholera. The incidence of these diseases is higher at the peak of the wet season, when fruits such as mangoes and shea-nut fruits are in abundance and poor sanitary conditions allow the transmission

⁶⁴Chapter Six examines the recurrence of diseases, such as the guinea-worm disease, with the introduction of structural adjustment policies in Ghana.

of parasites by houseflies onto unwashed fruits and food. Other diseases which have a seasonal distribution are nutrition related diseases such as malnutrition and anaemia which are more common in the latter part of the dry season and the wet season, when food supplies from the previous year's harvests have been depleted. Cerebro-spinal meningitis is however associated with the dry season when the weather is hot and dry (Fig. 5.7). These diseases contribute to the high mortality rate in the region as shown in Fig. 5.8 on the five most common causes of mortality. As will be shown in Chapter Eight, although hospital attendance in the region has declined as a result of increases in hospital fees as part of the structural adjustment policies, mortality rates have increased in the region with a marked increase in malnutrition and anaemia. This suggests that much of health care is being provided in the household and has implications for women as carers of household members. Chapter Eight examines the implications for women's workloads.

Fig. 5.9 summarises the inter-relationship between the environment, seasonality and the availability of resources in Northeast Ghana. The main point to note is that the wet season, from about April to October, is the time of greatest demand for agricultural labour. It is also the time of lowest food supply, lowest fuel wood availability and highest incidence of diseases. The discussion in this Chapter points to declining soil fertility, degradation of vegetative cover, increasing irregularity of rainfall and declining water table levels. A review of the literature in Section 2.9 indicates that it is women who are hardest hit by environmental degradation

Fig. 5.8
TOP FIVE CAUSES OF MORTALITY, 1991, UPPER EAST REGION



SOURCE: MINISTRY OF HEALTH, GHANA, 1991.

because of their responsibility for the collection of fuel wood and water and for food production and their crucial role in the management of natural resources (Dankelman and Davidson, 1988; Leach, 1991). The deterioration of environmental conditions in Northeast Ghana could therefore potentially cause increasing workloads for women in Zorse. In the context of deteriorating living standards from economic crisis, environmental degradation may add further pressures on women. These will be examined in Chapters Seven and Eight

5.7 SUMMARY

In summary, the data on current conditions in the Bawku district points to an increasing rate of environmental degradation. There is evidence of increasing irregularity of rainfall totals and distribution, decreasing quantity and quality of the vegetation, increasing loss of top soil, deteriorating quality of the soil, increasing runoff of rain water and decreasing ground water levels and increasing land shortage. These point to a growing stress on the environment of the region. A major cause of this has been attributed to an increasing pressure on the land from a rapidly increasing population (Dickson and Benneh, 1978; Rose Innes, 1977; Cleveland, 1980, Gyasi and Benneh, 1993).

Farmers in the region have tried to adapt the traditional farming systems to environmental stress and to minimise land degradation and maintain or increase the productive capacity of the land, by modifying the traditional shifting cultivation through fallow length reduction, and more fixed farming systems sustained mainly

by manure and other organic waste. Other ecologically based but less popular farming systems such as mixed farming, irrigation and other advanced systems are used (Gyasi and Benneh, 1993). However, as Gyasi and Benneh (op. cit.) note, unless population pressure reduction measures and more widely used soil conservation and other improved farming techniques are extended more widely, land degradation would continue with consequences for rural food supplies and social welfare and stability.

Thus part of the problem of northern underdevelopment may be explained in terms of the constraints arising out of its physical environment which has been deteriorating over the years. However although there are serious environmental problems, it would be futile to seek to explain the lack of development in the region solely with reference to the problems of the harsh savannah environment, which though serious are also found in other parts of West Africa, where there has been greater economic development. Reasons for northern underdevelopment also lie in strategies adopted for development since colonial times which at first failed to identify the fundamental problem of low productivity and later adopted a deliberate policy of using the region as a labour reserve for southern development. Although later development policies have made some attempts at bridging the gap between the south and the north, these were not successful largely due to low political commitment and the allocation of inadequate funds. The current structural adjustment policies being implemented in Ghana, by adding economic pressures to a region already severely disadvantaged by environmental degradation may be widening the

gap between the north and south and therefore between the rich and poor in Ghana.

The next Chapter will examine this issue further.

CHAPTER SIX

6.0 WOMEN AND STRUCTURAL ADJUSTMENT IN GHANA

6.1 INTRODUCTION

Chapter Two reviewed the policies adopted towards “Third World” development over the last four decades. These have varied from the modernisation policies of the 1950’s and 1960’s, to the redistribution with growth strategies of the 1970’s and early 1980’s. From the 1980’s, neo-liberalism became the dominant view of development. Liberalisation and the release of market forces, with a limited role of the state in market forces was seen as the “key to unlocking the future development prospects of developing countries” (Mosley, Harrigan and Toye, 1991:4), especially by international organisations. Policy based lending emerged in the 1980’s as the main tool for reforming the economic policies of many developing countries with lending conditions based on a change in economic policies to those favoured by the World Bank and the International Monetary Fund (IMF). Thus many developing countries including Ghana, were persuaded to adopt structural adjustment programmes (SAP)⁶⁵ in the 1980’s in an effort re-structure their economies. Studies are already showing a differential impact of SAPs at a general level on income groups and on gender. This Chapter examines the structural adjustment policies adopted in Ghana and their gender impact particularly in

⁶⁵ The term is used in this study to refer to both stabilisation and adjustment policies, although as Mearns (1991:5) points out, the IMF has had primary responsibility for stabilisation policies, and the World Bank for structural adjustment.

northern Ghana, a region already marginalised by previous development policies and vulnerable to increasing environmental degradation (Chapter Five).

6.2 THE ECONOMIC CRISIS

After a period of relative progress in the 1960's and 1970's, the 1980's were a decade of economic crises for many developing countries especially in Africa and Latin America. The crises had their main origin in adverse developments in the world economy, mainly from a sharp worsening in both trade and capital accounts, a rise in oil prices, a collapse in world prices of primary (agricultural) commodities which account for 88% of Africa's exports (Gladwin, 1991:2) and a major recession among the industrialised countries in the 1970's and early 1980's. Developing countries trade thus suffered from the combined effects of a slower growth in world trade, deteriorating terms of trade, increased interest rates and increasing restrictions on market access. These were compounded by internal factors such as distorted macro prices in most African countries, a narrow production base, over dependence on subsistence agriculture and excessive State intervention in the economy among others (UNECA, 1989:2-8).

Although most developing countries were affected by the crises, it was countries highly dependent on primary commodities which included most of sub-Saharan Africa, and the major debt borrowers of Latin America which were the worst affected. The result of these pressures from the recession were serious

setbacks to economic progress and massive deterioration in the economic well being of many families in the developing countries. The growth rate of GDP per capita, which averaged 3% per year between 1976 and 1980 for developing countries declined to negative rates of -1.1% per annum during 1981 to 1985. (Cornia et al, 1987: 16). Many indicators of human welfare showed a marked deterioration (UNECA, 1989).

It is within this context of a decade long depression and a huge debt burden that many “Third World” Countries went to the IMF and the World Bank for assistance to structurally adjust their economies. Stabilisation and adjustment programmes were introduced as a condition for receiving aid from the IMF and the World Bank to reduce the basic imbalances in their economies. Between 1980 and 1987, some 37 structural adjustment programmes were negotiated with the World Bank (Mosley et al, 1991). Ghana was one of the countries which underwent severe economic crises and adopted a structural adjustment programme to reverse the decline. This Chapter examines the role of women in the Ghanaian society and assesses the impact of the adjustment policies on women, focusing on the differences between women in the more developed south and the less developed north.

6.3 GHANA'S ECONOMIC CRISIS

A review of Ghana's structural adjustment programme cannot be understood without going back to examine the economic crisis which Ghana underwent. The

economic decline in Ghana began in the late 1960's and continued throughout the 1970's and early 1980's mainly as a result of simultaneous external shocks in the late 1970's and early 1980's, a flawed development strategy since the 1960's and gross economic mismanagement and corruption in the 1970's.

A positive growth rate of 2.1% per annum between 1960 and 1970 was followed by economic stagnation from 1970 to 1980. The growth rate then declined by 20% to -6.1% per annum between 1980 and 1983. The inflation rate increased from 9% per annum in 1970 to 122% in 1983 (Loxley, 1988). Stagnation or decline characterised almost all sectors of the economy during the period, particularly between 1980 and 1983. The most serious problems that faced the economy were declines in production in exports and food. Food self-sufficiency ratios in relation to basic consumption requirements, estimated by UNICEF, were particularly acute in the 1980's, declining from 83% in the 1960's to 71% in the late 1970's and to only 60% in 1982 (Cornia et al, 1987). There was a persistent decline in export volume from the mid 1960's and especially after 1975, so that by 1981, export volume was less than half that of 1975, with a decline in cocoa production being the major cause. The combined effect of falling export volume, deteriorating terms of trade, and declining capital inflows was a very large reduction in Ghana's import capacity which in 1982 was only 36% of the 1974 level.

The crisis was further worsened by prolonged drought, the worst in fifty years, and bush fires in 1982 and 1983 which aggravated the already low production of food crops and created the worst food shortage since Independence. The expulsion

of nearly one million Ghanaians from Nigeria in 1983 put further strain on an already critical food and unemployment situation.

6.4 GENERAL IMPACT OF THE CRISIS

While the macro-economic indicators reveal the depth of the recession, the social impact was just as severe. The fall in government revenue resulted in the inability of government to allocate adequate resources to basic social services. Real expenditure on education and health, for example fell sharply by almost 70% between 1975 and 1982 as shown in Table 6.1, resulting in acute shortage of drugs, equipment, books and teaching materials. Poor conditions of work also led to a mass exodus of health and education personnel. Over half of health personnel, for example, left the country between 1981 and 1984 (Commonwealth Secretariat, 1989).

The economic crisis also resulted in a substantial reduction of real incomes per head. In the urban areas, high rates of inflation in relation to money incomes drastically reduced real incomes especially in the formal sector. At the peak of the drought-induced inflation of food prices in 1983, the minimum wage was estimated to cover only 2.6% of a minimum socially acceptable budget for a family of five, while salaries of middle-level civil servants covered just 5.9% (Loxley, 1988:9). Tabatabai (1988) estimates that wages by 1983 covered only 15% of basic needs for an urban household of average size even where two of its members were employed (Tabatabai, 1988:728). Many employees were forced into the informal

sector to earn secondary income. Rural dwellers were also severely affected, as their incomes declined as a result of a fall in agricultural production and high inflation. In northern Ghana, farmers were badly affected by the prices of the main cash crops of yams and groundnuts which showed the lowest price increases while they were the worst affected by the drought.

TABLE 6.1
INDEX OF HEALTH AND EDUCATION EXPENDITURE
PER CAPITA, 1969 to 1982 (1975/76=100)

YEAR	EDUCATION	HEALTH
1969/70	77.3	71.6
1975/76	100.0	100.0
1978/79	94.4	84.9
1979/80	55.2	47.2
1980/81	35.7	35.8
1982	28.7	22.6

SOURCE: UNICEF, 1988;101.

The result of the economic stagnation was a substantial deterioration in the well being of Ghanaians as shown in Table 6.2. There was an increase in morbidity rates with diseases such as yaws and yellow fever which were virtually eradicated in the 1950's and 1960's re-appearing in the 1970's with major epidemics in northern Ghana. Infant and child mortality rates which had been declining in the mid 1960's and early 1970's rose from about 86 to about 120 deaths per thousand live births in 1983 to 1984 (Table 6.2). There was a worsening of the nutritional status of poor

households particularly of children and pregnant and lactating mothers with 1983 being the worst year and the northern regions having the worst rates (UNICEF, 1988:104).

In short, the very severe deterioration in all sectors resulted in a substantial increase in overall poverty in Ghana. Roughly between 30 to 35% of urban households and 60 to 65% of rural households were living in absolute poverty in the early 1980's.

TABLE 6.2
SELECTED QUALITY OF LIFE INDICATORS GHANA. 1960 TO MID 1980'S

INDICATOR	1960	LATE 1970'S	1980'S
Average Life Expectancy	45	55	53
Infant Mortality Rate (Per 1,000)	132	86	107-120
Child Death Rate (Per 1,000)	27	15	25-30
Average Calorie Availability as a % of Requirements	92	88	68
Primary Education Enrolment Ratio	38	69	-
Public Health Facility Visits Per Person Per Year	-	0.7	0.4
% of Population Below Absolute Poverty Line			
Rural	-	60-65	65-75
Urban	-	30-35	45-50

SOURCE: UNICEF, 1988:103

6.4.1 DIFFERENTIAL IMPACT OF THE CRISIS

While almost all Ghanaians were adversely affected by the crisis, the groups most acutely hit were low income households and small scale rural farmers. Among the rural poor, the most severely affected were peasant farmers in northern Ghana (Cornia et al, 1987; Songsore, 1992). This is due to the existence even before the crises, of regional disparities in resource endowments and imbalances in development between the north and the south, with the north standing out as the poorest, both in rural and urban areas, on almost every available development indicator as described in Chapter Three. The physical quality of life index further portrays the particularly depressed situation in the northern sector of the country. (Table 6.3).

TABLE 6.3
GHANA: PHYSICAL QUALITY OF LIFE INDEX,
1970 (% SCORES)

REGION	URBAN	RURAL
ALL REGIONS	58.8	37.3
Southern Ghana		
Greater Accra	76.6	52.4
Eastern	53.2	46.8
Central	50.5	36.3
Western	62.6	40.8
Volta	53.6	49.3
Ashanti	62.0	45.2
Brong-Ahafo	50.1	35.2
Northern Ghana		
Northern	42.7	13.0
Upper East	45.3	13.9

SOURCE: UNICEF, GHANA, 1988:107

Regional differences are also reflected in agricultural production. The forest belt in the south produces the main export crops of cocoa, coffee, oil palm and staple crops, such as maize, while the dry savannah of the north produces mainly non-Tradeable crops such as millet, sorghum, rice, and groundnuts which are largely undervalued and under priced in the national market. In 1979, northern Ghana which covers over 40% of the total area of Ghana, produced only 14% of the tonnage of agricultural produce (UNICEF, 1988:108). Admittedly, the very underdevelopment of the north, with a largely subsistence economy and little evidence of a modern sector,⁶⁶ may have provided a certain degree of protection against the overall decline in the economy and thus may have narrowed the gap in the deplored disparities between the north and the south. But this protection is offset by the northern regions vulnerability to increasing environmental degradation (Chapter Five). Compared to the rest of the country, the north experiences shortages of food with greater intensity because of the single rainfall season and the frequency of drought. The situation is further worsened by the fact that basic cash crops⁶⁷ in the region are also food crops and many rural households sell off food crops to satisfy non-food needs, leading to a long pre-harvest "hungry season". This has resulted in the low nutritional status of both adults and children in the region. In a study of household responses to food shortages in north-eastern Ghana, Devereux

⁶⁶The three northern regions contained relatively few wage earners, only 5% of the national total compared with 20% of the population (Rimmer, 1992).

⁶⁷These are mainly rice, groundnuts, beans, maize and millet.

(1994) found that most households responded by selling off agricultural crops, assets, migration and food rationing in descending order of importance.

6.5 THE STRUCTURAL ADJUSTMENT PROGRAMME

The human costs of the crisis outlined above were therefore very real and large. In recognition of these costs, the government of the PNDC⁶⁸ decided in 1983 that the only way to break out of the decline was to secure external resources to “restore imports to revitalise capacity, rehabilitate infrastructure and regain productive advance” (Green, 1988:9). A comprehensive package of economic reforms was therefore adopted with assistance from the International Monetary Fund and the World Bank aimed at reversing the serious decline and stagnation in the economy. The structural adjustment programme (SAP)⁶⁹ launched in 1983 was initially in two phases. The first phase of the programme, 1984 to 1986, concentrated on halting the economic decline in industrial production and commodity exports, while the second phase 1987 to 1989 focused on continuing the emphasis on growth and balance of payment soundness, while also raising

⁶⁸The PNDC Government headed by Flight Lieutenant Rawlings took over power from a civilian Government by a military coup d’etat in December, 1981.

⁶⁹The structural adjustment programme is also sometimes referred to as the economic recovery programme (ERP) There are several definitions of SAP, but Berg (1981) defines it as “....changing the structure of production so that the adjusting economy produces more tradeables, import substitutes and exports.....restoring equilibrium to the balance of payment deficits... The concept is usually more broadly defined as the adoption of measures designed to make an economy more productive, more flexible and more dynamic by using available resources more efficiently and by generating new resources. The importance of domestic policy deficiencies is more explicitly recognised.” (World Bank, 1981).

savings and investment rates and upgrading the quality of management in the public sector.⁷⁰ The programme had as its guiding principle "the realignment of the price and incentive system in the economy in favour of the productive, particularly the export sectors" (Rothchild, 1991:8). Its ultimate goal was the creation of "a growth-oriented, competitive, efficient and integrated economy" (Government of Ghana, 1987: pi).

The structural adjustment programme adopted in Ghana was a fairly standard IMF and World Bank package and consisted of the following measures.

6.5.1 DEMAND RESTRAINT MEASURES

These consisted of policies aimed at reducing demand in the economy, with the objective of reducing expenditure on imports and releasing resources for exports. Emphasis was also placed on reducing subsidies partly as a demand restraint measure. In Ghana this was achieved through cuts in government expenditure, formal sector employment and real wages and price decontrol through removal or reduction of subsidies.

To reduce government expenditure, real expenditure on services such as health and education were reduced such that in 1986, the Ministry of Health was allocated only 18% of its requested sum for drug procurement (Kraus, 1991:143). Subsidies on almost all items such as food, petroleum products and agricultural inputs were removed. A scheme of user charges or "cost recovery" was introduced in the areas

⁷⁰A third phase of the programme has since been launched, thus continuing the programme into the 1990's.

of health, education and basic amenities. Kraus reports that in 1985, "the basic fee for an adult to consult with a doctor was from two-thirds to a full day's minimum wage" (Kraus, 1991: 142). In education, book-user fees were introduced at the primary level and the costs of meals and boarding in secondary schools and universities were to be borne by parents and guardians of students. Rates for basic amenities were also raised. In 1986, rates for water were raised by between 150% and 1,150%, for electricity by 47% to 80%, telecommunications by 70 to 300% and postal rates by 600% (Loxley, 1988:15), to cite a few examples. Even in the rural areas, fees were charged for the use of bore-holes. In the Upper East Region, an annual fee of 19,000 cedis per bore-hole was imposed. The removal of subsidies and the introduction/increase in user fees while raising the cost of services, also shifted much of the cost from government to the individual. In terms of Ghanaian incomes these costs were very large.

The PNDC Government was also under strong pressure to reduce the size of the generally over staffed civil service which was attributed to be one of the causes of low productivity in the public services. The government therefore embarked on a massive retrenchment of workers. In the civil service alone, 45,000 workers were laid off between 1986 and 1988 (Jonah, 1989:142). Another 34,000 workers representing 39% of the cocoa services division and 5,000 non teaching staff of the Ghana Education Service were also laid off by 1987 (Jonah, 1989: 143). Another 5% of workers in the Public Service were to be laid off or "re-deployed" in each of the three years 1990 to 1993 (Kraus, 1991:140). The group laid off consisted

mainly of unskilled and low level workers in the clerical and secretarial grades. A freeze was placed on the hiring of new staff except for that of professionals. This resulted in an increase in unemployment levels.

Within the constraints imposed by the need to contain inflation, expenditures and the mopping up of resources for development, the Government tried to limit wage increases. The wage policy centred on the need to balance the raising of wages against the control of inflation and public expenditure. Wage increases allowed were skewed in favour of higher grade employees to provide incentives for expertise, a major shift from the previous policy of reducing the gap between high and low level workers. By the end of the first phase of the SAP, real wages were 50% below their 1975 levels (Jonah, 1989 :144).

As a measure of demand restraint, the system of price control which had hitherto existed on most goods was abolished, and for the few commodities on which they were retained, full pass-through of cost increases was permitted. Subsidies on food and agricultural inputs were removed and the producer price of food crops raised for the farmer, mainly through the impact of devaluation on domestic prices. This led to the shooting up of food prices, and with the declining real value of wages, resulted in a drop in purchasing power of many Ghanaians.

6.5.2 SWITCHING POLICIES

A key objective of the adjustment programme in Ghana was to switch resources from the production of goods and services which are not internationally tradeable (non-tradeables) to the tradeable sector by changing incentives in order to promote

exports. The main policy instruments were currency devaluation and to some extent wage control. In a bid to promote exports, one of the first steps taken under SAP were massive devaluations of the local currency, the cedi. This was to enable exports to receive a higher real cedi value for their production and export and to reduce demand for imports. From the 1982 level of 2.75 cedis to the dollar, the cedi depreciated steadily reaching 171 cedis per dollar in 1987 and 280 cedis by 1989. This was a 486% devaluation between 1984 and 1987, and 72% between 1987 and 1989 (Loxley, 1988:15).⁷¹ In 1986, a system of market determined exchange rates was established, with the introduction of weekly auctions and foreign exchange bureaux. The producer price of cocoa, the country's main export crop, was also increased mainly due to the effect of the devaluations. Between 1983 and 1987, the nominal producer price of cocoa was increased sevenfold (Loxley, 1988:14).

The devaluation did help boost exports with a substantial increase in exports initially of 29% in 1984, which then dropped gradually to 4.8% in 1989 because of falling cocoa prices on the international market (Kraus, 1991:138).

Attempts were also made to diversify the economy away from cocoa, which hitherto had provided about 60% of Ghana's foreign exchange earnings. The Ghana Export Promotion Council was re-invigorated to promote non-traditional exports. Although the amount and value of non-traditional exports is still not very

⁷¹Since then, the cedi has depreciated even further to about 950 cedis to the dollar as at February, 1994.

significant, there have been impressive increases in value particularly since 1986 (Anyemedu, 1991:215).⁷²

Although the devaluations succeeded in restoring the international viability of the cedi and in boosting exports, and enabled farmers to receive a higher producer price for cocoa, within Ghana, it led to drastic price increases and a decline in value of wages leading to a drop in purchasing power of most Ghanaians.

6.5.3 LONG TERM SUPPLY POLICIES

The main aim of this measure was to raise the long term efficiency of the economy. The main policy instruments were the rationalisation of state owned enterprises (SOE), under which SOEs operating at a loss were liquidated or privatised. By 1989, the divestiture of SOEs was a key component of the post stabilisation phase of the ERP (Gyimah-Boadi, 1991:200). Thirty SOEs were selected for sale or divestiture. There was also a massive retrenchment in some SOEs in preparation for sale. This further added to unemployment within the public sector.

6.6 IMPACT OF THE STRUCTURAL ADJUSTMENT PROGRAMME

As the recovery programme was designed primarily to deal with economic variables and targets⁷³, the SAP has been seen by its Planners as having achieved a

⁷² Non-traditional exports increased from 1% of total exports in 1984 to 5% in 1988 and the amount earned increased from \$6 million to \$42 million (Anyemedu, 1991:215).

huge success⁷⁴. The SAP reversed the decline of more than fourteen years and recovered some of the lost ground of the last decade. The negative GDP growth rate of the late 1970's and early 1980's became a positive rate of 6% during the 1984 to 1988 period (Rothchild, 1991:9). The export sector which nearly collapsed before the ERP was revived, and some progress made towards diversifying exports away from the long term reliance on cocoa. Railways and ports and the transport sector have been rehabilitated and an estimated increase in agricultural production of 3.6%, and in the industrial sector of 10.3% in 1988 has been achieved. The inflation rate was curbed, but not tamed. Inflation fell by over 90% from 122% to just 10% per annum between 1983 and 1985,⁷⁵ though it has since then climbed back to about 40% per annum by 1988 (Loxley, 1988:32). This is an improvement on the late 1970's but is still worse than the period 1973 to 1977. The SAP thus appears to have stabilised the economy and a growth rate of between 5 to 6% per annum was recorded between 1984 and 1990.

However, as Kraus (1991) notes, comparing Ghana's growth during 1984 to 1990 with 1982/83 baselines is not very useful or honest since Ghana's economy in

⁷³As the World Bank has made clear, the fundamental purpose of SAP in Ghana, was to improve the levels of output, export, foreign finance and the balance of payments, rather than directly to influence distributional objectives.

⁷⁴The World Bank and the IMF have persistently cited Ghana as an example of how SAPs can cure ailing economies and place them on a path to sustained growth. Critics (Green, 1988:) have argued that for the IMF and the World Bank, Ghana matters beyond the finance they have sunk in it from 1983. If the longest running (arguably successful) stabilisation/adjustment programme fails, then their credibility in Sub-Saharan Africa is likely to fall with it.

⁷⁵Some critics point out that the claim for the control of inflation has been exaggerated by World Bank Officials. Although a fall did occur, the peak of the inflation rate is attributed to the peak of the drought in 1983 and the trough of the inflation attributed to its departure. The average inflation rate for the period 1983 to 1988 was just over 40% (Toye, 1991:169).

1982/1983 was devastated by the worst droughts for fifty years, by bush fires that destroyed crops, and post war record low cocoa prices. In comparison with 1970 production levels, Ghana's economic recovery has been slow, with output in cocoa, timber, mining, industry, and consumption and access to social services continuing to be relatively low. It is also important to note that although adjustment policies played a part in the economic recovery, it would be wrong to conclude that they were the only factors responsible for the observed economic growth. As Toye (1991) points out, the favourable rains in 1984 and 1985 after the severe two years of drought and improved terms of trade⁷⁶, and the easing of labour shortages by the Ghanaians expelled from Nigeria, played an important role in the observed growth. Thus what happened in Ghana is that policy reforms have been helped by a rising tide of non policy developments.⁷⁷ Also despite forecasts in the mid 1980's of declining cocoa prices as a result of increasing world cocoa supplies, cocoa was pushed as the key export sector. The sharp price declines since 1986 have meant that increasing cocoa exports are not making the expected contribution to Ghana's exports.

Based on the economic indicators outlined above, in comparison to 1982/1983, the SAP has achieved a remarkable turnaround in Ghana's economy. However what its planners did not consider until recently, was the human cost at which these

⁷⁶Ghana's terms of trade improved by about 37% between 1984 to 1986. Cocoa prices rose and the price of imported oil fell. No less than 60% of the increased export proceeds of 1984 to 1986 can be attributed to the shift in the terms of trade.

⁷⁷As will be discussed in Section 6.8, distinguishing the effects of SAP from other issues, such as improving or deteriorating terms of trade and changes in weather conditions make the evaluation of SAPs very difficult.

achievements have been made. Particularly lacking was adequate consideration of the distributional effects of the structural adjustment programme. Some critics have argued that despite its heavy focus on agriculture and efforts to increase producer incentives for farmers, SAP reforms have not only failed to eliminate urban bias and re-distribute incomes from the urban to the rural sectors, but have in fact worsened agricultural production and incomes (Gladwin, 1991). By being too macro-economic in scope, they have ignored the reality of life at the micro-economic or village level, where the real producers, who are supposed to gain from urban-rural re-distribution, are. Two of the groups most severely affected by SAP have been farmers in northern Ghana and women food crop farmers and retailers. Although not all groups have lost out, it is important to note that those most severely affected are those with relatively poor ability to withstand such losses.

Secondly, it has also been pointed out that the economic gains outlined above have made no significant difference in the living standards of most Ghanaians. This is not because of the depth of Ghana's economic depression from the mid 1970's to 1983, but because the architects have been relatively indifferent to the core sources of growth and well being in Ghana (Green, 1990). Although the key institutions fostering human development, education and health have been re-vitalised, this has been done in ways that are inequitable to the poor majority of Ghanaians. Urban unemployment and inequality have also increased and are highly visible. Assuming that development is about, for and by people, and that imbalances between basic needs and real incomes and access to services for the poor matter, then SAPs

should reduce rather than increase poverty, unemployment and inequality. As Green (1988) notes, by the end of the 1980's the main focus of the SAP was still on macro economic restoration while people continued to decay.

It was UNICEF's (1987) study which focused attention on the human costs of adjustment and the distributional effects particularly on vulnerable groups such as poor households, rural women and children. It pleaded for an "adjustment with a human face" so that the costs to poor households are reduced and their capacity for survival during economic crises is enhanced. (Cornia et al, 1987).

6.6.1 IMPACT OF SAP ON NORTHERN GHANA

In spite of the "apparent" economic successes of the SAP, northern Ghana has benefited little from these successes. This is mainly because the SAP, particularly in the first phase, 1983 to 1988, was aimed primarily at the export sector in order to generate foreign exchange. Thus a high percentage of the external resources for the SAP have been directed at the mining sector and the timber and cocoa industries, mainly located in the south. In anticipation of increased activity in these sectors, infrastructural support such as rail and road rehabilitation has been undertaken in the south. In contrast, northern Ghana, which neither produces any major export crops nor has any industrial establishments, has had the least external resources directed at it. As one analyst notes

"almost all the loans contracted are going into the export sector with almost nothing going into the sedentary sector. Thus regions that have no export base and very few linkages with the enclave export economy are unlikely to benefit from the export boom" (Salia, 1987:6).

Hence the impact of the SAP has been a reinforcement of existing contradictions between northern and southern Ghana, with a further peripheralization of the north.

If the rural poor have hardly benefited from resource flows into the region's economic activities, they have also been the worst hit in terms of re-structuring of inter-regional terms of trade with the export-oriented south. Available studies indicate that the rural-urban terms of trade have shifted in favour of export crop producers since 1986 as a result of the producer price increases in export crops and devaluations (See Table 6.6). Food crop producers in Northern Ghana, whose major staples have received very little price support and attention under SAP, are especially affected because the major staples of sorghum, millet and groundnuts are not covered by minimum guaranteed prices as other staples are. In the social sector, evidence suggests that the added burden of SAPs are worsening the already low quality of life (UNICEF, 1988). This is discussed further in subsequent sections.

6.7 GENDER IMPACT OF THE STRUCTURAL ADJUSTMENT PROGRAMME

6.7.1 CONCEPTUAL ISSUES

Economic policies such as SAPs are presented in a language that appears to be, or is assumed to be gender neutral. The focus of attention is on economic variables with success or failure measured purely in monetary terms. The impact of resource

allocation and re-allocation, one of the main aims of SAPs, is assumed to be distributed equally among all segments of the population.

Elson (1991, 1992) notes that this apparent gender neutrality hides a deeper gender bias against women which is implicit in the conceptual framework underlying SAP programmes. These gender biases are identified as bias concerning the sexual division of labour, male bias which excludes or ignores the unpaid domestic work necessary for producing and maintaining human resources, and male bias concerning the household which is taken as the basic unit from which the macro-economy is made up (Elson, 1991b, 1992b). She argues that these conceptual biases have important practical consequences. For example women's reproductive work, which is largely unpaid, is assumed to be carried out by women regardless of the way in which resources are re-allocated during adjustment programmes. Women's unpaid labour is assumed to be "unproblematically available and infinitely elastic, able to stretch to make up the shortfalls in other resources needed for survival during adjustment." (Elson, 1992b:49). Although some women are able to do this, it is often done at a cost to their health and welfare. Thus what planners might see as "higher productivity" or "increased efficiency" is in fact a shift of costs from the paid to the unpaid economy, often at a cost to the health and nutrition of women. Elson thus argues that it is important to consider the double burden of women in the formulation of structural adjustment policies, otherwise adjustment may add to women's responsibilities without adding the resources needed for these responsibilities.

A second bias against women under SAPs is that although women carry a triple role of unpaid reproductive and community managing roles, as well as paid productive work, they are often unable to compete with men on equal terms due to gender inequalities in access to resources. Access to markets has benefits for women, but the benefits are limited because reproductive work is structured by unequal gender relations (Gladwin, 1991). SAP policies thus, not only undermine previous gains, but also shape, through an intensification of class and gender contradiction, the ability of people to actualise their own survival (Green, 1988; Mackenzie, 1992).

6.7.2 ROLE OF WOMEN IN GHANA

As women constitute half of Ghana's population and as they play an important role in the rural economy as food producers, in marketing and other sectors of the economy, and as reproducers and maintainers of human resources, it is important to understand and consider the impact of SAP on women. The way in which structural adjustment affects women depends on the role they play in society (Commonwealth Secretariat, 1989; Stewart, 1992). While both men and women perform a number of functions, women are different in having many demands on their time and capacities in most societies. This section considers the role of women in Ghanaian society and how structural adjustment policies affect women in the light of these roles.

Table 6.4, using data from the Ghana living standards survey of 1987 to 1988, shows the importance of agriculture as a source of income for low income rural smallholders in the savannah and forest zones of Ghana. It shows that although the percentage of household income from agriculture is not much different in the forest and savannah zones, the value of household consumption exceeds that of agricultural sales as a proportion of agricultural income particularly in the savannah area (Table 6.4). This indicates a relatively non-commercialised agricultural sector in the savannah area compared to the forest region.

TABLE 6.4
SOURCES OF TOTAL INCOME OF LOW-INCOME RURAL SMALL
HOLDERS IN GHANA, 1987-88.(Percentage of total income)

TYPE OF INCOME	PER CAPITA TOTAL INCOME	
	FOREST ZONE	SAVANNAH ZONE
AGRICULTURAL INCOME	57	68
From Home Consumption	37	54
From Agricultural Sales	20	14
NON-AGRICULTURAL EARNED INCOME*	40	31
NON EARNED INCOME**	3	1

SOURCE: SAHN, D. AND SARRIS, A (1991):264

*: Includes wages, salaries, and own account earnings.

**: Includes income from transfers, remittances, and other non-earned sources.

Of more relevance however, is the difference between tradeable and non-tradeable products and export crops⁷⁸ (Table 6.5). Agricultural income is mainly from non-traded foods in both zones, but the amount consumed by the household is higher in the savannah, with only a small percentage sold. Export crops are almost non-existent in the savannah region, again pointing to a non-commercialised agriculture (Table 6.5).

TABLE 6.5
SOURCES OF AGRICULTURAL INCOME OF LOW-INCOME RURAL
SMALL HOLDERS IN GHANA (FOREST AND SAVANNAH ZONES)

SOURCE OF AGRICULTURAL INCOME	PERCENT OF AGRICULTURAL INCOME	
	FOREST ZONE	SAVANNAH ZONE
TRADED FOOD*	18	26
Consumed By Household	9	16
sold	9	10
NON TRADED FOOD**	70	73
Consumed By Household	57	63
Sold	13	10
EXPORT CROPS***	12	1

SOURCE: Sahn, E and Sarris, A, 1991:66

* Rice, Maize, Groundnuts, and other Traded Food

** Millet, Cassava, Sweet Potato, Yams, and other non-traded Food

*** Cocoa, Tobacco, Cotton, Cola nuts, Rubber, Sugar and other Exportables.

The two significant points to note from Tables 6.4 and 6.5 are that a large proportion of household income in the savannah is obtained from a non-commercialised agricultural sector and that sources of this agricultural income are mainly from non-traded food, which is mostly consumed by the household. This

⁷⁸Sahn and Sarris (1991) give examples of tradeable foods as rice, maize, groundnuts, and non-tradeables as millet, root crops, and export crops as cocoa, tobacco, cotton and other exportables. Thus food crops sold internally are also classified as tradeables in Table 6.5.

implies that export or tradeable crops play an insignificant role as a source of household income in the savannah. As one of the main aims of SAP is to switch from non-tradeables to tradeables, this implies that many households in the savannah are left out.

Thus in examining the impact of structural adjustment policies on women it is important to examine which sectors of the economy women are mainly involved in, and also to examine whether women are net consumers or producers of traded goods whose prices are assumed to increase commensurate with devaluation and removal of price controls (Sahn and Sarris, 1991; Gladwin, 1991). Despite the problems associated with the measurement of women's work, (Beneria, 1982), the contribution of Ghanaian women to the national economy through productive activities in the formal and informal sector has been widely acknowledged. (Date-Baah, 1981, Oppong, 1984; Robertson, 1984). In agriculture, which forms the backbone of Ghana's economy, women made up 47% of the labour force in 1984 (Ghana, 1987:57), cultivating mainly subsistence non-tradeable food crops and vegetables. In 1970, 70.3% of the female agricultural labour force was involved in the production of staple foodstuffs and vegetables (Ewusi, 1987). With more than 70% of agricultural income for low income farmers being obtained from food crops, this shows the important contribution that women make towards household income. Even in the southern forest zone where the export crops of cocoa, coffee and kola-nuts are grown, women do not form a significant proportion of the export

crop labour force, though they may be allowed to grow subsistence crops among cocoa plantations (Bukh, 1979).

A large proportion of women are also in trade making up 85% of the total labour force in trade. The importance of Ghanaian female traders and the vital link they provide between producers and consumers has been well documented (Robertson, 1984; Clark and Manuh, 1991). Many of them are in retail trade, accounting for 90% of retail and only 11% of wholesale trade in 1984 (Ghana, 1987:62).

Women also engage in the informal sector as a supplementary activity to their primary income generating activity. A study by Oppong and Abu (1987) of sixty educated women in waged employment in Accra and Tamale⁷⁹ found that nearly a third of workers and half of those in government employment had current or former secondary income generating activities (1987:63).

The important point to note here is that many of these activities produce mainly goods and services which are not internationally tradeable and therefore are unlikely to benefit from the resource allocation and re-allocation in SAPs.

⁷⁹Tamale is the capital city of the northern region.

6.8 METHODOLOGICAL PROBLEMS OF EVALUATING STRUCTURAL ADJUSTMENT POLICIES

In contrast with the relatively sophisticated methods which exist for the appraisal of project and programme evaluations, there is no readily available methodology which can be applied to the evaluation of SAPs. Mosley et al (1991), have identified three methods for the evaluation of SAPs. The first, the “plan versus target” method measures what was expected to be achieved against what actually did happen. It is however criticised as being a “superficially attractive yardstick” because the targets are chosen by the Planners and are usually simply guesses which cannot predict extraneous events bearing on the economic outcomes with any reliability. Thus performance during the plan period may fall short of or exceed targeted performance due to reasons which are in no way connected to adjustment policies (Mosley, 1987; Mosley et al, 1991:184).

A second method of evaluating SAPs is the “with versus without” method which contrasts what actually happened during SAPs with what is believed would have happened in the absence of SAPs. Mosley et al (1991) argue that this approach is the best of the three evaluation methods as it attempts to eliminate the influence of extraneous variables by subjecting both treatment (countries with SAPs) and control (countries without SAPs) groups to the same influences. The difficulty with this approach however is that the control group consists not of a tangible thing, but a hypothetical counterfactual situation which would have been expected to materialise in the absence of SAPs. Thus the control group is not

directly observable and can never be known with any certainty. A more important problem particularly in developing countries, is that it is difficult to obtain data for this type of analysis.

The third method, the “before versus after” approach, which I adopt in this study, compares performance before adjustment with performance after adjustment. It is relatively simpler to evaluate and can be useful to show what actually happened during adjustment in programme countries. However as Goldstein, (1986:3) points out it may not be useful in showing why it happened. This is because performance during and after adjustment may be due to extraneous influences such as changing terms of trade, weather conditions or war and not necessarily due only to adjustment. This situation is worse where adjustment follows immediately after economic crisis and severe drought as in Ghana, which could have an impact on the variables chosen as criteria for evaluation. It is especially important in northern Ghana, the study area, where environmental degradation further worsens the situation. In spite of these disadvantages, I adopt this approach while acknowledging its defects. In this study, I do not attempt to distinguish between the effects of economic crisis and the adjustment policies themselves, but I attempt to draw attention to the impact of environmental changes where necessary.

What ever the approach adopted, the evaluation of SAPs is beset with a number of methodological problems. The fundamental problem in evaluating adjustment programmes is not knowing what would have happened in their absence. This problem is common to many project and programme evaluations. However, the

evaluations of adjustment policies is more complex due to a number of factors some of which are outlined below.

The first is that it is difficult to determine what was promised under adjustment and what is actually delivered, or what Mosley et al (1991) call “slippage” on structural adjustment loan (SAL) conditions. It is also often difficult to distinguish between the economic crisis which preceded adjustment, the adjustment policies themselves, and the massive inflow of foreign resources that follow their adoption. External factors such as war, climate, or changing terms of trade are difficult to control for as discussed above. The combination and sequence of specific events is complex and data for the analysis of long time series is difficult to obtain as the policies have also not been in effect for long.

A second main methodological problem is determining what really happened, which is also often controversial. Two problems with this approach are that conclusions are often sensitive to the two time periods chosen for comparison, and the pre-adjustment time trend of indicators chosen in the comparison is usually not taken into account.

As a result of these methodological problems, evaluations of adjustment on sectors of the population are sometimes inconclusive and inferential. In spite of these problems, there is the need to evaluate the policies to make them more responsive to the needs of those for whom they were formulated. It is therefore important that these methodological problems are kept in mind in the following sections where I examine the impact of SAP on women in Ghana and in Chapter

Eight where I examine its impact on women in Zorse using primary data from two surveys in 1984 and 1991.

6.9 IMPACT OF STRUCTURAL ADJUSTMENT ON WOMEN IN GHANA

As previously stated, the way in which structural adjustment affects women depends on the role they play in society. In Ghana, the emphasis on the promotion of exports, and the expenditure switching policies it necessitates has had a different impact on various sectors of the economy and on women in their variety of productive and reproductive roles.

6.9.1 IMPACT ON WOMEN AS PRODUCERS

As producers, a majority of rural women have been adversely affected by the economic reforms. In theory SAP policies should benefit women producers because of the emphasis placed on reviving production, eliminating an urban bias and aligning farm-gate prices with world prices. But as Gladwin (1991) points out, this depends on how the policy is implemented in practice, what types of agriculture are supported by SAPs, whether agricultural price increases cover changes in input costs when subsidies are removed and whether rural women are in fact selling or buying food crops to feed their families (Gladwin, 1991: 5). By concentrating on the promotion of exports in Ghana, SAP ignored domestic agriculture as a potentially powerful engine of growth. The overwhelming shift in resources to

cocoa rehabilitation and other export sectors⁸⁰ denied to domestic agriculture, especially food production, resources it might otherwise have obtained.⁸¹ It has been pointed out that perhaps the most obvious weakness of SAP in Ghana is its neglect of non-cocoa agriculture. The IMF and World Bank appear to have relied on “market forces” to reverse the fall in per capita production of food items. Food crops contribute much more to Ghana's GDP than does cocoa, but cocoa received 9% of capital expenditures and about 67% of recurrent agricultural expenditures in the late 1980's (Kraus, 1991:131). This shift of resources, coupled with devaluation and removal of subsidies on agricultural inputs had the effect of progressively turning the terms of trade against food producers in relation to non food consumer items and cocoa production especially from 1983 onwards as shown in Table 6.6. This created a relative price disincentive to produce food. While a simplistic picture of female responsibility for food crop production and male responsibility for cocoa production may not be drawn for Ghana (Mikell, 1989; Whitehead, 1991), women cocoa farmers are less likely to benefit from increases in cocoa prices because of the small sizes of their farms and the responsibility of wives to provide labour on male cocoa farms. Also of significance is the fact that 70% of the female agricultural labour force in Ghana is in food crop production, this means that their position has been worsened by the negative terms of trade for food crops. In northern Ghana, the percentage of women in the non-tradeable sector is even

⁸⁰Some of these were timber, mining and road rehabilitation.

⁸¹For example, the producer price of cocoa was increased by more than seven times in Ghana, between 1983 and 1987 as part of a major World Bank supported programme to rehabilitate the cocoa industry.

higher and this makes their position even worse. Although there have been increases in the producer prices of food crops as well, though not to the same level as export crops, the impact is eroded by higher prices for consumer goods and production inputs.

TABLE 6.6
RELATIVE PRICES OF FOOD, GHANA, 1977-1987 (1977=100)

	1977	1980	1981	1982	1983	1984	1985	1986	1987
Terms of Trade	100	96	91	112	138	86	60	57	55
Food/Non-Food									
Consumer Items									
Relative Prices	100	131	92	125	184	136	64	51	42
of Food/Cocoa									
Production									

SOURCE: LOXLEY, 1988:29

Even if women want to switch to the tradeable sector, social stratification at the village level and inequality in gender relations at the household and inequalities in access to the basic inputs of production and technological advice often make it difficult for them to take advantage of or benefit from the supposedly gender-neutral effects of SAPs.

The policy of retrenchment of thousands from the public sector and the holding down of wage increases resulted in an increase in unemployment particularly in the formal sector and a decline in real wages. Due to the impact of increased costs from

the devaluation of the cedi, there was a fall of 40% in the real incomes of urban wage earners between 1982 and 1985. Although reduced employment and real wages had an immediate impact on the formal sector, the informal sector suffered "knock-on" effects brought about by the influx of several re-deployees and their spouses trying to make ends meet. With a majority of women being employed in the informal sector, this influx is bound to affect their earnings. Female traders in Kumasi⁸² interviewed after the introduction of the SAP, reported increased competition in the markets at the same time as a decline in purchasing power, causing average sales to drop (Clark and Manuh, 1991). Between 1983 and 1987, there was a huge difference between the rise in wholesale prices and the rise in retail prices which has resulted in a reduction in profit margins for retail traders. With 90% of women traders being in the retail sector, this means that they are worse affected. Even in the formal sector, the retrenchment exercise tended to affect women more than men. As spelt out in the guidelines for staff reduction, those to be re-deployed were "Labourers, Cleaners, Charwomen, Drivers, Stewards, Cooks, Porters, Sweepers, Messengers, security Personnel and analogous grades " (Jonah, 1989:144). A high proportion of women employed in the formal sector are employed in these lower grades.

Reduced employment and real wages on the other hand also resulted in increasing female participation rates mostly in the informal sector, as women tried to sustain or supplement household incomes. No figures are available as yet, but the large number of women and children who have moved into petty trading, in

⁸²Kumasi is the second largest city in Ghana.

particular, provides some evidence. Increased female participation in the informal sector therefore may moderate the loss in household income, but may lead to increased working hours for women. Chapter Seven will examine this feature in Zorse.

Women have not been affected much by credit reform as they often lack the collateral to borrow from the formal sector.

6.9.2 WOMEN AS MOTHERS AND HOUSEHOLD MANAGERS

As mothers and household managers, women have prime responsibility for most informal care, education, feeding and for securing the basic needs of the family. Changes affecting their ability to carry out this role were brought about by some of the adjustment policies.

The structural adjustment policies involving the abolition of food subsidies, price decontrol, raising producer prices of food, devaluation and user fee increases, resulted in an increase in relative food prices. Food price indices rose significantly faster than the overall consumer price index in the middle and late eighties. Rising food prices, combined with declining earnings, resulted in a sharp fall in real household incomes. In 1982, a gallon of kerosene which is used for cooking and lighting mainly in low income rural and urban households, cost 42% of a minimum daily wage. By 1985, as a result of the removal of subsidies, it was 79% of the minimum daily wage (Kraus, 1991:146). The costs of many other essential food items were similarly affected. These changes in prices led to a reduction in real incomes especially for poor households, often to below minimum subsistence

levels. In their roles as mothers and household managers, the reduction in household incomes meant that women had to spend more time on organising household consumption and on food preparation. Decreasing household incomes, especially for poor families has also been found to have an impact on the nutritional status of children and of pregnant and lactating mothers (Cornia et al, 1987). Evidence of rising malnutrition among children in 23 countries including Ghana, has been associated with falling real incomes among poor households. In Ghana, pre school malnutrition increased by 50% between 1980 and 1984 and the estimated food availability as a percentage of requirements declined from 88% in the 1970's to 68% in the 1980's (UNICEF, 1988:25).

As a result of cuts in government expenditure on services, the introduction of or increase in user charges for services, and the higher food prices of the adjustment policies, the provision of health and educational facilities has deteriorated. With falling real salaries and scarcity of equipment resulting from cuts in expenditure on health, many doctors left government service, so that the number of doctors in government hospitals fell from 1,700 in 1982 to 665 in 1987. The introduction of user fees in hospitals led to a drop in hospital attendance. The Korle-Bu hospital, Ghana's biggest hospital, for example, experienced a drop of 25% in hospital attendance and a 50% drop in attendance at the more heavily used polyclinic (Kraus, 1991:142).

Poor households, particularly in northern Ghana, were hardest hit by these cuts. A study in the Upper West Region, revealed a drastic drop of 60% in attendance at

child and maternal welfare clinics, as a result of the withdrawal of supplementary feeding and the introduction of higher user charges (Songsore and Denkabe, 1988). The same situation was observed for general medical care in the region, with the poor either resorting to traditional medical care or delaying going to hospital until too late.

The cuts in government expenditure and increased user fees have also directly increased morbidity and mortality rates. The introduction of user fees of nineteen thousand cedis per annum for the use of bore-holes in northern Ghana, led to many rural communities abandoning their use and returning to drinking pond water, resulting in major outbreaks of guinea-worm infection all over northern Ghana (Songsore and Denkabe, 1988). This has a negative implication for agricultural activity and economic output. Infant and child mortality which had shown a reversing trend in the 1970's increased in the 1980's as a result of the declining health status of children (UNICEF, 1988).

In education, the introduction of book user fees in primary schools and housing and feeding charges in secondary schools and universities increased the cost of education at all levels. Though this resulted in the improved availability of books and equipment especially in primary schools, it meant that many low income families could not afford to send their children to school. The Government has argued that the fees at primary school level are modest, but they amounted to a day's minimum wage in 1990. The result was that the drop out rates at primary and secondary levels increased. Primary school enrolment declined by 4% between

1982 and 1989. In northern Ghana, where low enrolment and high drop-out rates already existed before adjustment, the motivation to send children to school, especially among peasant farmers, is further reduced by the high unemployment levels among young educated people.

The result of the increased cost of health care, education and basic services is that many people have turned to the family for the provision of these services, resulting in women having to spend more time on the care and maintenance of their families.

In summary the removal of the subsidies and the introduction or increase of user fees while raising the cost of social services have shifted much of the cost from Government to the individual. The significant point is that within the household, it is women as mothers and household managers who bear a greater burden of the cost of adjustment.

6.9.3 WOMEN AS COMMUNITY MANAGERS

Women's role extends beyond the household to a network of social and community relationships. In this role, women contribute to the nature, viability and cohesiveness of the community. The community can play a vital role in contributing to household survival during times of hardship as well as in raising social welfare in normal times. As community managers, the economic crisis and the ensuing adjustment may have increased women's role, as local social organisations have taken over some of the functions previously performed by the state. In Ghana, there has been increasing co-operation among women in community activities, forming

groups of producers, consumer co-operatives and female support groups to help ease the childbearing and rearing burden increased by adjustment. Thus several local women's groups have been formed in the last few years aimed at organising women to obtain and make effective use of resources. Several non-governmental organisations are playing an increasingly important role in service delivery in rural areas with the participation of rural women. Organisations such as Action Aid and Canadian Universities in Service Overseas (CUSO) are working with rural women in several development projects and supporting women's self help groups. National Organisations, such as the 31st December Women's Movement headed by the wife of the President, have also been formed to draw women into the development process, though its effectiveness is yet to be established. No specific study has been undertaken to assess women's community managing roles under SAP, but the implication of this is that women are spending more time in their community managing roles.

Overall, although economic indicators show some growth in the economy following adjustment, there has been a marked deterioration in the conditions that women face in their three roles.

6.10 STRUCTURAL ADJUSTMENT POLICIES AND TIME USE

One major theme emerging from studies on the impact of adjustment on women is that whether in their roles as producers, reproducers or community managers, it has resulted in increasing work loads and time demands, particularly for low income

women. As producers, more women are working in income generating activities in order to increase or sustain household income, while at the same time having to spend more time on their reproductive roles as wives and mothers and social organisers to maintain the well being of their families. Thus conflicting demands are made on women's time. Moser (1992), in a study in Ecuador points out that the real problem is not the length of time women spend, but the way in which they balance their time between activities undertaken in their various roles. She notes further that often, it is the time devoted to different activities which changes rather than total number of hours, usually with increases in productive work time at the expense of reproductive work. Thus an increase in female labour force participation may result in severe problems for children. An indirect evidence of declines in child care in Ghana may be the growing number of street and abandoned children and the growing number of children in the labour force.

Time budget studies show the long working day of rural women⁸³. Cutbacks in the public provision of rural health services, education and water supplies may make further demands on women's time as will be argued and shown in Chapter Eight. There is a limit to the extent to which women can switch time from human resource production and maintenance to productive work to earn an income.

⁸³See Chapter Two for a review of the literature on rural women's time use and Chapter Seven for women's time use in Zorse.

6.11 SOCIAL COSTS OF ADJUSTMENT.

Considerable criticisms have already been voiced about the costs of adjustment policies (UNICEF, 1988; Cornia et al, 1987, 1988, Commonwealth Secretariat, 1989, Gladwin, 1991; Afshar and Dennis, 1992). It has been argued that they bear most heavily on the poor and erode the “human resource” base of the economy, and that those who have lost out heavily are those with relatively poor ability to withstand such losses, such as poor farmers in northern Ghana and women food farmers and retail traders. UNICEF has called for an “adjustment with a human face”, and the ODI for an “adjustment with equity”. The World Bank has now indicated that SAP must include policies for “strengthening the human resource base.”

In recognition of the negative effects of the SAP and in an attempt to ease the worst effects, the Government in conjunction with the World Bank and IMF drew up a programme of action to mitigate the social costs of adjustment (PAMSCAD) with funds from donor countries in 1988.⁸⁴ The programme aimed at reducing the social costs of those identified as being most at risk from adjustment: that is the rural poor, especially in northern Ghana, and the under employed and unemployed in the urban and informal sector. The focus of PAMSCAD projects have been on employment generation under which re-deployees are retrained for work in the private sector, on non-formal education and on women's programmes including credit and skill management training. However despite a three year gestation

⁸⁴The IMF and the World Bank appear not to have made any studies of income distribution and it was not until 1988, that PAMSCAD was drawn up to ease the effects on low income groups.

period, the programme was poorly designed and poorly funded and has therefore not had much of an impact on reducing the social costs of adjustment. Furthermore, although the participation of women is encouraged in projects, it excludes certain categories such as traders. This exclusion is bound to have serious consequences as several women have been found to turn to retail trade as a survival strategy to increase their income. It is also doubtful whether the social dimensions of adjustment projects can fill the gap in social services left by Government cutbacks. In this context Non Governmental Organisations (NGOs) are becoming increasingly important in mobilising local people to undertake development activities that have been cut as part of SAP.

6.12 ADJUSTMENT, GENDER AND THE ENVIRONMENT

Research is also showing that the short term objectives of SAPs are exacerbating a trend towards environmental degradation as farmers struggle to produce crops on an increasingly deteriorating soil base and as forests are depleted to export timber to gain foreign exchange (Mackenzie, 1993). Thus calls are also being made for a SAP with an “ecological face” (MacNeil et al, 1989). It is argued that the increased stress on women who have significant responsibility for the management of the land and household reproduction is linked with a tendency towards unsustainable exploitation of the resource base. Using case studies from Kenya and Tanzania, Mackenzie (1993) illustrates how in practice, price increases introduced under structural adjustment programmes for both food and export

crops, may not have translated into an incentive either for increased production or for the maintenance of land management activities. However as Mearns(1991) notes, a more realistic understanding of the relationship between adjustment and the environment must take account of the multifaceted and plural nature of the connection.

In Ghana, the economic pressures on northern Ghana from adjustment policies, combined with environmental degradation outlined in Chapter Five, implies that women, with the primary responsibility for household reproduction and food production, may be bearing a heavy burden.

6.13 SUMMARY

The above analysis indicates that although at the macro-level, SAP appears to have yielded positive results in Ghana, the micro-level impact has left women worse off. Spatial differences have also left women in the peripheral northern savannah regions severely disadvantaged. In the light of this negative impact, the question is often asked whether women would have been better off if adjustment had not been undertaken. Most writers agree that given the economic conditions prevailing in Ghana in 1982, when the Government of the PNDC took over power, there was no feasible alternative to the major reforms undertaken (Cornia et al, 1987; Onimode, 1989; Rothchild, 1991; Rimmer, 1992). The question then is not whether to adjust but how to adjust. As Lele (1991) argues, the issue is “not whether to

adjust but the speed of adjustment and the mix of measures to ensure that growth is maintained” (Lele, 1991:50)

The SAP, by focusing on macro economic issues and neglecting the distributional issues of its impact, has left women shouldering much of the extra burden being placed on households. This has resulted mainly from the basic assumption that the switching of resources and labour from non-tradeables to tradeables, the main aim of SAP, is a costless operation. But as Elson (1991b, 1992b) points out, this is a shifting of costs from the paid to the unpaid economy, by placing the extra burden of absorbing the costs of re-structuring on households, and within households, on women.

Although it is important that “vulnerable” groups are protected during adjustment, as advocated by UNICEF (1988), or for “equity” reasons by ODI, this could focus attention on women as victims of adjustment and thus focus mainly on the detrimental impact of adjustment on women and not on the contribution that women can make to effective adjustment. This could result in a re-emergence of the WID debate of the 1970’s and 1980’s as reviewed in Chapter Two.

Studies have shown that much of the cost of adjustment has been shifted to the household and within households on women as household managers. There is therefore the need to look at macro economic policies such as SAPs at the micro-level with a gendered focus. Spatial differences also indicate that women in the peripheral north may be worse affected. Chapter Five showed that women in the north are already severely disadvantaged by environmental degradation. With

women's primary responsibility for household reproduction and food production, adding economic pressures to existing environment pressures is therefore likely to leave women in northern Ghana worse off. The next two chapters will examine the micro level impact of SAP and environmental changes on women in Zorse.

CHAPTER SEVEN

7.0: RURAL WOMEN'S WORK

7.1 INTRODUCTION

Measuring women's work particularly in developing countries, is associated with several problems. The conventional concepts of “work” and the methods of data collection and statistics based on them often fail to capture the real labour conditions of women. As a result, women's work is often under counted and undervalued (Beneria, 1982; Boulding, 1983; White, 1984a).⁸⁵ To remedy this situation, researchers have urged the need to re-define women's work in relation to its contribution to the production of goods and services for the survival of the family group, thereby taking into account both commodity and non-commodity production (Beneria, 1982; Dixon-Mueller, 1985). By so doing, this concept of “work” would take into account the production and reproduction of the household unit and not merely of the individual (Leon, 1984).

This chapter examines women's work within their triple reproductive, productive and community managing roles⁸⁶. In practice however, the separation of the three roles is often difficult to make, as within the domestic sphere the three categories of tasks are inter-related and one task can have both use and exchange values at different points in time. Thus the separation often results in an artificial

⁸⁵ See Chapter Two for a discussion of measurement of women's “work”.

⁸⁶ See Chapter Four for the definitions of reproductive, productive and community managing roles adopted in this study.

division and its ideological reinforcement (Mackintosh, 1984). Nevertheless the division is used in this study as a theoretical framework within which to consider the diversity of women's labour.

Using data from a field survey in Zorse in 1991, this Chapter examines women's work within the triple role framework to show their important contribution to the rural economy. In-depth studies of the operation of rural households are necessary to provide data on the nature and extent of women's work and the factors affecting this contribution. This will provide a background for examining the changing role of women and the impact of the national and local environment on rural women's time use in the next chapter.

7.2 REPRODUCTIVE WORK

7.2.1 DIVISION OF LABOUR IN THE HOUSEHOLD

In developing countries, the household⁸⁷ is the site for both reproductive and productive work and as such social relations within the household play a crucial role in determining women's choices. However, between cultures, there are variations in the pattern of allocation of functions in the household. All societies exhibit a sexual division of labour which varies cross culturally, "but the existence of some sexual division of labour, some sex-typing of activities is a very persistent fact of human society" (Mackintosh, 1984:3). Ethnographic studies show that

⁸⁷ See Chapter Four for a definition of "household" adopted for this study.

though the specific details of women's roles vary cross culturally, the common denominator is that the "breeding of babies and the feeding of humans of all ages is almost exclusively the work of women.....women also grow, process and cook food, provide water, fuel and clothing...." (Boulding, 1977). Biological and social reproduction appears to have been the primary responsibility of women everywhere for centuries.

Feminist writers⁸⁸ argue that an understanding of the sexual division of labour is crucial to any attempt to understand and change the social position of women as a whole. This is because the sexual division of labour appears to "express, embody and furthermore to perpetuate female subordination" (Mackintosh, 1984), which is seen as the central problem in the relations between men and women within the social process as a whole and the way those relations work to the detriment of women. Thus whether in wage or non wage work, the sexual division of labour appears to be a continuing fact and frequently works to the detriment of women.

In Ghana, gender and to a lesser degree age, are the primary variables which determine the division of labour in the household. Women are responsible for almost all domestic chores. Hardiman, in a study of Akan communities in southern Ghana, reported that in all the village communities, "the routine daily tasks of cooking, sweeping, washing clothes and household effects, fetching water and firewood and caring for children, fall mainly on the woman and it is rare to see adult men taking any part" (Hardiman, 1974:106).

⁸⁸See for example Mackintosh, (1984); Mies, (1986); Mohanty, (1988).

Among the Kusasi, the sexual division of labour is noticeable from the age of six onwards, but this becomes more rigid as children grow older and by the age of ten, children are net producers. Women in Zorse are solely responsible for almost all domestic work and child care. They are in charge of food preparation and cooking, sweeping and cleaning the compound, washing, fetching water and gathering fuel wood and the caring for and rearing of children and family members as well as the tending of kitchen gardens. Men are in charge of house building and repair which involves re-roofing and plastering of huts and animal rearing.

The burden of domestic work for women is often reduced by assistance from children and relatives. Who does what type of reproductive task is gender specific as shown in Table 7.1. Females offer the most assistance, at least for 90% of women, for every category of task with the exception of kitchen gardening and poultry keeping. The most striking aspect of this assistance from females is that the labour of daughters and daughters-in-law is the most frequently substituted for adult women's labour. About half of all women stated this as their main source of assistance. Another important source of female assistance is from other female relatives such as sisters or cousins, who commonly reside in extended family households. Girls take up domestic labour by the age of six and are fully occupied in all household tasks from about the age of ten years. Mothers and mothers-in-law are also important sources of help especially for child care, thus conforming to the traditional role of the grandmother taking care of children while women work. This feature appears common in several African villages and has also been observed in

TABLE 7.1 Percentage distribution of women by domestic activity according to the source of assistance, 1991.

ACTIVITY	SOURCE OF ASSISTANCE							TOTAL
	Female			Male				
	Daughter/ Daughter in Law	Mother/ Mother in Law	Other Female Relatives	Sons/Sons in Law	Husband	Other Male Relatives		
Cooking and Food Preparation	47.1	9.7	38.0	2.5	0.8	1.5	100.00	
Child Care	46.2	11.8	31.2	5.4	3.2	2.2	100.00	
Fetching Water	48.6	5.7	35.2	5.7	2.9	1.9	100.00	
Gathering Fuelwood	53.0	5.0	36.0	3.0	1.0	2.0	100.00	
Cleaning/Washing	52.1	4.4	34.0	5.3	1.1	2.1	100.00	
Kitchen Gardening and Animal Rearing	11.9	2.0	10.0	14.7	55.4	6.0	100.00	

Source : Fieldwork, Zorse, 1991.

the rural Caribbean (Momsen, 1993). With 48% of the women being in polygamous unions, the importance of co-wives, who are regarded more as sisters, is seen in the considerable help offered and tasks shared. Husbands, sons and male relatives, as expected, participated the least in household tasks, except in kitchen gardening and poultry keeping which is regarded more as a male task. Thus domestic work appears to be not so much a clearly defined set of tasks as the sum of jobs not done by men.

The division of labour therefore appears to be rigidly based on gender with females shouldering much of the work in the household.

7.2.2 THE WORKING ENVIRONMENT

For a proper understanding of the complexity and dynamics of women's work, it is important to understand the environmental conditions under which women live and work. These have been outlined in Chapter Five and show rainfall as the single most important environmental factor. The concentration of rainfall in one season and its variability in time and space, followed by a pronounced dry season has had a profound impact on peoples' lives in the area. The marked seasons that characterise the Bawku District mean that the availability of resources changes throughout the yearly cycle with its attendant consequences as depicted in Fig. 5.9 in Chapter Five. As the people rely on rainfall for growing most of their food supply, it means that during the wet season everyone's time and energy is put into growing enough crops to feed the family for the whole year and to earn some cash. The wet season, from

about May to October is therefore a period of increased demand for agricultural labour. It is also the period of greatest food scarcity, shortages of fuel wood and of outbreaks of diseases as depicted in Fig. 5.9. The long dry season, lack of adequate water, poor soils and population pressure on the land⁸⁹ all combine to make subsistence living difficult. From the harvest months of October to November until the first harvest the following year, there is a heavy dependence on stored food. A poor harvest means inadequate supplies in the months before the next harvests which could result in the "hungry season" starting as early as February. A vicious cycle therefore appears to operate in the region whereby food is in shortest supply when demand for labour is greatest and the shortage of food restricts activity and lowers productivity resulting in less food being produced.

The erratic and seasonal rainfall and population pressure on the land, together with the limited availability of natural resources, has had a profound impact on the types and seasonality of activities of both men and women in the area. Assibi, one of the male village Elders summed up the relationship between the seasons and activities in the area, "There are two seasons in Northern Ghana, one brings the hunger and the other the harvest". In July when the landscape is green, families are missing meals, and in December, when the area is parched and dry, they are looking forward to a good harvest of millet. Moving from hunger to harvest is a cycle of unrelenting effort in which erratic rainfall, environmental degradation, increasing population and rising prices diminish the returns (Action Aid, 1992). The seasons

⁸⁹The Bawku District is one of the most densely populated areas in Ghana. This factor, combined with shifting cultivation on a two or three yearly cycle and poor soils with little or no fertilisation, has resulted in population pressure on the land. See Chapter Five.

therefore have a profound influence on the lives of the people. Women's work and time use is analysed within this context.

7.2.3 TIME ALLOCATIONS - REPRODUCTIVE WORK

Time use surveys and data are associated with a number of methodological defects which are difficult to resolve partly because of the limited experience of using these instruments in developing countries and partly because the choices made depend on the purpose of the study being undertaken.⁹⁰ However, one of their main advantages is that they can be used as a measure of the degree of involvement in both paid and unpaid work and help to reveal the daily and seasonal fluctuations in the demand for labour and trade-offs between different categories of work at different times of the year. In this section, the aim is to obtain a broad estimation of women's time allocations as a measure of their workloads. The assumption is that the amount of time used for work could provide a reliable measure of the amount of work being carried on in typical households (Walker and Woods, 1976).

Table 7.2 showing the average daily time allocations of women, indicates that women have a long full day engaged in their reproductive tasks. When women's activities are disaggregated, cooking, including food preparation, is the most time demanding activity and also the most gender specific task. It was the activity which revealed the least equitable distribution between members of the household. Among the 180 married women living with their husbands, 72% of them did the cooking

⁹⁰A discussion of the methodological problems of collecting data on time use is presented in Chapter Four.

themselves and only 28% had any help, which was mainly from daughters. It was also the activity in which male household members assisted the least. Cooking is generally done once a day in the evenings, and any left-overs from the previous evenings meals are heated the next morning for children. In the dry season however, particularly after the harvest, when food is in abundance, cooking may be done in the mornings as well. Unlike in the urban areas of northern Ghana, where the evening meal is cooked on a rotational basis among the wives in the family, in Zorse, each married woman in the household is responsible for preparing meals for her husband and children from allocations of millet given out by the household head on a regular basis. Cooking and food preparation are laborious and time consuming because of the tools used. Food preparation often involves the pounding of vegetables and dried fish in a mortar, while millet and sorghum grains are winnowed and taken to the grinding mill for milling into flour. The main meal cooked is tuo zafi, a stiff porridge made from millet flour, and eaten with soup made from vegetables and dried fish and on rare occasions with meat. Wood and millet stalks are the main forms of fuel used and the fire has to be tended constantly to ensure that it does not die out.

Collecting water and gathering fuel wood each take about an hour of women's time each day on the average, but this depends on the family structure and size.⁹¹ The main sources of water supply in Zorse are a bore-hole situated at the centre of

⁹¹Section 7.5 examines the relationship between family size and composition and time spent in reproductive work.

the village, a well situated at the western outskirts of the village and a dam located about four miles to the south of the village. (See Fig 4.2 and Fig. 7.1) Time use includes walking to the water source, queuing and filling the wide enamel bowls with water. These bowls which weigh about 25 kilograms when full are then carried home on the head and poured into big pots for storage.

It is a predominantly female task although sons also provide some limited assistance. Hawa, a young mother aged 18 years with a six month old baby, estimates that she makes about six of such trips each day to fill the storage pots. She also helps her mother -in-law to brew the local beer, pito, and on such days she makes up to 15 trips for water for processing the pito.

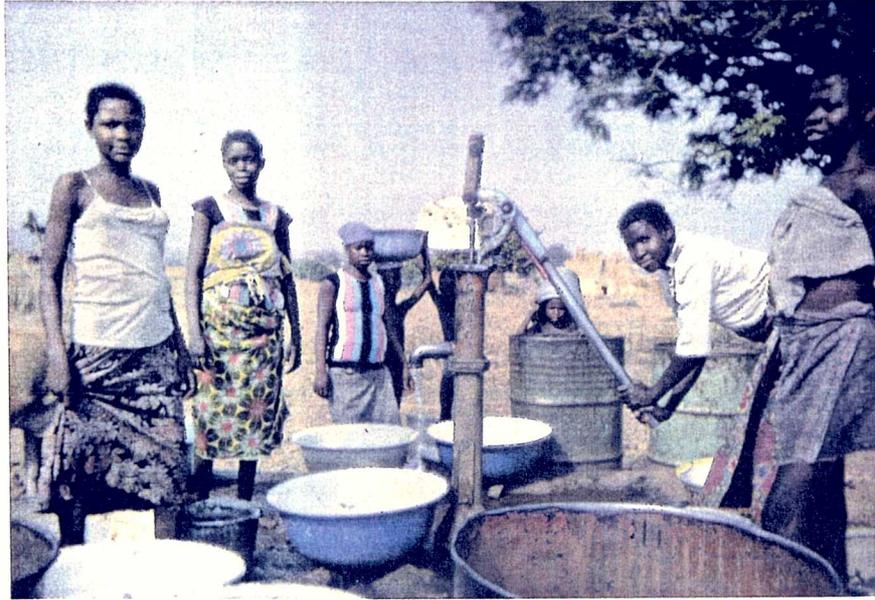
TABLE 7.2
AVERAGE DAILY TIME BUDGETS OF WOMEN IN
REPRODUCTIVE WORK, ZORSE, 1991 (Hours Per day)

ACTIVITY	WET SEASON	DRY SEASON
COOKING	1.7	2.0
CHILD CARE	1.2	1.1
WATER COLLECTION	1.1	1.2
GATHERING FUEL WOOD	1.2	0.7
CLEANING/WASHING	0.6	0.8
KITCHEN GARDENING	1.4	0.4
TOTAL	7.2 (5.8)	6.2 (5.8)

SOURCE: 1991 FIELDWORK, ZORSE

Figure in brackets ()= Total Time Use Excluding Kitchen Gardening.

FIG. 7.1 SOURCES OF WATER - SHOWING A BORE-HOLE AND AN UNLINED WELL

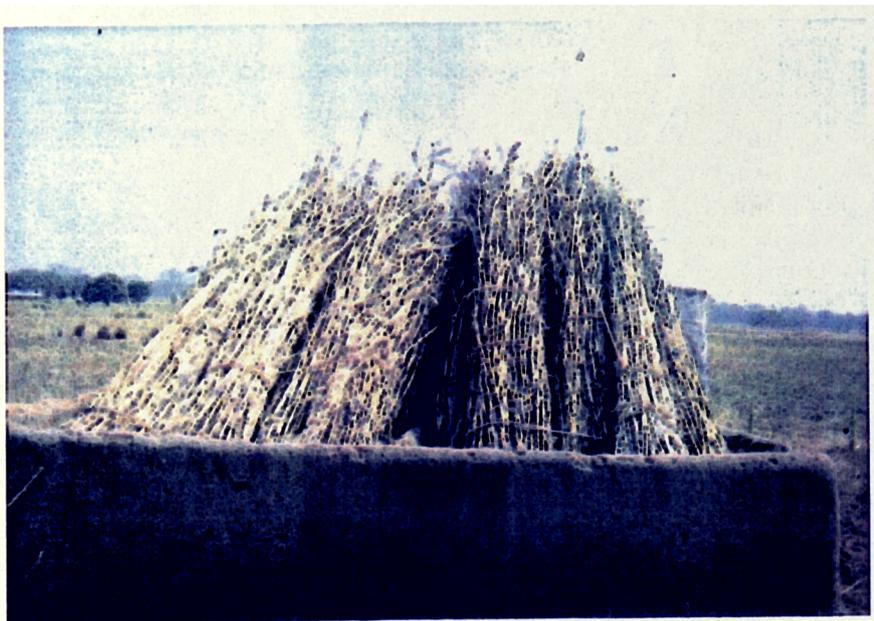


The main sources of fuel in Zorse are dried millet and sorghum stalks and wood obtained from gathering fallen twigs and branches from the nearby forest reserve or from surrounding farms. After the harvesting of the millet grains, the stalks are left to dry on the fields and later gathered and transported home. These are stock piled and serve as the main source of fuel supply from November to about March. (Fig. 7.2). When the millet stalks begin to run out by the early part of the wet season, and the twigs and branches from the forest reserve are no longer available, women have to walk further afield into the hillsides and sometimes even into neighbouring Burkina Faso to gather fuel wood. Collecting twigs from the forest reserve is often delegated to female children and young relatives, but the women often undertake the distant trips to the hillsides for wood themselves. Women usually organise these trips in groups with women from the same or other households. Such trips are usually undertaken about once a week. Fig. 7.2 shows women carrying dried millet stalks and fuel wood home. These bundles of wood can weigh up to 30 kilograms.

Child care is an important responsibility of girls and women. Girls are socialised to take care of their younger siblings from a very early age. Traditionally, grandmothers also played an important role in child-care. Amolsum, who is a grandmother and lives with her son and his three wives remarked on the changing role of grandmothers

" In my day, when a woman reached my age, she would be at home looking after the small children, while the young people worked. But now it is different. There is not enough food, so how can you stay at home and let others work?"

FIG. 7.2 TYPES OF FUELWOOD - SORGHUM STALKS



Clearly, the traditional role of the grandmother is undergoing changes.

Cleaning, washing clothes and utensils and other housework are the least time consuming activities. The mud huts do not entail much cleaning and sweeping and this is normally shared out among the female children in the household. Washing clothes is however mostly done by women themselves at the source of the water supply, usually at the bore-hole or well, but this is done about once or twice a week usually taking an average of forty minutes.

Kitchen gardening is mainly a wet season activity. This is a borderline activity between reproductive and productive work. Each married woman cultivates a garden on the land directly behind her hut, on which vegetables such as tomatoes, okra, and leafy greens are grown for the family's meals. Women also keep small livestock, mainly poultry, sheep, pigs and goats in the compound. These are considered a form of "banking procedure" to depend on, in times of need, rather than an occupation.

Women's workload based on their time use averages 7.2 hours in the wet season and the energy expended on their work is high. Sivard (1985) estimates that women's household production would be worth 25 to 40% of the world's gross national product, if most of reproductive labour were to be counted in standard production estimates. This estimate could be much higher in rural Africa.

7.2.4 SEASONAL IMPACT ON WOMEN'S WORK AND TIME USE

As discussed earlier, the extreme seasonal nature of farming means that for six months from about May to October, every one's time and energy goes into

producing enough millet to feed the family and to earn some cash for the whole year. At the same time women must take care of and maintain their households. If women are fully occupied by farm work during the wet season, how do they find the time for their reproductive work?. McGuire and Popkin (1989) argue that rural women in the "Third World" are involved in a "zero-sum game", a closed system in which time or energy devoted to any new effort must be diverted from their other activities. Women's participation and productivity in the economic system is thus affected by their reproductive responsibilities.

The relationship between the seasons and women's reproductive work and time use is shown in Table 7.2. There are seasonal differences in time use which are accounted for mainly by cooking including food preparation, and cleaning, which increase in the dry season, while other activities such as fuel wood gathering and kitchen gardening are reduced in the dry season. During the wet season, also known as the "hungry season", there is very little to cook, as food supply is at its lowest. Cooking is normally reduced to one hot meal per day as most women are working in the fields during the day. During this period, the resourcefulness of women is very important for the survival of the family. Cooking time is therefore reduced as a result of declining availability of food supply and demand for labour on farms. In the dry season however, particularly just after the harvests, from about November to February, when food supply is more abundant, more time is spent cooking. Sometimes meals are prepared in the mornings in addition to the evenings. Time use in cooking and food preparation therefore increases from 1.7 hours in the

wet season to 2 hours daily in the dry season. A national nutrition survey in northern Ghana also found a seasonal influence on cooking with meals being missed in the wet season in many parts of the region (National Nutrition Board, 1986).

Cleaning and washing clothes also show a seasonal impact. Time use increases from 0.6 hours in the wet season to 0.8 hours in the dry season. The dry season is a very dusty period with trees shedding their leaves, thus entailing more sweeping and dusting. Clothes have to be taken to the water source for washing rather than using rain water as in the wet season.

Time spent in gathering fuel wood on the other hand declines from 1.2 hours in the wet season to 0.7 hours daily in the dry season. This is explained by the availability of millet and sorghum stalks particularly in the early part of the dry season, and the location of the forest reserve nearby where twigs are picked. 62% of the women used millet stalks as their main source of fuel supply in the dry season, compared to only 9.6% who used the same source in the wet season (Table 7.3). The use of millet stalks for fuel, which normally should be left on the ground to provide soil cover, exposes the soil to sheet and gully erosion and thus contributes to the degradation of the environment. When the stalks run out by the early part of the wet season, and the dry twigs are no longer available in the forest reserve, women have to walk further afield in search of fuel wood.

Kitchen gardening, like other types of farming, is dependent on rainfall. Very little gardening therefore takes place in the dry season. Thus time used in this activity declines from 1.4 hours in the wet season to 0.4 hours in the dry season

when some vegetables such as pepper and tomatoes and leafy greens are grown but these have to be watered (Table 7.2).

TABLE 7.3
SEASONALITY AND USE OF TYPES OF FUEL, 1991

TYPE OF FUEL	WET SEASON		DRY SEASON	
	N	%	N	%
MILLET STALKS ONLY	22	9.6	140	62.1
MILLET STALKS AND FIREWOOD	75	33.2	59	25.9
FIREWOOD ONLY	119	52.8	16	7.1
CHARCOAL AND KEROSENE	9	4.1	9	4.1
OTHER	1	0.3	2	0.8
TOTAL	226	100.0	226	100.0

SOURCE: 1991 FIELDWORK, ZORSE

Some activities such as child care and collecting water, record almost consistent levels of time use, regardless of the season. The installation of a bore-hole in the village which is patronised by at least two thirds of the women, has no doubt helped to reduce time spent in search of water particularly in the dry season.

In summary Table 7.2 indicates a seasonal impact on time use, particularly on activities such as gathering fuel wood, cooking, cleaning and kitchen gardening. The total average daily time spent on reproductive work indicates a decline of an hour in the dry season, from 7.2 to 6.2 hours (Table 7.2). However, when kitchen gardening which is a borderline activity, and which accounts for the seasonal

difference in time use, is excluded from reproductive work, the total time use is 5.8 hours in both seasons. This suggests that when women are hard pressed for time as in the wet season, when everyone's time and energy go into producing enough millet to feed the family throughout the year, it is not the total length of time in reproductive work that changes, but rather the balance of time devoted to different activities. Thus in the wet season, time spent cooking, cleaning and washing are reduced to make up for the extra time put into farming. This seems to support findings from studies in Burkina Faso (Bleiburg et al, 1980), in the Philippines (Mueller, 1982), and in Sri Lanka (Wickramasinghe, 1993) that during peak farming periods, it is cooking and social duties which are sacrificed most, because these are the activities with the greatest flexibility in the time budget. The fact that the period of greatest demand for women's labour is also the time of scarcest food supply means that the nutritional status of women and the family as a whole is lowest at this time. A study in northern Ghana revealed that whereas women required an average of 2,400 kilo calories per day during the peak period of farming, their energy intake is generally between 1500 and 1800 kilo calories (Orraca-Tetteh, 1988).

In spite of the problems limiting time budget studies as discussed in Chapter Four, the data indicates that generally, reproductive work makes heavy demands on women's time. The division of labour in reproductive work is gender specific and women make use of female household members to reduce their burdens. There are

seasonal variations in women's time allocations, which is adjusted between tasks when demands are high rather than an increase in total time use per se.

7.2.5 CROSS-NATIONAL COMPARISONS

Comparisons with studies undertaken in other parts of Africa are often difficult to make due to the differences in the definitions of the various tasks, as well as the different categories of tasks used to calculate the time budgets. In spite of these differences, studies in other parts of the Third World reveal similarly long hours in reproductive work (Table 7.4).

In a study of a southern Savannah village in Ghana, which has similar climatic conditions to northern Ghana, it was observed that women spend a total of 10.5 hours in domestic work, with cooking including food preparation and water collection taking up to 2.1 and 1.3 hours respectively (Ardayfio-Schandorf, 1993). These studies also indicate seasonal variations in time use, with an increase often in the dry season. In Burkina Faso, in the same ecological zone as Zorse, daily time use in reproductive work increased from 3.6 to 4.5 hours in the dry season (Bleiburg et al, 1980), while an increase of one hour was observed in Sri Lanka (Wickramasinghe, 1993).

The time allocations of women in Zorse are closest to those for Burkina Faso depicted in Table 7.4. This may be explained by the fact that the two areas are in the same ecological zone as mentioned earlier and have a similar culture. A major difference is however evident in the amount of time allocated to kitchen gardening

which is much lower in Burkina Faso probably due to drier climatic conditions. These figures in general provide a broad picture of the long hard day of the rural woman and when added to their productive work, the picture that emerges "is one of a normal day fully spent in work of one kind or another" (Hardiman, 1974).

TABLE 7.4
AVERAGE DAILY TIME BUDGETS OF WOMEN IN REPRODUCTIVE
WORK IN SELECTED COUNTRIES

Activity	Ghana		Burkina Faso		Gambia	Nigeria
	Wet	Dry	Wet	Dry		
Cooking (Including Food Preparation)	1.7	2.0	2.0	2.5	6.3 ⁹²	5.9 ⁹
Child Care	1.2	1.1	NA	NA	NA	0.1
Collecting Water	1.1	1.2	0.6	0.8	0.8	0.7
Gathering Fuel wood	1.2	0.7	0.4	0.3	NA	0.2
Cleaning/Washing	0.6	0.8	0.4	0.8	3.9	1.2
Kitchen Gardening	1.4	0.4	0.2	0.3	NA	0.1
Total Time Use	7.2	6.2	3.6	4.5	11.0	8.2

SOURCES: Ghana Fieldwork in Zorse, 1991
 Burkina Faso Calculated From Bleiburg et al, 1980:76
 Gambia Barrett and Browne, 1989:5
 Nigeria Spiro, 1987: 185, 186.

KEY

NA- Not Available

⁹²Cooking time for Gambia and Nigeria are high because they include some food processing time such as threshing and winnowing grains. These are categorised under farming tasks for Ghana and Burkina Faso data. They are performed periodically and are different from food preparation.

7.3 COMMUNITY MANAGING WORK

Women's role extends beyond the household to a network of social and community relationships. In this role, women contribute to the nature, viability and cohesiveness of the community. The community can play a vital role in contributing to household survival during times of hardship, as well as raise general social welfare in normal times. The management of community networks can serve as an important survival strategy for women in times of crisis. In Zorse, an important aspect of this role was the maintenance of kinship linkages, the development of neighbourhood networks and the performance of religious, ceremonial and other social obligations in the community. Community or social management could involve some amount of leisure but it was extremely difficult to identify this.⁹³ It is during the dry season, particularly, the period between December and March, when the crops have been harvested and food is in abundance, that women increase their social and community managing roles. Festivals, marriages, funerals, religious rites, visits to parents, relatives and friends take place during this period (See Fig. 5.9). Time use in community management therefore is high, taking 1.7 hours daily.

In the Kusasi tradition, dying and returning to one's ancestors, particularly if the deceased is old, is greater cause for celebration than being born or entering into marriage. Burials are separate from funerals. Corpses are buried soon after death with little ceremony, and the funeral is performed in the following dry season. However to cut down on the cost of funerals, several funerals are often "piled up",

⁹³Indeed the concept of leisure appeared alien to many women. When asked what they do for leisure, many would reply that they visit sick friends or parents or shell groundnuts or some other activity.

until there is enough money and a good harvest to perform a "decent funeral". Funerals are also a great cause of debt. Immediate family and in-laws must provide accommodation, meat (often goats, sheep and cows are slaughtered), food and drink and entertainment for hundreds of people attending the funeral which may take from three to twelve days depending on the age and status of the deceased. Women play an important role in the organisation of these activities. Attendance at and contributions, not necessarily monetary, to these ceremonies ensures help in time of need.

Festivals such as the samanpiid festival, which is a thanksgiving ceremony to the gods for a good harvest, are also performed in the dry season, shortly after the harvest. The dry season is also a period when family linkages are re-kindled through visits. These visits are important to ensure assistance in times of need. In the wet season however, farming is the main pre-occupation of most women and there is very little time for social duties. Time use therefore declines to 0.4 hours daily.

Women's community management role also involves their participation in organisations, but patronage was very low. Thus, as observed for reproductive work, women's social management roles also indicate seasonal variations due to the influence of environmental conditions.

7.4 PRODUCTIVE WORK

In addition to social reproduction and community managing roles, women are also involved in productive work.⁹⁴ Ghanaian women, have been reported to be industrious, performing a wide range of income earning activities. In 1991, 51% of females aged over 14 years were economically active, while 49% of the agricultural labour force was made up of women (World Bank, 1991).

Women in northern Ghana may generate income in various ways, from the sale of surplus produce from their farms, the processing and sale of food and beer and other consumables, craftwork such as pottery, baskets and mats to petty commodity trading. The majority of women in Zorse (37%) described themselves primarily as farmers. (Table 7.5). These were defined as women who owned private farms, the produce of which was controlled by them.⁹⁵ Although women in northern Ghana are said to be less involved in agriculture compared to those in southern Ghana (Klingshirn, 1971; Rancoli, 1985), this figure of 37% describes reality only to a limited extent. All adult women work on household farms in addition to their private farms. The second major income generating activity for women in Zorse, making up 20% of the sample, was trading. 8% of the sample were pito brewers, while food processors and handicraft producers together made up 18% of the sample. Approximately, one-eighth (13.2%) were not engaged in any activity which earned them a cash income (Table 7.5).

⁹⁴Chapter Four defines productive work as work which earns women an income either in cash or kind.

⁹⁵Section 7.3.1 describes the different farm types existing in Zorse.

TABLE 7.5
DISTRIBUTION OF WOMEN BY PRIMARY
INCOME-EARNING ACTIVITY (%)

ACTIVITY	N	%
FARMERS	83	36.7
TRADERS	22	20.4
BEER BREWERS	34	8.4
FOOD PROCESSING	22	9.7
HANDICRAFTS	34	7.1
WATER SALES	21	1.8
FORMAL SECTOR	12	2.2
NO INCOME EARNING WORK	45	13.2
TOTAL	226	100.0

SOURCE: FIELDWORK, ZORSE, 1991

7.4.1 THE KUSASI FARMING SYSTEM

The Kusasi farming system has been described as a predominantly male farming system. The Kusasis have three main types of farms. The most important is the household or compound farm on which is grown the staple crop of millet and sorghum.⁹⁶ All household members old enough to work are expected to labour on these farms and it is from these fields that household members are fed for most of

⁹⁶The compound farm is located adjacent to the family homestead or "compound" hence its name. In addition, each household may have outlying grain fields, all of which are under the control of the household head.

the year. The produce is controlled by the household head who allocates it to each married women on a regular basis for preparing the family's meals.

Men and women also cultivate private plots and have complete rights of disposal over the produce from these. Men's fields however tend to be bigger than those of women. Data for the size of men's farms was not obtained, but a study in Zorse (Cleveland, 1980) indicates that men's farms on the average were about two acres. Women's fields were very small and were estimated to have an average size of 0.6 acres. They were also smaller than the household farms which had an average size of 2.5 acres, with most families having at least two plots of land. (Table 7.6). As a result, men's income from their private fields tended to be higher, whilst the smaller income of women went mainly towards the purchase of items necessary for the household. Whitehead (1984a) has suggested that the primary distinction which orders the production relations of the compound or household in Northeast Ghana is the distinction between private and household or compound farms. Other cash crops grown on women's private farms to a limited extent only, were cotton, kenaf fibres and dry season vegetables. Small livestock could also be reared by women but not cattle.

TABLE 7.6
DISTRIBUTION OF WOMEN BY AVERAGE FARM SIZES,
PRIVATE AND HOUSEHOLD FARMS (IN ACRES)

AVERAGE FARM SIZE	PRIVATE FARM		HOUSEHOLD FARM	
	N	%	N	%
Less Than 1 acre	53	64.1	14	6.3
1 to 2 acres	23	28.2	96	42.5
3 to 5 acres	7	7.7	89	39.4
More Than 5 Acres	-	-	27	11.3
TOTAL	83	100.0	226	100.0
AVERAGE SIZE	0.6 acres		2.5 acres	

SOURCE: FIELDWORK, ZORSE, 1991

Women's farms were smaller than men's farms because of the relative inaccessibility of land for women compared to men. The land tenure system in the Kusasi area is characterised by communal ownership with individual lineages or families, headed by men owning portions (See Chapter Three). Thus, theoretically, each member of a kinship group, male or female, has rights to land by virtue of membership of the group. However, in practice, the situation is different. The authority to decide on land allocation to individuals is delegated to male lineage heads or household heads, with women's access depending on the goodwill of male members of the household or lineage. Secondly, most of the land allocated for farming is inherited under a patrilineal system of inheritance with the majority of women deriving their use-rights from their husbands. Women are thus at a

disadvantageous position under the patrilineal system of inheritance which precludes wives from inheriting their husband's property. Some women are however able to acquire or borrow land by way of gifts. Table 7.7 confirms the importance of husbands and the husband's lineage system as an important source of land acquisition for women. More than half of the women acquired land from this source. Women's own lineage system played an important role providing 30% of women with land for farming. Only 13% of women did not have to go through their husbands or the lineage system to acquire land. Such women acquired land as gifts through male friends, known as suum, and other sources. The relationship between the woman and the suum is not of a sexual type and he can assist the woman to work on her farm.

TABLE 7.7
DISTRIBUTION OF WOMEN BY SOURCE
OF LAND ACQUISITION (%).

SOURCE	N	%
HUSBAND/HUSBAND'S KIN-GROUP	47	56.5
WOMAN'S KIN-GROUP	25	30.7
PRIVATE SOURCES	11	12.8
TOTAL	83	100.0

SOURCE: FIELDWORK IN ZORSE, 1991

The average age of women who acquired land through their own efforts was 54 years, suggesting that as women grow older they gain more independence. However, even though such women did not acquire land through the male controlled lineage, they still had to go through males to obtain land. Thus the importance of males in land acquisition is re-emphasised. In answer to the question whether it was easy for them to acquire land, almost all women gave the refrain "Women do not own land....we do not have any power over land".

7.4.2 DIVISION OF LABOUR IN FARMING

The division of labour on the farm has become more gender neutral in response to shortages of male labour. Traditionally, the division of farm labour was gender specific, with men in charge of land clearing, ploughing, weeding and some elements of harvesting.⁹⁷ Females mainly planted, harvested, transported the crops home and threshed the millet (Table 7.8). However, over time, due to net male out migration, women have taken on new tasks and now weed on all three types of farms and are involved in some initial land clearing on their private farms although men still cut down the trees. Men have access to the unremunerated labour of their wives and often of all women in the household on their private farms, but women do not have automatic access to their husband's labour on their private plots. Often women use their own labour or obtain labour from male members of their kin

⁹⁷The type of tasks involved in harvesting is also gender specific. Men cut down the millet and sorghum stalks, after which women undertake the more laborious task of cutting the ears of grain from the stalks and putting them into containers to transport home.

groups or in-laws, but have to provide them with food and drink. The ability to command labour is therefore crucial in determining the household's viability.

TABLE 7.8
DIVISION OF FARM LABOUR AMONG THE KUSASI

FARM TYPE	CROPS GROWN	FEMALE TASKS	MALE TASKS
HOUSEHOLD FARMS	Millet	Planting, Weeding*, Harvesting, Transporting Crops, Processing Crops	Clearing Fields, Planting, Weeding, Harvesting
MEN'S PRIVATE FIELDS	Millet, Sorghum, Rice, Groundnuts	Planting, Weeding*, Harvesting, Transporting, Processing	Clearing Fields, Planting Millet, Weeding, Harvesting.
WOMEN'S PRIVATE FIELDS	Groundnuts, Rice, Cow peas, Millet*	Clearing Fields*, Planting, Weeding*, Harvesting, Transporting, Processing.	Clearing Fields, Weeding, Harvesting

SOURCE: FIELDWORK, ZORSE, 1991

* Activities which have undergone changes in the sexual division of labour

The type of crop grown was also traditionally gender specific. Men had the greater responsibility for the main staple crops of millet and sorghum which were grown on the household farm and controlled by the household head. Millet could also be planted on men's private plots. Women were traditionally not allowed to grow millet on their private farms, although their labour was crucial for its growth on the household farm, and were thus completely dependent on men for the staple food. It appears that the rationale for this tradition was to keep women dependent on, and under the control of men. As Amadu, one of the male village elders summarised,

"These crops (ie millet and sorghum) are all used as food. If a young women is allowed to cultivate these crops she may become disrespectful towards her husband. This is because she will have all her needs,and she can leave him and marry someone else.....If you allow the woman to be independent with food and money you cannot control her. But if she is not independent, you can control her. To be able to control them, our fore-fathers made these laws."

Women were however responsible for supplementing the diet with the produce from their private fields, on which they grew groundnuts, rice and legumes. A distinction thus seems to exist between the staple crop of millet and all other crops, which implies an equation between millet and food. However as it became more profitable for men to concentrate on cash crops and as yields of millet from the household farms declined because of erratic rainfall and impoverishment of the soil, women began growing millet on their private plots to make up for the shortfall in household millet production. Millet is usually directly consumed by the household

or sold to supplement household income. Crops from women's private fields are traditionally viewed as the "hunger crop" for the household when the millet supply from the household granary runs out and are thus very important for the survival of the household.

The equation of males with "cash" and females with "subsistence" farming, (Boserup, 1970) therefore appears to be an over simplification in Kusasi households. Cash crops such as groundnuts and rice are also food crops. Women's unremunerated labour is vital both for men's cash crop farming and also on their private farms, the income from which tends to be smaller than from men's but very important for household survival. Thus the introduction of cash cropping may not have altered the sexual division of labour in agriculture in Zorse substantially, as suggested by Boserup (1970) and evidence from earlier research (Palmer, 1977; Roberts, 1979, Rogers, 1980)⁹⁸, but it has led to an intensification of women's work. Women are working harder on the household farms by taking on additional tasks of weeding and growing the staple crop of millet, in addition to working on men's private farms as well as their own farms.

Another significant point is that women appear to be losing access to land and cash income as they now have to use their private land for millet instead of growing other crops, such as rice and groundnuts, some of which they might have sold to obtain cash income, because the household farms can no longer produce enough millet to feed the family. With population increasing at a rate of 3.5% per annum in

⁹⁸See Chapter Two for a review of the literature on the impact of agricultural development programmes on the sexual division of labour in Africa.

the Upper East Region(Ghana, 1987), this could put even more pressure on food production.

In summary, the traditional pattern of the sexual division of labour in farming by task and by type of crop grown has undergone some change, becoming more gender neutral, in response to the introduction of cash cropping, shortages of male labour and deteriorating environmental conditions. Women have taken on traditional male tasks such as weeding and the cultivation of the staple crop of millet resulting in the intensification of their workloads. Similar findings have been observed for Luo and Kikuyu women of Kenya who have taken on the traditional male tasks of land clearing (Trenchard, 1987) and the Ewe of southern Ghana, who changed the cropping pattern and shifted the staple crop from yam to cassava cultivation, in response to male out migration, thus lengthening and intensifying their work day (Bukh, 1979).

The implication of women taking on these traditional male tasks in addition to their reproductive roles means that women's workloads are increasing with possible effects on the health status of women and children. Recent statistics have shown the declining nutritional status of babies and children in the Upper Region of Ghana which may be attributed partly to increasing workloads. (UNICEF, 1988).

The division of labour in farm work among the Kusasi thus shows an expansion in the role of women in agriculture contrary to earlier studies which indicated their limited role compared to women in southern Ghana (Hill, 1975; Manoukian, 1951; Klingshirn, 1971).

7.4.3 TRADING

Next to farming, the most important source of income for women was trading, with 20% earning their main income from it. It was the one activity that women combined most with other types of productive work. The proximity of Zorse to Bawku, the District Capital, which is located about five miles away, gives women a ready market for either the sale or purchase of goods. Traders in Zorse were mainly retailers, trading mainly in agricultural produce purchased from surrounding villages for sale in the Bawku market. Others sold cooked food and consumer items at strategic points in the village.

Husbands were the most important source of capital. Some husbands allocated a small amount of capital to their wives for investment in trading from which the profits were expected to be used for household needs. However, in the current economic situation in Ghana with high unemployment rates and rising prices of goods and services as a result of the adjustment programme, men are becoming a less reliable source of economic support and women must depend more on their own resources for trading and for feeding their families. Income from sales is very important for supplementing household income. 93% of traders stated this as their main reason for trading. Lamisi who is a mother of two young children sells sweets, cigarettes, matches and other small consumer items on a table near the main path through the village. She borrowed her initial capital of 2,000 cedis from her mother-in-law. She makes a profit of about 200 cedis each week. She summed up the importance of income from her sales

" if it were not for the little money I obtain from this table I would starve to death. The millet allocated by the household head is simply not enough to feed me and my children."

7.4.4 OTHER INCOME-EARNING WORK

Brewing beer, known as pito, is a labour and capital intensive activity. It is also time consuming, taking about three days to brew during which some processes must run concurrently. It also appeared to have been the most lucrative business in the village, with 45% of women desiring to go into the business although lack of capital was cited as the major impediment. Amina, aged 58, one of the two wives of the village Chief and clearly one of the most influential and comparatively well off women in the village, brews pito. She brews about a quarter of a bag of malt (3 basins) from fermented sorghum, each week, during the dry season and only about two basins of malt⁹⁹ during the wet season. She uses a capital of about 10,000 cedis for each brew, from which she has to purchase fuel wood and malt. Her co-wife, daughter-in-law and nieces and two other women all assist her in the brewing process. She pays the two assistants and her co-wife about 250 cedis a day and provides them with food on brewing days. She also makes malt for sale, farms soybeans and produces local soap from caustic soda and ash for sale. She classifies herself primarily as a pito brewer. Explaining why she is involved in so many other activities, she said

⁹⁹A bag of malt contains about 12 basins of malt.

" there is a slump in the market for pito because people have become poorer. The few people who buy, do so on credit and it is hard to claim the money back. There is very little profit in it these days and that is why I have to do other things to survive."

The main foods processed in Zorse for sale include the fermentation of malt for beer brewing, the husking and milling of rice, the extraction of oil from shea-nuts and groundnuts and the production of spices from soybeans and seeds. Although the work is laborious and time consuming, much of the processing takes place in or near the home and therefore women receive some assistance from household members. It is therefore one of the activities most compatible with women's reproductive roles.

Thus although women pursued one main income earning activity, a change could occur when domestic situations, the availability of capital or raw material, or the market indicates that a change is necessary. Most women were also often involved in secondary income generating work. Table 7.9 shows farming as the one activity that was combined most with other types of productive work, indicating the importance of farm income for household income.

Of the 70 women who engaged in a secondary income earning activity, 75% of them went into farming (Table 7.9). As much of farm work takes place in the wet season, this suggests that much of the other productive work takes place in the dry season as Table 7.16 will show. This indicates the importance of the diversification of the income base to counteract seasonal uncertainty particularly in areas prone to drought as in Zorse. A study in Burkina Faso showed households that diversified

their economic base were better able to withstand the effects of drought.(Reardon et al, 1988).

**TABLE 7.9
DISTRIBUTION OF WOMEN BY SECONDARY
INCOME-EARNING ACTIVITY. (%)**

MAIN INCOME-EARNING ACTIVITY	SECONDARY INCOME ACTIVITY N=70		
	FARMING N=53	OTHER N=17	TOTAL N=70
	FARMERS	0.0	100.0
TRADERS	95.8	4.2	100.0
BREWING	85.7	14.3	100.0
FOOD PROCESSING	75.0	25.0	100.0
HANDICRAFTS	87.5	12.5	100.0
WATER SALES	66.7	33.3	100.0
FORMAL SECTOR	100.0	0.0	100.0
OTHER	100.0	0.0	100.0
TOTAL	75.0	25.0	100.0

SOURCE: FIELDWORK IN ZORSE, 1991

7.4.5 ACCESS TO CAPITAL AND CREDIT

Most women desired to earn an income but their ability to do so depended partly on their access to capital. The main source of capital for women's productive work was from husbands and relatives (Table 7.10). Upon marriage, husbands were

expected to provide some capital to their wives to invest in some income generating activity, the proceeds of which was expected to be used for the household. Women's own resources through sale of crops or other items was also an importance source of capital for women. About a third of women farmers and beer brewers however obtained capital through credit facilities.

TABLE 7.10
SOURCE OF CAPITAL/CREDIT BY TYPE OF
INCOME-EARNING WORK (% Number of Women)

SOURCE	PRODUCTIVE WORK		
	FARMERS	TRADERS	BREWERS
HUSBAND/RELATIVES	59.0	60.2	21.4
SALE OF CROPS/ITEMS	10.3	17.5	28.6
CREDIT/SUSU	28.2	18.2	32.2
OTHER	2.6	4.0	10.7
TOTAL	100.0	100.0	100.0

SOURCE: FIELDWORK IN ZORSE, 1991

Women's access to credit facilities through formal sources is limited particularly in northern Ghana, because they do not have the jural rights to land and property as in the south, which may be used as collateral to guarantee loans from Banks. Their situation relative to women in the south is therefore worsened. Access to credit is mainly through informal sources such as savings or susu groups and women's organisations formed on the basis of the various income generating activities. The

susu groups are a popular source of obtaining credit through investing money in a rotating savings credit association. This is operated with periodic contributions by each member to a common fund which becomes available to each member in turn on a rotating basis. Credit functions are also undertaken by most of the women's organisations, some of which receive assistance from external sources such as the Catholic Church for the Christian Mothers Association and the Nor Yini group which received some assistance from the National Council for Women and Development. The Brewers Association was one of the most organised of these groups and therefore accounted for the highest proportion of women who obtained capital from credit facilities. The association was made up of twenty members who contributed 200 cedis each week, which was saved and given out as loans on a rotational basis to members.

The importance of women's income to total household income is depicted in Table 7.11. Sale of their own crops and private income was the main source of household income for more than half of the women in the sample. Allocation of food from the household farm was the main source for only 22% of the women. Only 16% of husbands provided monetary support. Women's income, though often smaller than men's, is therefore important, as most of it is directed towards basic household needs.

TABLE 7.11
WOMEN'S HOUSEHOLD INCOME (% OF WOMEN)

MAIN SOURCE OF HOUSEHOLD INCOME	N	%
SALE OF CROPS/PRIVATE INCOME	117	51.6
FOOD FROM HOUSEHOLD FARM	51	22.4
MONEY/FOOD FROM HUSBAND	36	16.2
MONEY/FOOD FROM RELATIVES	9	4.0
OTHER	13	5.8
TOTAL	226	100.0

SOURCE: FIELDWORK IN ZORSE, 1991

7.4.6 CHOICE OF INCOME EARNING WORK

Certain household factors may make it possible for women to engage in a particular activity. Table 7.12 suggests a relationship between a woman's main income-earning activity and her age, at a 0.05 significance level. Older women tend to be in pito brewing and handicraft production, while traders and women working in the formal sector¹⁰⁰ are younger. The data suggests that work requiring traditional skills such as brewing beer and handicrafts are done by older women. Those requiring more formal education are done by younger women. Farmers and traders were also relatively young. In the Caribbean, a similar trend has been observed for jobs requiring formal education which is also dominated by young

¹⁰⁰These were mainly teachers, nurses and labourers employed in the forest reserve.

women. However, the evidence for traders and farmers suggests the opposite trend, with traders and farmers being the oldest because trading is seen as a traditional skill built up through experience and farming is done by the less educated who tend to be older (Momsen, 1993:135). Women with no economic activity are mainly young unmarried or newly married women with an average age of 20.2 years (Table 7.12). Newly married women are often expected to assist their mothers-in-law and to begin biological reproduction as soon as possible before engaging in income earning work. They therefore often have heavier reproductive duties.

Other factors such as the household type and size, number, age and sex composition of children, education as well as the location of the activity may have an effect on the type of economic activity a woman chooses. The number of children a woman has appears to follow the same pattern as the age of the woman. Occupations with women with the lowest number of children, as for example those in the formal sector, traders, and those with no income earning work, were also the youngest group of women, presumably because they had been in marital unions for a shorter period (Table 7.12). However the significance level of 0.1 suggests that there is not enough evidence in the data to support the hypothesis that the variables are related. The size of a woman's household and her choice of income earning work however appear to be strongly related at a significance level of 0.003 (Table 7.12).

TABLE 7.12
PRODUCTIVE WORK BY AGE, NUMBER OF CHILDREN AND
HOUSEHOLD SIZE OF WOMEN (AVERAGES)

PRODUCTIVE WORK	AGE	NO. OF CHILDREN	HOUSEHOLD SIZE
FARMERS	38.7	3.8	8.1
TRADING	30.2	3.0	7.6
BREWING BEER	52.8	4.8	9.0
FOOD PROCESSING	36.5	3.2	10.1
HANDICRAFTS	48.2	4.1	12.3
SELLING WATER	40.33	5.5	7.2
FORMAL SECTOR	28.4	2.7	6.2
NO ACTIVITY	20.2	2.2	10.3
TOTAL AVERAGE	36.6	3.6	8.8

SOURCE: FIELDWORK, ZORSE, 1991

ANALYSIS OF VARIANCE

AGE	NUMBER OF CHILDREN	HOUSEHOLD SIZE
F Value = 1.8560	F Value = 1.4716	F Value = 3.6174
DF = 9	DF = 9	DF = 9
Significance = .05	Significance = .1	Significance = .003

Again some activities with women who were youngest and had the lowest number of children, such as traders and formal sector employees, lived in smaller household sizes. This however does not apply to women with no economic activity, who lived in large households. Such women, a majority of whom were young and unmarried or were newly married were often less free to move around than older women. Large households also often required the labour of young women to help with domestic chores while older women who had more skills earned money. Other

factors such as availability of land, capital and credit may also have an important influence on women's choice of income earning work.

7.4.7 INCOME

The control, management and access to monetary income is especially vital for women since vulnerability is often defined in terms of economic criteria. Income from productive work was very small. Women earned an average yearly income of about 6,198 cedis,¹⁰¹ an equivalent of about twelve pounds sterling in 1991, with a median income of only 2,000 cedis. (Table 7.13). About three-quarters of the women earned less than 5,000 cedis per annum. Although the average income earned did not vary much by season, the median income in the dry season of 1,700 cedis compared to 1,000 cedis in the wet season suggests that more women earn a higher income in the dry season (Table 7.13).

There were however differences among women. Almost 8% of them earned more than 10,000 cedis per season, with a maximum of 160,000 cedis. It is thus important in gender studies to consider ways in which women are not a simple undifferentiated empirical category. The inequalities created by the differential access to income reinforces the distinctions created by gender, age and household status, which will be examined below.

¹⁰¹Chapter Four discusses the problems associated with estimating women's income. Income was often underestimated for fear of taxation and the belief that it is bad to talk of one's harvest, as it could lead to poor harvests in the future. Therefore interpretation of data on income must be treated with caution. One Pound = 500 Cedis approximately in 1991.

**TABLE 7.13
DISTRIBUTION OF WOMEN BY INCOME**

AMOUNT EARNED	N	%
UP TO 5,000 Cedis	172	76.1
5,000 to 10,000 Cedis	37	16.4
More Than 10,000 Cedis	17	7.5
TOTAL	226	100.0
AVERAGE INCOME	6,198 Cedis	
MEDIAN INCOME	2,000 Cedis	

SOURCE; FIELDWORK, ZORSE, 1991
 Median Income (Dry Season) = 1,700 Cedis
 Median Income (Wet Season) = 1,000 Cedis

Access to income is often related to age, gender and position in the household, among other factors. Household factors, such as age, number of children and household size in Zorse, when correlated with income did not show any statistically significant relationships. However, household headship and particularly education were related to income. Although income was generally low, female headed households had the lowest incomes at a .05 significance level, with an average income of 2,275 cedis, about a third of the average income for all women (Table 7.14). This supports the evidence that female headed households in rural Africa tend to be poorer than their male headed counterparts (Due, 1991). Women with some education earned four times more than those with no formal education and about three times more than the average income at a .008 significance level (Table 7.14).

Income by type of economic activity shows women working in the formal sector to have the highest income of about 16,000 cedis per annum, followed by brewers and farmers in descending order. As most women with some education were employed in the formal sector, this further supports the hypothesis that education and income are related. However the relationship with type of income earning activity was not statistically significant.

TABLE 7.14
AVERAGE INCOME BY HOUSEHOLD HEADSHIP
AND EDUCATION (In Cedis)

	NUMBER OF WOMEN	AVERAGE INCOME
<u>HOUSEHOLD HEAD</u>		
Husband	95	4,925
Other Male	37	10,295
Female	6	2,275
Total	139	6,198 (Average Income)
<u>EDUCATION</u>		
Some Education	18	18,429
No education	120	4,308
Total	139	6,198 (Average Income)

SOURCE: FIELDWORK, ZORSE, 1991

Analysis of Variance

Household Headship

F Ratio = .6252

DF = 3

Significance = .05

Education

F Ratio = 7.3570

DF = 1

Significance = .008

7.4.8 TIME USE - PRODUCTIVE WORK

The marked seasons that characterise northern Ghana mean that the availability of resources changes throughout the yearly cycle and this has an impact on productive work and time use. As observed for reproductive and community managing roles, the amount of time spent in income earning work suggests some variability with the seasons (Table 7.15). Women spent generally between four and seven hours daily, with an average of 4.1 and 5.2 hours on their productive work in the wet and dry seasons respectively. In the wet season, with the exception of formal sector employees who had fixed hours of work, more time was spent in farming than in any other activity. In the dry season, the only type of farm work done is the growing of vegetables watered from shallow wells dug in stream beds. This is becoming an increasingly important source of income for women in the dry season, but acquisition of suitable land is often difficult for women. Time spent in farming therefore falls from about 5 hours to 1.6 hours daily. All other activities record time increases in the dry season, with the highest increase of about 30% and 23%, being in trading and food processing respectively. This again suggests the use of the dry season to diversify income as also found in Burkina Faso (Reardon et al, 1988). A seasonal impact is therefore reflected in women's time allocations to productive work (Table 7.15).

Productive work is not always performed each day and therefore daily averages may not always provide an accurate picture of time use. Weekly time budgets, calculated by multiplying daily time by number of days worked per week may

therefore prove more useful in providing a broad picture of time use. Table 7.15 indicates that although farmers did not record the highest daily hours, their weekly hours were one of the highest, except for those in formal employment. The lowest weekly time use in each season is in beer brewing, This is because even though it is a time intensive activity, the brewers in the village co-operate among themselves, such that on any one day there are only two sources of beer supply in the village. Thus on the average each women brews beer only twice a week.

**TABLE 7.15
AVERAGE DAILY AND WEEKLY TIME ALLOCATIONS
OF WOMEN TO PRODUCTIVE WORK. (In Hours)**

PRODUCTIVE WORK	DAILY HOURS		WEEKLY HOURS	
	Wet Season	Dry Season	Wet Season	Dry Season
FARMERS	5.2	1.6	27.1	3.5
TRADERS	4.8	6.2	21.6	32.9
BREWERS	4.0	4.2	12.0	12.2
FOOD PROCESSING	4.7	5.8	18.8	25.5
HANDICRAFTS	5.0	5.3	20.5	25.5
WATER SALES	5.5	6.3	22.0	33.3
FORMAL SECTOR	7.0	7.0	35.0	35.0
TOTAL	4.1	5.2	22.6	24.5

SOURCE: FIELDWORK IN ZORSE, 1991

The increased average daily time use in the dry season implies that women use the time saved from not farming, in earning extra income from other productive

work. The implication is that the traditional view of the dry season being a period of rest is changing. As household incomes are falling as a result of deteriorating environmental conditions and economic restructuring, women are making more use of the dry season to generate additional income to offset the economic pressures. Women's work may therefore be intensifying as a result of the twin processes of environmental degradation and economic re-structuring. Chapter Eight will examine these implications further.

7.5 TOTAL WORKLOAD

Total workload is defined as the amount of time women spend in reproductive, community management, and productive work. It is obvious from Table 7.16 that women have a full day, working at least 11 hours. Household maintenance takes the largest proportion of women's time and when the border line activity of kitchen gardening is included, it takes almost twice as much time as productive work. There are seasonal differences in total time use with more time being spent working in the dry season. The differences are accounted for mainly by social duties and productive work which increase by 1.3 hours and 1.1 hours respectively in the dry season. Household maintenance time remains consistent in both seasons. This confirms findings from other "Third World" Countries (Bleiburg et al, 1980; Mueller, 1982; Moser, 1992) that when demands on women's time are high as in the wet season, it is leisure and social duties which are sacrificed most because of their flexibility. It may therefore be inferred that demands for household

maintenance are inelastic, while leisure and community management and income are the more elastic elements in the time budget. Thus there appears to be a trade-off between reproductive, productive and community managing roles of women with the latter being traded for the first two.

The division of household labour depends on a number of variables, primarily gender. Section 7.1.1. has shown responsibility for housework to be mainly that of women and female children. The considerable amount of time spent in productive work has however not led to a re-distribution of reproductive work. These patterns seem to undergo little change even in times of crisis.

TABLE 7.16
AVERAGE TOTAL DAILY TIME USE OF WOMEN IN
REPRODUCTIVE AND PRODUCTIVE WORK (HOURS)

ACTIVITY	WET SEASON	DRY SEASON
HOUSEHOLD MAINTENANCE	5.8	5.8
KITCHEN GARDENING	1.4	0.4
SOCIAL DUTIES	0.4	1.7
PRODUCTIVE WORK	4.1	5.2
TOTAL TIME USE	11.7	13.1

SOURCE: FIELDWORK IN ZORSE, 1991

Cross-cultural comparisons of women's total workloads with other studies, as observed for reproductive work, are difficult to make due to the different variables employed in calculation, but in general, many studies have shown that rural women

in Africa have a heavy workload (Table 7.17). In rural southern Ghana, an average of 10.5 hours on reproductive and 3.5 hours in productive work in a 14 hour day was reported (Ardayfio-Schandorf, 1993). In the Gambia, an average of 6.8 hours in farming and 5 hours in household maintenance was reported (Mair, 1984).

TABLE 7.17
TOTAL DAILY TIME BUDGETS IN SOME AFRICAN
COUNTRIES (in hours)

Activity	Ghana		Burkina Faso		Gambia	Uganda
	Wet	Dry	Wet	Dry		
Household Maintenance	5.8	5.8	3.4*	4.2*	11.0**	8.0
Kitchen Gardening	1.4	0.4	0.2	0.3	NA	0.5
Productive Work	4.1	5.2	5.6	3.8	6.8	7.0
Social Duties	0.4	1.7	0.5	0.8	NA	NA
Total Time Use	11.7	13.1	9.7	9.1	17.8	15.5

SOURCES: Ghana: Fieldwork, Zorse, 1991
 Burkina Faso: Bleiburg et al, 1980:76
 Gambia: Barrett And Browne, 1989:5
 Uganda: Mwaka, 1993:

KEY

NA Not Available

* Household maintenance for Burkina Faso excludes child care time

** Household maintenance for Gambia excludes child care and fuel wood collection time, but includes food crop processing.

The main feature of women's workloads in all the countries depicted in Table 7.17 is the large amount of time spent on household maintenance which in most

cases is more than time spent in productive work. There is also a seasonal impact on time use in Burkina Faso, although some opposing trends with those for Zorse are shown. Social duties increase in the dry season for both data sets, but while productive work increases in the dry season in Zorse, it declines in Burkina Faso. This may be due to the impact of dry season gardening in Zorse, an increasingly important source of income generation, which is not very popular in Burkina Faso as a result of the drier conditions. The differences may also be due to the different time periods of data collection.

7.6 HOUSEHOLD STRATEGIES

The above analysis has shown the long hours that women put into their work and their increasing workloads. Despite this, there has been no corresponding change in the division of labour in the household and men have not taken on new reproductive responsibilities. How are women able to cope with their increasing productive work while still performing their reproductive roles?

The capacity of women to balance their reproductive and productive work depends on a number of household factors and how women are able to utilise these to their advantage. Among these factors, studies in Latin America have found the composition of the household in terms of other females and the particular stage in the life course to be of major importance (Chant, 1987; Moser, 1992). In Ghana, the structure of the household, particularly with regard to the number of other female adults and children has been found to have an impact on women's time use

(Dunn et al, 1978; Francois, 1981). Relations between members of a household are often assumed to be uniformly governed by a benevolent male member of the household. However, household members often face confrontation and domination based on their position within the age and gender hierarchy in the household. It is therefore important to focus on gender differences and on the stages of the life course and the way in which they impact on gender roles which are themselves embedded in the cultural patterns of labour organisation (Radcliff, 1986). This can then be used to deconstruct household strategies.

The following section will therefore examine some of the factors that affect women's reproductive time use and the household strategies employed to overcome these. Productive work time use is excluded in the discussion because it is dependent on several other variables which may not be directly connected with the household such as the type of activity, the scale of operation and the amount of capital available.

7.6.1 AGE AND STAGE IN THE LIFE COURSE

The Kusasi household is a complex social institution in which various forms of hierarchy come together to give clear lines of super-ordination and subordination, with the basic status markers being age, gender and marital status (Whitehead, 1984a). The hierarchy in the household is reflected by the spatial arrangements of huts which reflects the division of social space within the compound. A high status in the household is reflected by the proximity of location of one's hut to that of the household head.

Women pass through various stages in their life course from being a young unmarried adult, through early and late reproductive stages, to the post child bearing stage and these have their appropriate terminology in the Kusaal language. During each stage in the life course, females have clear cut biological, economic and cultural roles. These stages are determined mainly by age, marital status and relationship to the head of the household, which in turn determines the status of the woman in the household and sometimes the type of tasks performed and the amount of time allocated to a particular task.

Age or marital status analysed individually did not appear to have any relationship with the number of hours women spend in reproductive work. However the two factors put together and labeled as the life cycle stage seemed to suggest a strong relationship between a woman's life course and her time use (Table 7.18). Young unmarried women and particularly women in the early reproductive cycle allocate more hours to household tasks than any other group. This period coincides with the early childbearing period or single marital status. During this period the status of the woman in the household is low compared to older wives, mothers or mothers-in-law. Women in the post reproductive stage had the lowest time use in all household activities except child care thus conforming to their traditional role as grandmothers. They also had the highest social management time use. Women in the older life cycle stage perform less housework, because in the Kusasi traditional society, as obtains in most parts of Ghana, respect for older generations is encouraged.

TABLE 7.18
WOMEN'S DAILY TIME USE BY THE STAGE IN THE LIFE COURSE
(Average Hours Per Day)

Reproductive Work	Young Single Stage	Early Reproductive Stage	Late Reproductive Stage	Post Reproductive Stage
<u>Household Maintenance</u>				
Cooking	2.1	2.2	2.1	1.6
Child Care	1.0	2.1	1.1	1.4
Water Collection	1.8	1.6	1.2	0.8
Fuel wood Collection	0.7	0.8	0.7	0.3
Cleaning/Washing	0.7	0.8	0.8	0.6
Total Maintenance	6.3	7.5	5.9	4.7
Kitchen Gardening	0.4	0.5	0.6	0.6
Social Duties	1.9	1.7	1.3	2.2
Total Time Use	8.6	9.7	7.7	7.2

SOURCE: Computed From Fieldwork, Zorse, 1991

Analysis Of Variance

F Value = 5.7841

DF = 3

Significance = .003

Key

Young unmarried = Single and aged 15 to 29 years

Early Reproductive = Married and aged 15 to 29 years

Late Reproductive = Married, divorced or widowed and aged 30 to 49 years

Post Reproductive = Married, divorced or widowed and aged 50 years plus.

The Kusasi society is patrilineal with patriarchal kinship structures, in which women marry into a man's patrilineage and are expected to produce sons to ensure the future of the kinship group. The position of the young wife as the newest

member of the lineage required to earn approval from its older members, improves as she grows older, bears children and gains the right to assistance from young wives, leaving her free to engage in activities outside the household. Responsibility for housework is progressively shifted to teenage daughters and then to the daughter-in-law, and the senior woman's role rapidly becomes supervisory.

Thus after women leave child bearing behind, they often gain considerable respect, power and economic control. It has been suggested that this may be partly due to the fact that older women are no longer considered sexually threatening and this makes them freer to operate in the markets, manage their own families and to make household decisions. Studies in Colombia (Townsend, 1993) and the Caribbean (Momsen, 1993), have also found that women's informal power tends to increase greatly with age.

7.6.2 HOUSEHOLD COMPOSITION

This shift of responsibility with movement up the life course, depends to a large extent on the composition of the household especially in terms of the number of other females. This is the determining factor in a woman's household status and the type and amount of housework performed. For example, Amina, who is the senior of the two wives of the village Chief performs little actual housework even though she has a supervisory role. She is aged about 58 years. Her two sons are away working and attending educational institutions in the south, but their two wives and children all live with her. Two of her nieces also live with her. She has organised them so that her daughters -in-law and nieces do most of the housework thus

releasing her to engage in her productive work. She is the most popular pito brewer in the village and has a soybean and rice farm, for which she won a prize for the best small scale female farmer in legumes, in the Bawku East District during the Farmer's Day celebrations in 1990. She also processes local soap from caustic soda and ash. Her co-wife, who is junior to her, daughters-in-law and nieces all help her in her productive work as well. Thus by utilising her high status in the household as a senior wife, mother-in-law and grandmother, she is able to get her daughters-in-law and nieces who occupy much lower positions in the family to do most of the housework.

On the other hand, Apoayan, who is aged 25 years, with three children aged 7,3 and 6 months and does not live with her mother-in-law or other relatives, talks of the amount of time she spends in her reproductive tasks. She used to trade before the birth of her first child, but with no adult female to help her after the birth, as well as financial constraints, she gave up trading.

The life course of women and the composition of the household in terms of other females are therefore important in determining the way women are able to combine their triple roles, with women in the younger stages bearing much of the work burden and older women who have more authority and higher status doing less. Thus by using household members to offset at least part of their labour, some women are able to balance their reproductive and productive roles. In a study in Latin America, it was also observed that in extended family households, the burden of reproductive work was less on individual women (Chant, 1987). The

composition of the household is in itself an important strategy for increasing the total resources available to women and is an insurance mechanism especially for the poor (Moser, 1992). However, as noted by Whitehead (1984b), the use of junior female labour by older females could also create a division of interests among women. It is therefore important that development planners take these division of interests into account when planning certain types of development projects.

7.6.3 HOUSEHOLD SIZE

Household sizes in Ghana and particularly in the northern part, are large with an average size of 8.8 in Zorse in 1991. Table 7.19 suggests some relationship between household size and time use particularly for social duties, with women living in large households working longer hours. The significance level of 0.5 however suggests that there is not enough evidence in the data to support this hypothesis. A possible explanation may lie not in the size of the household per se, but in its composition particularly in the number, age and sex structure of children which are examined next.

TABLE 7.19
DAILY TIME USE BY HOUSEHOLD SIZE. (Average Hours)

ACTIVITY	SIZE OF HOUSEHOLD		
	SMALL (1-6)	MEDIUM (7-12)	LARGE (12+)
Household Maintenance	5.2	6.1	5.9
Kitchen Gardening	0.4	0.6	0.5
Social Duties	1.3	1.5	2.0
TOTAL	6.9	8.2	8.4

SOURCE: FIELD SURVEY ZORSE, 1991.

Analysis of Variance

F Ratio = .2701

DF = 2

Significance = .56

7.6.4 NUMBER, AGE AND SEX STRUCTURE OF CHILDREN

The number of children a woman has, and particularly the number of female children can be used as an important household strategy for women in the combination of their triple roles. In Ghanaian traditional society, children are highly valued and a large number of children gives a woman a higher status. This is evidenced by the fact that the total fertility for the sample was 7.1 as against 8.1 for the average ideal family size, implying that women would want to have more children than they currently have. (See Chapter Eight).

Dunn et al (1978) observed that in Ghana, children were frequently asked to perform various household tasks and that "women's common labour device is a child" Thus help from older children often alleviates the demands which large family

size makes on women's time obligations. However, although women with a larger number of children in Zorse appeared to spend less time on housework than those with few children, the relationship was not statistically significant, thus suggesting that other characteristics of the children, such as the age and sex structure, may have more of an influence on a woman's time use.

The age structure of children and particularly the age of the youngest child, has been observed to influence women's time use rather than her number of children per se (Mueller, 1982). In order to examine the effect of age structure of children on women's time use, children were divided into three age groups, below six years, six to ten years and eleven to eighteen years living with the mother. Of the three age groups, only the presence of young children below six years old was found to have a statistically significant relationship with women's time use at a .007 significance level, implying a strong relationship between the two variables. Women with young children consistently worked longer hours than those without young children (Table 7.20). This confirms the observation made earlier that women with a lower household status, who are likely to be in the early reproductive stage and therefore have young children, worked longer hours (Table 7.18). Contrary to expectations, the presence of children above ten years of age did not appear to have a relationship with women's time use. This is probably because most women lived in extended family households, where the presence of other family members would help alleviate some of the demands on women and make them less dependent on older children.

TABLE 7.20
WOMEN'S TIME USE BY CHILDREN'S AGE, ZORSE (Average Number of Hours)

ACTIVITY	DAILY TIME USE (HOURS)	
	NO CHILDREN < 6 YEARS	CHILDREN < 6 YEARS
HOUSEHOLD MAINTENANCE		
Cooking	1.8	2.2
Child-Care	1.0	1.0
Fetching Water	1.1	1.4
Gathering Fuel wood	0.7	0.9
Cleaning/Washing	0.6	1.0
TOTAL HOUSEWORK	5.3	6.5
KITCHEN GARDENING	0.4	0.3
SOCIAL DUTIES	1.6	1.4
TOTAL TIME USE	7.3	8.2

SOURCE: FIELDWORK, ZORSE, 1991

Analysis of Variance

F Ratio = 7.2500

DF = 1

Significance Level = .007

7.6.5 EDUCATION

Much of the available information on the effect of education on time use pertains to the developed world and often shows that the amount of time devoted to household tasks reduces with increasing education (Mueller, 1982). Parallel data for developing countries are few and often do not show any significant relationships (Jayme-Ho, 1976; Mueller, 1982).

Only 15% of women in the sample were educated, but these women consistently worked longer hours in reproductive and social management duties than women with no education, thus contradicting the evidence from the developed world (Table 7.21). A possible explanation may lie in the level of education which was very low. Only 12% of the 34 women who had any formal education had studied beyond the primary school level. A large proportion of these women were young and could therefore be classified in the first two life cycle stages depicted in Table 7.18, which may account for the positive relationship between education and time use. Probably due to the small number of women with some education, the relationship was however not statistically significant.

**TABLE 7.21
WOMEN'S AVERAGE DAILY TIME USE BY EDUCATIONAL STATUS.**

ACTIVITY	TIME USE (IN HOURS)	
	SOME EDUCATION	NO EDUCATION
HOUSEHOLD MAINTENANCE		
Cooking	2.0	1.9
Child Care	1.5	1.1
Fetching Water	1.8	1.2
Gathering Fuelwood	0.8	0.7
Cleaning/Washing	0.6	0.4
Total House work	6.7	5.3
KITCHEN GARDENING	0.7	0.4
SOCIAL DUTIES	1.7	1.5
TOTAL TIME USE	9.1	7.2

SOURCE: FIELD SURVEY, ZORSE, 1991

F Ratio = .0210

Significance = .6

7.6.6 HOUSEHOLD FACTORS AFFECTING TIME USE - REGRESSION ANALYSIS

The above analysis indicates that the stage of the life course of women (age and marital status), and the presence of young children aged less than six years were statistically significantly related to women's reproductive time use. Although education and household size appeared to be related to time use, the relationship was not statistically significant.

In order to describe the relative strength of the individual household characteristics which account for women's reproductive time use, a stepwise multiple regression analysis was employed. Regression analysis is a method which provides a means of identifying the relative contribution of a number of predictor variables (in this study, household characteristics), to the common variance in the chosen criterion variable (reproductive work time). Correlation coefficients of various household characteristics and reproductive time use showed only the following variables to be correlated to household maintenance time use at a 0.05 significance level and a two tail test

1. Presence of young children, 0-5 years (Correlation co-efficient = .1875, P = .008)
2. Life cycle stage (age and marital status) (Correlation co-efficient = -.2030, P=.004).
3. Income earning activity (correlation co-efficient = .1439, P = .055)

Thus there was a positive relationship between women with young children and time use, that is, the more young children a woman has, the more her housework, and a negative relationship between life cycle stage and time use, that is the higher up a woman's household status, the less hours she worked.

A stepwise regression analysis shown in Table 7.22 however indicates that the number of young children is the only statistically significant variable which contributes to the explanation of variation in reproductive time use. The other factors entered in the regression, but found not to contribute to the variation in housework time use are also shown in Table 7.22. However regression analysis must often be interpreted with caution. While part of the total variance will be due to error, it is likely that some factors associated with time use have either been inadequately represented by the methods employed in this study, or have been completely neglected. For instance the sex structure of children aged ten years and above and total household income¹⁰² are likely to affect time use, but in the absence of the required data, these were excluded from the analysis.

Another note of caution is that as most of the women (61%) lived in large extended family households, it is difficult to control for factors such as number of children, household composition and size. The presence of other female members in the household, often means that tasks are shared, so that household size or number of children may not have much of an impact on time use. A study of time use in an urban area of southern Ghana, also found that the nature of households was such that it was difficult to use regression analysis to explain variance in women's time use (Francois, 1981).¹⁰³

¹⁰²Women's own income from their productive activities was entered in the regression analysis, but not total household income.

¹⁰³A regression of factors affecting time use in the study mentioned, found age of the woman and the type of income earning work performed as the two factors explaining variance in women's time use (Francois, 1981: 104-105).

TABLE 7.22
STEPWISE MULTIPLE REGRESSION ANALYSIS
OF WOMEN'S REPRODUCTIVE TIME USE

Variables In The Equation					
Independent Variables	B	SE B	Beta	T	Sig T
Number of Children Aged 0-5 Years	65.0000	27.3861	.6428	2.373	.0450
Constant	85.0000	8.6602		9.815	.000

Multiple R = .64281

F = 5.53333

Significant F = .0450

R Square = .4132

Adjusted R Square = .33985

Standard Error = 25.98076

Variables not in the Equation

<u>Independent Variables</u>	<u>Beta In</u>	<u>T</u>	<u>Sig T</u>
Age of Woman	.0805	.257	.805
Education	.4450	1.871	.103
Household Size	.2383	.863	.416
Household Headship	-.2946	-1.068	.321
Number of Children	.4297	1.736	.126
Number of Children Aged 11-18	.484478	1.871	.103
Occupation	.1369	.429	.681
Income	-.4551	-1.935	.094

SOURCE: FIELDWORK, ZORSE

7.6.7 SOCIAL NETWORKS

Another important household strategy is social networking. This strategy is multi-dimensional taking the form of kinship and ethnicity. Women maintain kinship networks even in their new marital residence which become important mechanisms for coping. Sometimes these are not necessarily blood relations. Women use these

friendship relationships to obtain land for farming and for assistance in time of need. (See Section 7.5).

Women also organised into associations, often on the basis of the various income generating activities. An important function of these groups was to accumulate savings often through a revolving or rotation fund, as discussed in section 7.3.3 and to obtain support, in times of crisis. The two most popular groups in Zorse were the Nor Yini (meaning unity) Group and the Christian Mothers Association. However organised social associations was not very strong. Only 38 women or 17% of the respondents belonged to an association. Many women said they did not know the functions of these groups and did not think they would benefit from them. Thus social networks appear to be more informal and individualised, rather than than community based.

Another strategy for offsetting the pressures from environmental degradation and economic crisis was migration. Migration, both seasonal and long term has been a feature of the Northern Regions since the colonial period. The existence of inequalities in development as a result of the exploitation of the more abundant agricultural, forest and mineral resources in the south, generated migration from many areas in northern Ghana, including the Bawku District (Nabila, 1974). Migration was often to cocoa growing areas, mines and to the urban areas to seek better economic opportunities and often involved males, leaving wives behind. Remittances from migrants were therefore an important source of income support for many families. With the economic crisis which has also affected the south and

particularly low income groups in urban areas, southward migration has been drastically reduced from about the mid 1970's. Thus remittances from migrants are no longer a reliable source of income support. Indeed economic decline and crisis have been seen as the major reason for the decline in the north-south migration from about the mid 1970's (Tabatabai, 1988:727).

7.7 SUMMARY

This Chapter has shown the important role that women play and their contributions to the local economy in Zorse. The picture that emerges is one of women working hard to generate an income, to produce food for the family, to maintain kinship linkages and in addition carry out their myriad domestic tasks essential for the maintenance and reproduction of the household.

Yet this substantial contribution is undertaken with limited resources partly as a result of gender inequalities in the distribution and access to these resources. Some of these gender differentials have been identified as inequalities in access to land, capital, credit, income and command over household labour and these undermine women's productivity.

Women's time use as a measure of their workloads shows that women have heavy demands made on their time. More time is spent on household maintenance than on social management or income earning work. Seasonal variations in time use occur with more time spent in productive non-farming work and in social duties in

the dry season. Therefore the dry season which was traditionally a period of rest for women has also become a busy period for women, indicating an intensification of women's work. The division of labour in farm work also shows an intensification of women's workloads with some tasks such as weeding and the cultivation of staple crops such as millet becoming more gender neutral. Household factors observed to influence women's workloads are the life course stage and the number of young children.

Women try to cope with the pressure and burdens of their triple roles by utilising female household members, particularly daughters and daughters -in-law and by reducing their social management roles when necessary. These coping strategies have important implications as they may lead to further increases in gender role differences and to gender differences in educational achievement and thus worsen the inequalities in employment opportunities for women. They may also lead to a division of interests among women as older women use junior females to offset their labour. Thus it is important to consider ways in which women are not a simple undifferentiated category even at the household level. Households cannot be said to have a single economic strategy. Household strategies necessarily embody relationships of power, domination and subordination (Wolf, 1990:60) and are often characterised by polarisations between individual constituents based on a number of variables, especially age and gender. Patterns of inequity in the allocation of both resources and responsibilities identified in this study mean that vulnerability

and the use of household strategies are not uniform within the household. The divisions within the household are therefore important in terms of vulnerability.

CHAPTER EIGHT

8.0 WOMEN AND CHANGE

8.1 INTRODUCTION

The 1980's were a period of important changes in Ghana. Attempts were made to halt the economic decline which had permeated almost all sectors of the economy, through the implementation of a structural adjustment programme (SAP). The measures adopted under this programme had far reaching consequences for almost all Ghanaians, particularly for those in low income urban and rural households (See Chapter Six). The major effect of these measures was that rising food prices combined with declining incomes led to a sharp fall in real household incomes. In addition, the removal of subsidies and the introduction or increase in user charges while raising the cost of social services shifted much of that cost from Government to the household. The 1980's also saw a deterioration in environmental conditions particularly in the northern savannah zone (See Chapter Five). While almost all regions and social strata have been adversely affected by the crisis generated by these changes, the impact has been felt most severely by the "peripheral" rural poor of northern Ghana, a region which already lagged behind in almost all development indicators and is the most vulnerable to environmental degradation. Among the rural poor, both men and women pay the price of structural adjustment, but the burden of absorbing the costs of adjustment is often greater for women as managers of household resources.

The focus in this chapter is therefore to examine the local level impact of macro economic structural adjustment policies and environmental degradation on women in Zorse. As Mackenzie (1993) argues, there is the need to locate the environment and gender centrally in an analysis of the impact of macro economic policies. To examine the changes in women's work and time use, the trends observed in 1991 and presented in Chapter Seven are compared with data obtained in 1984 from women in the same households.

As noted in Chapter Six, the evaluation of structural adjustment programmes is beset with methodological problems. The most fundamental of these is that since the structural adjustment measures were introduced because of deteriorating economic circumstances, it is difficult to distinguish between the effects of the economic crisis, the effects of the adjustment policies themselves, and the massive inflow of foreign resources that followed their adoption (Mosley et al, 1991). It is also difficult to control for other external factors such as deteriorating climatic conditions and conclusions are very sensitive to the two time periods chosen for the comparison, in this case, 1984 and 1991¹⁰⁴ In the discussion that follows I make no attempt to distinguish between the effects of the economic crisis and the adjustment policies themselves, although studies in Ghana have shown that SAP worsened socio-economic conditions particularly for low income households (Cornia et al, 1987, 1988; Rothchild, 1991; Adedeji et al, 1990). The economic crisis engendered by adjustment was further exacerbated by deteriorating

¹⁰⁴ See Chapter Six for a more detailed discussion of the methodological problems and difficulties of evaluating structural adjustment polices.

environmental conditions in northern Ghana and I attempt to draw attention to the contribution of environment degradation to these changes where necessary.

8.2 DEMOGRAPHIC CHANGES

In this section, the socio-demographic changes that have taken place in Zorse between 1984 and 1991 are examined as a background to changes in women's work and time use. The focus in this chapter will therefore be to highlight the occurrence or absence of change.

8.2.1 CHANGES IN AGE-STRUCTURE

In traditional societies, chronological age by itself may not define the role or status that a woman may have, the type of work that she may do, or the degree of power that she may hold within the family or society (Katz and Monk, 1993). However age, in conjunction with other variables or factors is important in determining a woman's position and role within the household. Chapter Seven showed the importance of generational age and position in the life course in determining amount of work carried out by women in the household (Section 7.6).

The distribution of women by ten year age groups shows a similar age structure in both the 1984 and 1991 samples (Table 8.1). The major changes over the period are in the 15 to 19 age group which decreased from 15% in 1984 to 11.5 % in 1991 and in the over 50 age group which increased from 19.4% to 26.6%. This may have an effect on some of the variables to be examined later. The average age of the

village women also increased from 35 to 37 years. However, the significance level of 0.85 obtained indicates that it is likely that there is no significant difference between the two samples in terms of age groups. Comparable national data is not available since no census has been taken after 1984 and the 1988 survey includes only women aged 15 to 49 years. However comparisons with the 1984 regional and national census data both show a youthful population with over 60% of the population aged between 15 and 39 years (Table 8.1).

TABLE 8.1
DISTRIBUTION OF WOMEN BY AGE GROUP, ZORSE. 1984 AND 1991

AGE GROUP	ZORSE 1984 N=250	ZORSE 1991 N=226	UPPER REGION 1984	GHANA 1984
15-19	14.8	11.5	13.1	17.4
20-29	24.8	27.4	29.0	31.0
30-39	20.8	20.8	22.2	19.8
40-49	20.0	13.7	16.3	13.1
50-59	11.4	14.2	9.1	8.1
60+	8.0	12.4	10.3	10.6
TOTAL	100.0	100.0	100.0	100.0

SOURCES

Zorse: Field Survey, 1984 and 1991

Ghana: Ghana, 1987

Upper Region: Ghana, 1987

'T' Test - P Value = 0.85

8.2.2 CHANGES IN FERTILITY

8.2.3 MARITAL STATUS

Marriage is very important among the Kusasi, with more than three quarters of the sample being married in both years. Divorce remains very low and declined further, but the proportion of widowed women fell from 14% to 11% percent (Table 8.2). This could be the result of a narrowing in the age gap between husband and wife, thus implying a decrease in the practice of poaeling or child betrothals, where young girls are given out in marriage to men often much older than themselves usually in appreciation of some past good deed to the girls family, or may reflect increasing re-marriage among widows. Divorced and widowed women are encouraged to re-marry within the lineage (if they were widows of lineage members) in order to maximise its growth (See Chapter Three). However the significance level of 0.8 again indicates that it is unlikely that there is a significant difference between the two samples.

At the national level, there are differences between the proportions in each marital union (Table 8.2). Married and widowed women form higher proportions in Zorse than at the national level. Widows in particular form a large percentage, 11% in 1991 in Zorse, but only 1.5% at the national level. This therefore suggests that more women marry in the villages and also that widowhood occurs more often in the rural areas, probably due to the age gap between spouses. Single and divorced women, on the other hand, form a much smaller percentage in Zorse than at the national level. These differences in marital status between the village and national

level are largely explained by rural-urban and north-south differentials, and the greater strength of tradition and cultural practices in rural areas.

TABLE 8.2
DISTRIBUTION OF WOMEN BY MARITAL STATUS, ZORSE,
UPPER EAST REGION & GHANA

Marital Status	Zorse		Upper Region 1984	Ghana	
	1984	1991		1980	1988
Never Married	7.0	8.9	7.3	19.3	19.8
Married	76.6	79.6	90.3	72.4	64.8
Separated/Divorced	2.2	0.9	1.1	6.8	4.2
Widowed	14.2	10.7	1.3	1.5	1.5
Other	-	-	-	-	5.5
TOTAL	100.0	100.0	100.0	100.0	100.0

SOURCES

Zorse: Field Survey, 1984 and 1991
 Ghana, 1988: Ghana, 1989: 9
 Ghana, 1980: Singh, Owusu and Shah, 1985:
 Significance Level = 0.8

Polygamous marriages are still very much in practice in Zorse with 52% and 48% of women being in such unions in 1984 and 1991 respectively. These percentages are much higher than the 35% for Ghana in 1980 (Singh et al, 1985) and 33% in 1988 (Ghana, 1989). Urban-rural and regional differentials, particularly in levels of education, religion and cultural practices appear to account for these differences.¹⁰⁵

¹⁰⁵An almost perfect inverse relationship has been observed between education and polygamy in Ghana, such that the higher the level of education, the lower the extent of polygamy (Aryee, 1985; Ghana, 1989). With the Upper Region having the lowest school enrolment levels, it is no wonder that it has the highest proportion of polygamous unions.

8.2.4 AGE AT FIRST MARRIAGE AND BIRTH

Age at first marriage and first birth are important indicators of fertility in developing countries. The average age at first marriage in Zorse increased from 16.4 years in 1984 to 18.3 years in 1991. Thus in 1984, whereas 45% of the women were married by age 17, only 27% had married by this age in 1991. At the national level, the average age at first marriage for females increased from 17.7 years in 1980 (Ghana Fertility Survey) to 18.3 years in 1988. (GDHS, 1988). Thus change occurred faster in Zorse and by the end of the 1980's, age at first marriage in Zorse was close to the national average.

As a result, age at first birth also increased from 16.8 years to 19.2 years within the period. The time period between the ages for the two events indicates that birth occurs soon after marriage, however the time period appears longer in 1991 than in 1984. The implications of these three factors, increasing age at first marriage and at first birth and a wider time gap between the two events suggests declining fertility in the area. Some respondents attributed the higher age at first marriage in 1991 to the increasing difficulty in obtaining the bride price of four cows.

8.2.5 NUMBER OF CHILDREN

However, in spite of these indicators suggesting declining fertility, women continue to have a large number of children with the average number of births per woman increasing from 4.3 in 1984 to 4.7 in 1991. Total fertility¹⁰⁶ which for the

¹⁰⁶Total fertility may be defined as the number of births that a woman would have if she survived the entire reproductive span and experienced the fertility schedule prevailing in a given period (Shah and Singh, 1985:93). It is usually calculated from the birth history of women by summing up the age-specific fertility rates across the reproductive ages and multiplying by 1000. However

purposes of this study, is estimated from the completed family size or the average number of children ever born to women aged 50 years and over, also increased from 6.8 to 7.1 births (Table 8.3).

TABLE 8.3
AVERAGE NUMBER OF CHILDREN EVERBORN
TO WOMEN BY AGE-GROUP, ZORSE AND GHANA.

Age Group	Average Children Ever born Zorse 1984	Average Children Ever born Zorse 1991	Average Children Ever born Ghana 1988
15 - 19	0.25	0.36	0.2
20 - 24	1.67	1.49	1.3
25 - 29	3.35	3.04	2.7
30 - 34	4.5	4.7	4.2
35 - 39	5.85	6.13	5.5
40 - 44	6.19	6.88	6.6
45 - 49	6.06	7.53	7.3
50+	6.8	7.09	-

SOURCES

Zorse: Field Survey, 1984 and 1991

Ghana: Ghana Demographic and Health Survey, 1988

Significance Level = 0.1

The distribution of the number of children ever born to women by age group for the two survey years indicates that in 1991, women in the younger cohorts (age groups 15 to 29) were having fewer children, thus reflecting the later age at first marriage and birth. However, from age 30 onwards, the average number of children born to women is consistently higher in 1991 than in 1984 (Table 8.3). The higher

in the absence of the required data, Brass et al (1968) have observed that the completed family size or the average number of children ever born to women aged 45 or 50 plus years can be taken as an estimation of the total fertility rate of an area. For this study, I use the completed family size of women aged 50 plus years as an estimate of total fertility rate of Zorse.

rates in 1991 for the older cohorts may be a reflection of the demographic transition which may lead to lower fertility in the near future if the later age at first marriage and birth continues. The observed significance level of 0.1 however suggests that it is likely that there is no difference between the sample means probably due to variability in the data.

National surveys in Ghana indicate that the level of fertility remains high and stable at about seven births per woman, though a decline of about 10% occurred in the 1970's mainly in the urban areas (Ghana, 1989). Rural-urban and regional differences in levels of fertility occur, with higher fertility and a slower rate of decline in rural areas and in the northern regions (Singh et al, 1985:60).

The high fertility among the Kusasis is related to the high value placed on children. Children are regarded as a gift from God and therefore no attempt should be made to stop such gifts. When the question was asked whether they were content with the number of children they had, many women answered, " However many children God gives is good, one cannot have too many children". On the ideal or preferred family size, women in Zorse reported an average ideal number of 8.1 children, as against 7.1 current completed total fertility, implying that women would want to have more children than they currently have. The sex of the children was also important. Of those who indicated the number of children they would like to have, 87% wanted to have more boys than girls, thus confirming the higher value placed on boys than girls. The preference for larger family sizes is also reflected at the national level. The Ghana Health and demographic survey in 1988 found that

only 23% of currently married and fecund women wanted to stop child bearing, with the northern regions again having the lowest proportions and the highest completed family size (Ghana, 1989:54).

Thus fertility appears to be on the increase in Zorse between 1984 and 1991 as observed in other rural areas in Ghana. With the increasing age at first marriage and first birth in Zorse however, it would be expected that fertility might decline in the near future. However, with the current fertility preferences, which do not seem to have changed despite the deterioration in economic conditions over the period and increasing difficulty in feeding children from declining yields from household farms (See Chapters Five and Six), it is doubtful whether fertility will decline.

8.3 CHANGES IN HEALTH STATUS

The health status of a people is an indication of the well being and quality of life of the society. The disparities in levels of development in Ghana, with the northern regions standing out as those with the poorest quality of life have been discussed in Chapters Three and Six. These disparities are also reflected in the distribution of and access to health services. The Upper East Region has only 2.4% of the total number of health establishments although it has 8% of the country's population and has the highest number of people per doctor. But perhaps the best indicator of the effectiveness of the health care system is in terms of public health service attendance. In 1984, the northern sector with about 19% of Ghana's population

accounted for only 5% of public health service attendance (Adibo, 1986). The inadequate health service infrastructure, as well as the lack of adequately trained health service staff, explains to a large extent, the high morbidity and mortality rates for the northern regions.

Other factors accounting for the poor health status of people in the region are malnutrition, poor sanitary conditions which lead to infectious and parasitic diseases, and high fertility rates (Nabila, 1992). Consequently, the average life expectancy in the area is well below the national average, 45 years compared to a national average of 56 years, with female life expectancy in the region also being the lowest.

The generally poor health conditions prevailing in the region in the 1970's and early 1980's as a result of the economic crises in the country were exacerbated by the cut in government expenditure on social services including health-care, and the introduction of user charges at hospitals, among other measures which were introduced as part of the structural adjustment programme in 1984. The impact of these measures on the rural poor, particularly in northern Ghana has been discussed more fully in Chapter Six, but the impact on health was that health services became expensive and inaccessible for many families as much of the cost was shifted from Government to households. As a result of the withdrawal of supplementary feeding and the introduction of user charges, attendance at maternal and child welfare clinics dropped in several areas in northern Ghana. There is no hospital in Zorse, but figures for attendance at the three biggest hospitals in the region, including

Bawku hospital (which is located five miles from Zorse) show a drop. Cases of the top ten most common diseases reported at the three hospitals fell from 104,447 in 1986 to 91,518 in 1991 (Ministry of Health, 1991). Attendance at Bawku Hospital, dropped from 8,388 in 1984 to 3,618 in 1987, a decline of more than half the number in three years.

In addition, the increasing decline in earnings and household income, with its consequent low attendance at clinics and the inability to purchase adequate nutrition, resulted in an increase in parasitic and infectious and nutrition related diseases in the country as a whole, and in the region in particular. In the Upper East Region, the top seven diseases reported at the Bawku hospital in 1991 were anaemia, gastro-enteritis, malaria, pneumonia, malnutrition, measles and cholera in descending order (Ministry of Health, 1991). There was also a recurrence of yaws and yellow fever in the region in the 1980's as a result of the economic crises and re-structuring measures (UNICEF, 1988). These diseases are poverty related as they are caused mainly by poor shelter, inadequate clothing, malnourishment and insanitary conditions, and are generally preventable especially with the availability and application of low cost health measures.

The combined result of all these was a deterioration in the health status of people in the region as a whole. With the shift in health care from hospitals to the household where the magnitude of care is provided by women, this implied that much of the increased burden fell on women.

In Zorse, the data points to a decline in health status during the seven year period. Data on general morbidity and mortality in Zorse is lacking, but data on infant and child mortality can be used as an indicator of the health status and the quality of life of people, particularly in developing countries. Infant and child mortality rates are estimated for this study from the data on the number of children ever born and the number surviving to women at successive ages utilising Brass' (1968) indirect estimation technique¹⁰⁷. These are presented in Appendix 1.1 and 1.2.

TABLE 8.4
PROPORTION OF CHILDREN DEAD AMONG EVERBORN
BY AGES OF MOTHERS, ZORSE AND GHANA.

Age Group	Zorse 1984	Zorse 1991	Ghana 1980	Ghana 1988
15 - 19	0.16	0.45	0.12	0.07
20 - 24	0.21	0.03	0.15	0.14
25 - 29	0.24	0.18	0.18	0.15
30 - 34	0.19	0.22	0.21	0.16
35 - 39	0.25	0.25	0.23	0.16
40 - 44	0.31	0.23	0.26	0.18
45 - 49	0.27	0.30	0.29	0.18
50+	0.35	0.38	-	-
TOTAL	0.30	0.23	0.23	0.17

SOURCES: Zorse: Fieldwork, 1984 and 1991
 Ghana, 1980: Ghana Statistical Service, 1980
 Ghana, 1988: G. D.H. S., 1988

¹⁰⁷This method is based on specified mortality conditions (Brass, 1968:108) and makes it possible to estimate the proportion of children born who survive to age 1, 2, 4, 5 up to age 20, from the proportions reported as surviving among children ever born to women in successive ages. The proportion dead shown in column five of Appendix 1.1 and 1.2 and summarised in Table 8.4 are then converted into estimates of infant and child mortality.

The proportion dead among children everborn is summarised in Table 8.4 above, and shows that generally the proportion increases with the age of the mother both for Zorse and national data. The notable exception being for mothers aged 15 to 19 in 1991, which is the highest proportion for any of the age groups.

When these proportions are converted to infant and child mortality rates¹⁰⁸, the pattern that emerges is one of increasing mortality (Table 8.5). Infant and under five mortality (0 to 5 years) increased over the seven year period. The dramatic increase in the infant mortality rate in Zorse from 160 to 450 deaths per thousand live births in 1991 seems unexplainable due to the comparative reliability of estimates of women in the 15 to 19 age groups who have been observed to have the tendency to report number of children born or dead with much better accuracy than older women and which according to Brass' (1968) technique approximates infant mortality. This high infant mortality rate could therefore be the result of the smaller proportion of women in the 15 to 19 age group which fell from 15% in 1984 to 11% in 1991 (See Table 8.1) which means that there were fewer births recorded for this age group in 1991, or more likely, it could be due to the increasing number of low birth weight babies born particularly to young mothers as a result of inadequate nutrition and the poor health status of women in the village as a result of deteriorating conditions. Such babies face greater mortality risks due to their low birth weights. The number of low birth weight babies more than doubled in the Upper East Region from 7.3% in 1988 to 19.5% in 1991 (Ministry of Health,

¹⁰⁸Using Brass' (1968) technique, the proportion dead is multiplied by 1000 to give an estimate of mortality rates at ages 1,2, 4 and 5.

1991). These figures suggest that the increase in infant and under five mortality rates between 1984 and 1991 noted for Zorse (Table 8.5) is more likely to represent the true situation.

TABLE 8.5
INFANT AND CHILD MORTALITY RATES FOR SPECIFIC
PERIODS, GHANA AND ZORSE (Per Thousand Live Births)

Area	Infant Mortality	Infant & Child Mortality (0-5 yrs)
Ghana		
1973 - 1977	99.6	187.2
1978 - 1982	86.4	152.4
1983 - 1987	99.0	154.7
Upper Region		
1978 - 1987	103.1	221.8
Zorse		
1984	160.0	190
1991	450.0	220.0

SOURCES

Ghana: Ghana Demographic and Health Survey, 1988
 Upper Region: Ghana Demographic and Health Survey, 1988
 Zorse: Field Survey, 1984 and 1991

At the national level, infant and child mortality rates also indicate an increase between the early and late 1980's (Table 8.5). It further confirms findings from recent studies in Ghana which indicate that infant and child mortality rates which had shown a static or reversing trend in the 1970's had increased in the 1980's due to the declining health status of children from the impact of structural adjustment measures (UNICEF, 1988; Adansi-Pimpim, 1985).

In summary, the data over the period indicates an increasing fertility rate despite a reduction in the age at first marriage and at first birth, a deterioration in health status, as evidenced by increasing infant and child mortality rates, declining numbers of patients attending hospitals in the Bawku District and an increasing occurrence of infectious and nutrition related diseases. These point to a link with the adjustment policies of increases in hospitals fees, food price rises and declining household incomes. It is also linked with the declining yields from household farms which means that women have to buy food whose prices have increased as a result of the adjustment measures. These problems are discussed further in the next section.

8.4 CHANGES IN THE NUTRITIONAL STATUS OF WOMEN AND CHILDREN

Food and nutrition are also important aspects of the well being and quality of life of a people. The availability of food in sufficient quantity and quality is a basic requirement for life. Even in the best of times, the nutritional status of many families in the rural areas was sub-optimal. With the food price rises associated with SAP measures, women as mothers and care takers of the family have found it very difficult to afford to buy the required food to maintain adequate nutritional standards. This has resulted in a decline in the general level of nutrition and health of many families in Ghana (UNICEF, 1988). A study in three polyclinics in Ghana found an increase of 36% in the incidence of protein energy malnutrition between

1985 and 1988, pointing to a deteriorating nutritional status of children in the country. This was attributed to the increasing cost of food (Orraca-Tetteh, 1988).

In the Upper East Region, a region already disadvantaged in terms of several socio-economic indices, the situation is further compounded by the reliance on rainfed agriculture, which is not only seasonal in concentration, but also highly irregular (Chapter Five). The dependence on rainfall, coupled with declining soil fertility and the export of foodstuffs from the region have led to shortfalls in food availability for household consumption and for local sale. These, together with declining household incomes from the effects of SAP measures, have left women in the region, as mothers and managers of the family, particularly vulnerable.

Recent studies indicate that the nutritional and food conditions of people in northern Ghana are extremely grim. A survey showed that the nutritional status of adults in northern Ghana was inadequate in terms of the total quantity available for consumption (National Food and Nutrition Board, Ghana, 1986). For both calorie and protein intake, northern Ghana falls far below the south particularly for children under five, and pregnant and lactating mothers, especially those in poor homes. (UNICEF, 1988:15 to 17). Most adults in northern Ghana have an energy intake of between 1,500 and 1,800 kilo calories per day, an amount that falls short of the 2,400 kilo calories required for the peak period of agricultural activity (Orraca-Tetteh, 1988). Furthermore, the expenditure of energy for even light activity is well above the average value of diet in northern Ghana. With taboos and cultural practices which tend to favour men in intra- family food distribution particularly of

protein rich foods, the nutritional status of women and children is further worsened. For example, in Zorse there is a marked taboo on the consumption of eggs and chicken for females from about the age of ten years onwards and the best parts of the family's meals are reserved for men and boys.

With such traditional practices, which are worsened by declining yields from household farms as a result of deteriorating environmental conditions and high food prices on the market, it is no wonder that about 50% of children between one and five years of age are estimated to be underweight. A survey in the region found that the incidence of malnutrition in the 0 to 5 year group had increased from 52% in 1986 to 70% in 1990 (Ministry of Health, 1990) and further that children in northern Ghana had the lowest weight for age among the three ecological zones. The deteriorating nutritional status of people in the region is further reflected in the increase in diseases related to dietary deficiencies. In 1985, anaemia was the third most commonly reported disease at the Bawku district hospital and malnutrition was the tenth, but by 1991 anaemia was the foremost reported disease and malnutrition the fifth. (Ministry of Health Services, 1991).

Undernourished women are at a greater risk of giving birth to low birth weight babies who face a greater risk of mortality. In the Upper East Region, the number of low birth weight babies has been on the increase since the mid 1980's, and more than doubled from 7.3% in 1988 to 19.5 % in 1992 (Ministry of Health, 1992). Health Personnel in the region see inadequate nutrition among pregnant mothers and the excessive workload of women in the region as major factors causing the

rising number of low birth weight babies. (Peoples Daily Graphic, February 18, 1993:8). The increasing proportion of low birth-weight babies also accounts for the high morbidity and mortality rates in the region with 5 out of every 100 babies dying before the age of five. Poor nutrition also affects women's activity and overall physical performance.

Lack of nourishment was one of the major complaints at the village mobile health clinic, which comes once a week from Bawku, the District Capital. The clinic is operated by Midwives and Community Health Nurses and provides maternal and child health care, as well as immunisation against the main childhood diseases. One of the Nurses at the clinic observed that malnutrition cases were on the increase and that "Poverty is the main cause of malnutrition in the village and not ignorance". This was confirmed by Adisa, who had just lost her three year old daughter due to malnutrition and anaemia,

"It is not that I do not know what to give my child to make her healthy, but I just do not have the food nor the money to purchase it. The harvests last year were poor and I do not have the capital nor the land to trade or farm".

The supplementary feeding programme, through which food packages¹⁰⁹, were given to mothers of malnourished children on each monthly visit to the clinic had been withdrawn as part of the SAP measures. The nurses were trying to get the women to prepare high protein porridges from beans and groundnuts for their children, but mothers even if they could afford these foods, often lacked the time to prepare them.

¹⁰⁹These were often donations from Aid Agencies.

Women's nutritional status is also often affected by their heavy workload, by seasonal peaks in labour demand and by seasonal fluctuations in food supply. The long "season of hunger" from about February to July is characterised by low food stores and food shortages as staple food supplies from the previous harvest are at their lowest. At the same time, it is also the period of increased demand for agricultural labour and increased incidence of water-borne diseases such as malaria (Fig. 5.9). Thus the period when food is most required to provide sufficient energy for hard farm work is also the time when food is scarcest and diseases are most common. During this "hungry season", the nutritional status of many household members is at its lowest. In Zorse it was common for meals, particularly breakfast and lunch to be missed during the wet season when labour demands were high and food short. Missed meals lead to undernourishment and lowered energy and concentration which in turn means lowered productivity. Women are hardest hit because in addition to farm work they have to undertake reproductive tasks as well. A survey in the Upper East Region found that 30% and 50% of males and females respectively were underweight for most part of the year, but during the "hungry season" this increased to 49% and 63% of males and females respectively (National Food and Nutrition Board, 1986). Thus more females than males are underweight which is unsatisfactory particularly for women in their reproductive years as it affects the development of the foetus and subsequent child. With the declining nutritional status of women and children and the increasing workloads over the period, women's health status may further decline.

8.5 CHANGES IN FOOD CONSUMPTION

As a result of the food price increases brought about by the adjustment measures, coupled with declining yields from household farms, many households made some changes to their diets. 52% of the women were of the opinion that their consumption patterns had worsened since 1984 while 46% felt that there had been no change. Only 2% of the women had experienced an improvement in their dietary patterns (Table 8.6). The foods most frequently cut out in order of rank were meat, yams,¹¹⁰ rice, cowpeas (beans) and wild fruits and plants. The removal from the diet of these staples for more than half of the women meant a lack of variety in foods eaten and sources of protein. For these women (52%), their diet consisted mainly of millet and vegetables, with the frequency of eating also reduced, particularly in the wet season.

The distribution of resources within the household is not always even (Dwyer and Bruce, 1988) and therefore food reductions may also not be evenly borne by all household members. Available evidence shows that when households have to reduce food consumption, it is likely that the consumption of women and girls is reduced more than that of men and boys. With the intra-household food distribution which is in favour of men and boys in Zorse, it is likely that it is women and girls who have had to reduce consumption of these foods more than men or boys.

Some new foods had however been introduced since 1984. These were mainly soybeans which was introduced by the Ministry of Agriculture with attractive

¹¹⁰This is a root crop.

incentives to encourage its production. In view of the reduction in cowpeas and meat consumption which are important sources of protein, the introduction of soybeans which is also a protein rich legume, is a valuable addition. However it is still not very popular in the traditional diet.

The main reasons given for no longer eating the foods listed were that they could not afford to buy those foods or had no capital to cultivate those crops (Table 8.7). For women who cultivated them, the preferred choice was to sell them to obtain cash income and purchase millet which was cheaper.

TABLE 8.6
CHANGES IN CONSUMPTION PATTERNS
1984 TO 1991, ZORSE

CHANGE IN FOOD CONSUMPTION	N	%
Deterioration in Food Consumption	107	52.2
No Change in Food consumption	94	45.8
Improvement in Food Consumption	4	2
Total	205	100.0

SOURCE: FIELDWORK, ZORSE, 1991

TABLE 8.7
REASONS FOR CHANGES IN FOOD CONSUMPTION

REASONS	N	% OF WOMEN
Too Expensive	70	65.4
Lack of Inputs To Grow Them	27	25.2
Unavailability	7	6.8
Other	3	2.6
Total	107	100.0

SOURCE: FIELDWORK, Zorse, 1991

In summary, although the nutritional status of people in the Upper East Region has always been poor, particularly in the wet season, this has been worsened by declining environmental conditions and the heavy workloads of women as a result of their triple roles. The situation is further exacerbated by the adjustment measures which resulted in food price increases, making many families change their food consumption patterns by cutting out foods they can no longer afford to purchase or cultivate. Thus the poor nutritional status which has been a feature of people in the region for some years, has been worsened by declining household yields due to unreliable rainfall conditions and rising food prices from the adjustment policies.

8.6 CHANGES IN EDUCATIONAL STATUS

Studies in developing countries have widely recognised the importance of education as an agent of change (Aryee, 1985:20). In Ghana the educational level of the mother has been observed to be strongly related to demographic variables such as fertility and infant and child mortality. These two variables have been shown to decline as the education of mother rises (Shah and Singh, 1985, World Development Report, 1992).

As observed for other indicators of development, northern Ghana also lags behind the other regions in terms of the distribution of educational establishments, staffing and educational inputs. These have resulted in higher levels of illiteracy, lower enrolment figures and high drop out rates especially for girls in the region (Ghana, 1987). This poor state of educational facilities in the region has been further worsened by the adjustment policies of the introduction of school fees and the reduction of educational budgets. These have exacerbated the already limited access to education in the north and in particular for girls. Parents who are already hard hit by the impact of the adjustment measures have been found to pull girls out of school when a choice has to be made between girls and boys.

In Zorse very few women had any formal education, but this doubled over the study period from 7% in 1984 to 15% in 1991 (Table 8.8). However in spite of the increasing number of women with some education over the period, the level of education achieved was lower in 1991. Of the 7% who had some form of education in 1984, 66% of them had more than primary school education, compared to only

17% of the 34 women in 1991. These figures indicate a growing drop out rate for girls particularly after the primary school. However probably due to the small number of women with education in the sample, a test of significance (T test) did not yield a statistically significant result.

Data for the Upper Region between 1984 and 1988 depicted in Table 8.8 shows a similar trend of increasing numbers of educated women from 10% in 1984 to 18% in 1988, but with a declining level of education, also indicating a growing female drop out rate as observed for Zorse. In 1984, 68% of educated women in the Region had post primary school level education, but by 1988 this had dropped to 52%¹¹¹ (Ghana, 1987). As the rate of migration for females in the region is low, this cannot be attributed to migration.

TABLE 8.8
DISTRIBUTION OF WOMEN BY LEVEL OF EDUCATION,
ZORSE, GHANA AND UPPER EAST REGION (Percentages)

Level of Education	Zorse 1984	Zorse 1991	Ghana (Upper Region) 1984	Ghana (Upper Region) 1988
No Education	93.4	85.0	90.0	81.7
Primary School	2.2	12.4	3.2	8.7
Middle School	3.6	1.8	5.2	8.0
Post Middle	0.8	0.8	1.6	1.6
TOTAL	100.0	100.0	100.0	100.0

SOURCES

Zorse: Field Survey, 1984 and 1991
 Ghana, Upper Region, 1984: Ghana Population Census, 1984
 Ghana, Upper Region, 1988: G.D.H.S., 1988

¹¹¹It must be noted that data for 1988 is for a sample of women aged 15 to 49 years and therefore the growing drop out rate could be due to sampling error. However, evidence from other studies suggests a growing drop out rate for girls in Ghana since the mid 1980's (See for example, Kraus, 1991).

Although the drop out rates are for adult women, the same trend has been observed for children. At the national level, primary school enrolment rates dropped by 3.4% between 1982 and 1989 (Kraus, 1991) and in the Upper Region the drop out rate has been observed to be even higher (Songsore and Denkabe, 1988). The drop out rate has been attributed to the introduction of school fees at all levels of education as part of the SAP in 1985. Primary school fees of 500 cedis per term were introduced for the first time in Zorse in 1986. In addition to this, school uniforms, a chair, table, books and stationery which used to be provided free by Government (except for uniforms) now had to be provided by parents. This was estimated to cost about the equivalent of ten pounds sterling in 1991. With an average yearly income of about the equivalent of twelve pounds in 1991 (See Table 7.13) this means that the cost of educating one child is equivalent to about a year's income and therefore out of the reach of most women. Many women complained of the increasing cost of sending their children to the village primary and junior secondary school. Although some men did contribute towards the cost of educating their children, it was not required of them traditionally. Education of children was often solely the responsibility of the mother. Older siblings were expected to help with the fees, but in a situation where most people were faced with an increase in the cost of living and declining real incomes, such help was getting more limited. During my stay in the village four women had their children sent home from school because they had not paid the term's school fees. With the imposition of school fees, parents are having to make a choice between which children to send to school

and this choice is often in favour of boys because of the cultural values of the area. Lamisi who has a son and daughter in the primary school contemplated letting her daughter drop out in the next term. "I only earn about 200 cedis a week from my sales. How can I afford to pay fees for these two children?" With the majority of women being poor rural producers, the cost recovery element of the structural adjustment programme threatens the success of the educational reforms being undertaken, which have as one of their major aims increased access to education. It is also likely to lead to further gender differences in educational achievements which may translate into differences in employment opportunities.

8.7 CHANGES IN HOUSEHOLD STRUCTURE

Among the Kusasi, the household¹¹² as the basic unit of social structure seems very appropriate. The Kusasi word for house "Yin" means both the house (compound) and the people who occupy it. The household is a well defined system of status's, authority and decision making, and it is the primary locus of consumption and its members form a significant production unit. This section will examine changes or lack of change in its composition and size between 1984 and 1991.

¹¹² See Chapter Five for the definition of "household" adopted for this study.

8.7.1 HOUSEHOLD SIZE AND COMPOSITION

Household sizes did not reflect any major changes over the period. Large households continued to be prevalent in the region, with an average size of 8.1 in 1984 and 8.8 in 1991. The largest household, of which there were three, contained 22 members and the smallest one member.

The Kusasi household is a complex social institution in which various forms of hierarchy combine to give clear lines of super-ordination and subordination, with the basic status markers being age, gender and marital status. (See Chapter Seven). Households vary in their composition from simple nuclear families to extended family households containing more than one married man, each of whom may have more than one wife, their children and other extended family members.

Household composition in Zorse as observed for size, also did not indicate any significant changes over the period (Table 8.9). Extended family households continued to be the prevalent type, with female headed households forming only a small percentage of between 3 and 4% of the samples in both years. The size of the household varied with the type, with extended family households being the largest and female headed households, the smallest in size. Nuclear family households differed in size depending on whether they included one or more wives.

Although household types in Zorse have not varied much over the period, their sizes reflect some changes. Nuclear family households in particular have changed in size with the single wife household increasing in size from 5 to 6.3 persons per household, while the size of the multiple wife household reduced from 10.5 to 8.8

persons per household. The increasing trend towards nuclear families with one wife has apparently had no impact on fertility as the average number of children increased over the study period.

TABLE 8.9
DISTRIBUTION OF WOMEN BY HOUSEHOLD TYPE (%) 1984 AND 1991

HOUSEHOLD TYPE	NUMBER OF WOMEN					
	1984			1991		
	N	%	\bar{X} SIZE	N	%	\bar{X} SIZE
NUCLEAR FAMILY	90	36.0	8.1	79	35.0	8.1
One Wife	40	15.9	4.9	40	17.7	6.3
Multiple Wives	50	20.1	10.5	39	17.3	8.8
EXTENDED FAMILY	152	61.0	9.0	138	61.1	9.6
FEMALE HEADED	8	3.1	4.6	9	3.9	4.9
TOTAL	250	226	8.1	226	100	8.8

SOURCE: FIELD WORK, Zorse, 1984 AND 1991

8.7.2 HOUSEHOLD HEADSHIP

Household headship in Kusasi culture and indeed over most of northern Ghana, is based on age and gender. Generational age takes precedence over chronological age, and within generations, males take precedence over females. Illustrating the importance of generational age, Agbakon, who heads an extended family household of fifteen members indicated

"on my death, my eldest son, who is older than my brothers will not take over as household head. Instead my eldest brother, being an uncle to my sons, will succeed as household head".

Thus uncles being higher on the generational ladder take precedence over sons even though sons may be older in chronological age..

Household headship in Zorse over the study period does not show any major changes. Husbands or other males continue to head households for almost all women (Table 8.10).

TABLE 8.10
DISTRIBUTION OF WOMEN BY HOUSEHOLD
HEADSHIP, ZORSE, 1984 and 1991 (Percentages)

HOUSEHOLD HEAD	1984	1991
Husband	68.2	65.0
Other Male	28.74	30.5
Female	3.1	3.9
TOTAL	100.0	100.0

SOURCE

Field Survey in Zorse, 1984 and 1991

Significance Level = 0.05

Female headship is very low, between 3% and 4% and does not show much variation over the period (Table 8.10). Female headship occurs among older women and devolves to women mainly through widowhood. In both years, all the female household heads were widows who headed small nuclear family households with an average size of 5 persons, comprising mainly their own children. Most of

them had access to only a small income. Anobiga, aged 36 is a typical example of a woman household head with a low income. She lost her husband two years ago and has four children aged between six and sixteen years. She works on her late husband's household farm together with her two sons. Sometimes her brothers provide assistance, but only after they have finished work on their own farms, by which time the rains have almost ceased. She obtains about a bag of millet from her farm which is not adequate to feed her family for the year.

A notable exception to the often small, nuclear but poor female headed households found in Zorse was that headed by Shetu, a widow aged 56 years. She heads an extended family household of nine people comprising her three children, daughter-in-law, sister and nieces. Her oldest son migrated to the south to work on a cocoa plantation. He comes home periodically to see his wife and children. She has a large household farm and a private farm and uses the labour of all her household members on the farms. In addition, she and her daughter -in-law trade in the dry season with capital sent home by her son. She and her family were therefore comparatively better off than some of the male headed households.

8.8 SOCIO-DEMOGRAPHIC CHANGES - A SUMMARY

In summary, an analysis of the socio-demographic characteristics in Zorse indicates some changes over the period. Fertility has continued to rise despite the declining age at first marriage and first birth. The health and nutritional status of women and children in Zorse points to a deterioration as evidenced by rising infant

and child mortality rates, increases in infectious, parasitic and nutrition related diseases, increases in the number of low birth weight babies, declining availability of food and changes in food consumption patterns. The number of women with some education has increased but the drop out rate is higher. Households however do not show any major changes and continue to be large in size, composed mainly of extended families and headed mainly by males, reflecting the strong traditions in the area. Rising fertility rates despite falling socio-economic standards and increasing poverty gives cause for concern.

In the discussion I have argued that these changes are linked to the food price increases, declining household incomes and increases in the cost of health care, education and other basic amenities which were introduced as part of measures of the structural adjustment programme. In addition, the worsening environmental conditions, particularly the unreliability of rainfall conditions and declining soil fertility in northern Ghana, have re-inforced the deteriorating circumstances of many women in Zorse. The trend at the national level towards higher levels of education, nutrition and health status which were interrupted by the economic crisis therefore appear to be manifested and re-inforced by worsening environmental conditions in Zorse. The next section will examine the implications of these socio-demographic changes on women's work and time use.

8.9 CHANGES IN REPRODUCTIVE AND PRODUCTIVE WORK

8.9.1 CHANGES IN REPRODUCTIVE WORK

Over the seven year period, the cultural norm that reproduction is women's work did not change as men did not take on new reproductive tasks. The allocation of tasks within the household continued to be gender specific, with females undertaking much of the reproductive work (Table 8.11). Help from husbands, sons or other male relatives appears to have further reduced over the seven year period for activities such as cleaning, washing, child care and fetching water. However more males provided assistance with tasks such as kitchen gardening which is socially acceptable for males to undertake. Thus reproductive work appears to have become even more gender specific.

8.9.2 CHANGES IN INCOME-GENERATING WORK

In terms of the number of women engaged in an income earning activity,¹¹³ there was not much change over the seven year period. The percentage remained at around 86% of the total number of women in both years (Fig. 8.1). Research in Latin America has found that women increase their participation in the labour force during economic crises (Chant, 1992; Gonzalez de la Rocha, 1988; Moser, 1992; Rocha et al, 1987), but Zorse being a rural area with limited resources and employment opportunities even in the informal sector, may be different in this context. A study in a low income settlement in Zimbabwe (Kanji and Jazdowska,

¹¹³ An income generating activity for this study, is defined as any activity which earned women an income either in cash or kind. Chapter Four discusses this further.

TABLE 8.11 Distribution of women by domestic activity according to the source of assistance, 1984 and 1991.

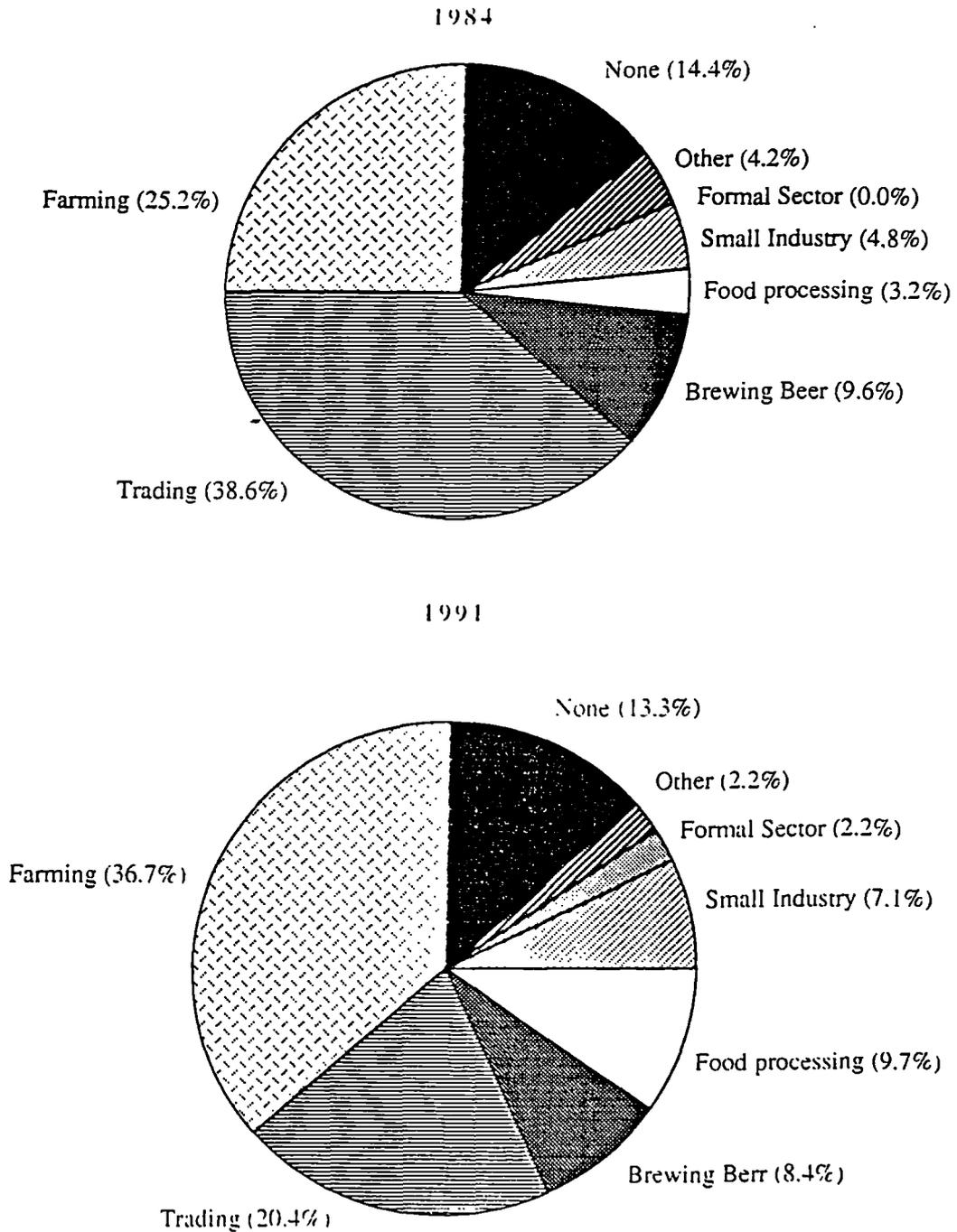
ACTIVITY	SOURCE OF ASSISTANCE												TOTAL	
	Female						Male						1984	1991
	1984	1991	Mother/ Mother in Law	1984	1991	Other Female Relatives	Husband	1984	1991	Sons/Son in Law	1984	1991		
Cooking and Food Preparation	56.7	47.1	8.8	9.7	33.1	38.0	-	0.8	1.4	2.5	2.0	1.5	100.0	100.0
Child Care	31.0	46.2	13.2	11.8	24.0	31.2	4.1	3.2	7.7	5.4	-	2.2	100.0	100.0
Fetching Water	47.1	48.6	6.4	5.7	33.6	35.2	1.3	2.9	11.5	5.7	-	1.9	100.0	100.0
Gathering Firewood	-	53.0	-	5.0	-	36.0	-	1.0	-	3.0	-	2.0	100.0	100.0
Washing/Cleaning	37.3	52.1	5.8	4.4	31.1	34.0	11.4	1.1	13.5	5.3	-	2.1	100.0	100.0
Kitchen Gardening	19.2	11.9	5.3	2.0	19.9	10.0	24.2	55.4	30.8	14.7	1.5	6.0	100.0	100.0

Source : Fieldwork, Zorbe, 1984 and 1991.

1993) observed a similar trend to that found in Zorse, with the number of women engaged in income generating work reducing due to diminishing profits and fewer customers. This may be a feature in rural Africa which requires further investigation.

However, there were changes in the types of income generating work that women were engaged in over the period. There appears to have been a movement from trading into farming and food processing (Fig. 8.1). Whereas traders made up 39% of the sample in 1984, by 1991 only 20% were primarily traders. The number of farmers on the other hand increased from 25% in 1984 to 37% in 1991. This seems to contradict findings in southern Ghana which show that with economic restructuring, more women moved into the informal sector, particularly into trading (Clarke and Manuh, 1991) and in the Sudan, that environmental degradation tends to encourage a shift away from farming as the primary source of income (Riely, 1991). However, the situation in Zorse may be different in the sense that the Bawku District borders two countries, Burkina Faso and the Republic of Togo and as a result there is much international trade between the three countries. Before the introduction of SAP policies of devaluation and the removal of subsidies, prices of foodstuffs and petroleum products were cheaper in Ghana because of the over valued currency. On the other hand manufactured goods were in short supply and expensive because they were sold at black market prices. As a result there was much lucrative retail trading involving the export of food crops and petroleum products for sale in the neighbouring countries, and in return the purchase of

Fig 8.1
Distribution of Women by type of Economic Activity, 1984 and 1991



manufactured goods, mainly wax printed cloths and other consumables for sale in Ghana.¹¹⁴ With the SAP measures of currency devaluation and removal of subsidies however, the prices of food crops and petroleum products rose in Ghana and it was no longer lucrative to take them across the borders. Manufactured goods also became abundant on the local market due to trade liberalisation. The declining real incomes of most people with the introduction of adjustment measures also meant that the purchasing power of many residents in and around Zorse has declined. Trading therefore became less lucrative in the Bawku District. This therefore may account for the reduction in the number of traders in Zorse. Traders in Kumasi in southern Ghana also reported a similar decline in the purchasing power of their customers (Clarke and Manuh, 1991). In Nigeria, a study of Yoruba women showed that with SAP, the ban on all imported food and resulting price hikes encouraged women to start farming and to cash in on the higher producer prices (Guyer and Idowu, 1991). In Zorse however, the incentive to move into farming appears to be not higher producer prices of food crops, since these are produced at a higher cost, but for survival. As most farmers put it “at least with farming one’s children would not go hungry”. Lahadi, who sells some consumer items near the village school commented on the declining purchasing power

"people don't have much money these days to buy food particularly during the hungry season,. Some buy on credit, but there is always a lot left over. When someone comes with no money and a hungry baby, or a hungry school child, I give what they need and then I end up in debt myself".

¹¹⁴Items were usually smuggled in and out of Ghana without paying custom duties thus netting a high profit margin.

With the declining yields from household farms, declining profit from trading and lack of capital to expand trade, more women preferred to go into private farming to earn a cash income. 58% of the women saw farming as offering the best economic opportunities for women while 28% stated trading.

8.10 CHANGES IN TIME USE

Women's time use as a measure of their workloads in 1991 has been presented in Chapter Seven. In this section, the focus will be on the changes that have occurred in women's time use patterns between 1984 and 1991.

8.10.1 CHANGES IN REPRODUCTIVE TIME USE

In their reproductive roles as mothers and wives, research has shown women to be most affected by the adjustment policies in terms of increasing workloads and conflicting demands on their time (Moser, 1992). Table 8.12 presents seasonal differences in women's time use in reproductive work in 1984 and 1991. As time spent gathering fuel wood was not obtained in the 1984 survey, for purposes of compatibility, it is also excluded from the 1991 data.¹¹⁵

¹¹⁵Chapter Seven which presents a discussion of time use in 1991 however includes time spent gathering fuel wood.

TABLE 8.12
AVERAGE DAILY TIME USE IN REPRODUCTIVE WORK.
ZORSE. 1984 AND 1991

ACTIVITY	WET SEASON		DRY SEASON	
	1984	1991	1984	1991
HOUSEHOLD MAINTENANCE				
Cooking	1.5	1.7	2.3	2.0
Child Care	1.6	1.2	1.4	1.1
Water Collection	1.4	1.1	1.9	1.2
Cleaning/Washing	1.1	0.6	0.8	0.8
TOTAL HOUSEWORK	5.6	4.6	6.4	5.1
KITCHEN GARDENING	1.5	1.4	0.6	0.4
TOTAL	7.1	6.0	7.0	5.5

SOURCE: FIELD WORK, ZORSE. 1984 AND 1991.

Over the period, reproductive time use reduced by over an hour in both seasons, with a bigger reduction in the dry season from 7.0 to 5.5 hours (Table 8.12) Time use between 1984 and 1991 declined for almost all housework except for cooking time in the wet season. The reduction in water collection time during the seven year period which is greater in the dry season, is due to the installation of a bore-hole in the village in 1985. Washing and cleaning which are affected by water access also declined, but so also do other activities such as child care. An explanation for the reduced time use in most activities is not easy to obtain since no other time saving device has been constructed in the village over the period. The

reductions may therefore imply that women are delegating more work to children and other female family members, or more likely that they are deliberately reducing time spent in reproductive work in order to increase time devoted to other types of work. Seasonal variations indicates an increase in time demands in the dry season in both years.

Women's time allocation to reproductive work indicates that women are spending less time in 1991 in reproductive work in both wet and dry seasons. As the number of women who received assistance with their reproductive work reduced from 75% to 65% in 1991, it is unlikely that women are delegating more work to other family members. With the exception of water collection time, where time saving is explained by the installation of the bore-hole, the reductions in time devoted to other activities implies that women are cutting down reproductive time use in order to make up for time spent in other work. However with the imposition of fees for the use of the bore-hole as part of the cost recovery scheme of the SAP, time use in collecting water might begin to increase as women turn to cheaper sources of obtaining water. In 1991, a fee of 50 cedis or 200 cedis was charged per basin or drum of water respectively fetched from the bore-hole. In addition the maintenance of the bore-hole has been shifted from the District Council to the Zorse community and a levy charged on all residents who use the bore-hole. These fees were introduced in 1986, one year after the installation of the bore-hole. As a result some women had stopped using the bore-hole particularly in the wet season when water is available from wells and streams. Unless some exemptions are

granted, the numbers using wells and streams could increase with implications for the re-occurrence of diseases such as the guinea worm disease which has been drastically reduced in the region due to the installation of bore-holes and educational campaigns (Ministry of Health, 1991).

8.3.2 CHANGES IN TIME SPENT IN PRODUCTIVE WORK

Although in terms of the numbers of women participating in productive work, there was no significant change (Fig. 8.1), the average time spent in production increased for all activities within the seven year period in both seasons. On the average, time use increased by 0.8 hours in the wet season and almost three hours in the dry season (Table 8.13). This implies that women are working harder in 1991 in both seasons, but particularly in the dry season. It also suggests that in 1984 women did not make optimum use of time saved from not farming in the dry season, whereas in 1991, this was optimised to earn an income in the dry season. For example, some women who were involved in trading travelled longer distances in the dry season to purchase or sell goods.

Seasonal differences in time use also indicate changes between the two survey years (Table 8.13). In 1984, whereas average daily time use declined in the dry season by an hour from 3.3 to 2.3 hours, the seasonal difference in 1991 was reversed showing an increase of 1.1 hours in the dry season. Time allocations between 1984 and 1991 therefore indicate that not only are women working harder in the wet season, a period of heavy demand for agricultural labour, but also that

their workloads are getting heavy in the dry season as well, a period traditionally reserved for rest.

The implication is that women are spending more time in income-earning activities in order to supplement falling household incomes resulting from adjustment policies and declining environmental conditions. As Apoayan, one of the women in the village stated,

"previously we could rely on millet allocations from household farms for preparing the family's meals. Now the allocations are not enough to last us even three months, so we have to work harder in other activities to be able to feed our children".

It appears that women are working longer to increase their incomes in order to offset the effects of declining household incomes.

TABLE 8.13
AVERAGE DAILY TIME USE IN PRODUCTIVE WORK, ZORSE.
1984 AND 1991 (hours Per Day)

ACTIVITY	WET SEASON		DRY SEASON	
	1984	1991	1984	1991
FARMERS	3.5	5.2	1.1	1.6
TRADERS	3.7	4.8	1.0	6.3
BREWERS	2.7	4.8	3.9	4.2
FOOD PROCESSING	4.8	4.7	3.0	5.8
HANDICRAFTS	2.0	5.0	2.6	5.3
FORMAL SECTOR	-	7.0	-	7.0
AVERAGE DAILY TIME USE	3.3	4.1	2.3	5.2

SOURCE: FIELDWORK,, ZORSE. 1984 AND 1991

8.3.3 CHANGES IN COMMUNITY MANAGING WORK

With cut backs in Government expenditure on social services and basic amenities, studies in Latin America (Moser, 1992) have shown an increase in the community managing roles of women, particularly in negotiating and participating in community level developmental programmes or NGO participatory delivery systems. In Zorse, the level of NGO participation was minimal. The main NGOs operating in Zorse were the National Council on Women and Development (NCWD)¹¹⁶ and The Bawku East Women's Development Association (BEWDA) and the 31st December Women's Movement but their role was very limited and consisted of the provision of very limited funding for women's income generating activities.

Collective organisation in the community for self help often recommended as an important survival strategy (UNICEF, 1988) was also low in Zorse. The few associations that had been established were mainly to help one another meet their practical gender needs particularly in generating an income. The Nor Yini, the Christian Mothers and the Brewers Associations appeared to be the best organised groups and had obtained loans from the NCWD and the local Catholic Church for income generating activities. Other groups were more of the susu type in terms of their functions. Although participation in these groups was low, they formalise the informal female support networks that women everywhere depend on. They also help to construct women's role in community organising as an extension of their

¹¹⁶The NCWD was set up by Government as an umbrella organisation for all women's associations. See Chapter Two for its role in Ghana .

domestic role. Thus they ensure not just survival but appear to perpetuate existing gender relations.

Much of women's community managing role in Zorse was in maintaining kinship linkages and networks which have been discussed in Chapter Seven. This declined by 0.4 and 0.7 hours in the wet and dry seasons respectively between 1984 and 1991. Women appear to be acting individually and not collectively in their struggle to make ends meet. Co-operative strategies were therefore not evident. The few self help organisations were mainly to meet met women's practical gender needs.

8.3.4 CHANGES IN TOTAL DAILY TIME USE

Women's average daily total time use are presented in Table 8.14. The activities are grouped into four main categories: Household maintenance and kitchen gardening, making up reproductive work, productive work made up of women's income earning activities either in cash or kind; and social duties, which are an essential part of women's daily work.

Overall, women have a full workload working between eleven and thirteen hours a day which appears to have increased over the seven year period, particularly in the dry season. Although the data is not very conclusive, the following patterns of change emerge. Time spent in reproductive work¹¹⁷ and social duties declined in both seasons over the seven year period. Time spent in

¹¹⁷As noted earlier, Household Maintenance time in this Chapter excludes time spent gathering fuel wood, for purposes of compatibility of the two data sets.

productive work however increased particularly in the dry season. In spite of these time use changes, reproductive work still occupies more than half women's work hours (Table 8.14).

There is a seasonal impact on women's time use. In the wet season, with heavy demands made on women for agricultural labour, they reduce the amount of time spent in household maintenance and particularly in social management, making these the elastic component of women's work. In the dry season, whereas there was a reduction of one hour in productive work in 1984, this trend was reversed in 1991 showing an increase of almost one hour per day in the dry season. The increase in working hours in the dry season in 1991 is therefore accounted for mainly by productive work.

**TABLE 8.14
TOTAL DAILY TIME USE OF WOMEN IN ZORSE
1984 AND 1991 (AVERAGE HOURS PER DAY)**

ACTIVITY	AVERAGE NUMBER OF		HOURS PER DAY	
	WET SEASON 1984	SEASON 1991	DRY SEASON 1984	SEASON 1991
HOUSEHOLD MAINTENANCE	5.6	4.6	6.4	5.1
KITCHEN GARDENING	1.5	1.4	0.6	0.4
SOCIAL DUTIES	0.9	0.5	2.4	1.7
PRODUCTIVE WORK	3.3	4.1	2.3	5.2
TOTAL TIME USE	11.3	10.6	11.7	12.4

SOURCE: FIELDWORK, ZORSE, 1984 AND 1991

In 1984, during the dry season women increased their reproductive and social management time and reduced productive work time use. However by 1991, with rainfall conditions getting more and more unreliable leading to declining yields from household farms, and with reduced household incomes from the impact of adjustment measures, women used the slack period to increase their household incomes through productive work, thereby increasing total work hours to 12.4 hours in the dry season. Rising prices of food and other basic goods and cutbacks in social services affect women more because of their primary involvement in household consumption and welfare. With falling household incomes, women are under greater pressure to earn more but often have few opportunities to do so.

When women were asked whether they thought they were working harder now than in 1984, more than half of them replied in the affirmative. As was summarised by Lariba

"We work more than our mothers in the past. Our mothers in the past only busied themselves with preparing food for the household. After that they sat down and relaxed. They only had to grind the millet and plant on household farms. Our mothers did not weed. Today, we work from sunrise in our domestic tasks and in addition go and work on the farm. We weed and in the evening we have to go home and prepare the evening meal for the family. This is what we do daily from sunrise to sunset. Our mothers in the past never did this. We work and work and we are tired and poor."

Men however did not have this view of women's work. According to Agbakon

"A woman cannot work more than a man. A woman does only women's work. I can work on the farm from sunrise until sunset. The woman has to stop and go home and do the cooking and feed the children. What a woman does is not equal to what a man does."

Clearly the perception of work held by men and women is different.

7.4 SUMMARY

In summary, there is a visible process of impoverishment taking place in Zorse with deteriorating health and nutritional status, changes in the pattern of food consumption, a growing school drop out rate for girls, and an intensification of women's workloads as evidenced by increasing time use particularly in the dry season and more intensive farm work. These are linked to the crisis caused by macro economic SAP policies and further worsened by environmental degradation. These changes are unlikely to affect all households in the same way, nor all members of a household in the same way. When households have to reduce resources, such as reduce food consumption, it is girls and women who are the worst affected since they have the greater responsibility for household management. Despite the fact that women are working harder particularly in productive work, the cultural norm that reproductive work is women's "work" did not change and men did not take on new responsibilities in the household. These changes have important implications for women in their triple role.

The necessity for access to resources as a result of the economic crisis and the deteriorating environment, has made women increase their productive workloads and reduce reproductive and community management time. Paid and unpaid work appears to be competing for women's time with the result that women have a longer working day. Studies have found that when women increase their productive work, loss of leisure and less time for domestic work are the main changes in their time allocation patterns (Goldschmidt-Clermont, 1987; Moser, 1992). The significant point is that an increase in productive work time is being used by women in Zorse as a survival strategy against the effects of structural adjustment and changing ecological conditions, but this is done at the cost of a longer and harder day. Also of significance is the point that even though total work hours have not changed much between the two years (between 11.3 and 12.5 hours), the balance of time between women's various reproductive, productive and community managing roles is adjusted to make up for the deteriorating conditions. "Third World" women appear to be involved in what McGuire and Popkin, (1989) call a "zero-sum game", a closed system in which time or energy devoted to any new effort must be diverted from their other activities.

Another significant point to note is that women appear to be struggling to survive individually and not collectively. Co-operative strategies were not evident and the sphere of struggle is individualised and privatised. Women are struggling individually to increase their productive work and in addition make use of kinship

linkages and household members. The few self help organisations were mainly to meet women's practical gender needs

In conclusion, the field data has shown the way in which macro economic SAP policies have been reinforced by declining environmental conditions to make women as mothers and household managers in Zorse more vulnerable to its impact. To cope with the crises women have increased their productive work at the cost of household maintenance and social management. Thus the ability to cope with the crises depends, as observed in the Sudan (Gray, 1993), on the capacity to engage in income earning activity.

Some may argue that SAP, by increasing work hours in income generation is making women more productive. But when this is undertaken in addition to reproductive and social duties and therefore at the cost of a longer and harder day, this gives cause for concern. By ignoring the unpaid domestic work necessary for reproducing and maintaining human resources and assuming that these will continue regardless of the way in which resources are re-allocated,, SAPs appear to have intensified women's working day in Zorse, thus justifying Elson's (1991b; 1992b) concerns about gender bias in SAPs. With the deteriorating health and nutritional status noted in Zorse, this gives cause for concern for the welfare of women and the family as a whole. It is also disastrous if SAPs counteract the beneficial effects of labour and time saving technology such as the installation of the bore-hole by the introduction of charges for water.

It is therefore important that development planners understand the time constraints of women and the ways that changes in women's time allocations can affect the welfare of the family. Unless the triple role of women is recognised, rural women will continue to be severely constrained by the burden of simultaneously balancing their different roles which may limit their participation in development.

CHAPTER NINE

9.0 CONCLUSION: WOMEN, TIME, CHANGE AND THE TRIPLE ROLE

9.1 SUMMARY OF FINDINGS

This study illustrates how economic decline and macro economic adjustment policies have combined with environmental degradation to make women in Zorse, a small savannah village in Northern Ghana, more vulnerable to impoverishment. The effects of SAP which have resulted in rising food prices, increases in the cost of social services and declining real and household incomes, when combined with declining and erratic rainfall conditions and deteriorating soil fertility, have meant increasing workloads and falling standards of living. The study has shown a visible process of impoverishment taking place in Zorse, with a decline in food consumption in many households, deteriorating health and nutritional status, as indicated by increasing child and infant mortality rates, increasing incidence of diseases related to nutritional deficiencies and declining levels of education particularly for girls between 1984 and 1991.

The study also finds an intensification of women's workloads as evidenced by increasing time use and more intensive farm work with diminishing returns. Women's workloads are increasing not so much in total work hours, as in the type of tasks carried out. Women are increasingly having to work harder as prices rise with currency devaluations, the removal of subsidies and price decontrol, as payment is increasingly required for services previously provided free by the State and as the environment degrades.

Women are trying within a limited range of options, to meet the basic needs of the household by intensifying productive work, particularly farming and by making more use of the dry season, a period traditionally reserved for rest, to

diversify and earn income to supplement falling household incomes and declining yields from household farms. The traditional division of labour in farm work has become more gender neutral as women take on tasks traditionally reserved for men in response to declining household incomes. Thus the necessity to gain access to resources has forced women to increase productive work hours at the expense of reproductive and community management roles, which even though reduced, still take up more than half of women's work hours. When asked why they were working to earn an income, many replied "Nde la yela" literally meaning "Because of eating". Many were of the opinion that if they could generate an income either in cash or kind, their children would never go hungry. This seems to support Rocha et al's (1987) analysis of evidence from Brazil, Argentina and Mexico which leads them to conclude that "the resolution of the basic problem of consumption has become a central concern around which women's activities now turn" (Rocha et al, 1987:17-18).

In spite of the intensification of their workloads, women in Zorse appear to be losing access to land and cash income, as private land is now used for growing the staple crop of millet for household consumption rather than for growing cash crops, in response to declining yields from household farms. Women's labour therefore is vital for household survival strategies.

Although the study showed an intensification of women's workloads, various household strategies are utilised by some women to cope with the pressure and burden of the triple role intensified by SAP. The study found that the capacity of women to balance their triple role depended on various household strategies adopted by women. Among the factors affecting time use,

the composition of the household in terms of other females, the stage in the life course of the woman, and the presence of young children, aged less than six years, were found to be the important factors influencing women's work hours and were important for coping with the pressure and burden of increasing workloads. But there were differences among women in the way they were able to utilise these factors. Older women who have some independent source of income were able to utilise junior female household members to their advantage. On the other hand, women in the earlier stages of the life course, women who had young children and had no independent sources of income appeared to be bearing much of the increase in work hours. Thus even among poor women there are differences in the way they are able to cope with the crisis. The assumption by SAPs that women's unpaid time is infinitely flexible, able to stretch to make up the shortfalls in other resources needed for survival during adjustment (Elson, 1991b; 1992b), appears evident here. But this is done at a cost. It is therefore important to consider ways in which women are not an undifferentiated category even at the household level. Household strategies necessarily embody relationships of power, domination and subordination often based on age and gender. Households therefore cannot be said to have a single economic strategy. It also implies, as observed in India (Raghuram and Momsen, 1993), that vulnerability and the need for coping strategies are not uniform within the household.

Cash income was found to be pitifully small, with an average of an equivalent of about twelve pounds per annum. Household headship and education were found to be related to cash income. Female headed households

tended to have the lowest incomes as observed over much of rural Africa, and women with some education had the highest incomes. This underscores the importance of education as a means of improving women's income earning capacity, and therefore the observed declining levels of education in Zorse give cause for concern. There were however differences between women who were able to increase or diversify their income earning capacity, as opposed to those who could not. The two most popular pito brewers in the village were two examples of women who diversified and increased their income earning base because they had access to credit facilities from private sources and were able to utilise the labour of junior household members for their reproductive work. They were the two women with the highest incomes in the village. On the other hand, women with no access to credit and other productive resources, and no access to labour to offset their reproductive work, were worst affected. Similar findings have been observed in Ecuador between women who are coping with increasing time use and those who are "burnt out" (Moser, 1992).

In response to the question whether men or women were worse affected by the crisis, almost all women thought themselves in a worse position relative to men. The main reason given was that women were more concerned with and responsible for household consumption and welfare. As one of the women summarised during one of our focus group meetings

" We know that these problems we are facing are not the fault of our men. They know what is happening at home, that the money and millet is hardly enough to feed the whole family, but they pretend not to see....they go and get drunk in order not to see. I am the one who sees what the children need everyday and I have to think what to do."

9.2 THEORETICAL IMPLICATIONS

Although both men and women pay the price of adjustment, women as producers, as home managers, as those with primary responsibility for child bearing and rearing and in their role as community managers have borne a substantial part of the impact of adjustment and environmental change within individual households. They have borne the greater share because of the gender inequalities in access to and distribution of resources within the household. The assumption that resources and income are evenly distributed within the household has been questioned (Dwyer and Bruce, 1988). In Zorse the study came up with the following gender inequalities in the distribution and access to resources in the household which have meant that women bear a greater burden of the adjustment measures.

Firstly the sexual division of labour assigns women in Zorse, as observed almost all over the world, primary responsibility for reproductive work. Despite the fact that women were working harder than before in productive work, the cultural norm that reproductive work is "women's work" did not change with the crisis, and men did not take on new responsibilities in the household. Reproductive work still took the largest proportion, more than half, of women's work hours. Elson's (1991b and 1992b) concerns about the gender bias in SAPs concerning the sexual division of labour which ignores barriers to labour re-allocation in adjustment policies designed to switch from non-tradeables to tradeables appears justified here. This has meant an intensification of their work loads as women take on more productive work without any substantial reduction in reproductive work.

Secondly gender differentials were also evident in access to and command over labour, particularly in farm work in Zorse. Men were able to utilise the labour of their wives, and indeed of all female household members, to work on the household farm and on men's private farms (Section 7.4.2). Women did not have command over men's labour and often had to rely on their own labour or on others, either from within or outside the household. Work on household farms and men's farms, had priority over farm work on their own land, so that women's production was often more difficult to increase than men's. This may lead to lower yields on women's farms as found in the Sudan (Gray, 1993).

Thirdly, gender differences in access to land, capital, credit and income were skewed in favour of men. The most important productive resource for subsistence agriculture is land. This resource was however, controlled by male dominated cultural norms and systems of inheritance. Women could only have access to land through males either as members of their kin groups or as male friends. As a result, women's farms were generally smaller than men's. Access to capital or credit for income generating work again showed that they had to rely on husbands and male relatives or on informal sources. As a result of these inequalities, women's access to income tended to be more restricted than men's and much of the income went into supplementing household consumption.

These inequalities in allocation of both resources and responsibilities have meant that women are more affected by the SAP measures which had increased food prices and pushed health care, educational and other service costs on to the household. Given women's lack of economic power and of control over

resources, SAPs may further be subjecting many women to increased poverty, powerlessness and marginalisation in terms of access to productive resources.

Not only are women disadvantaged by the existence of gender inequalities in access to resources in Zorse, but also they are not socially organised to make their voices heard and act as a community to face the crisis. In the urban areas of Ghana, co-operatives, social and religious associations and self help groups are in evidence and serve as a source of support for women, but women in Zorse appeared to be coping with the crisis individually. The few women's organisations present in Zorse were not well supported. Community self help as a survival strategy therefore appeared very low in Zorse. The sphere of struggle to survive appeared to be individualised and privatised with women increasing their workloads in order to generate more income and utilising female household members and kinship linkages to cope with the crisis. The use of an increase in productive work both in terms of time use and taking on more farm tasks as a survival strategy, may be interpreted by Development Planners to mean that women are making more productive use of their time to generate more income which could imply a reduction in some of the gender inequalities outlined above. But, to me, the increase in time spent in productive work, appears to be a cruel and painful choice between survival and non-survival. Women have to intensify their burden of productive work in addition to their other roles in order to ensure the survival of their families. The increased income therefore may not give women economic autonomy and so possibly empowerment, but it is used for the survival of their families. This does not promote equality but rather may intensify female subordination. Emphasis on

employment as a means of empowering women, as advocated for during the UN decade for women (1975-1985), cannot by itself ensure equity. The control over productive resources is also important for enhancing women's position.

The use of the term "survival strategies" as other studies in Africa have shown, runs the risk of "romanticising" or at least elevating this process of trying to cope with all the accompanying stress and anxiety to a status that it does not warrant. Idealising poor women and relying merely on their innate "resourcefulness" does not resolve their problems. It simply "imbibes" us with a false sense of security (Ward, 1982:13). As shown in Chapter Two, rural women's contributions to the economy in Africa in terms of both paid and unpaid work had previously been ignored or under estimated by policy-makers and development planners. But current development policies run the risk of over estimating the extent to which women can compensate for the low wages, rising prices, cuts in Government services, and diminishing employment opportunities of SAPs. I would argue that survival strategies cannot be a substitute for more equitable macro-economic policies.

9.3. POLICY ISSUES

Although the study showed that gender inequalities in access to resources in Zorse were skewed in favour of men, it is still conditioned by low incomes and resources. Although gender equality in access to these resources might help alleviate some of the problems of meeting basic household consumption needs, it would hardly be adequate to offset the effects of the crisis. Men themselves

are also severely affected by SAPs which have resulted in few opportunities for work, poor access to credit and poor educational and health facilities. Gender equality is important and should be a first step towards alleviating some of the problems that women face, but it may not be enough to alleviate their burdens. There is also the need to challenge all forms of inequalities, both regional and in the international economic order. The equality of women must be linked to national and economic development.

Women have been shown to be marginalised within the economy and in the political sphere while exhausting themselves through their reproductive, productive and social management contributions. Their disadvantaged situation defines a set of needs requiring attention. But to the extent that these needs are bound up in structured inequality, the basis of that inequality must also draw attention. Much of the hardship suffered by many rural African women follows from their disadvantaged material condition as dictated by international economic structures and relations and in the case of northern Ghana, also by internal economic structures. But the situation of women must be understood not just in terms of structures of capitalism, but also in terms of gender relations. Women's tasks are carried out from within gendered roles and therefore there is the need for strategies that would re-structure gender relations to ensure more equitable distribution of resources and responsibilities and to redress women's lack of control over resources and locate more accumulation in the hands of women, particularly poor women. This is necessary to ensure an effective adjustment process with some real prospects of sustained growth.

Ideally, policies are needed that will promote good reproduction and community management as well as production. Policies that seek to meet people's needs must recognise women's triple role. People do not merely live by production, and reproduction does not automatically follow production, as assumed by SAPs. Non-tradeables are important in poor countries and especially for women, poor people and people in marginal areas, as shown from the difficulties of women in Zorse.

National and regional policies must address not only the control of resources between public and private, as SAPs do, but also the control of resources between men and women. In Ghana there is still some need to do this at the national level, but the real need is for empowerment, for processes under which women take more control over their own lives, exert more rights and contribute more to collective decisions at the local, regional and national levels, as described by Batliwala, (1993) and Rowlands (1994). This is a whole new dimension of work which this thesis does not address in any detail. There is therefore a need for further research which would address these possibilities for Zorse and other marginal areas.

In conclusion, Ghana went through a period of economic decline culminating in the implementation of a structural adjustment programme in 1984. While it may be difficult to differentiate the effects of the decline from those of the adjustment policies, the intensity of the measures adopted have resulted in increasing social and gender inequalities in Ghana. By its very aim of promoting exports and tradeables to the exclusion of non-tradeables, SAP has left a large section of the population, particularly the "marginal rural poor" and

women, worse off. By adding economic pressures to a region already vulnerable to environmental degradation, SAP has made women as managers of household resources, bear a greater share of the burden. With women being the least socially organised, this implies that a struggle against gender inequalities may be more difficult than social inequalities. Gender inequalities may therefore be widening in Ghana. There is therefore the need, as mentioned earlier, for policies that will empower rural women to take control of their own lives and to escape from the poverty which arises not only from lack of productivity, but also from their double oppression and exploitation as members of a subordinate class and as women.

Macro economic policy prescriptions that rely on “getting prices right” without taking a close look at the micro level implications of these policies will continue to reproduce, justify and strengthen economic, social and gender inequality. There is therefore the need for empirical research that promotes the elaboration of theoretical concepts adequate for analysing the effects of macro level development policies on the situation of women in varying forms in society. This thesis contributes to that need, and to the continuing efforts of feminist scholars to make gender visible in development research and planning and in particular to identify the inter-relationship between gender, the environment and macro economic policies.

APPENDIX ONE

APPENDIX 1.1

Average Number of Children Ever born Surviving and Dead, and the Proportion of Dead Among Children Ever born by Age of Mother, Zorse, 1984

Age Group	Mean Number of Children			Proportion Dead Among Children Ever Born
	Ever born	Surviving	Dead	
15 - 19	0.25	0.2	0.1	0.16
20 - 24	1.67	1.3	0.4	0.21
25 - 29	3.35	2.5	0.9	0.24
30 - 34	4.50	3.5	0.9	0.19
35 - 39	5.85	4.4	1.5	0.25
40 - 44	6.19	4.3	1.9	0.31
45 - 49	6.06	4.4	1.7	0.27
50+	6.8	4.4	2.4	0.35
Average No. of Children	4.3	3.0	1.3	0.30

SOURCE: Calculated from Field Survey Data, 1984

APPENDIX 1.2

Average Number of Children Ever born, Surviving and Dead, and the Proportion Dead Among Children Ever born by age of Mother, Zorse, 1991

Age Group	Mean Number of Children, 1991			Proportion Dead among Children Ever born
	Ever born	Surviving	Dead	
15 - 19	0.36	0.2	0.2	0.45
20 - 24	1.49	1.4	0.05	0.03
25 - 29	3.04	2.5	0.5	0.18
30 - 34	4.70	3.7	1.0	0.22
35 - 39	6.13	4.6	1.5	0.25
40 - 44	6.88	5.3	1.6	0.23
45 - 49	7.53	5.3	2.2	0.30
50+	7.09	4.4	2.7	0.38
Mean No. of Children	4.7	3.6	1.1	0.23

SOURCE: Calculated from Field Survey Data, 1991

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