

UNIVERSITY OF CAPE COAST

FEMALE SOCIO-ECONOMIC STATUS, FERTILITY DECISION-MAKING AND FERTILITY BEHAVIOUR IN THE AKUAPEM SOUTH DISTRICT

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FRANK SAGOE

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UNIVERSITY OF CAPE COAST

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BY

FRANK SAGOE

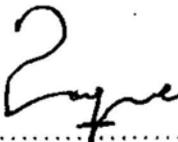
**THESIS PRESENTED TO THE CENTER FOR DEVELOPMENT STUDIES
OF THE FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF CAPE
COAST, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF THE MASTER OF PHILOSOPHY DEGREE IN
DEVELOPMENT STUDIES.**

MAY, 2007

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature 

Date 18/05/2007

Name: Frank Sagoe

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature 

Date May 30, 2007

Name: Prof. C.K. Brown

Co-Supervisor's Signature 

Date August 22nd 2007

Name: Mrs. Akua Britwum

ABSTRACT

The study was an exploratory and non-interventional design focusing on the socio-economic status, fertility decision-making and fertility behaviour of females in the Akuapem South District of the Eastern Region of Ghana.

The multistage sampling procedure was used in selecting Nsawam and Obodan/Fotobi from the Akuapem South District to serve as the study area. The Statistical Package for Social Sciences (SPSS) was used to analyze the data. Additionally, the chi-square statistic and the difference between two means tests, and the Pearson correlation coefficient were applied to infer specific relations in order to reduce the chances of presenting a merely descriptive work.

The study revealed that education and residence were significantly related to fertility behaviour. There was also a significant relationship between fertility decision-making and socio-economic status. The analysis further revealed that there was an inverse relationship between high socio-economic status and the mean number of children born. However, the analysis did not reveal any significant difference between high socio-economic status and fertility behaviour.

Based on the findings of the study it was recommended that, in order to raise their socio-economic status, females should pursue education to the post-secondary level. Also, it was recommended that females should delay marriage until they gain employable skills. To reduce the number of children ever born, it was recommended that husbands should communicate with their wives about the benefits of giving birth to a fewer number of children.

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I cannot bring this acknowledgement to an end without expressing my thanks to Miss Rebecca Arthur, who typed out the final copy of the thesis.

It must be noted, however, that all errors in this work are mine, and I accept responsibility for them.

DEDICATION

To all Mothers in Ghana

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LIST OF ABBREVIATIONS

GDHS	Ghana Demographic and Health Survey
GFAMS	Ghana Female Autonomy Micro Study
GFS	Ghana Fertility Survey
F	Frequency
FIDA	Federation of Women Lawyers
HIPC	Highly Indebted Poor Countries
NCWD	National Council on Women and Development
NGOs	Non-Governmental Organisations
PAMSCAD	Programme of Action to Mitigate the Social Cost of Adjustment
PNDCL	Provisional National Defence Council Law
SAP	Structural Adjustment Programme
UN	United Nations

CHAPTER ONE

INTRODUCTION

Background to the Study

A woman's degree of control of her own child bearing and rearing behaviour, including her ability to decide where and with whom her children should live and how they should be treated and trained are critical issues (Oppong, 1977). This is because motherhood in the African society goes beyond the experience of conceiving and giving birth and of looking after and caring for a child. It is an identity and a necessity for adult status. To have children is accepted with social approval.

Factors or variables that are thought to determine fertility are many and varied. Contraception, age at first marriage, socio-economic development, cultural factors, breastfeeding, socio-economic status of females among others, affects fertility in both traditional and urbanized societies (Bongaarts, 1983). Apart from the social pressure, especially on married women to become mothers, the decisions to have children or not will depend on the control they (women) have over their own fertility (Hartman, 1995). Furthermore, the attitudes men hold towards sex influence a woman's ability to control her fertility through contraception (Hartman, 1995).

The degree to which any of the above variables affects fertility behaviour depends, to a large extent, on the power relations between the spouses, the personal aspirations of the spouses and, to a limited extent, the influence of kins. The cultural conditions existing in a particular time and

space affect fertility behaviour. Norms affecting reproductive behaviour and fertility are contingent upon the needs of the community. Among the Akans of the forest regions of Ghana, for example large numbers are necessary for the labour they will provide on the farms.

. In general, Ghanaian culture views people without children as selfish and strange. Not only couples, but also childless single women feel abnormal. If having no children is seen as selfish, having just one child-denying the child siblings – is only a little better than those without children (Calhoun et al, 1994).

The desire for large family sizes and son preferences has been with Ghanaian families from time immemorial. A large family size is supposed to bring status not only to parents but the lineage. In Akan society, the esteem in which a lineage is held could also depend upon the size of the group (Awusabo-Asare, 1988). A large lineage group can marshal support and command resources, both of which go to bolster the family or a lineage's potential (Caldwell, 1982; Awusabo-Asare, 1988). Child bearing is considered the most important vocation of women and Ghanaian ethnic groups show strong pro-natalist tendencies. Thus, the mother of many children is well respected. In Ghana, a ceremony named "Badudwan" in Akan is performed to celebrate the birth of a tenth child to honour the father on the birth of the tenth child.

Furthermore, children, especially sons, are considered a source of wealth and prestige. They provide labour on the farm, security to parents in old age and continue the family name and lineage at the death of the father.

According to a Chinese proverb, "Having a son is like having two eyes, having a daughter is like having only one eye", and people still believe it to be true. This not wholly true for Ghana where for example, in some typical Akan matrilineal societies females are very important for expanding and ensuring continuity for the lineage.

Although traditionally, well-defined roles were assigned to a woman in the community, her status was recognized mainly for her functions in the family and especially procreation and child rearing responsibilities (UN, 1992). Often, however, especially if married, women did not share economic independence, equal civil rights, political power and educational and occupational opportunities with men (UN, 1992).

With regard to women's status and fertility behaviour a principal focus has been on the relationship between fertility and women's labour force participation, marital status, education level, family type, domestic decision-making and possession of modern goods, among others (Jejeebhoy, 1991: Guoping, 1999). According to Guoping many studies on the issue appear to suggest that, other things being equal, increases in such macro-level phenomena as urbanization and industrial growth and development will tend to lead to a more equitable access to socio-economic and other valued resources for women than had been the case previously. Therefore, it has been established that the widening of women's options should be conducive to desires for family planning methods, and hence decreasing fertility. It is therefore assumed that the status of women can directly and indirectly influence fertility through family planning efforts.

Fertility regulation, as a family planning measure, has been focused on married couples, under the assumption that the couple will either make their own decisions independently, or negotiate a compromise on contraceptive use. The United Nations Population Fund estimates that more than 55 percent of Third World women were using some form of contraception by 1994 (Sadik, 1994).

A study done using information from the Ghana Demographic and Health Survey in 1988 found that rather than being characterized by mutual compromise and reciprocity, the direction of spousal influence in Ghana was almost exclusively male over female. Examining the influence of spouses over each other's contraceptive attitudes in Ghana, Ezeh (1993) came to the conclusion that women's attitude towards contraceptive use is significantly moulded by their husbands' views, although the reverse is not true.

There are traditional barriers that somehow discourage the use of family planning methods. For example, most cultures are yet to be liberated from the preference for male children over female ones. Many couples who have only girls are reluctant to adopt contraceptive methods and keep having more children in the hope that they will get a son. The reverse also holds true for those with only sons.

Furthermore, opposition to birth control is often a reflection of sexual politics, specifically men's fear that if women control their own fertility, fathers will lose control over their daughters and husbands over their wives (Hartman, 1995; Harrison, 1992). It appears females in settings who want no more babies may be afraid to practise birth control because they fear their husbands will beat them if they find out. Or, at times, those religiously

inclined may believe that using birth control devices might be sinful because it is against religious teachings. These fears make one believe that family planning will be accepted only when and where the status of women improves. According to Hartman (1995), rapid growth of population is not an independent cause but rather a symptom of problems in economic and social development that centre on the status of women.

One of the factors that influence fertility levels in Ghana is change in marriage patterns. Over the last five years there has been an 8 % decline in the proportion of women in union, from 70 % in 1993 to 62 percent in 1998 (GSS, 1998). The percentage of married women in polygynous union decreased from 33 per cent in 1988 to 28 percent in 1993. As at 1993, the Eastern Region, of which the study area forms part, is the area where polygyny is least (18 percent) practised (GSS, 1993).

In Ghana, it is relatively rare for a woman to go through life without marrying that is why even some women whose belief is the Christian faith do not considered it as a sin for being in polygamous marriage even though christianity forbid polygamous marriages. Even old women that are widowed or divorced are expected to re-marry. Marriage is both early and universal in Ghana (Logan, 1998). With few exceptions, almost all Ghanaian women marry in their lifetime. In fact, by age 25, over ninety (90) per cent of Ghanaian women are married (Nabila et al, 1997). It has been observed that females who marry early have less knowledge about contraceptive practices and are more likely to have higher fertility. On the other hand females who marry later have possibly acquired skills that help them to make more mature decisions about childbearing and rearing.

Ghanaian females have tended to have non-domestic roles and have not generally been housewives who do not work and need to be encouraged to participate in income-generating activities. Whether as paid labour, traders, or unpaid family labour they have always worked to augment the family income. The majority of the women who work for wages or income do so to contribute additional income to maintain the household. A woman's financial contribution to household resources gives her an important economic role and breadwinner's responsibilities while at the same time the added income help raise the socio-economic status of the entire household (UN, 1992). Hence, their role as wage earners provides women (both single and married) with greater power and economic independence while at the same time it also affords them greater personal satisfaction and social recognition.

Before 1970, the majority of economically active women were providing reproductive labour which included: childbearing and rearing, care of the elderly, growing, processing and preparation of their family food and the production of goods for own consumption rather than for exchange (Sai, 1994). Presently in Ghana, women form about 61 percent of those in the informal sector, with 60 per cent of these women being engaged in retail trade (UNICEF, 1992). From all indications, female employment is high in Ghana, with three in four women in employment (GSS, 1998). In the Akuapem South District, the majority of women in the exchange economy can be found in the informal sector engaged in the retail trade.

The traditional Ghanaian society is passing through both social and economic changes. This has brought in its trail changing factors influencing reproductive decision-making. The ability to choose and regulate the number

of offspring through contraception (whether modern or traditional), and abortion, should be the responsibility of the couple. But it appears that decisions influencing fertility behaviour of females is the prerogative of the man, even though it is the woman who bears the child and, in most cases, has the important function of rearing the child to adulthood.

With the changing social and economic conditions of females as a result of their introduction to western values, the role of females in decision-making in the area of reproduction is changing. For example, according to Blood (1972), among the intellectual elite, mutual consultation and negotiation exist between husband and wife. A research conducted in the Cape Coast Municipality by Dolling (1993) on decision making among middle class families found that, in the majority of families, decision-making between husbands and wives to a very large extent was shaped by the fairly equal contribution that each made to the upkeep of the family and the level of education of the women and the difference in age of the couple.

The modernization of the Ghanaian society has provided access to education for women. There has been an increase of girls at the secondary level. The literacy rate of 63.7 per cent in the district is higher than the national average of 49 per cent. Women in Ghana are generally less educated than men, with 2.3 years of schooling compared with 4.9 for males (GSS, 1998). Education generally has broadened the horizon of females. Those who have been lucky enough to have secondary and post secondary education, for instance, have had the desire to fulfill themselves not only through marriage and childbearing but also through the desire for improved standard of living

for themselves and their family members. Such females also tend to have knowledge of contraceptive methods leading to lower fertility ranges.

The Akuapem South District of the Eastern Region of Ghana has not been left out in the ongoing socio-economic changes taking place in the country as a whole. Since 1980, two conspicuous interrelated changes that have affected the lot of women in the district are: (1) the apparent increase in female status and participation in the market economy in the district and (ii) a seeming reduction in fertility rates of the district (Akuapem South District, 2000).

The Structural Adjustment Programme (SAP), which the country adopted as a result of the decline in the economic fortunes of the country in the 1980s, brought some modest improvement in the socio-economic and cultural development in the society: To help lessen the impact on those who suffered some economic hardship, both the government and non-governmental organisations, as well as women's groups, such as Federation of Women Lawyers (FIDA), 31st December Women Movement and the National Council on Women and Development (NCWD), embarked on programmes to improve the status of women in the country. Of particular interest to these groups are women's rights, reproductive health and the economic empowerment of women. The National Council on Women and Development (NCWD), the 31st December Women Movement and some international organizations embarked on programmes which involved increasing women's participation in politics, education, employment as well as the recognition of their rights. These women groups for example, advocated for appropriate measures to eliminate discrimination against women in the field of health care in order to

ensure on the basis of equality of men and women, and access to health care services, including those related to family planning.

These issues—improving the status of women, elimination of all forms of discrimination against women and economic empowerment of women are important because they do not only affect population policies, fertility behaviour, fertility –decision making but also the general socio-economic development of the society. Also, an overall improvement in the role and status of women appears to be one of the basic prerequisites for the successful implementation of any population policy.

Statement of the problem

The past few years have witnessed debates in the literature and in conferences on population growth and factors affecting reproductive behaviour. Appropriate measures which are thought to limit population growth and fertility rate include the expansion and use of modern contraceptives among married couples through family planning methods. It is also thought that as the socio-economic inequalities between the sexes diminish it sets off behavioural changes that are responsible for declines in family sizes (Jejeebhoy, 1991). Those more concerned with the prospects for fertility decline in contemporary Third World nations, including Ghana, have argued about the relative impact of socio-economic development and family planning programme efforts. It is this reasoning, among others, that led to the idea that “development is the best contraceptive” at the 1974 World Population Conference held in Bucharest, Romania. But this argument ignores the fact that even if the assertion is valid at the macro level, societies is made

up of individuals. At the individual level, it is imperative that the economically or educationally emancipated person should be provided by the society with the opportunity or means to achieve the size of family consistent with his or her own perception of social reality (Logan, 1998). Other options are the adoption of policies related to family roles and opportunities for women that will give them alternative satisfaction and options other than childbearing and child rearing.

Proponents of the idea that policies related to family roles and opportunities for women give them alternative satisfaction and options other than child bearing and child rearing argue that such policies offer greater promise of reduction of family size because they directly and indirectly alter the motivational framework of reproduction. Among the means suggested for limiting reproduction within marriage is the modification of the complementary roles of men and women (Oppong, 1987). Of particular interest in this regard is the relation between female employment, education and fertility. This has led to the idea that expansion of female employment avenues or opportunities would lead to fertility reduction. However, empirical findings have repeatedly demonstrated that this relationship is complex and depends on the extent to which work, childbearing and child rearing are in conflict or compatible (Kasarda, 1971). In the case of education, it has emerged that educating the female per se does not bring about a reduction in fertility. It is the number of years of schooling, which is important (Awusabo-Asare, 1990).

It has also been noted that there is disparity between the desire to stop child bearing and non-use of contraceptive among fecund women above the

age of fifteen years. Data from the 1998 Ghana Demographic and Health Survey (GDHS) indicate that seventy (70) per cent of married couples either want a child after two years or want no more children, indicating that a large proportion of women need contraceptive to space or limit births. However, only 22 per cent of married women were using contraception during the survey.

At the end of the year 2000, Ghana's per capita income was only \$390, coupled with a high inflationary rate of 45 per cent and an external and internal debt of 41 trillion cedis, a situation that placed the country in the domain of the Highly Indebted Poor Countries (HIPC). However, the country has seen some measure of socio-economic development in terms of physical infrastructure (like schools, hospitals), moderate job options in the informal and formal sectors of the economy, and changes in the cultural values in terms of the influence of the kinship system on family formations. Most important of all is the fact that economic emancipation of Ghanaian women, through their full participation in both agricultural and non-agricultural sectors of the economy, has given them an opportunity "to rephrase their position" and play an active role in the decision-making processes within the household (Addai-Sundiata, 1996).

It is often assumed that women who are married form part of a western-style couple and that fertility decisions are discussed between husband and wife (Rogers, 1980). Furthermore, one of the factors thought to be linked to fertility decline is the level of autonomy of women within the society. The general thesis has been that, when women are able to take independent decisions on a wide range of issues including those on

reproductive health, then their fertility begins to decline (Mason, 1993). This general theme does not seem to play out in parts of Ghana such as among the Akan and Gas (Oheneba-Sakyi et al, 1996).

Communication between spouses appears also to be taken as one of the major determinants of contraceptive use and family size. The nature and extent of communication in this regard may depend to a large extent on several factors including the level of education, the age difference between spouses, and the type of marriage, among others.

According to Caldwell and Caldwell (1987), community, institutional and the cultural contexts interact in diverse ways to influence individual couples' attitude towards societal norms. As structural changes in the form of urbanization and industrialization take place in society, the relative equality of women and men in different spheres is seen to change through time (Boserup, 1970). However, Giele and Smock (1977) recognize that no society in the world provides women with status equal to that of men.

Changes in the status of females in terms of education, employment, marriage, and family type, among others are also said to have a varied effect on fertility. Anker (1983), for example, argues that the status of women is a factor that can help reduce the number of children a woman would have. Although the family is regarded as the basic unit of society, several issues of family research, such as couple communication and household decision-making in relation to social change, have largely been neglected (Oheneba-Sakyi et al, 1996) It is therefore not out of place if an exploratory study is conducted at the micro or village level to specify the contextual conditions

under which female socio-economic status and decision-making can help explain the fertility behaviour..

Objectives of the Study

The general objective of the study is to examine the factors affecting female socio-economic status, fertility decision making and fertility behaviour in the Akuapem South District of Ghana.

Specifically, the study will:

- i. Determine the level of female socio-economic status in the district in terms of selected indicators such as level of education, occupation, family type, place of residence, and marriage type;
- ii. Examine the effect of each selected indicator of female status on fertility behaviour;
- iii. Determine the level of usage of contraceptive methods in the district;
- iv. Examine the level of communication between males and females in the district;
- v. Examine the relationship between the socio-economic status of females and fertility decision-making; and
- vi. Investigate the relationship between socio-economic status and fertility behaviour.

Research questions

It is a methodological requirement for any research to formulate research questions to guide the study. Sarantakos (1998) argues that the researcher's personal expertise and interest as well as the needs of the

community should be incorporated in the framing of the questionnaire. The

following research questions therefore were posed to guide the study:

- i. What is the level of female socio-economic status in the district?
- ii. What is the level of knowledge and usage of contraceptive in the district?
- iii. What socio-economic factors influence fertility behaviour?
- iv. What is the level of communication between males and females in the district?
- v. To what extent can a female choose to regulate the number of offspring and timing of birth through contraception?
- vi. To what extent does socio-economic status influence fertility decision-making?
- vii. What effect does socio-economic status have on fertility behaviour?

Hypotheses

The following hypotheses were proposed for the study:

1. H_0 : There is no significant relationship between high female socio-economic status characteristics and fertility behaviour.
 H_1 : There is a significant relationship between high female socio-economic status characteristics and fertility behaviour.
2. H_0 : There is no significant relationship between high female socio-economic status and fertility decision-making.
 H_1 : There is a significant relationship between high female socio-economic status and fertility decision-making.

3. H_0 : There is no significant relationship between high female

socio- economic status and fertility behaviour

H_1 : There is a significant relationship between high female

socio- economic status and fertility behaviour

Rationale for the Study

Although studies have been conducted on fertility levels, patterns and differentials, little is known about studies that focus exclusively on the relationship between the status of women, decision-making, and fertility behaviour. According to one study, the status of women is inextricably linked with their level of autonomy in society (Oheneba-Sakyi et al, 1996). The main thrust of this micro study is to collect data on the socio-economic indicators (such as family type, education, occupation type, marriage type, residence) and communication, decision-making and fertility behaviour in the Akuapem South District.

The research is undertaken for the purpose of seeking additional information to augment the data from the GDHS to help explain the fertility behaviour of females. It is hoped that this study, even though limited in scope, will add to the body of knowledge on the relationship between socio-economic variables and fertility behaviour in the country.

Furthermore, the study is expected to contribute to the discussion on issues concerning women, specifically the relationship between their socio-economic status, their decision-making and fertility behaviour. It will also provide information needed by policy makers and other groups interested in issues affecting the status of women, and also act as a basis for further research.

1. **Desired family size:** The number of children one wants to have in one's lifetime.
2. **Fertility behaviour:** Actual birth performance, i.e. the number of live births one has had.
3. **Female socio-economic status:** A composite index derived from the place of residence, family type, educational level, occupational type and marriage type. The average will be the index of female status.
4. **Fertility decision-making:** It involves the decisions that one makes with regard to birth spacing, breastfeeding, number of children to have and contraceptive usage.
5. **Nuclear family:** A couple living with their children only.
6. **Extended family:** A couple having a kin member staying with them.
7. **Urban Area:** An area with a population of five thousand or more people.
8. **Rural Area:** An area with a population of less than five thousand people.
9. **High Professional:** It includes doctors, lawyers, army officers, managers, head of institutions, and lecturers
10. **Low Professional:** Nurses and teachers.

The study is organized into six chapters. Chapter One presents the background to the study, the statement of the problem, objectives of the study, research questions, the rationale of the study, and operational definition of terms.

In Chapter Two, the literature that has a bearing on the research topic is reviewed. This chapter reviews some models and theories of fertility change, female socio-economic status and fertility, contraception and fertility, communication, and determinants of reproductive decision-making. It concludes with the conceptual framework to be used to guide data collection and analysis.

Chapter Three deals with the methodology, which includes the study area, the study design, sampling procedure, the techniques and tools for the research, data collection procedure and data processing and analysis.

The presentation of findings from the field is taken up in Chapter Four. The main topics dealt with in this chapter include: educational status, fertility behaviour, participation of women in economic activity, marital status, communication and decision-making and contraceptive usage.

The discussion of findings on the socio economic status of women and fertility behaviour is dealt with in Chapter Five. The chapter presents the analysis of the fertility behaviour obtained from the survey. The socio-economic and demographic differences among females in the study area are discussed. Chapter Six, which is the final chapter, deals with the summary, conclusions, recommendations for policy and further research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The concepts of fertility behaviour and fertility decline have engaged the attention of many writers and researchers. Fertility is a multi-dimensional demographic phenomenon. It is believed that improved status of woman does contribute to fertility reduction. A review of related literature on the subject would provide a conceptual framework for the study, which will constitute the basis for the analysis of data from the field.

The review of literature is organised under a number of sub-headings namely: theories of fertility change; socio-economic status of females and fertility; contraceptive knowledge and use; determinants of fertility decision making; and the conceptual framework for the study. The reason for organizing the review in this way is to separate the general from the specific.

Some theories of fertility change

The demographic transition theory

The demographic transition theory developed by Thompson (1929) and Nostestein (1945) argues that fertility falls when societies undergo significant structural changes.

Researchers argue that the type of industrialization and conditions that the advanced countries went through may not be repeated in the Third World countries. Furthermore, the indication that fertility is negatively related to changes in the socio-economic condition in a country is even negated by the

“Baby boom” of the western industrialized countries, particularly America, which took place in the 1940s (Tolnay and Glynn, 1994). Lucas (1977) also argues that theoretically, the segmented changes which the theory believed triggered off fertility decline, have not been properly defined. According to Awusabo-Asare (1988) migration, an important component of population change is also neglected in the theory.

Caldwell (1982) reformulated the transition theory in his net inter-generational wealth flow. He asserted that high and low fertility rates are rational at different stages of socio-economic development. According to Caldwell, in the transitional society where there is a net flow of resources from children to parents, high birth rate is deemed economically and socially rational. On the other hand, in the advanced countries where resources are from parents to children, low birth rates are economically rational. Caldwell (1982) argues that, the high birth rate that pertains in Africa will only change when the direction in the flow of wealth changes from parents to children. The theory postulates that the factors that will likely induce a reversal of resources from parents to children are universal formal education, employment opportunities outside the family and changes in ideas brought about by the media. An outcome of this, according to Caldwell, is the promotion of economic nucleation of the family. These factors will influence decisions about family size.

Using data from several countries, Kocher (1973) proposed a model of rural development and fertility decline under conditions of equitable income distribution. According to him, when increase in agricultural production and income are widely diffused, living conditions of the inhabitants improve, leading to modern lifestyles which will lead to the desire for smaller families among couples. He argues that a greater number of individuals will experience changes in the variables that intervene between income and fertility.

The variables that will induce the desire for smaller family size include: increased survival of children, higher costs and lower productive value of children, desire for smaller families and readily available family planning facilities.

The central proposition underlying the framework is that equality in the distribution of the development process and its benefit (improved rural incomes widely diffused) will lead to a more rapid modernization process among a larger proportion of families. This will lead to a more widespread desire for smaller families and hence an earlier, more rapid and sustained overall fertility decline. As modernization takes place within the family, the changes in attitudes, values, and lifestyles that take place are likely to produce a decline in the relative importance of children as a source of satisfaction or productive value and a rise in their absolute cost (both direct and indirect), the net effect being a desire for fewer and fewer children.

According to Kocher (1973), modernization brings reduced mortality, higher educational enrolments and achievements, material sources of

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satisfaction, in addition to children and less need to depend on children in one's old age.

Rural dwellers attached prestige to large family sizes and cheap labour that children provide on the farms. So therefore, if incomes increase without attitudinal change in behaviour towards family planning development in the rural areas will not have any significant change in fertility behavior.

Female socio-economic status indicators and fertility

The concept of status differs from one society to the other and from one cultural context to the other. The differences have arisen as a result of the varied socio-cultural context within which it is conceptualized, due to the varied factors determining it. Curtin (1975) argues that the status of women covers an individual or groups position in society and implies the idea of ranking. It could also be asserted that the status of women indicates the overall position of women in society and this similarly implies an element of ranking, including the amount of control they exercise over economic, social, political and domestic spheres, as well as the autonomy they enjoy, and the esteem accorded them. According to Calhoun et al (1994: p 63) "statuses are positions in the social order that define who we are in relation to others, and so play a key role in establishing social identity". The problem of the concept of status is that it is a vague one. The difficulty may be resolved if the status referred to is reflected in some indexes such as that of education or employment (Mauldin and Berelson, 1978).

One of the most interesting trends in the literature has been the attempt to correlate fertility behaviour with the status of women. Reduced fertility can

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often be correlated with status as measured by such factors as education, employment, residence, marital status, and characteristics of the family, among others (Dixon, 1975). El-Hamasy (1978) asserts that the status of women is subjective, therefore the value of fertility, for example, and the status of women will depend on how status is defined, what indicators are measured and on the basis of what specific data.

On this note, certain socio-economic variables like employment, education, family type, marriage type, status and residence that are believed to have effect on fertility and could be used to define the status of women will be examined to help provide a conceptual framework for the study.

Marital status, family type and fertility

Generally, the nuclear family is known to consist of a male and female related by a marriage tie, and their offspring. The extended family, on the other hand, consists of persons related by blood or marriage ties (Mulekwah, 1991). In the African context, there are two main types of family – the nuclear family, that is the conjugal family, and the extended family (Mensah-Bonsu, 1996).

It appears that high fertility in traditional cultures is associated by the extended family system. This argument is supposedly based on the extended family's ability to extend financial resources and help in child rearing to kinsmen.

The basic preposition has been that higher fertility occurs in extended families because of: (i) the encouragement of early and nearly universal marriage, (ii) the reduction of the parents' cost of childbearing and rearing

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because of the availability of joint economic resources and additional personnel for child care; and (iii) the increased motivation of both husband and wife to reproduce through inducements of increased status and potentially increased economic and political positions vis-a-vis other extended families (Ryder, 1976).

Several types of marriage systems exist in Ghana. These include: (1) customary law marriages which is registered under PNDCL 112, (2) Marriage under the Ordinance (Cap 127), and (3) Marriage under the Islamic law (Cap 129). Other types of marriage termed consensual unions, which do occur in Ghana are not regarded as legal.

Marriage norms appear to be among the most important determinants of fertility levels in sub-Saharan countries. The age at which men and women first enter into the marital union, the form that the marital union takes, the prevalence of polygamy, divorce and separation, all have a bearing upon the number of children ever born. Marriage involves a variety of cultural practices. One that is assumed to have effect on fertility is polygyny, the practice of a man having two or more wives. In West Africa as a whole, an average of 20 percent of married males is reported to be in polygynous union (Chojnaka, 1980). Aryee (1985) established that polygyny, in spite of the rate of modernization, is still widely practised in Ghana. His study revealed that about one in three (34.6 percent) of all currently married women were involved in polygynous unions.

Greenstreet (1987) asserts that polygynous unions help to sustain traditional patterns of high fertility because wives in these households are tempted to demonstrate their fertility to their husbands. Likewise, the males

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like to prove to their partners their sexual potency. The wives tend to feel more secure and confident in public when they have many children with their husbands, and these results in large families with its attendant problems of too many children to feed, to clothe and to shelter.

The effects of polygyny on fertility are less clear-cut. Some researchers have argued that polygyny reduces fertility. According to Sussman and Steinmertz(1988), a possible mechanism for this lowering effect is that polygyny is closely associated with a prolonged post-partum sexual taboo. However, as Hen (1977) observes polygyny could have two effects: to lower the number of children per married woman by lengthening birth intervals, and to increase the proportion of women married. The former effect, according to him, would be to decrease individual and overall fertility, and the later would be to increase overall fertility.

The age at which marriage takes place is crucial in determining fertility behaviour. Marriage for women in most traditional societies, takes place soon after puberty. The age of marriage for women is significant for fertility as it is the women who carry and give birth to children. Early age of marriage, according to Nukunya (1992), contributes to high fertility as almost the entire childbearing period of the women from puberty to menopause is used for childbearing. High fertility associated with early age of marriage of women means that the wives in these marriages will give birth to more children. The effect is that, the increased number of children in the family will mean that there is a drain on the economic resources of the household and the household's life will evolve very much around the burden of meeting the basic needs of food, healthcare, water and clothing (Awortwi, 1999).

Survey (WFS) data from 29 countries. In 15 of the 29 countries, women who had married at age 20 – 21 had at least 0.5 fewer children on average than those who married at 18 – 19. From the data analyzed, one could assert that the most direct link between age at marriage and fertility is that women who marry later spend less time exposed to the risk of conception. In societies where women are allowed to marry early and where nearly all childbearing takes place within marriage, changes in the age at marriage can significantly affect fertility.

Divorce as a phenomenon in marriage has a negative effect on completed family size. Marital dissolution reduces the exposure to the risk of pregnancy in marriage. A study of WFS data from ten (10) Asian countries revealed that, all other things being equal, women who have been widowed, divorced or separated, or remarried had fewer children than other women. According to Sussman and Stienmertz (1988) women who are widowed or divorced have slightly fewer children than women in stable first marriages. On the relationship between marital status and family size, Bleek (1987), in his study of the people of Aware, found disparities between the legally married, divorced and never married. Whereas the legally married in both male and female samples who considered a family size of more than five (5) as ideal constituted 69% of the sample in that group, the divorced and never married constituted 57% and 40% respectively in this group.

The inclusion of women in gainful employment is said to have a major lowering impact on fertility only in respect to employment in the modern sectors of the economy. With regard to women's work, a simple view expressed frequently and supported with large and expensive data sets has been that fertility is inversely associated with women's labour force participation, leading to the idea that expansion of female employment would lead to fertility reduction (Oppong, 1987).

The World Fertility Survey (WFS) on 38 countries, conducted by the Population Division of the United Nations (UN), found out that women working in professional or clerical jobs had lower fertility rates than women working in domestic service, in agriculture, or not working. It emerged from the analysis of the data that, if other socio-economic factors were taken into account, professional and clerical workers would have a child less after 20 years of marriage than non-working women. Furthermore, the data revealed that the difference in fertility between professional and clerical workers, on the one hand, and agricultural workers and non-working women, on the other, was greatest in the most developed of the 38 countries. In the least developed countries, the type of work had no consistent effect on fertility. Also, the differences in fertility among the type of workers was greatest where family planning programmes was strong and where women's status was relatively high, as measured by educational attainment and age at marriage.

It has also been found that in some developed countries U-shaped relations exist between occupational status of females and fertility. The highest fertility is not found only among low-status groups like farmers and

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farm workers but also among high status groups. Farmer fertility is often high, though not necessarily highest among all occupational groups. As fertility declines, farmer fertility sometimes falls faster than fertility in other groups (UN, 1983; McGreevey and Birdsall, 1974). According to Birdsall (1976), studies suggest that decline in the agricultural labour force contributes to fertility decline.

The employment of women has attracted special attention because of the possibility that work could interfere with childbearing and provide reasons for favouring a smaller family. According to Brown (1996), many women find it relatively easy within the informal sector to care for their children, perform domestic chores and also engage in their numerous economic activities. Folbre (1990), on the other hand, asserts that most women engage in agricultural production in the informal sector where the opportunity costs of bearing children are low, and high fertility remains an important source of economic activity. To women in developed countries, it may appear that employment leaves little time for childcare, but this is seldom true for peasant women in developing countries (Standing, 1983).

Mason and Palan (1981), in an attempt to develop a framework within which to observe the employment-fertility relationship, hypothesized that fertility varies negatively or positively with internal division of labour. To Mason and Palan, this is the major force shaping the employment-fertility relationship. The framework tends to look at the incompatibility hypothesis, which hinges on the two roles of mother and worker, played by a woman. It is hypothesized that the more incompatible the two roles, the more negative the employment – fertility relationship will become. That is to say when the roles

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of mother and worker are structured in such a way that role conflict is generated by competitive sets of familial versus extra familial obligations, an inverse relationship between fertility and work will emerge. There will, however, be no relationship when no such constraints are present. The role conflict hypothesis, according to Oppong (1983), does not offer any explanations for a positive work – fertility relationship and does not take into account variations in childcare standard.

Oppong and Abu (1987), on the other hand, suggest four points, which create the opportunity cost of children. These are: distance between work and home; length and flexibility of working days; availability of childcare support; and whether children may or may not accompany the mother to her place of work. The writers conclude that an inverse relationship could occur where there is a serious role conflict between women's work and fertility. Mohan (1983) confirms this assertion by stating that childless women actively participate in the labour force.

Also according to Farooq et al (1987) the type of work and work place can have a negative or positive effect on fertility. The direction of the relationship, it appears, depends on the degree of separation from home, the availability of household members to help in housework and childcare, and the extend to which children can accompany their mother to the work place. Thus, married women in the informal sector have higher fertility than those in the formal sector.

Education and fertility

Globally, research indicates a consistent inverse relationship between women's education and fertility (Palmer, 1991). But what has also been noted is that the intensity and shape of the relationship between these two indicators vary. For instance, fertility may not decline continuously with additional years of women's education, but may sometime rise. Females with higher level of education have fewer children because they are more likely to use contraception and marry later than women with lower levels of education. Education of women, at least up to the secondary level, is also closely correlated with wider use of modern contraception and, by further implication, lower fertility (Sai, 1994).

It is also to be noted that research on the relationship between educational level attainment by females and their fertility behaviour in Africa has been done. One study of women in Kenya analyzed the impact on a woman's total fertility of her age at first marriage, level of education, place of residence, marital status, religion, contraceptive use and work status (Agyei and Mbamanyo, 1989).

In a study on fertility among Yoruba women, Sembajwe (1981) found that fertility among women with no schooling was lower than that of women with primary education. Fertility then, according to Sembajwe, declines as education increases from primary to secondary and even tertiary. In most developing societies of the world, family size declines as education increases.

The 1998 GDHS has revealed that the higher the educational status of a woman, the smaller the family size desired. For example, women with secondary education consider a family size of 3.4 children as ideal, whereas

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their colleagues who have never been to school favour 5.5 children as ideal.

The findings confirm Ageh-Gbede's(1990) study on educational level and fertility rates which revealed similar lower family size expectation (desired and ideal) among women with secondary education than women with out formal education. Of all interventions to control fertility it has come to light that girls' access to educational opportunities appears to be the most crucial. Education imparts a sense of control over ones destiny, which may encourage attempts to control childbearing as well. In general, with a few exceptions, educated women earn more and have fewer children who enjoy better health.

Education influences fertility directly through attitudes to childbearing and family size, as well as indirectly by affecting the age at marriage. As suggested earlier, education can influence the age at marriage in a number of ways: by increasing the number of years in school, by delaying the time when a girl receives instruction in household duties, such as cooking, and by changing attitudes to marriage (Chatterjee, 1982).

According to the Population Impact Project (PIP)(1998) differences in ideal family size by education level may be attributed partly to the fact that women with low levels of education tend to be older and of higher parity. But it is interesting to note that, within all levels of education, ideal family sizes increase with age. It is generally accepted that these influences could affect one's traditional values and attitudes regarding reproduction and fertility preferences.

The other side of the education-fertility relationship is that studies conducted in less developed countries, on the other hand, show that female education, as a necessary pre-condition for fertility decline, is, at best, weak

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due to the presence of other intervening variables like female employment and residence (Tan and Haines, 1984). Some primary education, in fact, appears to increase rather than decrease fertility. The highest fertility is often found, not among women without education, but among those with a few years of education, as few as three (in Philippines) or as many as ten (in Sierra Leone) (Cochrane, 1983). This positive effect of education at low level is especially marked in rural areas (Hamelin and Mason, 1980) and in less urbanized and poorer developing countries, where per capita income is below US\$500 (Cochrane, 1983).

Even though the government of Ghana has embarked on universal education for all school-age children, it appears its effect on fertility has not been pronounced. Rather, the fertility-reducing effect of formal education occurs with post-basic school education (Awusabo-Asare, 1988). "For Ghana, therefore, it appears the fertility-inhibiting effect of formal education will be achieved not only with universal basic education but also a higher proportion of females achieving post-middle (Post JSS) education" (Awusabo-Asare, 1988 p.477). Awusabo-Asare goes on to assert that the basic education in Ghana is not sufficient by itself to provide the individual with the socio-economic independence and change in attitude towards fertility behaviour associated with education.

Some authors have noted in many surveys that the impact of education on fertility is not monotonic. For women with very little education, the number of children ever born tends to rise with education until some threshold level (typically somewhere between five and seven years of schooling) is

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reached. Thereafter, fertility and education are generally correlated
(Cochrane, 1983) and (Cochrance and Farid, 1990).

Residence and fertility

Studies on fertility have shown that fertility differentials exist between rural and urban places of residence. Kazeze (1981) notes that studies taken in Chad, Gabon, Egypt and Nigeria have shown higher fertility in urban areas. In the case of Ghana, Burkina Faso, Niger and Cote d'Ivoire, lower fertility rates are to be found in urban areas.

Ascadi and Johnson (1990) found no correlation between the mean number of children born and the level of urbanization in Cote d'Ivoire. The researchers concluded that Cote d'Ivoire has one of the most urbanized population and one of the largest mean desired family sizes. The inference from this paradox as exists in Cote d'Ivoire is that the traits of both rural and traditional ways remain quite apparent in most sub-Saharan African cities, especially in squatter or shantytown settlements inhabited by migrants. Urbanites generally have access to better education, wider spectrum of work opportunities, a more serene public health environment, and more avenues for self-improvement and social mobility. They invariably also face higher costs in raising children. If these factors are considered, urban fertility tends to be substantially lower than rural fertility, by 0.5 to 1.5 births, on the average, across countries (Stolnitz, 1983).

One impact of urban living is the wider and more varied, though possibly less intense, personal contacts it promotes, and the access to communication networks it makes possible (Findley and Orr, 1978). Such

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contacts can lead to a wider search for a marriage partner and a consequent delay in marriage, to the spread of the idea of controlling fertility, and to the quicker diffusion of contraceptive technology. Another aspect of urban living and of the communication networks generally rooted in urban areas is the continual introduction and diffusion of new goods, from bicycles and T.V set to electronic games and the latest fashions (Bulatao, 1982). Aspiration for such goods eventually conflicts with child rearing. In Taiwan, China and Indonesia, households owning a greater number of modern consumer durables have been shown to have lower fertility (Chernichovsky and Meesook, 1981; Bulatao and Lee, 1983).

It should be noted that many urban-rural differentials are not inherent, and can be increased or decreased by appropriate policy. When differences between urban and rural households in education, income and other fertility determinants are discounted, the fertility differential between urban and rural households is substantially reduced (UN, 1979).

The total effect of residence, including its pervasive influence on other fertility determinants, tends to be significant. In fact, cases are occasionally reported of lower fertility rates in rural areas than in urban areas (Birdsall, 1976). Careful comparisons suggest to the contrary, that urban fertility is lower in each of the 20 countries covered by the World Fertility Survey when all urban and all rural women are compared. When only ever-married women are compared, urban women still have lower fertility, except in three countries: Indonesia, Pakistan and Bangladesh (Rodriquez and Cleland, 1980). In these countries and in several others, the later age at marriage in urban area reduces urban fertility (Cochrane, 1983). In more urbanized

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societies, urbanites are more likely to come from larger and more cosmopolitan centres, where anti-natal influences are likely to be even stronger. The evidence from the 1988 and the 1993 Ghana Demographic and Health Surveys (GDHS) indicate that, in general, urban women are more likely to want to stop childbearing than their rural counterparts. The mean preferred family sizes from the GFS of 1979/80 were 6.3 (Rural) and 5.5 (Urban). The 1988 GDHS also found that the mean ideal family size was larger for rural women than for urban women: 5.6 for rural women compared to 4.7 for urban women. Women in the rural areas prefer larger family sizes than their urban counterparts: 4.8 versus 3.7 children for all ages.

Contraceptive knowledge and use

The use of contraception to regulate one's family size and socio-economic circumstances constitutes family planning (Ampofo, 1994). According to Ampofo, families concerned about maternal and child health and seeking the following objectives usually adopt family planning methods:

- (i) the regulation of the intervals between pregnancies,
- (ii) determining the number of children in the family; and
- (iii) avoidance of unwanted births.

Improving the quality of, and accessibility to, family planning services is one means to raise prevalence rates and lower fertility. Raising contraceptive prevalence is viewed as one of the major mechanisms to lower fertility levels and eventually reduce population growth. However, it is not clear what factors are most effective at achieving this goal (Beegle, 1995). One approach promotes the expansion and improvement of family planning

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services (supply – side). On the other hand, demand for contraception is contingent on the demand for children; factors that influence the demand for children will be expected to influence the rate of contraceptive use.

Contraceptive use among women appears to vary by women's characteristics including age, number of children, education and type of place of residence – urban or rural. The Egyptian Demographic Health Survey of 1988 – 1989 reveals that 24 percent of married women aged 20 – 24 years old use contraceptives, rising to 53 percent for women aged 35 – 39 years old, then declining to 45 percent in the 40 – 44 age group El-Zanarty et al, (1993).

In a study about the socio-cultural contexts of fertility among the Yakurr of Southern Nigeria, Obono (1998) reveals that the rate of approval for the use of contraception was high (76.6 percent). However, the level of personal use was low (15.4 percent). Santow (1993) has documented *coitus interruptus* (withdrawal) as the oldest of the contraceptive methods known to people. Its high level of use by men in Southern Nigeria was 32.1 percent (Obono, 1998). It emerged from Obono's study that the high use was as a result of its economic cheapness. Herod (1988), on the other hand, found out that among the married women in Guatemala, 16 percent of the women were using the Pill, 7 percent the iud and 2 percent the condom. With regard to the use of traditional method of fertility regulation, 14 percent of the respondents were practicing abstinence.

The Mozambique Demographic Health Survey indicates that nearly all Maputo women and men know at least one Western contraceptive method (Gasper et al, 1998). According to Agadjanian (1998), despite the widespread knowledge about contraceptives, the degree of practical exposure to

characteristics. According to him, in Mozambique, differences between informants' with more education, whose social and information world is structured largely on the use of Portuguese, and those less educated, who live in a predominantly Tsonga – speaking milieu, are particularly salient.

The role of men in reproduction is of particular importance in the African context where fertility rates are relatively high and contraceptive prevalence relatively low. The available evidence shows that a woman's attitude towards contraceptive use depends not only on her individual characteristics but also on the characteristics of her husband (Ezeh, 1993). Her characteristics, however, do not affect her husband's family planning attitudes. Mason et al (1988) on the other hand, found out that husband's fertility preferences were more significant than wife's preferences in determining contraceptive use in communities and countries that were more gender stratified.

The closer a man and woman are in their levels of education, and the more education they have, the more likely they are to use family planning methods. A study of Nigerian couples found that, when both husband and wife have secondary or higher education, 61% of couples reported discussing family planning (Meekers and Oladosu, 1996).

A woman's perception of her husband's attitude toward family planning strongly influences whether she will use family planning (Salway, 1994). If a woman thinks that her husband approves of family planning, she is much more likely to use it. In an analysis of DHS data from Kenya, for example, a wife's perception of her husband's approval was more significant

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in explaining whether or not she used contraception than two other communication variables – discussion between partners about family planning and agreement between spouses about approval of family planning (Lasee and Becker, 1997).

Gaisie and David (1974) have established the relationship between social change and knowledge and use of family planning methods. The two researchers assert that family planning becomes successful under improved labour conditions. They therefore argue that a shift from labour intensive process to industrialization could increase the use of family planning methods.

High fertility and low use of modern contraceptive method in the rural areas of Ghana have frequently been cited in the media and the GDHS (1993, 1998). According to Odoom (1991), the available evidence shows that couples that accept to use the family planning method do so in response to the desire to improve upon their standard of living and for the health of the mother and/or children. He asserts that young females (15 – 19 years) do not use family planning methods because they want to become mothers early; older females (45 – 49), on the other hand, are non-users of modern contraceptive method because they believe they are beyond child-bearing.

The knowledge of family planning methods continues to be high among Ghanaian women. It appears, the condom, pills and injectables are the commonest modern methods of contraceptives known by Ghanaians (GSS, 1998). Three in five currently married men reported having ever used a method of family planning, with nearly one in two having used a modern method (GSS, 1998). Among currently married women, 22 percent use some method of contraception, and 13 percent use a modern method.

methods there are barriers to family planning usage. Many women and their husbands fear the side effects of contraceptive use and other females are dissuaded by their husband's disapproval or by family pressure to have more children. Difficulties in obtaining contraceptives and a shortage of trained health personnel also restrict access to family planning methods.

Determinants of fertility decision-making

Decision making in the domain of fertility behaviour among the married, divorced and single is a very serious issue in demographic studies. In the literature, it is seen to depend on culture, economic conditions and social factors. The man and woman in a conjugal bond or co-habiting relation, all things being equal, should be the ones to determine reproductive decisions – whether contraceptive is to be used, the number of children to be born (family size) and sex preference (boy or girl).

From the family perspective, the first step in a rational fertility decision-making process presumably involves communication between spouses (Mott and Mott 1985). It is argued by the two authors that communication between husband and wife begins after the couples have developed a certain amount of empathy as a result of increase in marital duration, since, with the passage of time, the relatives become less of a barrier, and a greater understanding develops between the partners.

Communication within marriage is an important indicator of the type of authority existing in a family. Various studies have shown that many differences exist in the level of communication between spouses. Donovan

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(1995) reports that women who are educated, who marry at later ages, and who are monogamous discuss family size with their husbands. According to him, contraceptive use is much better practiced if both the husband and the wife communicate on reproductive issues. In a study in India on inter-spousal communication, 42.7% percent of women who reported to have discussed the desired number of children with their spouses, had ever used a modern form of contraception (Bhatia 1980). Furthermore, the communicating spouses had a higher level of current contraceptive use at every level of age, education and income. The frequency of couple's discussion of family planning is positively related to contraceptive approval and its adoption in general (Awusabo-Asare, 1990). Studies indicate that successful practice of contraception is highly influenced by communication between couples (Kar and Talbot, 1980).

As women's equality with men increases, so does their ability to communicate about reproductive matters and to participate in reproductive decisions (Meekers and Oladosu, 1996). When a woman shares decision-making power, she is better able to bring up and discuss family planning and sexual relations with her sex partner.

A woman who has some economic power also may be more likely to discuss family planning with her husband. Gage (1995) notes that in Togo women who worked for cash and invested some of it in credit for saving plans report the highest levels of communication with their husbands about family planning. He further asserts that the level was substantially higher than among women who worked for cash but did not invest or who did not work for cash at all.

polygynous – also affects the relative power a women has and thus the extent that the couple communicate (Kulu, 1990). In Togo, for example, women who chose their husbands without any family advice reported the highest levels of discussion with their husbands about family planning. On the other hand, women in marriages arranged by their families reported the lowest levels of communication (Meekers and Oladosu, 1996). The researchers also argue that women in polygynous marriage often have low status and report little communication.

Even though studies show that issues concerning fertility are discussed between spouses in a household, several factors inhibit communication between spouses. For example, because of the lineage system that takes prominence over the nuclear family in Africa, conjugal interests invoke emotional commitment to kins, thus weakening conjugal bonds (Clark, 1994). According to Oheneba-Sakyi et al (1996), this translates into inadequate communication and discussions between couples. Furthermore, in situations where husbands are much older than their wives, undue fear and intimidation, and respect for authority vested in age, may prevent wives from freely exchanging ideas with their spouses. Chaudhury (1983) and Cain (1984) argue that where differences seem to exist between the wife and husband over attitudes and practice with regard to family planning, the husband's preference often dominates.

Brown (1996) asserts that in most traditional Ghanaian communities, women do not take part in decision – making. According to Benneh (1992), with more women in either, the labour force or engaged in more viable

is now being challenged. Decision-making between spouses in the household is now believed to depend to a great extent upon the relative power position of the spouses and their respective aspirations (Brown, 1996). According to Buor (1996) reproductive decision – making in the context of the Ghanaian family is determined by forces like education, employment status, income, and place of residence, family and marriage types and the extended family system, among others.

The African, according to Mbiti (1969), is incurably religious. Religious beliefs largely influence reproductive decisions within Ghanaian families. This can be ascertained by the large numbers of females who visit prayer camps' with the intention of going for answers to their fertility problems. This has arisen because of the pronatalist beliefs of traditional society. A woman who lives all her life without a child is not accorded the respect due to women with children. The biblical injunction that humankind should be fruitful and multiply and replenish the earth and subdue it (Genesis 1: 28) has had some influence on females who sometimes refuse to use contraceptives because to them they cannot keep their children in their womb. Differences in fertility desires among the various denominations also exist. For example, the Protestants and Moslems show flexibility in the use of family planning devices (methods) whilst Catholics show disapproval of the use of modern family planning methods apart from the natural methods like periodic abstinence, among others. Ageh -Gbede (1990) conducted a research using the Ghana Fertility Survey, and the findings show some disparities among the various religious groups. The mean additional children wanted by Catholics

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were 2. 6; Protestants 2. 3; Moslems 3.0 and adherents of traditional religion
3.5 (Ageh-Gbede, 1990).

Mortality rates in Africa have been on the high side. The decline in infant and child mortality rates has been slow. The high mortality rates have had an influence on reproductive decisions of couples. It was hoped that, when a woman has several children, the tendency of the survival of some, in the event of some dying through disease, would be high. This attitude towards reproduction enables females to give birth to more children. As the likelihood of infant and child survival improves in a community, the parental motivation to have more children as a guarantee against possible deaths diminishes (Bulatao, 1982).

Khalifa (1988) conducted research on the attitudes of men toward family planning and found that about 34 percent of ever-married men reported that family planning decisions should be the husband's right while 45 percent claimed such decisions should be made jointly by the couples. Again, in the United States of America, where a similar research was conducted, 75 percent of men aged 20-39 years believed that men and women should share equal responsibility for decisions about contraception and that men were twice as likely to claim that they had greater responsibility in decision-making on contraceptive as women (Grady et al, 1996). Another research on fertility decision – making in Zimbabwe shows that about 55 percent of the men thought that the husband should have the final say in the decision to use contraceptives. Only 6.3% reported that the responsibility for obtaining family planning information and supplies rested with their wives (Mbizvo and Adamchak, 1991). EL – Zanarty et al (1993), after analyzing the 1992

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Egyptian Demographic and Health Survey, revealed that 55 percent of the men interviewed reported that they and their wives decided together on the use of the family planning method and 37 percent reported that they alone had the last word.

In traditional communities, the kin have been known to have strong influence on decisions that affect reproductive behaviour of couples. Differences in the pattern of reproductive decision-making exist between matrilineal and patrilineal societies. According to Buor (1996), this influence seems to be strongest among matrilineal families. He asserts that, even though, ideally, the man and woman in a conjugal bond should be the determinants of reproductive decisions, the strong extended family bond has made the extended family very influential in fertility decisions.

Two often contrasting views postulated about the nature of these fertility decisions are: (i) the single decision - making model and (ii) the sequential decision-making model. The single decision making model assumes that the demand for children is fixed at the start of marriage and that, the later stages of reproductive life are relevant only with regard to how well the initial decision is carried out. The desired number of children represents fertility goals, according to this model.

The other view, the sequential decision – making model, assumes that a rough decision about desired family size is made early in a marriage, but that the desired family is recalculated periodically, with each achieved birth affecting the demand for subsequent births. A couple's desired family size is regarded not as a fixed figure but rather as a sequential number recalculated after each birth.

In the African context it is posited that men play a dominant role in reproductive decision-making (Isiugo – Abanihe, 1994; Renne, 1993). Approaches used to assess this include the use of data on couples and the use of data on men alone. The first approach examine issues such as the extent of spousal disagreement on reproduction, the role of spousal communication in shaping contraceptive use and / or the influence that husbands have over wives' attitudes and behaviours (Bankole, 1995; Dodoo, 1993; Ezeh, 1993; Mott and Mott, 1985). The second approach utilizes data on men alone and seeks to understand the correlates of men's reproductive attitudes and behaviours (Isiugo –Abanihe, 1994; Lamptey, 1978; Oppong, 1987). Although spousal disagreement on fertility desires are substantial, knowing wives' intention alone would be sufficient for predicting future fertility levels. The authors argue that while husbands want more children on average than wives, the latter tend to have the average of children they want while husbands take on additional wives to satisfy their fertility desires (Kritz and Adebusoye, 1998). Bankole (1995) suggests that intentions of both spouses are significant predictors of couple's subsequent fertility. A further conclusion is that in cases where spouses disagree, the couple's fertility is intermediate between the fertility of those who agree to have more children and those who agree to stop childbearing.

The theories did not assess the influence of kins and significant others on the couples decision on family sizes. Marriage in the traditional family set up is regarded as marriage between two families but not two individuals. Thus, the influence of kins is very crucial in the decisions that couples make regarding family sizes.

From the review of literature, it is quite evident that socio-economic characteristics of a woman are a determining factor of her status either in the family or in the society. The status to a larger extent, including the influence of kins would in turn influence her reproductive behaviour and marriage norms and, consequently, the number of children ever to be born (Fig1).

The present study adopts the theoretical position that enhanced status of female, through paid employment, advanced education (above the basic level), nucleation of the family, urban dwelling, and marriage type, tends to empower women by strengthening their position in the decision – making process in the house, which goes to affect their fertility behaviour.

The study, then, is based on the theory that changing or improved socio-economic status of females affects the perception of women to marriage and reproductive norms, which go to influence their decision-making on family size. Female status is assumed to be influenced by individual characteristics and also by institutional factors and societal norms. The socio-economic factors include: education, family type, occupation, place of residence and type of marriage. These are assumed to determine the status of a woman as either high or low. The impact of these background indices on female status in a household will be positive or negative depending on the amount of socio-economic capital (age, income, education, employment) that the individual brings into the relationship (Oheneba – Sakyi, et al 1996).

The level of a women's status influences the choice of partner, type of marriage (customary, ordinance, Islamic, consensual), form of marriage (monogamy versus polygamy), contraceptive norms and equality in wife-

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husband relationship. The underlying assumption is that when the status of women improves and their perception towards marriage and reproductive norms changes, they adopt measures that enable them to control their fertility behaviour. The status they gain gives them autonomy and more control over important decisions affecting them and their fertility behaviour.

Background Variables

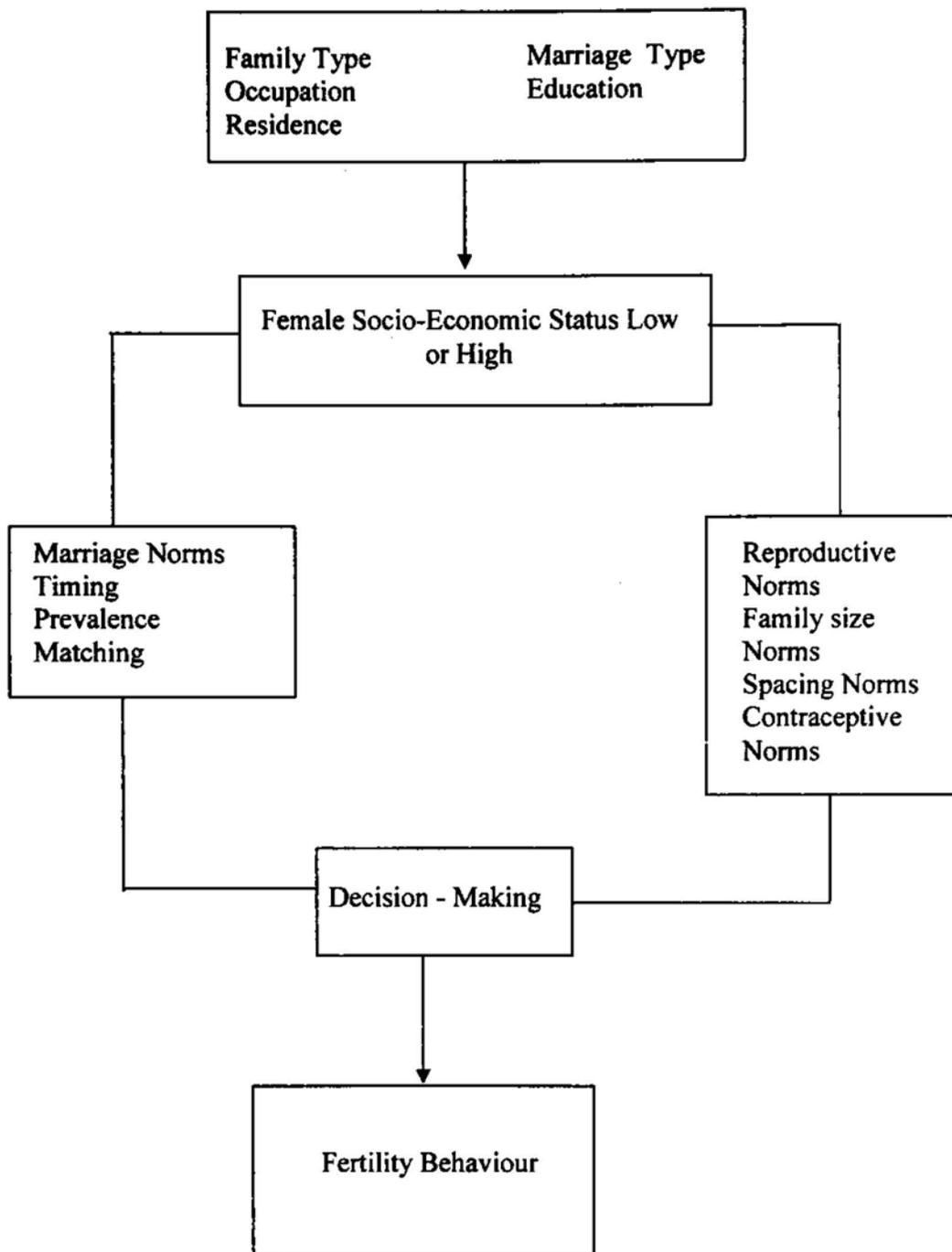


Figure 1: Modified conceptual framework for fertility decline

Source: Adapted from UN(1992) and Oheneba-Sakyi et al (1996)

CHAPTER THREE

METHODOLOGY

Introduction

This Chapter consists of six sub-sections. The area of study provides a frame of reference in relation to respondents to be studied. The study design, sampling procedure, techniques and tools, data collection procedure and analysis take up the rest of the chapter.

The study area

The Akuapem South Districts is one of the fifteen districts, which constitute the Eastern Region of Ghana (Fig 2). It was carved out of the former larger district-- Akuapem District- in 1988. In terms of size, it covers an area of about 403 square km. It shares boundaries in the south with Ga and Tema Districts both in the Greater Accra Region, to the northwest with Suhum-Kraboah-Coaltar District, and to the northeast, the Akuapem North District. The district has Nsawam as the district capital, located within a gap along the main highway from Accra to Kumasi, a distance of about 23km (Fig 3).

The closeness of the district capital to the national capital has made it possible for inhabitants of the district to have frequent contact with it for a very long time, through trade, education (formal and informal) and other socio-cultural activities.

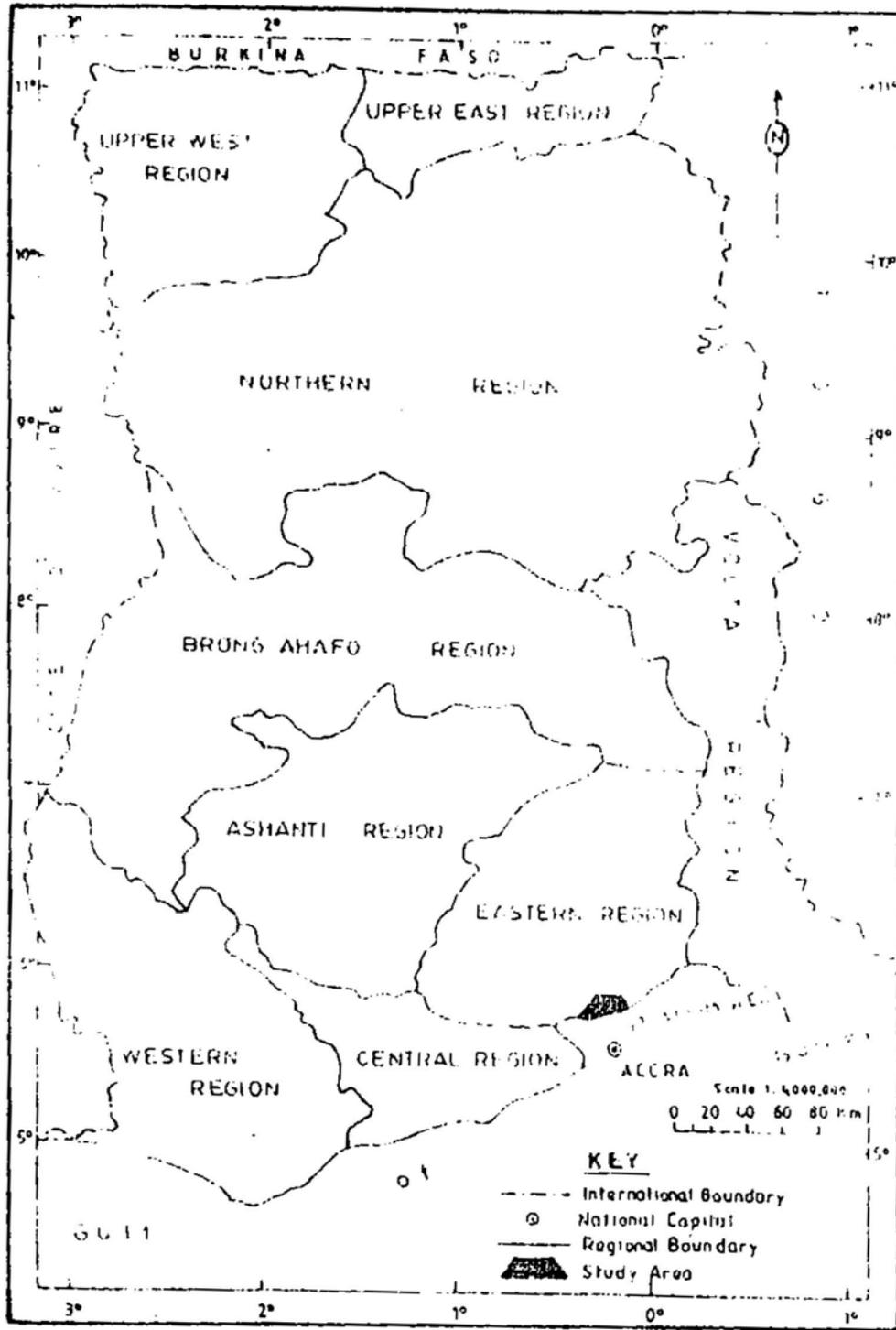


FIGURE 2: MAP OF AKUAPEM SOUTH DISTRICT IN THE NATIONAL CONTEXT

Source: Akuapem South District Assembly, 2000

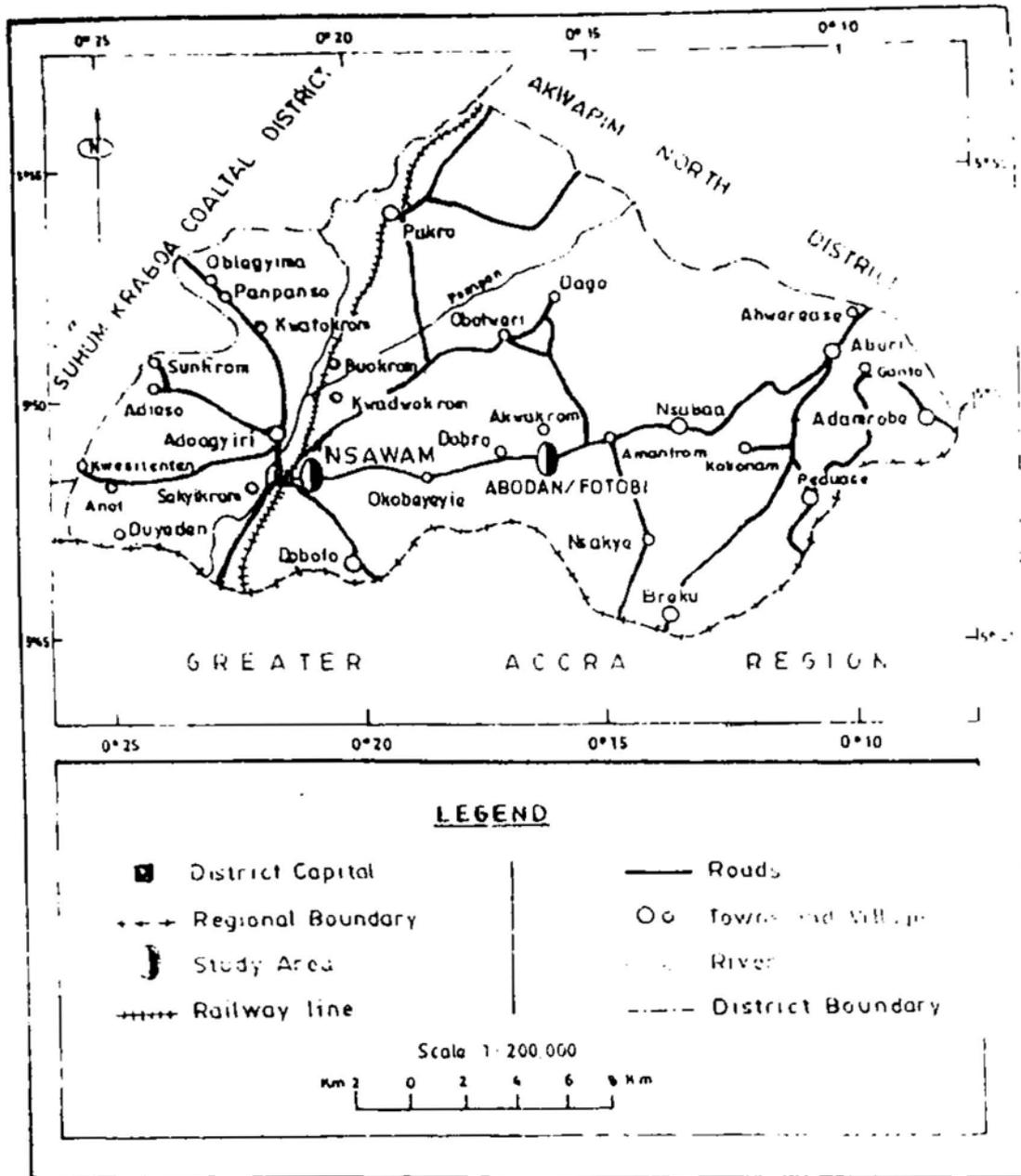


FIGURE 3: MAP OF AKUAPEM SOUTH DISTRICT SHOWING THE STUDY AREA

Source: Akuapem South District Assembly, 2000

There is therefore, the possibility that the inhabitants of the district have acquired values, beliefs and innovations associated with urbanization from Accra. Furthermore, the district has both urbanized and very remote rural settlements. It is also to be noted that no research on the status of women and their fertility behaviour had been done.

The socio-economic and cultural diversity, coupled with the fact that there is the likelihood that the district has experienced some socio-economic and cultural transformation over a period of time, makes it ideal for this study. These factors have largely influenced the researcher's choice of the district for this particular study.

The district has a total population of 116, 176 (Akuapem South District Assembly, 2002). The annual growth rate is 1.9%. The average household size is 3.9 persons with about 15.6 persons within a compound house. The predominant religion is Christianity (93.4%) while only 4% are Moslem. The major ethnic group is Akuapem.

Agriculture, which is the main occupation of the area, consists of the cultivation of food and cash crops. Food crops include corn, cassava, plantain, and vegetables. Cash crops are made up of cocoa, oil palm, pineapples and citrus. The deforestation of the forest and shifting cultivation practices have reduced most of the forest into secondary forest. The situation has led to the interest in the cultivation of vegetables and fruits like pineapples in the lowlands of the district. About 40.1 % of the people are engaged in agricultural activities. The district has the potential for commercial farming with a focus on non-traditional crops like the pineapples, vegetables and citrus fruits. Of these, pineapple is the leading crop in the district, which accounted

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for 60 % (14,954) of total national pineapple export earning US\$5m in 1995.

This rose to about 20,000 tons in 1997, which earned US\$12m. (Akuapem South District, 2002). These commercial crops are cultivated by farms such as Koranco Farms, Combined Farms, Greetex Span, among others.. About 55 percent of the total quantity of pawpaw exported out of the country comes from the district. The main producers include Buella and Rose Farms(Akuapem South District,2002).

The industrial sector is made up of food processing, fish processing, corn milling, palm oil extraction, among others. Industries of various levels can be identified especially at Nsawam, Dabro, Aburi and Adoagyiri. he industrial activities are diversified, ranging from pharmaceutical to fruits processing. Artifacts and other craftwork are produced using simple tools. Broadly, the activities can be put into the following categories:

- (I) Agro-based and related activities;
- (Ii) Wood/timber and related activities;
- (Iii) Manufacturing activities;
- (Iv) Quarrying and construction; and
- (V) Technician and mechanical services.

The tourism potential of the district lies in the tropical climate and serene environment experienced on the Akuapem Ridge. Within the area is located Ghana's internationally acclaimed Aburi Botanic Garden, established in 1890. There are waterfalls at Mensanan, near Nsawam and Boade at Nsakyee. The district has the well-established Aburi industrial centre made up of wood carvers producing artifacts. The district is also privileged to have the

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first privately owned Botanic Garden and a tourist village at Konkonuru,
which was established by Papaye Company.

The study design

The study used a cross-sectional, exploratory and non-interventional study design focusing on the Akuapem South as a case study. It aimed at quantifying the distribution of certain quantitative and qualitative variables in a study population at a given point in time. The dependent variable was children ever born. The independent variables were: educational status, occupational status, communication, religion, ethnicity, family type, marriage type, age, decision-making, and residence.

The study covered the demographic and socio-economic characteristics of ever married females and males, (not necessarily couples), their age, education, marital status, communication and decision-making, fertility behaviour, fertility preference, and contraceptive use, among others. The fertility behaviour, knowledge about contraception, attitudes towards family size and beliefs about marriage of the female and male population (aged 15 and above) were investigated

Sampling procedure

The Akuapem South District is divided into seven (7) Area Councils and forty-two (42) Electoral Areas. The Area Councils are: Nsawam, Aburi, Adoagyiri, Nyerekyere, Obodan/Fotobi, Dago-Anameranpa and Pakro-Ayenasi (Akuapem South District, 2000).

A multi-stage sampling technique was employed to obtain a sample of eligible respondents in the settlement. The multi-stage sampling was adopted because of its varying composition that ensures representativeness and reduction of bias in the sampling. The first sampling activity was to stratify the administrative unit into urban and rural councils. The criteria used were the size of the population, social infrastructure, and predominant occupation of the area. Polit and Hungler (1995) argue that stratified random sampling offers the researcher the opportunity to shape the precision and representativeness of the final sample. Using the above criteria, Nsawam and Aburi were chosen to represent the urban council areas whilst Adoagyiri, Nyerekyere, Obodan/Fotobi, Dago-Anameranpa and Pakro-Ajenasi constituted the rural council areas. Nsawam Council was selected purposively out of the two urban councils to represent the urban area. Using the simple random sampling technique, the Obodan/ Fotobi Council was selected to represent the rural councils. The two areas were chosen to represent a wide range of economic, social and cultural conditions. Nsawam, as the industrial centre and district capital, was chosen to provide information on modern trends on fertility behaviour. On the other hand, Obodan/Fotobi, a typical farming community, was expected to represent traditional views and practices on fertility.

Four hundred respondents were targeted to be interviewed. The sample size of 400 constituted 0.50 percent (or a sample fraction of (0. 50) of the population of 78,312 aged 15years and above. This percentage (0.05) is deemed appropriate as compared to the 0.20 percent or 0.002 sample fraction used in the 1993 and 1998 Ghana Demographic and Health Surveys.

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Moreover, it must be admitted that the sample size was also determined, to some extent, by the nature of the study and available logistics. A quota representation, based on the population of Nsawam and Obodan/Fotobi, was used to allocate the sample size of respondents for each settlement. According to Twumasi (1986), the critical requirement for quota sampling is that there should be enough cases from each segment of the population and that the sampling estimation should be determined in a practical manner. Based on this advice, 250 and 150 of the sample were allocated to the urban and rural settlements respectively. In terms of sex, 240 of the respondents were females while 160 were males, with a sex ratio of 3: 2 (Table1). More women than men were chosen because the focus was on women, and fertility issues are more concentrated on women than men. However, males were included in the study in order to obtain information on their background characteristics and their views that could be of relevance in explaining the relationships.

A proportional representation based on the population of the settlements was not used because it would have made the sample allocation heavily skewed in favour of the urban settlement.

Table 1: Estimated population, sample and response rate of the survey areas.

Settlement	Estimated	Sample		Total	Response Rate (%)
	Population (2002*)	Male	Female		
Nsawam	21,450	110	140	250	223(89.2)
Obadan/Fotobi	3,880	50	100	150	143(95.3)
Total	25,330	160	240	400	366(92.0)

*District Statistician, 2002

Source: Field Survey, 2002

The Electoral Areas used for the 2000 Presidential and Parliamentary Elections constituted the sampling frame for the selection of houses, households and respondents in each settlement. According to Siegel (1997), one is free to choose any sample size from each individual stratum, and that there is no requirement that the sample size should be the same for each stratum but according to the size of the population. Guided by this assertion, 80 and 225 houses were selected from Obodan/Fotobi and Nsawam respectively to yield 305 houses (Table 2). In selecting the houses, a systematic random sampling technique was used. The houses in each stratum were numbered and listed serially and all households in the selected houses were included in the sample. One in two of the listed houses was chosen from each stratum until the desired sample was reached.

The final stage was the selection of eligible respondents for the study. Women and men aged 15years and above formed the sampling unit for the selection. One respondent per household from a house was selected and

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 interviewed. Borg and Gall (1989) posit that for individuals in a defined population to have an equal probability and independent chance of being selected as members of the sample, simple random sampling could be used. Where there were more than one respondent in a household, a simple random technique was used to select one for the interview. Both female and male respondents were selected from every other household till the number expected from the settlement was obtained. The total response rate was 92.0 percent (Table 1)

Table 2: Electoral areas and number of houses selected

Towns Selected	Electoral Areas	Houses selected from each	Total Number of Houses Selected
Nsawam	9	25	225
Obodan/Fotobi	1	80	80
Total	10	105	305

Source: Field Survey, 2002

Techniques and tools

The basic instrument of the research was the interview schedule. The schedule was based on the design of the questionnaires for the Ghana Demographic and Health Survey (GSS), the World Fertility Survey (WFS) and selected works of experienced researchers. Questions from the Ghana Female Autonomy Micro Study (GFAMS) were also added. These model instruments were used to study fertility behaviour and related issues in Ghana.

The schedule was divided into sections. Section A dealt with personal characteristics of the respondents. Sections B to E dealt with the socio-

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economic status, contraceptive usage, fertility preference, and fertility behaviour, while Sections F and G took up the issues of communication and decision-making processes. Each respondent was asked to respond to a series of closed and open-ended questions about his/her socio-economic status, decision-making and fertility-related issues. In all, 57 questions were asked the male and female respondents.

Data collection procedure

Sources of data

Data for the study were collected from both primary and secondary sources. Primary data were obtained from respondents through the administration of the interview schedule. Two sets of schedule were used – the female and male schedules. Secondary data, on the other hand, were derived through the analysis of the Ghana Demographic and Health Survey (GDHS), the World Fertility Survey (WFS) and from published materials such as books and journal, articles dealing with demographic issues.

Pre-field activities

Borg and Gall (1989) have suggested the need to pilot-test a new instrument within a population similar to that from which the sample for the study would be taken. Based on this suggestion, the test instrument was pilot-tested on a randomly selected sample of 25 respondents.

The pre-testing of the research tools was conducted at Tafo in the East Akim District, which exhibits similar socio-economic characteristics as the research areas. This was done to find out the difficulties to be encountered in

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the administration of the schedules. It also enabled the researcher to streamline and modify some of the questions for easier and better responses.

A preliminary visit was undertaken by the researcher to the District to assess the lay-out of the study areas and also the numbering of the houses. The visit also helped in the selection of the field assistants. Rapport was established with the Assemblyman of Obodan/Fotobi and workers at the District Assembly during the visit.

Four field assistants were recruited and trained to help the researcher for the data collection. Before the survey, a one –day workshop was held for the assistants. Teachers and National Service personnel who had had an experience in census survey were co-opted to assist in the research. The workshop was aimed at training the field workers to comprehend the meanings behind the questions presented in the schedule. This helped the researchers to agree on the translation into the local language.

Field activities

The four field assistants were selected, based on residential location to make the data collection easier. Each interviewer was encouraged to work in the area for which he or she was assigned full responsibility in order to speed up the procedure of the administration of the schedule. The researcher personally interviewed all the respondents from the rural areas.

Personal interviews were conducted at the respondent's home, workplace or nearby location at his or her own convenience. The interview was conducted in a local dialect for illiterate respondents and the answers were written down in English. The interaction of interviewers and the respondents

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was one-on-one. It provided an avenue for in-depth discussion of some of the issues covered. The canvasser method was also used to obtain data from the literate respondents. The period for the main fieldwork was from February-May, 2002

Some field problems and their solutions

It does happen that in the course of collecting and recording data, errors result from the interviewer's inability to clearly transmit what is wanted to the respondents, from the respondents not understanding the question, from the respondents' inability to provide the required information, and from the interviewer misunderstanding or misrecording the information given. Some of the problems encountered in the field and how they were solved are discussed below.

The main study was conducted in February – May, 2002. This was the season for clearing, burning, and planting in the District. In the Obodan/Fotobi area, it was difficult to meet the respondents at home as they spent most of their daytime on their farms and returned to their homes late in the evening. In the Nsawam area, workers went home from work late and for such respondents, interviewing took place in the evening. Some workers were also interviewed at their work places.

Age misreporting was few. When detected, the age misreported was crosschecked and corrected by comparing the age at first birth with age of first child. Another problem that affected data collection was the attitude of respondents towards the study. Some respondents were not convinced about the usefulness of such academic exercises. Such respondents were persuaded

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to cooperate with the interviewers since the information would help policy makers in the development planning efforts of the District.

The presence of a partner of selected respondent during the interview seemed to have a telling effect on the respondent and the answers given. Some respondents were cautious of the answers they gave when their partners were present. To avoid any possible confrontation between couples, interviews were sometimes rescheduled to take place when one partner was absent.

The last, but not least, problem faced was that some respondents wanted to be paid in kind or cash before being interviewed. Some money had to be parted before some of the respondents acceded to the request for an interview.

Post- field activities

After the data collection, a day's workshop was held to discuss field workers' observations, impressions and encounters In the field. This had the advantage of supplementing the information captured by the formal interview schedule.

Data processing and analysis

Data processing and analysis include the process of editing and coding, inputting and running of the results. The data obtained from the field was analyzed with the Statistical Package for the Social Sciences (SPSS) software after it had been cross-checked and screened in the field by the researcher for consistency. Schedules with uncompleted entries were rejected. This was done where the researcher judged that such rejection would in no way affect

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the outcome of the analysis. A total of 366 respondents responses were judged good enough to be used for the analysis.

The analysis was based on frequency distribution and cross tabulations. To assess the strength and nature of the relationship between the different indicators affecting behaviour, correlation coefficients were also calculated, along with chi-square analysis in certain cases. Selected independent variables such as education, occupation, marriage type, family type, place of residence, communication and decision-making, were related to fertility behaviour. The selected socio-economic variables were measured and coded as follows:

Education: Post-Secondary to University (1) and Others (2);

Occupation: High and Low Professional (1) and Others (2);

Place of Residence: Urban (1) and Rural (2);

Family type: Nuclear (1) and Extended (2);

Marriage type: Monogamy (1) and Polygamy (2);

Communication: Communication on fertility issues;

Decision-making: Decision on fertility issues;

Contraception: Knowledge and usage of contraceptives;

The dependent variable was fertility behaviour, which was measured in terms of actual birth performance.

Pearson correlation coefficient was used to determine the level of relatedness between the various socio-economic variables and fertility behaviour. In some cases, chi-square and difference between two means tests were carried out on the data to assess their significance.

A technique was employed to derive a composite socio-economic status index as a measure of the status of women (Appendix A). To examine

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**the relationship between female socio-economic status and fertility behaviour,
the index of female socio-economic status (high or low) was related to fertility
decision -making and fertility behaviour.**

CHAPTER FOUR

DEMOGRAPHIC, SOCIAL AND ECONOMIC PROFILES

OF THE RESPONDENTS

Introduction

This chapter deals with the findings of the research. It is discussed under eight sub-sections. The first sub-section is this introduction to the chapter. It is followed by the characteristics of the respondents such as age, religious affiliation, place of birth and ethnic origin. The section under socio-economic status deals with the indicators used to compute the composite socio-economic index: family type, marriage type, education, residence, occupation and marital characteristics. The next sub-sections deal with contraceptive knowledge and use, fertility levels in the survey area, social communication and decision-making, and sex preferences.

Characteristics of the respondents

Knowledge of the background information of the respondents is significant because of the implications the information has for the perceptions and attitudes of the respondents towards contraception, decision-making and fertility behaviour. Under this section the variables discussed are: age distribution (of the respondents); ethnicity; religious affiliation; and place of birth.

The age-sex distribution of the respondents is shown in Table 3. The data show the distribution of women aged 15-54 and men aged 20-54 in the survey. Relatively high proportions (86.2%) of women are in the reproductive age of 15-44 with 69.6% below the age of 40 years. The proportion of women declines with age. The low proportion (0.8%) of the respondents in the 15-19 age group might be due to age mis-reporting. This might be because some of the respondents did not know their actual birth dates or that, some of them intentionally refused to disclose their correct ages. It could be observed that the modal age group is 25-29. The proportion of respondents declines with age after the modal age group.

Table 3: Age-sex distribution of respondents

Age	Male		Female		Total	
	F	%	F	%	F	%
15-19	-	-	3	1.4	3	0.8
20-24	10	6.7	13	6.0	23	6.3
25-29	36	24.2	42	19.6	78	21.3
30-34	24	16.1	48	21.8	72	19.7
35-39	20	13.4	45	20.7	65	17.8
40-44	26	17.4	36	16.6	62	16.9
45-49	25	16.8	27	12.4	52	14.2
50-54	8	5.4	3	1.4	11	3.0
Total	149	100.0	217	100.0	366	100.0

Source: Field Survey, 2002

The Akuapem South District is a heterogeneous community populated by diverse ethnic groups with their own specific norms and values, and historical traditions which affect their outlook of life. The predominant ethnic group in the area was the Akan. About 64.8 % of the sample were Akans. The second largest group (15.6%) was the Ewe ethnic group. The Guans and the Ga Adangbes constituted 9.3 % and 8.2 % respectively. Only 2.2 % were from the three Northern Regions. (Table 4.). The findings are supported by the fact that the district is populated by Akans in general and Akuapems in particular (Akuapem South District Assembly, 2000).

Table 4 : Ethnic origins of the respondents

Ethnicity	F	%
Guan	34	9.3
Akan	237	64.8
Ewe	57	15.6
Ga Adangbe	30	8.2
Northern Extraction	8	2.2
Total	366	100

Source: Field Survey, 2002.

Religion

Religion and religious practices have a bearing on the attitudes, practices and behaviour of adherents. From Table 5, Christians, made up of Catholics, Protestants, Charismatic and other church groups are in the majority

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(93.9 percent). The influence of the charismatic churches in Ghana cannot be over-emphasized as revealed by the data presented. About 35.5 percent of the total respondents reported being practitioners of the charismatic faith, whereas 45.1 percent professed that they were adherents to the Protestant faith. Moslems were only 2.5 percent. The low representation of Moslems might be due to the absence of Zongo communities in the surveyed area. To a great extent, this confirms the findings of a survey conducted in the District to find out the religious affiliation of the inhabitants. It was found out that Christians were in the majority (93.4) (Akuapem South District Assembly, 2002).

Table 5: Religious affiliations of respondents

Religion	F	%
Traditional	13	3.6
Catholic	42	11.5
Protestant	165	45.1
Moslem	9	2.5
Charismatic	130	35.5
Other churches	7	1.9
Total	366	100

Source: Field Survey, 2002.

Place of birth

Urban-rural and rural-urban migration is an important factor in population dynamics. From the data presented, 62.0 %of the respondents were born in the district. Those born in the Greater Accra Region were, 12.6 %, the

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 second highest (Table 6.) Out of the total respondents, only 0.3 % were born in the Western Region. The proximity of Accra to the district might account for the high number of the respondents reporting Greater Accra as their place of birth. The district, capital, Nsawam is becoming a satellite town of Accra

Table 6: Place of birth of respondents

Region	F	%
Eastern	227	62.0
Ashanti	17	4.6
Central	32	8.7
Greater Accra	46	12.6
Northern Regions	6	1.6
Volta	29	7.9
Western	1	0.3
Brong Ahafo	8	2.2
Total	366	100.0

Source: Field Survey, 2002.

Socio-economic indicators

Education and economic activity are two of the main determinants of the status of women in modern societies (Agyei and Mbamaanyo, 1989). In traditional societies, family type and marriage type appear to be two variables that can increase or decrease one's autonomy or power in the household (Buor,1996). Under this sub-section, economic activities, family type, education, marital characteristics and residence, are used as the determinants

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of the status of women. The occupational categories were derived from the economic activities the respondents were engaged in are presented in Appendix D

Economic activities

Ashford (2001) asserts that employment can elevate the status of a woman. For it enables her to earn income and have more control over resources. The largest occupational groups were low professional and commercial workers. Less than one percent of the female respondents were engaged in high professional occupations as compared to 6.7 % of the male respondents (Table 7). This goes to confirm the generally low employment status of women in Ghana. In the case of commercial activities, the data presented show that it is the preserve of women: 32.3 % of the women were found in commercial activities as compared to 6.0 % of the male respondents. About 15.2 % of the women were engaged in agricultural activities whereas 15.4 percent of the male respondents were also found in this activity. Most of the women in agriculture were engaged as casual labourers on the farms of the agro-based processing factories set up in the rural areas. The females accounted for 1.4 % of those not doing any profitable activity to bring in money. The study revealed that there were few job openings in the study area, which required wage-earning employees. The people were therefore mostly engaged in agricultural and commercial (buying and selling) activities.

Occupational	Female		Male	
	F	%	F	%
No Response	1	0.5	5	3.4
High Professional	2	0.9	10	6.7
Low Professional	70	32.3	53	35.6
Clerical	18	8.3	26	17.4
Commercial	70	32.3	9	6.0
Skilled Manual	14	6.5	17	11.4
Unskilled Manual	6	2.8	6	4.0
Agriculture	33	15.2	25	15.4
Not Working	3	1.4	-	-
Total	217	100.0	149	100.0

Source: Field Survey, 2002

The data presented show that women occupied lower paid, lower-status (low professional) jobs than men. They could also be found more in the informal commercial sector than men. The findings confirm the UNICEF (1992) assertion that more women than men are confined to the informal sector

Women's participation in economic activity

In order to obtain a detailed picture of women's economic activity, seven possibilities with regard to activity status were considered. The results are summarized in Table 8. The data show the proportion of women in each occupational category. About 12.6% of the women in the rural area were

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engaged in low professional occupations. Furthermore, 48.4% and 26.3% were engaged in commercial and agricultural activities respectively. In the case of the urban respondents, 47.5% were engaged in low professional occupations and 19.7% and 6.6% were engaged in commercial and agricultural activities respectively. None of the respondents from the rural area was engaged in the high professional occupations, while, in the case of the urban residents, there were 1.6%. Even though the rural areas produce all the raw materials for the agro-processing industries, not a single processing factory has been established in the rural area. The overrepresentation of commercial and low professional workers found in the study emphasizes the dominance of these occupations in the study area. In general, more of the women were engaged in low- status economic activities than the men.

Table 8 : Occupational characteristics of female respondents by residence

Occupational Category	Rural		Urban		Total	
	F	%	F	%	F	%
Not applicable	-	-	1	.8	1	0.4
High profession	-	-	2	1.6	2	0.9
Low Profession	12	12.6	58	47.5	70	32.3
Clerical	-	-	18	14.8	18	8.0
Commercial	46	48.4	24	19.7	70	32.3
Skilled manual	9	9.5	5	4.1	14	6.5
Unskilled manual	1	1.1	5	4.1	6	2.8
Agriculture	25	26.3	8	6.6	33	15.2
Not working	2	2.1	1	0.8	3	1.4
Total	95	100.0	122	100	217	100.0

Source: Field Survey, 2002

Kin ties that exist in the traditional family system influence family members on many issues. About 49.8% of respondents were in the extended family whereas about 50.2 percent were in the nuclear family. About 54.7 % of the respondents in the rural area claimed to be in the extended family as against 45.9 % of the respondents in the urban settlements. With regard to the nuclear family, 45.3% of the respondents in the rural areas reported that they were in the nuclear family as against 54.1% of their counterparts in the urban area.

Family Type	Rural		Urban		Total	
	F	%	F	%	F	%
Extended	52	54.7	56	45.9	108	49.2
Nuclear	43	45.3	66	54.1	109	50.2
Total	95	100.0	122	100	217	100

Source: Field Survey, 2002.

Of those having a kin member staying with them, 55.6% reported staying with the husband's kin member. About 42.2% and 2.2% were staying with the wife's and couple's kins respectively.

Educational status of respondents

The educational status of the respondents is presented in Table 10. On the whole, 8.2% of the respondents had never been to school; 38.0 % had only basic education; 18.0% had secondary and vocational education: 27.6% having had Polytechnic, Teacher and Nursing education; whilst only 8.2% University education. The data go to support the GSS(1998) assertion that the literacy rate of 63.7% in the district is very high as compared to the national average of 49%. The educational levels of males were higher than those of their female counterparts. Whereas 4.0% of the males had no formal education, the proportion for the females was 11.1%. Furthermore, the male respondents who had attained University education were 10.1% as compared to 6.9 % by the females who had university or diploma education. It is to be noted that, with the exception of the basic level where the percentage of

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 females exceed that of males, at the other levels, the female respondents' educational level was not encouraging. It is interesting also to note that even though about 18 % of both males and females had secondary education, only 21.1% of the females had post secondary education as against 36.1% for males. In conclusion, the data had revealed that the male respondents were better educated than their female counterparts.

Table 10 : Educational status of the respondents by sex

Education level	Female		Male		Total	
	F	%	F	%	F	%
No Formal	24	11.1	6	4.0	30	8.2
Basic	93	42.9	46	30.9	139	38.0
Secondary/Voc.	39	18.0	27	18.1	66	18.0
Tr. /Poly/Nursing	46	21.1	55	36.9	101	27.6
Univ/Diploma	15	6.9	15	10.1	30	8.2
Total	217	100.0	149	100.0	366	100

Source: Field Survey, 2002

With regard to the educational level of women in the two study areas, the results have confirmed the disparities in the educational attainment between urban and rural women. From Table 11, 11.1 % of the respondents had no formal education; 42.9 % had basic education; 18.0 percent had secondary and vocational education; 21.2 % had post-secondary education; and 6.9 % had University and diploma education. With regard to secondary, post-secondary and university education, the urban-rural differential is remarkable. About 22.1 % of the females in the urban area had had secondary

education as against 12.6 % of those in the rural area. With regard to post secondary education, whereas 33.6 % of the females in the urban areas had had post-secondary education, only 5.3 % of the females in the rural area had had post-secondary education. In the case of university education, 12.3 % of females in the urban areas had had university education, whereas none of the respondents from the rural area had had university or diploma education. The educational background of the females in the rural area clearly suggests unequal access to post-basic education facilities between females in the rural and urban areas. The low level of educational attainment by the female respondents might be due to the lack of role models in their teachers especially at the basic and post basic level of education that has an impact on the aspirations of the girls (Offei-Aboagye, 1996). Furthermore, the rural area of the district can boast of only one vocational institute.

Table 11: Educational attainment of women by residence

Education Level	Rural		Urban		Total	
	F	%	F	%	F	%
No formal	14	14.7	10	8.2	24	11.1
Basic	64	67.4	29	23.8	93	42.9
Secondary/Voc./Tec	12	12.6	27	22.1	39	18.0
Post Secondary	5	5.3	41	33.6	46	21.1
University/Diploma	-	-	15	12.3	15	6.9
Total	95	100	122	100	217	100

Source: Field Survey, 2002

Marriage patterns are of demographic importance for countries like Ghana experiencing high fertility level. Its effect on other socio-economic characteristics, such as school and labour force participation in the life of a woman, cannot be overemphasized. Out of the 366 respondents, 77.3% were married. The rest were either divorced (6.0%), single (13.9%) or widowed (2.7) (Table 12).

Table 12 : Marital status of respondents

Marital Status	F	%
Single	51	13.9
Married	283	77.3
Divorced	22	6.0
Widowed	10	2.8
Total	366	100.0

Source: Field Survey, 2002

The form of marriage, in the district is mostly customary. About 59.3% of the respondents were married under the customary law. The respondents who reported that they were married under the ordinance/church rites were 26.2%. As low as 1.9% were married under the Islamic law and 6.3% were in consensual marriage.

Table 13 : Form of marriage of respondents <https://erl.ucc.edu.gh/jspui>

Form of Marriage	F	%
Not applicable	23	6.3
Customary	217	59.3
Ordinance/Church	96	26.2
Consensual	23	6.3
Islamic	7	1.9
Total	366	100.0

Source: Field Survey, 2002

About 66.8 % of the women interviewed reported of being in monogamous marriage whereas 22.6 % were in the polygamous type of marriage (Table 14). The data presented show that polygamy might be losing its relevance in the study areas. This confirms the GSS (1993) finding that polygamous marriages have been declining since 1993. The national average now stands at 28%.

Table 14: Marriage type of female respondents

Type	F	%
Not Applicable	23	10.6
Monogamy	145	66.8
Polygamy	49	22.6
Total	217	100.0

Source: Field Survey, 2002

Marriage formation and dissolution in Ghana are undergoing changes. The two phenomena have come under public scrutiny of late. Marriage formation and dissolution can have a positive and negative effect on the stability of society as a whole and the household in particular.

As an institution, marriage marks the beginning of family formation, and appears to have played a major role in the population changes in Ghana. The data show that 60.0% of the respondents in the rural area were in monogamous marriages as against 72.1% of their counterparts in the urban areas who were in such marriages. With regard to polygamous marriage 30.1% of the respondents in the rural area are in such marriage type as compared to 16.4% of the respondents in the urban area in such a marriage. Even though the incidence of polygamous marriage appears to be low in the rural areas, it still provides more hands for work at home and on the farm (Brown, 1996).

Table 15 : Marriage type of females by residence

Marriage Type	Rural		Urban		Total	
	F	%	F	%	F	%
Monogamy	57	60.0	88	72.1	145	66.8
Polygamy	29	30.5	20	16.4	49	22.6
Not Applicable	9	9.5	14	11.5	23	10.6
Total	95	100	122	100	217	100.0

Source: Field Survey, 2002

The arrangement of marriage by parents for their children is now becoming a thing of the past. The family arranged only 2.2 % of the marriages; 65.6 % of the respondents reported choosing their own partners. The data show that there is a shift from the traditionally arranged marriage to that of independent decision in partner selection by would-be couples.

Table 16 : Partner selection by respondents

How Partner was selected	F	%
Not applicable	28	7.7
Alone	240	65.6
Help of family	50	13.6
Consent of family	32	8.7
Arranged by family	8	2.2
Other	8	2.2
Total	366	100.0

Source: Field Survey, 2002

Reasons for marriage

Marriage is nearly universal in the country. Both social and cultural reasons are given by individuals for entering into marriage. To a question why they married, 36.6% reported “to give birth” as the most important reason for entering into marriage. This, to a large extent, explains the pronatalist attitude of the Ghanaian society. About 21.4 % and 14.6 % gave “companionship” and “a must for all” respectively as the most important reasons for entering into marriage (Table 17).

Table 17 : Reasons given by respondents for marriage

Reasons	F	%
To give birth	168	36.6
Prestige	39	7.84
A must for all	67	14.6
Companionship	98	21.4
For love	59	12.9
Material benefit	7	1.5
Religious injunction	10	2.2
Social Pressure	8	1.7
Other	3	0.7
Total	459*	100.0

*More than the number of respondents because of multiple responses.

Source: Field Survey, 2002.

Security in marriage

The reasons for having children in Ghana are many and varied depending on the type of family and the system of inheritance. According to the proponents of the economic model children are presumed to have properties that make them more unique and thus set them apart from most consumer goods (Fredman, 1974; Awusabo Asare, 1988). To a question whether they would feel secure in their marriage life if they did not give birth, 18.0 % of the respondents reported that they would feel secure whereas 81.4 % reported that they would not (Table 18).

Table 18 : Security in marriage

Security	F	%
Yes	66	18.0
No	298	81.4
Not Applicable	2	0.6
Total	366	100.0

Source: Field Survey, 2002

The reasons given by the respondents who thought that they would not feel secure if they did not give birth in marriage can be seen in Table 19. About 21.4% of the reasons were that their in-laws would put pressure on them to bear children. Furthermore, about 20.8% gave future care as the reason for having children. About 15.8% of the reasons was to prove that they were fecund. It was also clear that about 6% of the reasons was associated with the need to expand their respective extended families. Only 6.4% of the reasons given related to divorce.

Table 19 : Reasons for having children in marriage

Reasons	F	%
Divorce	19	6.4
Loneliness	56	18.8
Future Care	62	20.8
To prove fecund	47	15.8
Pressure from In-law	64	21.4
Expansion of Family	18	6.0
Other Reasons	32	10.7
Total	298	100.0

Source: Field Survey, 2002.

The respondents' responses suggest that women, in general, perceive children as very important for the stability of their marriages. Within the African and Ghanaian family context, children are regarded as economic assets and a source of security (Logan, 1983).

Residence and age at first marriage

The environment in which one finds oneself affects one's way of life and attitude towards marriage and fertility issues. The apparent differences in the time one enters into marriage and the reasons for such an action can be explained by socio-cultural factors.

The median age at marriage in Ghana is currently 19 years (GSS, 1998). The lowest median age (18.2) is in the Upper East Region and the highest (19.8) in the Eastern Region.

The results of the study show that about 25.3% of the women in the rural area entered into marriage before the age of 20, whereas only 4.5 % of those in urban settlements entered into marriage at that age. By the age of 34 all the married respondents in the rural area had contracted their marriages. With regard to the respondents from the urban area, 5.4% contracted their marriage after the age of 34 (Table 20). It could therefore be inferred that the respondents from the rural area entered into marriage at an earlier age than those from the urban areas. Thus, residence has an important influence on the age at which one enters into marriage. The phenomenon of early marriage, invariably leads to early pregnancy, childbirth and a long reproductive life span.

Table 20 :Age at first marriage of female respondents

		by residence					
		Rural		Urban		Total	
Age at First Marriage		F	%	F	%	F	%
15-19		23	25.3	5	4.5	28	13.8
20-24		41	45.1	47	40.3	88	43.3
25-29		19	20.9	52	46.8	71	35.0
30-34		6	6.6	4	3.6	10	4.9
35-39		-	-	2	1.8	2	1.0
40-44		-	-	4	3.6	4	2.0
Total		89	100	114	100	203	100

Source: Field Survey, 2002

The campaign for the provision and use of contraceptives on the market has long been the main element of family planning programme in the country. Ezeh(1993) asserts that women's attitude towards contraceptive use depends not only on her individual characteristics but also on the characteristics of her husband. The growing availability of modern contraceptive methods such as the pill, condom, injectables and sterilization, has made it possible for some couples to space the births of their children and to prevent pregnancy.

Knowledge, attitudes and practices about contraceptive use

The family planning service is designed purposively to assist couples and individuals in their reproductive ages. The data in Table 21 indicate high levels of awareness of both modern and "traditional" methods of fertility control. The most common and well-known method is the condom. About 91.1 % of the respondents reported having heard about the condom. Its relatively high level of use (18.9 %) indicates not only its availability but also its economic cheapness. About 45.9 % of the respondents knew about the pill but only 17.5 % were using it. Those currently using a method represent 55.5% of the respondents

From the data, it can be seen that knowledge and awareness of contraceptive methods are high but the usage is relatively low. The data also reveal that the least known contraceptive method was the injectable (9.9%). The finding goes to support the assertion made by Oheneba-Sakyi et al (1996)

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that the condom and the pill are the best known and currently used methods of
contraception in the world.

To find out the number of the respondents who had ever used
contraceptive a question was asked to that effect. Out of a total of 366
respondents, 58.9% reported having ever used a method, whereas 41.1%
reported in the negative. If the high rate of knowledge of a contraceptive
method can be translated into actual use among couples, then the objectives of
the Population Council can be achieved. The data in Table 21 reveal that the
knowledge of contraceptive methods is high but the usage is low. The finding
goes to answer the second research question which seeks to find out the level
of knowledge and usage of contraceptive methods in the study area. This
finding is consistent with the GSS (1998) study on the use of contraceptive
methods in Ghana.

Table 21: Knowledge and use of contraceptive methods by respondents

(percentages)

Method	Ever Heard	Currently Using
	%	%
Condom	91.1	18.9
Vasectomy	18.3	1.1
Withdrawal	29.5	2.5
Abstinence	29.8	5.5
Diaphragm/Foaming	21.0	2.5
Pill	45.9	17.5
IUD	19.4	3.8
Female Sterilization	18.0	1.9
Injectable	9.9	1.4
None	6.0	1.6
Others	19.1	3.8

Source: Field Survey, 2002.

Ever used contraceptive method by residence

About 37.9 % of the women in the rural area reported having ever used a contraceptive method (Table 22). In the case of the women in the urban area, 61.5 % reported having ever used contraceptives. David and Gaisie asserts that the high use of contraceptives among the urban dwellers might be due to social change and knowledge of family planning methods. To find out if residence was associated with having ever used contraceptive the data was subjected to a chi square X^2 test. The calculated X^2 (11.886) was greater than

the critical value (3.841) at the 0.05 level. This means that the relationship between having ever used a contraceptive method and residence was statistically significant. It can, therefore, be concluded that more women who were resident in the urban area had ever used contraceptives than their counterparts in the rural areas. This goes to confirm the assertion that residence influences contraceptive use (Stolnitz, 1983). The main reason for the high use of contraceptives among women dwelling in the urban areas might be due to their access to family planning service providers and the availability of contraceptive methods.

Table 22 : Ever used contraceptive method by females by residence

Ever Used Contraceptive	Rural		Urban		Total	
	F	%	F	%	F	%
Yes	36	37.9	75	61.5	111	51.2
No	59	62.1	47	38.5	106	48.8
Total	95	100.0	122	100.0	217	100.0

$X^2 = 11.886$

df = 1 at 0.05 level

Critical value = 3.841

Decision = statistically significant

Source: Field Survey, 2002

Reasons for the use of contraceptive method

Contraceptive methods like the pill, IUD, condom and injectable are offered for sale in pharmacy shops and health clinics. The reasons for the use of a contraceptive method are many and varied. As indicated in Table 23,

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 more than half (54.1%) of the responses were on the need for birth spacing; 12.6% on the need to stop child bearing; 11.7 % of the responses were on the complications of child childbirth; and only 4.6 percent on the achievement of family size. The responses show that the major reason for the use of a contraceptive method among the respondents was for birth spacing. The finding corroborate Ampofo (1994) assertion that the major reasons for the use of contraceptives is for regulation of the intervals between pregnancies ,avoidance of unwanted birth and family size that one desires.

Tables 23: Females reasons for using a contraceptive method by respondents

Reason	F	%
To space birth	120	54.1
Stop birth	28	12.6
Health Reasons	26	11.7
Not Married now	18	8.3
To go to school	17	7.7
Have enough children	11	4.6
Other reasons	72	0.9
Total	222*	100.0

*Multiple responses

Source: Field Survey, 2002

Reasons for not using a contraceptive method

Despite the widespread knowledge of contraceptive methods, studies have also uncovered a number of reasons why people do not use any, even when they say they would prefer to avoid a pregnancy. Salway(1994) argues that a woman is likely to use a family planning method if her husband approves of it. Table 24 shows that 20 % of the responses had to do with side effects; 18% was with no need for a method. It also reveals that 15.3 % of the respondents indicated the need for a child and 6.3% expressed the disapproval of their husbands.

Table 24 : Females reasons for not using a method

Reasons	F	%
Side effect	30	20.8
Not necessary	26	18.1
Need a child	22	15.3
Against religion	14	11.8
Partner not approve	6	6.3
Others	40	27.8
Total	138*	100.0

*Multiple responses

Source: Field Survey, 2002.

Fertility level in the survey area

Women's characteristics, such as age at marriage, occupation, education, rural-urban residence, family type and marriage type have been

known to be some of the determinants of fertility levels in the country.

Children ever born are a function of economic, cultural and social factors. The structural model presumes that educational opportunities, urbanization and occupation tend to lower the number of children ever had by females. These factors act together to influence the birth performance of couples. These indicators were cross-tabulated with children ever born to find out the relationship between them.

Children ever born by the respondents

In the survey the respondents were asked about the number of children they had ever had. The mean number of children ever born by residence is shown in Table 25.

Table 25: The mean number of children ever had by residence

Residence	F	Mean	SD
Rural	143	3.5	2.70
Urban	233	2.4	2.04

Source: Field Survey, 2002.

The mean number of children was 3.5 and 2.4 for rural and urban areas respectively. To find out the significant difference between residence and the mean number of children ever had, the test of the difference between two means was used. The calculated Z (4.07) at the 0.05 significance level falls within the rejection zone (Appendix F). Thus, there exist a significant difference between the mean number of children ever had and residence. This

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 confirms the assertion that fertility in the urban area is lower than that in the rural area (Stolnitz, 1983).

Table 26 : The mean number of children ever had and desired family size by age group

Age Group	Children Ever Born	Desired Family Size
15 – 19	1.0	4.7
20 – 24	1.0	3.9
25 – 29	1.2	3.3
30 – 34	2.8	3.9
35 – 39	2.9	4.1
Total	2.9	4.0

Source: Field Survey, 2002.

From the data presented in Table 26 there is little doubt that the mean number of children ever born is very low. The mean of 2.9 is below the national mean of 4.46 (GSS, 1998). The mean desired family size of 4.0 is above the 2.9 mean number of children ever born. This reveals that the respondents have not achieved their ideal family size. The data also proves that there is a positive relationship between age and children ever born. Even though the completed family sizes of (4.7) and (5.7) of the age groups 45-49 and 50+ respectively were higher than the mean number of children ever born for the study area, it could be concluded that the overall mean number of children born for the study area was low.

More than half of the respondents (55.2%) reported income of the household as the most important factor to be considered when deciding on the

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preferred number of children (Table 27). This is followed by the health of the woman (20.8%) and fecundity (17.8%). Thus, the economic situation and purchasing power as well as the health of the woman are important factors for the determination of desired family size.

Table 27 : Reasons for desired family size stated by respondents

Reason	F	%
Fecundity	65	17.8
Health of women	76	20.8
Mortality	28	7.7
Income of Household	202	55.2
Desired number of Children	44	12.0
Economic Situation	56	15.3
Other	16	4.4
Total	366	100

Source: Field Survey, 2002.

The finding corroborate Becker (1960) assertion that household incomes or the economic situation is a major determinant for children by couples

Ethnicity and the mean number of children ever born

There are a number of cultural factors that are believed to influence the fertility behaviour of women. Among the cultural factors are ethnic norms and values such as sexual taboos. The mean number of live births by ethnicity

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 observed in the present study is given in Table 28. The fertility differences among the tribes show that ethnicity has an influence on fertility behaviour. The respondents from the Northern Region had the highest mean number of children ever born (4.5) with the lowest number of children ever born reported by the Ga Adangbe (2.0). This goes to confirm the findings of the GSS (1998), which also show that the respondents from the Greater Accra Region reported the lowest mean number of children ever born. It is acknowledged that in Ghana, where the use of modern contraception is generally low, ethnic differences in the children ever born can also be explained through socio-cultural factors such as “bedu-guan” rites and the lineage systems of the Akans, and the longer post -partum abstinence and breastfeeding among the Ewe (Gyimah, 2001)

Table 28 : Mean number of children ever born by ethnicity

Ethnicity	F	%	Mean
Guan	34	9.3	2.4
Ga Adangbe	30	8.2	2.0
Akan	237	64.8	2.9
Ewe	57	15.6	3.3
Northern Extraction	8	2.2	4.5
Total	366	100.0	3.0

Source: Field Survey, 2002

Family type and the mean number of children ever born

Nuclear families are generally associated with a desire for fewer children than those in the extended or joint households because nuclear families are considered to be more egalitarian and conjugality-oriented, and closer to a western pattern of family organization. The data presented in Table 29 show that the respondents in the extended family had 2.8 mean number of children ever born as against 3.2 by their counterparts in the nuclear family. This finding goes to refute the assertion that monogamous marriages are associated with small family sizes. The major reason for this situation is that the majority of the respondents from the nuclear families have archived their desired fertility behaviour.

Table 29 : Mean number of children ever born by family type

Family Type	F	Mean	SD
Extended	108	2.9	2.0
Nuclear	105	3.2	2.4

Source: Field Survey, 2002

To assess the significant difference between the means, the difference between two means test was used. The calculated Z (.990) at 0.005 significance level falls within the critical region (see Appendix G). It is to be noted that the mean number of children ever born by those in the nuclear family is higher than those in the extended family. However, there is no significant difference between the mean number of children ever born and family type.

Religion and children ever born

Religious beliefs and practices afford people the ability to link what they say and do with what they think (Zande, 1990). The biblical injunction to Adam and Eve to be fruitful and multiply and replenish the earth and subdue it has had influence on both Christians and non Christian alike (Genesis 1:28)

Table 30 : The mean number of children ever had by religion

Region	Rural	Urban	Total
	Mean	Mean	Mean
Traditional	9.3	3.0	6.2
Catholic	4.5	2.8	3.0
Protestant	3.1	2.5	2.7
Moslem	3.8	6.4	5.2
Charismatic	3.0	1.4	2.4
Other	1.5	2.8	2.1
Mean	4.2	3.1	3.6

Source: Field Survey, 2002.

The data in Table 30 show that the believers in the traditional religion had the highest number of children ever born (6.2). This is followed by the Moslem community which had 5.2 mean number of children ever born. Apart from the “other” religious group that had 2.1 mean number of children ever born, the believers in the charismatic faith had the lowest (2.4) mean number of children.

The data depict that the Moslem respondents in the urban area had the highest mean (6.4) number of children ever born. The data show that among the Christian denominations, the Catholics had the highest number of children ever born. The Catholics in the urban and rural settlements had 2.8 and 4.5 mean number of children ever born respectively. The data in Table 30 suggest that religious beliefs and practices can have an appreciable impact on children ever born under certain conditions. The findings confirm those of Agedegbade (1990) that religious beliefs have an influence on fertility behaviour.

Marriage type and children ever born

Greenstreet (1987) notes that polygamous unions help to sustain traditional patterns of high fertility because wives in those households are tempted to demonstrate their fertility to their husbands. On the other hand, in a study on the socio-cultural factors that affect the fertility of women in the Nkoranza District of the Brong-Ahafo, Baffour (1989) discovered that polygamy rather showed a negative relationship with fertility.

Table 31 shows the relationship between the mean number of children ever born and marriage type. The mean number of children ever had by those in monogamous marriages was 3.0 as against 3.3 by those in polygamous marriages.

Table 31: Mean number of children ever had by marriage type

Marriage Type	F	Mean	SD
Monogamy	145	3.0	2.1
Polygamy	49	3.3	2.3

Source: Field Survey, 2002.

To assess the significant difference between the means, the difference between two means tests was used. The calculated Z (1.088) at 0.05 significance level falls within the critical region (Appendix H). Thus even though the children ever had by those in the monogamous marriage was lower than those in the polygamous marriage the difference was not significant.

Residence and age at first child

Research has suggested that women who had their first birth early tend to have a greater number of children than those who delay their first birth (GSS, 1998). Age at first birth is a factor of importance in fertility studies because of the inverse relationship it exhibits to the exposure of risk of conception (Westoff, 1992). As can be seen from Table 4.30, only 4.4% of the respondents had their first child in the teens. This shows that teenage pregnancy is low in the district. It is obvious from the table that for every age group, wives who reside in the urban area began child bearing later than their counterparts living in the rural area. This goes to confirm the assertion by Nukuya (1992) that early age of marriage contributes to the high fertility rate in the country and the assertion by Lightborne and MacDonald (1982) that the most direct link between age at marriage and fertility is that women who marry later spend less time exposed to the risk of conception.

Table 32 : Mean Age at First Child by Current Age and Residence

Current Age	Residence					
	Rural			Urban		
	F	%	Mean	F	%	Mean
15 – 19	4	4.4	17.6	-	-	-
20 – 24	10	11.1	20.3	3	2.7	21.3
25 - 29	18	20.0	20.1	24	20.5	22.5
30 – 34	23	25.6	20.5	25	21.2	23.1
35 – 39	21	23.3	21.2	24	20.5	23.2
40 – 44	9	10.0	21.6	27	23.1	23.7
45-49	5	5.6	22.1	14	2.0	24.2
Total	90	100.0	20.5	117	100.0	23.0

Source: Field Survey, 2002.

The mean age at first child for the rural areas was 20.5 years as compared to 23.0 years for the respondents in the urban areas. The data therefore show that the respondents in the rural areas give birth earlier than the respondents in the urban areas.

Table 33 : Mean age at first child by residence

Residence	F	Mean	SD
Rural	90	20.5	1.9
Urban	117	23.0	2.5

Source: Field Survey, 2002

between the two means test was used. The calculated $Z(3.189)$ at 0.005 significance level does not fall within the critical region.(see Appendix I). Thus, there is significant difference between the age at first child and residence .

Education and children ever born

The 1998 GDHS has revealed that the higher the educational status of a woman, the smaller the family size desired. Education affects fertility through a variety of channels. Employment and income, to a large extent, depend on education. The results in Table 34 show that respondents in the rural areas had a higher (3.2) mean number of children ever born than their counterparts in the urban settlement who had 2.7 mean number of children ever born. This is consistent with studies on urban-rural differentials in fertility (GDHS, 1988). Furthermore, the respondents with no formal education had the highest (5.2) mean number of children ever born as compared to the respondents with university education who had the lowest (2.0) mean number of children ever born. This confirms Sembajwe(1980) assertion that fertility declines as education increase from primary to the secondary level. Whereas the respondents with no university education in the rural areas had 1.1 mean number of children born, their urban counterparts had 2.9 mean numbers of children born. It is evident from the data presented that the number of children born declines with rising educational levels. The research finding is consistent with the globally accepted inverse relationship between a woman's educational level and fertility. It is envisaged formal

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education will create conditions that will build up knowledge, which will influence the reproductive behaviour of individuals (Awusabo-Asare, 1988).

Table 34 : Mean number of children ever born by educational level

Education	Rural Mean	Urban Mean	Total Mean
No formal	6.4	4.0	5.2
Basic	3.6	2.8	3.2
Sec/Voc/Tec	2.5	2.1	2.3
Tr/Poly	2.2	2.0	2.1
Univ/Dip	1.1	2.9	2.0
Mean	3.2	2.7	2.9

Source: Field Survey, 2002.

Number of children ever born by occupation and residence

The data in Table 35 show the mean number of children ever born by occupation and residence. Conforming to expectations, women working in agricultural and commercial activities had the highest mean (3.1) and (3.7) children ever born. Furthermore, an interesting finding is the high mean (3.0) number of children had by those engaged in high professional activities. Although it is very difficult to discern clearly significant patterns in the results, with the exception of the low professional and unskilled manual categories, the respondents in each occupational category in the rural area had higher mean number of children born than their counterparts in the urban area. The finding is consistent with Stolintz (1983) assertion that urban fertility tends

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 to be substantially lower than rural fertility in developing countries. Even though the findings go contrary to the accepted norms in the case of the positive relationship between the high profession and number of children ever born, a plausible explanation might be the low number of respondents in that occupational category (0.9 %). The inverse relationship found between employment and fertility in developed countries is either absent or very weak in developing countries (Standing, 1978).

Table 35: The mean number of children ever born by occupation and residence

Occupational			
Category	Rural	Urban	Total
High Professional	-	3.0	3.0
Low Professional	2.2	2.6	2.4
Clerical	-	2.5	2.5
Commercial	3.7	3.5	3.7
Skilled Manual	3.1	2.0	2.7
Unskilled Manual	2.8	3.2	3.0
Agriculture	3.9	2.2	3.1
Not working	3.0	2.5	2.8
Mean	3.1	2.7	2.9

Source: Field Survey, 2002.

Decision-making on fertility issues between couples usually starts with communication on such issues. Communication can be verbal or non-verbal. As women's equality with men increases, so does their ability to communicate about reproductive matters with their spouses. (Meekers and Oladosu, 1996).

Communication on fertility issues

The frequency of couple's discussion of family planning is positively related to contraceptive approval and its adoption in general (Awusabo-Asare, 1990). Four items were grouped under fertility issues. They were: family size, birth spacing, breast-feeding and contraceptive use. The information presented in Table 36 shows that 15.6 % of the respondents had never discussed family size with their partners as against 78.1% who had done so. In the case of birth spacing, 23.2% had never discussed the issues of birth spacing with their partners, whilst 70.5% had. More than half (60.1%) had never discussed breast-feeding. These responses show that communication between couples on breast-feeding was very low. About 33.1 % of respondents did not discuss contraceptive use whereas 41.7 % did.

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Table 36 : Proportion of respondents discussing fertility issues

Item	Family Size		Birth spacing		Breastfeeding		Contraceptive	
	F	%	F	%	F	%	F	%
Family size	57	15.6	85	23.2.8	220	60.1	121	33.1
Seldom	68	19.8	53	14.5	39	10.7	67	18.5
Often	85	24.8	87	27.8	45	12.3	62	16.9
Regularly	133	38.8	118	32.2	38	10.4	23	6.3
Not applicable	23	6.3	23	6.3	24	6.6	93	25.6
Total	366	100	366	100	366	100	366	100

Source: Field Survey, 2002.

The data presented show that the least discussed issues were breastfeeding and contraceptive while family size and birth spacing were the most discussed fertility issues.

Table 37 : Female communication on fertility issues by residence

Communication on Fertility Issues	Urban		Rural		Total	
	F	%	F	%	F	%
Yes	99	81.1	32	33.7	131	60.4
No	23	18.9	63	63.3	86	39.6
Total	122	100	95	100	217	100.0

$X^2 = 50.291$

df = 1 at 0.05 level

Critical value = 3.841

Decision = statistically significant

Source: Field Survey, 2002.

From the data presented in Table 37, it could be observed that 39.6% of the respondents did not communicate with their spouses on fertility issues as against 60.4% who did. Also, about 18.9% of the urban respondents did not communicate with their spouses as compared to 66.3% of their counterparts in the rural area who did not. To test for the significant association between residence and communication on fertility issues the data was subjected to a chi-square test. The calculated X^2 (50.291) was greater than the critical value (3.841) at the 0.05 level of significance. Thus, the result suggests that the respondents in the urban area communicated on fertility issues more than their counterparts in the rural areas.

Communication on fertility issues and family type

Table (38) shows the extent of communication on fertility issues between spouses by family type. Clark (1994) argues that because of the lineage system that takes prominence over the nuclear family in Africa conjugal interest invoke emotional commitment to kins, thus weakening conjugal bonds. About 38.5% of the women in the nuclear family reported that they did not communicate with their spouses on fertility issues as compared with 40.7% of their counterparts in the extended family.

$X^2 = 3.635$ [© University of Cape Coast https://erl.ucc.edu.gh/jspui](https://erl.ucc.edu.gh/jspui)
 $df = 1$ at 0.05 level

Critical value = 3.841

Decision = Not statistically significant

Source: Field Survey, 2002.

The data in Table 39 reveal that 70.5% of the respondents with low level of education did communicate with their spouses as compared with 56.4% of their counterparts with high level of education. With regard to those who did not communicate with their spouses, 29.5% with low educational status did not communicate with their spouses as compared with 43.6% of their counterparts with high educational status. When the data were subjected to the X^2 test, the critical value (3.841) was found to be greater than the calculated $X^2(3.635)$.

Thus, one can conclude that the level of education attained does not influence communication on fertility issues.

Communication on fertility issues and type of marriage

The type of marriage affects the autonomy of a woman and thus the extent to which she communicates with her partner (Meekers and Oladosu, 1996). Kulu (1990) on the other hand asserts that the type of marriage affects the relative power of a woman and the extent to which she can communicate with her husband. About 31.7% of the respondents in monogamous marriages did not communicate with their spouses as compared with 49.0% of those in polygamous marriages who did not. With regard to those who did communicate, 68.3% of the respondents in monogamous marriages did, as compared with 51.0% of their counterparts in polygamous marriages. (Table 40).

Table 40 : Female communication on fertility issue by marriage type

Communication	Monogamy		Polygamy		Total	
	F	%	F	%	F	%
Yes	99	68.3	25	51.0	124	63.9
No	46	31.7	24	49.0	70	36.1
Total	145	100.0	49	100.0	194	100.0

$X^2 = 4.728$ $df = 1$ at 0.05 level

Critical value = 3.841 Decision = statistically significant

Source: Field Survey, 2002

The results from the study showed that women in monogamous marriages communicated more with their spouses on fertility issues than those in the polygamous marriages.

Fertility decision-making

The process of decision-making starts with communication. Before couples can communicate and decide on an issue there must be mutual trust and respect for each other's view. When a woman and her spouse share the decision-making power, she is able to bring up and discuss family planning and sexual matters with her partner (Mott and Mott1985).This section is examined within the context of the decision making model and determinants of the fertility decision – making.

Bour, (1996) asserts that reproductive decision making in the context of the Ghanaian family is determined by forces like education, employment status, income, and place of residence, family and marriage type and the extended family system among others. With the exception of decision-making on breast feeding, there was a high level of joint decision-making on family size and birth-spacing by couples. About 73.5 % of all decisions on family size were taken jointly by the couples. It was only in 14.5 % of households that the male took the decision independently (Table 41).

In the case of birth spacing, 74.3 percent of decisions were taken jointly, and 10.7 % and 6.0 % were taken independently by the husband and wife respectively. Decisions on breastfeeding appear to be the prerogative of the women. About 68.6 % of all the decisions were taken independently by the women, whereas 17.2 % were taken jointly. From the analysis, it could be inferred that there was a high level of communication and joint decision-making on fertility issues among the respondents.

Table 41 : Percentage of respondents having a say in decisions on fertility**issues**

Item	Family Size		Birth Spacing		Breast Feeding	
	F	%	F	%	F	%
Husband	53	14.5	39	10.7	18	4.9
Wife	14	3.8	22	6.0	251	68.6
Both	269	73.5	272	74.3	63	17.2
Others	5	1.4	4	1.1	3	0.8
Not applicable	25	6.8	29	7.9	31	8.5
Total	366	100.0	366	100.0	366	100.0

Source: Field Survey, 2002.

Decision-making on contraceptive issues

Research show that males and to a large extent outside influence affects a couples decision to use or to discontinue the use of a contraceptive method (Mbizvo and Adamchak) Family planning education is, to a large extent, concentrated on women, perhaps because most contraceptives in the market are for women (Wambui, 1994). If this is true, then women should have control on the use and choice of the method. From the data in Table 42, 28.4 percent of decisions on the use of method were made independently by the wife; 7.4 % were made independently by the husband; and 53.0 % of the decisions were made by “others” (health workers, friends, and relatives). With regard to the choice of method, about 32.2 percent of the females made independent decisions as compared to 7.4 % made by husbands and 47.5 %

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 made by others (health workers, friends, relatives). With regard to the discontinuation of the use of a method, about 50.8 % of the decisions were made jointly by the couples as against 32.5 % made by the wife alone.

Table 42 : Percentage of respondents having a say on contraceptives

Item	Use of Method		Choice of Method		Discontinuation of use of method	
	F	%	F	%	F	%
Husband	27	7.4	27	7.4	28	7.2
Wife	104	28.4	118	32.2	119	32.5
Both	33	9.0	42	11.5	186	50.8
Others	194	53.0	174	47.5	26	7.1
Not applicable	8	2.2	5	1.4	7	1.9
Total	366	100.0	366	100.0	366	100.0

Source: Field Survey, 2002.

The results thus show that women had a greater say in the use, choice and a discontinuation of the use of a contraceptive method than men. The results further reveal that outside influences, to a large extent, exert pressure on couples to choose or use a method rather than discontinue the use of a method. The high level of communication on fertility issues by the couples is a reflection on the high level of discussion on family sizes.

The decision to have a child

From the data in Table 43, 76.8 % of the respondents reported that they had not been influenced by anyone to have a child. About 23.2 % of the respondents reported that there was outside influence on them to have a child. Out of this number 13.7 % and 3.3 % reported the outside pressure to have a child was from their parents and in-laws respectively. This result is very remarkable, as it will remove the pressure on couples to have children if they are not ready. The result also suggests that the right to have a child is in the hands of the couple themselves.

Table 43 : Decision to have a child

Influence	F	%
Couple	281	76.8
Parents	50	13.7
Friends	18	4.9
In-law	12	3.3
Others	5	1.4
Total	366	100.0

Source: Field Survey, 2002

Fertility decision-making by residence

Nukunya (1992) asserts that urbanization influences fertility decision through the promotion of anonymity, secularism and diminution of kinship ties. Table 44 shows the relationship between fertility decision-making and residence. The data show that 70 % of the respondents had influence on fertility decision making. With regard to those who had influence on decisions

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 concerning fertility issues, 86.1% of the respondents in the urban area had influence on such issues as compared to 49.5% of the respondents in the rural areas. To find out whether the apparent difference was significant, the data was subjected to a X^2 test. The test revealed that the calculated X^2 (34.084) was larger than the critical value (3.84) with one degree of freedom at 0.05 level. Thus, there is a significant association between fertility decision-making and residence. We might therefore conclude that the urban respondents have more say on decisions regarding fertility issues than their counterparts in the rural areas. This result goes to confirm literature that women living in urban areas come across new information from the news media which enable them to have a say on fertility issues.

Table 44 : Fertility decision-making by residence

Influence on Fertility Decision making	Residence				Total	
	Rural		Urban		F	%
	F	%	F	%		
Yes	47	49.5	105	86.1	152	70
No	48	50.5	17	13.9	65	30
Total	95	100.0	122	100.0	217	100

$X^2 = 34.84$ $df = 1$ at 0.05 level

Critical value = 3.841 Decision = Statistically significant

Source: Field Survey, 2002

Marriage type whether free choice, arranged, or polygynous also affects the relative power a woman has and thus the extent that the couple communicate (Kulu, 1990). The data in Table 45 show that 23.4% of those in monogamous marriage had no influence on decisions concerning fertility issues. Similarly, 76.6% of the respondents in monogamous marriages had influence on such issues as against 59.2% of the respondents in polygamous marriages. To find out whether there was an association between decision on fertility issues and marriage type, the data was subjected to a X^2 test. The calculated chi-square value (5.500) was greater than the critical value (3.841) with 1 degree of freedom. Thus, there was a significant association between marriage type and decision-making on fertility issues. From the data it could be concluded that those in monogamous marriages have a greater influence on decisions of fertility issues than their counterparts in the rural areas.

Table 45 : Decision on fertility issues by marriage type

Influence on Decision on Fertility Issues	Marriage Type				Total	
	Monogamy		Polygamy			
	F	%	F	%		
Yes	111	76.6	29	59.2	140	71.2
No	34	23.4	20	40.8	54	29.8
Total	145	100.0	49	100.0	194	100.0

$X^2 = 5.500$ $df = 1$ at 0.05 level

Critical value = 3.841 Decision = Statistically significant

Source: Field Survey, 2002

Decision on fertility issues by family type

Brown(1996) asserts that in most traditional Ghanaian communities women do not take part in decision- making. Table 46 shows that 30.5% of the respondents in the nuclear family had no influence on decisions on fertility issues. Similarly, 69.5% of the respondents in the nuclear family had influence on decisions on fertility issues as compared to 70.6% of the respondents in the extended family. To test for the association between decision-making on fertility issues and family type the data was subjected to a chi-square test. The chi-square statistic (.037) was smaller than the critical value (3.841) with 1 degree of freedom at 0.05 level of significance. Thus, there was no statistically significant association between family type and decision-making on fertility issues. The result confirms Brown (1996) assertion that decision- making between spouses is now believed to depend to a great extent upon the relative position of the spouses and their relative aspirations.

Table 46 : Decision on fertility issues by family type

Influence on Decisions on Fertility Issues	Family Type				Total	
	Nuclear		Extended		F	%
	F	%	F	%		
Yes	75	69.5	77	70.6	152	74.7
No	33	30.5	32	29.4	65	25.3
Total	108	100	109	100	217	100.0

$X^2 = 0.37$ $df = 1$ at 0.05 level

Critical value = 3.841 Decision = Not statistically significant

Source: Field Survey, 2002.

Fertility decision-making by educational level

Table 47 shows the relationship between decision-making on fertility issues and educational level. Donovan (1995) asserts that women who are better educated, who marry at later age, and who are in monogamous marriages discuss family size with their husband. It could be observed that 13.1% of the respondents with high education did not have influence on fertility issues as compared to 36.5% of the respondents with low educational level. Similarly 86.9% of those with high education had some influence as compared to 63.5% of their counterparts with low educational level. The calculated chi-square (11.467) was greater than the critical value (3.841) at 1 degree of freedom at 0.05 significance level. The chi-square test revealed that there was a significant association between fertility decision-making and educational level.

Table 47: Fertility decision-making by educational level

Influence on Decisions on Fertility Issues	Educational Level				Total	
	High		Low		F	%
	F	%	F	%		
Yes	53	86.9	99	63.5	152	70
No	8	13.1	57	36.5	65	30
Total	61	100	156	100	217	100

$X^2 = 11.467$ $df = 1$ at 0.05 level

Critical value = 3.841 Decision = Statistically significant

Source: Field Survey, 2002.

The results of the study have, thus, shown that the respondents with high education could influence decisions on fertility issues more than those with low education. This suggests that education broadens the outlook of people towards fertility issues. This is consistent with the findings of Meekers and Oladosu(1996) that higher levels of educational attainment leads to communication on fertility issues.

Sex preference

The pressure on African women to bear children, particularly sons, is widespread across the continent (Sai, 1994). In Ghana, among the Akans, son preference is widespread, stemming from the prevalence of the matrilineal system of inheritance.

Sex preference by residence

According to a Chinese proverb, “having a son is like having two eyes and having a daughter is like having only one eye” and among the Akans it is believed that to give birth to a son means to give birth to a human being. The results in Table 48 indicate a preference for boys to girls in the district: 50.3% for boys as against 46.4% for girls, while 3.3% had no preference.

Table 48. Sex preference of respondents <https://erl.ucc.edu.gh/jspui>

Preference	F	%
Boy	184	50.3
Girl	170	46.4
Any	12	3.3
Total	366	100.0

Source: Field Survey, 2002.

When the data were disaggregated into sex preference by sex, 71.1% of the male respondents reported that they preferred a boy to a girl as compared to 35.9% of the females who preferred a boy. With regard to the preference for a girl, 25.5% of the male respondents preferred a girl as against 60.8% of the females who preferred a girl. When the data was subjected to the chi-square test it was found that the calculated χ^2 (45.508) was greater than the critical value (5.991). Thus, there is a significant relationship between sex preference and the sex of a child. The findings suggest that while males prefer a boy to a girl, females prefer a girl to a boy. The finding does not confirm Cain's (1994) assertion that in patriarchal society's women prefer sons to daughters.

Sex Preference	Male		Female		Total	
	F	%	F	%	F	%
Boy	106	71.1	78	35.9	184	50.3
Girl	38	25.5	132	60.8	170	46.4
Any	5	3.4	7	3.3	12	3.3
Total	149	100.0	217	100.0	366	100.0
X ²	= 45.508		df = 2 at 0.05 level			

Critical value = 5.991 Decision = Statistically significant

Source: Field Survey, 2002.

Conclusion

The analysis showed the relationship between each selected variable and mean number of children ever born. The chi-square test was also employed to find out if there were significant relationship between socio-economic characteristics and fertility decision – making, communication, fertility preference and sex preference.

The sample was made up of 149 men and 217 women. The majority of the respondents were Akan (64.8%) and most of them were Christians (93.9). The Moslems were underrepresented because of the absence of Zongo communities in the district. Most (62.0%) of the respondents' place of birth was in the Eastern Region, the area of the study.

Only a few firms can be found in the district. As a result, most of the economically active populations were engaged in low (32.3%) and commercial (32.3%) occupations. About (42.9%) of the respondents had

attained only basic education and only 8.2% had University education and Diploma education.

About 77.3% of the females were married and the form of marriage was customary (59.3). Only 22.6% of the female respondents were in polygamous marriages. About 55.5% of the respondents claimed they had used a contraceptive method; and 84.2 in the rural and 85.2 in the urban approved of couples using a method. About 58.9% of the respondents were currently using a method. The most used method was the pill(18.9%) and the least used was the vasectomy. The fertility level of the respondents was low (2.9).The mean number of children born was 3.5 and 2.4 respectively for the rural and urban settlements. The completed family size was 4.7 for the 45-49 age group and the corresponding fertility preference was (4.1). There was no significant relationship between communication on fertility issues and family type. Furthermore, there was no significant relationship between decision on fertility issues and family type. However, there was a significant relationship between ever-used contraceptive method and residence. Moreover, there was also a significant relationship between communication on fertility issues and residence.

Knowledge about a contraceptive method was quite high but its relative use was very low. There was no significant relationship between ever use a method and residence. About 60% of the respondents did communicate with their spouse on fertility issues. The relationship between communication on fertility issues and residence was significant. However, communication on fertility issues and educational level was not statistically significant. There was a high level of joint decision-making on family size (73.5) and birth

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spacing (74.5). The relationship between decision-making and residence was
statistically significant.

CHAPTER FIVE
FEMALE SOCIO-ECONOMIC STATUS INDEX AND FERTILITY
BEHAVIOUR

Introduction

From the literature reviewed, the status of women is said to be a product of selected socio-economic variables such as family type, marriage type, occupation, education and residence. In the previous chapter, the relationship between these selected variables and the mean number of children ever born was assessed by cross tabulation.

In this chapter, a correlation matrix is constructed to examine the associations between the selected variables to ascertain whether they are dependent or independent of each other. The chapter discusses the findings from the survey in accordance with the hypotheses and the conceptual theoretical framework. A composite socio-economic status index (high or low) was created (Appendix A). It was used to find its relationship with the number of children ever born. For the analysis of the categorical data, the chi-square test was used to establish whether the observed association between the independent and dependent variables was statistically significant. The chi-square (X^2) was also employed to examine the relationship between socio-economic status, residence and the number of children ever born.

Dixon(1975) assert that reduced fertility can be correlated with status as measured by such factors as education , employment ,residence ,marital status and the characteristics of the family among others. Table 50 Presents Pearson’s correlation coefficient showing the relationship between children ever born and socio-economic indicators.

Table 50 : Correlation Matrix of Socio-Economic Characteristics and Children Ever Born.

	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈
X ₁								
X ₂	.887**							
X ₃	-.149**	-.069						
X ₄	-.228**	-.129	.23					
X ₅	-.263**	-.230**	.013	.499**				
X ₆	-.503**	-.448**	.018	.481**	.396**			
X ₇	.843**	.800**	-.016	-.131	-.183**	-.385**		
X ₈	.282**	.218**	.018	-.156*	-.168	-.174**	.19**	
X ₉	.179**	.155*	.075	.071	.033	-.133**	.107	.052

* p < 0.05 **p < 0.01

X₁ = Socio-economic status

X₅ = Fertility Decision-making

X₂ = Education

X₆ = Residence

X₃ = Family type

X₇ = Occupation Type

X₄ = Communication

X₈ = Marriage Type

X₉ = Children Ever Born

Source: Field Survey,2002

The results indicate that negligible to low correlation exists between the socio-economic characteristics and children ever born. The results also

indicate that not all of the variables are significantly correlated with each other. From Table 50, it could be seen that a significant and positive relationship exists between occupation ($r = .843^{**}$), education ($r = .887^{**}$), marriage type ($r = .282^{**}$) and socio-economic status.

On the other hand, there exists a negative correlation between family type ($r = -.149^{**}$), decision-making ($r = -.263^{**}$), residence ($r = -.503^{**}$) and socio-economic status.

From Table 50, it could be seen that a significant and positive relationship exists between education ($r = 0.155^*$) and children ever born. This positive relationship, which is negligible, might be due to the low educational level attained by the respondents. Secondly, there exists a negative relationship between residence ($r = -.133^{**}$) and children ever born. The implication of this finding is that residence has a negative effect on children ever born. Thirdly, there is no statistically significant relationship between family type and children ever born. This is shown by the minimal (0.4) difference in the mean number of children ever born between the extended family (2.8) and nuclear family (3.2) in the survey area.

Finally, the association between marriage type and children ever born was not statistically significant. This is shown by the data in Table 30 where there was only 0.3 differences in the mean number of children ever born between the females in monogamous and polygamous marriages. The small variation or difference might be due to the low representation of respondents in polygamous marriages.

Hypothesis (1) states that:

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H₀: There is no significant relationship between female socio-economic status characteristics and fertility behaviour.

H₁: There is a significant relationship between female socio-economic status characteristics and fertility behaviour.

The Pearson correlation coefficient was used to test the association between the socio-economic characteristics and fertility behaviour. From Table 50 it could be seen that a significant and positive relationship exists between education ($r = 0.155^*$) and children ever born. Furthermore, the relationship between family type (.075) and children ever born and marriage type and children ever born (0.52) did not show any significant relationship. On the other hand, there exists a negative relationship between residence ($r = -.133^{**}$) and children ever born. The implication of this finding is that urbanization has a negative effect on children ever born.

From the analysis of the data, it has been established that residence and education are the two most important characteristics that had significant relationship with fertility behaviour in the study area. The positive correlation between education and the number of children ever born would suggest that education had not achieved the expected aim of helping to reduce the level of fertility in the district. It is expected that higher education should have a negative effect on fertility behaviour (Awusabo-Asare,19888). But the positive correlation can be explained by the fact that 54% of the female respondents had not gone beyond the basic level of education. As Awusabo-Asare (1988, p.55) observes:” the threshold for fertility decline at the micro level in less developed countries with high levels of illiteracy appears to occur after primary education for females”.

The analysis of the data further reveals that there is a significantly negative relationship between residence and fertility behaviour (-33). Thus, the hypothesis which states that there is no significant relationship between female socio-economic characteristics and fertility behaviour is rejected in terms of education and residence, and accepted in terms of family type, marriage type and occupation. The findings are consistent with the results of Jejeebhoy (1991) in her study on women's status and fertility in Tamil Nadu, India. She found out that not all of the selected factors associated with women's status are correspondingly associated with fertility behaviour.

Socio-economic status

Researchers have argued that there is no uncontroversial way to define the status of females in society. For instance, Mason (1993) asserts that the concept of status of females is a relative term, which defies a universally accepted definition. According to Devi (1980), the concept of "status of women" eludes precise definition and hence precise measurement.

In this study, five social and economic variables namely: education, occupation, residence, family type and marriage type are combined to create a composite status index to determine the status of females as either high or low (Appendix A). The fertility levels of women in relation to their status categories are then discussed.

The level of female socio-economic status

The results in Table 51 indicate that the level of female status was low. Only 29.0% of the female respondents had a high status as compared to 71%

with low status. In terms of rural-urban differential, 3.2% of the females in the rural area had a high status as against 49.2% of those in the urban area. The high level of disparity in status might be due to the method used in computing the composite index for the socio-economic status. This is consistent with El Hamesy (1978) assertion that status is subjective and depends on the indicators used to measure it.

Table 51 : Female socio-economic status and residence

Socio-Economic Status	Urban		Rural		Total	
	F	%	F	%	F	%
High	60	49.2	3	3.2	63	29.0
Low	62	50.8	92	96.8	154	71.0
Total	122	100.0	95	100	217	100.0

$$X^2 = 54.906$$

Critical value = 3.841 df = 1 at 0.05 level

Decision = Statistically significant

Source: Field Survey, 2002.

The Chi-square test was applied to see whether the apparent difference in status was real. The result showed that the calculated value (54.906) of the chi-square was greater than the critical value (3.841) at 5% level of significance. The results imply that the difference in status between the females in the urban and rural settlements was statistically significant. The data suggest that there are more women with low socio-economic status in the rural areas than in the urban areas. This goes to confirm Calhoun et al(1996)

assertion that statuses are positions in the social order that define who we are in relation to others. The results of the Pearson correlation coefficient show that there was a positive significant relationship between socio-economic status and education (.887), and marriage type (.282), and occupation (.843). However, there was a negative significant relationship between socio-economic status and residence (-.503) and family type (-.149).

Female socio-economic status and fertility decision-making

Hypothesis (2) states that:

H₀ : There is no significant relationship between high female socio-economic status and fertility decision-making.

H₁: There is a significant relationship between high female socio-economic status and fertility decision-making.

The data in Table 50 show the correlation matrix of socio-economic characteristics and children ever born. It could be seen that there exists a negative relationship between fertility decision-making ($r = -.263^{**}$) and high socio-economic status.

The negative correlation between fertility decision-making ($0.-263^{**}$) and socio-economic status implies that the relationship is significant.. Even though majority of the respondents had low socio-economic status, the observed patterns of decision-making from the study (Table 40) shows that decisions on family size and birth spacing were mostly jointly made by the couples and decisions on breast feeding was women dominated. The findings corroborates the assertion made by Ohene-Sakyi et al(1996)that decisions

making reflect both traditional practices and changing situation in the economy.

Female socio-economic status and fertility behaviour

Hypothesis (3) states that:

H₀: There is no significant relationship between high female socio-economic status and fertility behaviour.

H₁: There is a significant relationship between high female socio-economic status and fertility behaviour.

The theoretical position adopted is that when the status of women improves and their perception towards marriage and reproductive norms changes, they adopt measures that enable them to control their fertility behaviour.

Table 52 shows the relationship between female socio-economic status and the number of children ever born. The data shows the respondents with high socio-economic status had approximately 2.7 mean number of children ever born as compared to 3.1 mean number of children ever born by the respondents with low status. This goes to affirm the conceptual framework proposition that high status affects decision making which goes to influence respondents fertility behaviour. The data confirm Jejeeboy(1991) assertion that there exist an inverse relationship between high female status and number of children ever born

Table 52 : Female socio-economic status index and mean number of children ever born

Socio-economic Status	F	Mean	SD
High	63	2.7	2.0
Low	154	3.1	2.3

Source: Filed Survey, 2002

To assess the significance of the difference between the means, the difference between two means tests was used. Since this is a two tailed - test at the 0.05 significance level, the corresponding critical values are $Z = 1.96$ and $Z = -1.96$. Based on the confidence limits, if the paired mean sample difference falls in the critical region we accept H_0 . On the other hand, if it falls outside the critical region then we reject H_0 and accept H_1 . The calculated Z was 1.29, which falls between -1.96 and 1.96 (see Appendix E). Since this does not fall in the rejection region, the null hypothesis is accepted. Thus, there is no significance difference between high female socio-economic status and the mean number of children born to the two groups. There is therefore no significant relationship between high female socio-economic status and fertility behaviour-with particular reference to childbirth

Summary

To obtain a measure for the status of women, a composite socio-economic status index (high or low) was created by grouping together five variables, namely: family type, education, marriage type, residence and occupational activity.

There was a positive relationship between occupation and residence.

Moreover, there was positive relationship between socio-economic status and residence. Furthermore, only education and residence showed a significant relationship with children ever born. Thus, Hypothesis One which states that: there is no significant relationship between female socio-economic characteristics (family type, marriage type, occupation, education and residence) and fertility behaviour was rejected in terms of family type, marriage type and occupation and accepted in terms of education (.155**) and residence (-.133**)

The data further revealed that female socio-economic status was very low. Only 29% of the female respondents had high status.

Hypothesis Two states that there is no significant relationship between socio-economic status and fertility decision-making. Socio-economic was found to be significantly related to fertility decision making (-.263**). Thus, the alternative hypothesis, which states that there is a significant relationship between socio-economic status and fertility decision making, is accepted

Hypothesis Three states that there is no significant relationship between socio-economic status and fertility behaviour. The analysis of the data revealed an inverse relationship between high socio-economic status and mean number of children ever born. The respondents with high status had 2.7 mean number of children ever born whereas their counterparts with low status had 3.1. The calculated Z statistics (1.29) falls within the critical region (-1.96 and +1.96). Thus, there was no significant difference between the two means. Therefore, the null hypothesis, which states that there is no significant

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**relationship between female socio-economic status and fertility behaviour, is
accepted.**

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter deals with the summary of the study, the conclusions, recommendations and areas for further research. The summary focuses on the main findings of the study. The conclusions are derived from the main findings from the study, which tried to answer the research questions and other important issues raised. The recommendations for policy makers and implementers, on the other hand, are based on the conclusions. The section on area for further research covers areas that can be studied to increase our knowledge and understanding of family dynamics and fertility behaviour of women.

Summary

The general objective of the study was to examine the factors affecting female fertility behaviour in the Akuapem South District. It was hypothesized that there was no significant relationship between socio-economic status and fertility behaviour. The study used a cross-sectional, exploratory non-interventional study design, which focused on the Akuapem South District as a case study. The interview schedule was used to collect data from the field. The analysis was based primarily on the results of the data collected. Means, cross-tabulations, Pearson correlation and simple frequency distribution statistics were used to analyse the data. Because the data was categorical, the most effective tool to test the significant association between the dependent

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variables were occupation, family type, marriage type, residence, and education

Main findings of the study

Socio-economic status indicators

Five variables were used as proxy for socio-economic status index characteristics (marriage type, family type, education, occupation and residence). There were no significant relationships between marriage type, family type, occupation and fertility behaviour. However, there was a significant relationship between education (.155*), residence (-.133**) and fertility behaviour.

Contraceptive knowledge and use

The level of knowledge of a contraceptive method is high. Almost 94% of the respondents knew about a contraceptive method. The findings revealed that as much as 45.5% of the respondents had ever used a contraceptive method. Both men and women knew about a modern and a traditional method of contraception. The data revealed that about 58.9% of the respondents were currently using a method. The well-know method was the condom (91.1%) but only 18.9 were using it. With regard to the pill 45.9% knew about it, but only 17.5% were using it.

Spousal communication on fertility issues

Family size, birth spacing, breast-feeding, and contraceptive use were used as items for fertility issues. About 15.6 percent of the respondents claimed they have never discussed family size with their partners. About 23.2

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% claimed that they have never discussed birth spacing. With respect to breast feeding 601 % have never discussed such an issue and 33.1% have never discussed contraceptive use with their spouses.

Decision-making on fertility issues

More than half (53%) of the respondents took the decision to use a contraceptive method by the advice of “others” (health workers, relatives and friends). In general, respondents in monogamous marriages (54.4%) had more influence on decisions affecting fertility issues. There was joint decision making on family size (73.5), birth spacing (74.3%), breastfeeding (17.2%) and contraceptive use (9.0%). There was significant association between residence (.396**) and fertility decision-making.

Sex preference among respondents

The results indicate a preference for sons to girls. About 50.3% of the respondents wanted a boy if only they were to choose between either a boy or a girl. There was significant relationship between sex preference and sex.

Socio-economic status index

The findings revealed that female socio-economic status in the survey area was very low. About 29% had high status and 71% had low status. The chi-square test showed a significant association between status and residence (Table 5.2).

Fertility behaviour in the survey area

The mean number of children ever born for the respondents was about 3.0. The males had a lower mean number of children ever born (2.7) than the females (3.0). The disparity between the urban mean number of children born (2.4) and rural mean (3.5) shows that there is a relationship between residence and fertility behaviour. The Ga Adangbe ethnic group had the lowest mean number of children ever born (2.0). The highest mean (4.5) was reported from the respondents from the Northern Regions. The traditional believers had the highest mean (6.2) number of children ever born.

The age group 50+ had the highest mean (5.7) number of children ever born. There was an inverse relationship between socio-economic status and mean number of children ever born. Those with high status had 2.7 whereas those with low status had 3.1. The difference between the means test revealed no significant difference between the two means.

Results of hypotheses

The following are summaries of the results of the hypotheses:

Hypothesis One

There was a significant relationship between fertility behaviour and education (0.155*) and residence (-0.133**).

Hypothesis Two

There was a significant relationship between high female socio-economic status (-.263**) and fertility decision-making.

Hypothesis Three

There was no significant relationship between high female socio-economic status and fertility behaviour ($Z = 1.29$).

Conclusions

Based on the result of the study the main conclusion that emerged were as follows:

1. Females in the district in general had low socio-economic status. There was wide variation in socio-economic status between female respondents in the rural and urban areas. The underlying low socio-economic status of the females in the rural area is because of the low educational level attained by them.
2. High socio-economic status was inversely related with the mean number of children ever born. Females with higher status had a fewer mean number of children than those with low status. There was no significant difference in the mean number of children had by the two groups.

Thus, hypothesis Three, which states that there is no significant relationship between female socio-economic status and fertility behaviour, is not rejected.

3. Not all the selected variables used to compute the status index were statistically significantly associated with fertility behaviour. Only education and residence were statistically significant. Hypothesis One, which states that there is no significant relationship between female socio-economic characteristics and fertility behaviour, is rejected in

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**terms of education and residence, and accepted in terms marriage type
and occupation.**

4. **There was a significant relationship between socio-economic status and fertility decision-making. Thus, Hypothesis Two, which states that there is no significant relationship between socio-economic status and fertility decision-making, is rejected.**
5. **Age at first marriage for the rural respondents was quite early as compared to their counterparts in the urban area. This invariably removed them from the formal school system.**
6. **The mean number of children ever had was low. Fertility preference was higher than the mean number of children ever had. The majority of the respondents prefer a boy to a girl. On other hand, majority of the females prefer a girl to a boy.**
7. **The level of knowledge and ever used a contraceptive method is generally high. The condom and the pill were the most known and widely used method of contraception. The least used were the injectable and surgical forms of contraception.**
8. **The level of communication between couples on fertility issues was appreciably high.**

Recommendations

Based on the findings of the study and conclusions the following recommendations are made:

1. **There is the need to raise the socio-economic status of females to an appreciable level. This can be done through encouraging females to pursue education to the post-secondary level.**
2. **In order to enhance the education of females, it will be necessary to monitor their education to enable early identification of drop-outs and remedy measures taken.**
3. **There is the need for couples to discuss about the benefits of giving birth to a fewer number of children.**
4. **Health Services Providers should undertake education and campaign on the use of the surgical forms of contraceptive method.**
5. **All efforts should be made to encourage young girls to delay marriage before they finish their basic education or gain employable skills. This will go along way to increase the age they enter into marriage. Thus, there is the need for family life education for school girls.**

Areas for further research

In the light of the findings, the following problem areas should be given special attention for further research:

1. **The relationship between occupational status and decision-making in the household.**
2. **The relationship between women's status, sex preference and fertility behaviour.**
3. **The effect of the interstate succession law on sex preference.**

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APPENDIX A**SOCIO-ECONOMIC STATUS INDEX**

To obtain an approximate measure with regard to the status of women, a composite socio-economic status index (High or Low) was created by grouping together five variables which, together, reflect a woman's status in the family or community in Ghana.

The five variables are; family type, educational level, marriage type, residence and occupational activity. These variables were measured in the analysis by a dichotomous variable set equal to one and two

Variable	One Point	Two Point
Family Type:	Nuclear	Extended
Educational Level:	Post Sec. To University	Primary to Secondary
Marriage Type:	Monogamy	Polygamy
Residence:	Urban	Rural
Occupational Activity:	High and Low Professional	Others'

To classify the respondents according to the status index, each respondent was scored according to the above classification. The respondents then were classified into one of the two levels, according to the total number of points obtained. A score of 6 and above was classified as low status and a score less than 6 as high status.

APPENDIX B

INTERVIEW SCHEDULE FOR FEMALES

Section A: Background of Respondents

1. How old are you? -----
2. Religious Affiliation (church you attend)
 - i. Traditional [] ii. Catholic [] iii. Anglican []
 - iv. Methodist [] v. Presbyterian [] vi. Moslem []
 - vii. Pentecost [] viii. Charismatic [] ix. Other (please specify)
3. Ethnicity (Tribe)
 - i. Guan [] ii. Ga-Adangbe [] iii. Fanti [] iv. Ewe []
 - v. Ashanti vi Akuapem [] viii. Krobo [] ix. Hausa []
 - x. Dagomba [] xi. Other (please, specify)-----
4. Place of Birth:-----

SECTION B: SOCIO-ECONOMIC STATUS

EDUCATION STATUS

5. What is the highest level of school attended ?
 - i. No formal education [] ii. Primary [] iii. J.S.S./Middle/Primary []
 - iv. Secondary/Technical/Vocational [] v. Polytechnic []
 - vi. Nursing [] vii. Teaching Training []
 - viii. University Diploma/Specialist []
 - xi. Other (specify)-----
6. Do you know how to read and write?
 - i. Yes [] ii. No []
7. What is your husband's (partner, finance) level of education?

- i. No formal education [] ii. Primary []
- iii. J.S.S/Middle/Primary [] iv. Secondary/Technical/Vocational []
- v. Polytechnic [] vi. Nursing [] vii. Teaching Training []
- viii. University Diploma/Specialist []
- ix. Other (specify) -----
8. Marital Status
- i. Single [] ii. Married [] iii. Divorced/separated []
- iv. Widowed []
9. What was your age at first marriage? -----
10. What is the form of your marriage?
- i. Customary [] ii. Ordinance [] iii. Church []
- iv. Ordinance/Church [] v. Islamic [] vi. Consensual []
11. How was your current partner chosen?
- i. Entirely by me alone [] ii. With help of family []
- iii. Consent of family []
12. How many other wives does your partner have?
- i. None [] ii. One [] iii. Two [] iv. Three []
13. If more than one, what is your rank (e.g. 1st, 2nd) -----
14. At what age do you think a man or woman should marry?
- i. Man ii. Woman
- 14b. Can you give one reason for the age you have stated? -----
-

15. Why did you marry? (rank) i. To give birth [] ii. For prestige []
 iii. It is a must for all [] iv. For companionship []
 v. For love [] vi. Money/Material benefit []
 vii. Religious injunction [] viii. Social pressure []
 ix. Other specify -----

FAMILY TYPE

16. Do you stay with any kin member (family member) i. Yes ii. No
 17. Whose kin (family member) are you staying with?
 i. Myself [] ii. Husband []

OCCUPATION/INCOME

18. Have you worked for pay in the last one-year?
 i. Yes [] ii. No [] (Go to 20)
 19. If yes what is your occupation? (work you do)? -----
 20. What is your source of income? (what you do to get money)
 21. What is your husband's occupation:-----

Contribution to household expenditure

22. What bear(s) the expenditure on the following:

Expenditure	Mainly Myself	Both Spouses (joint)	Mainly Husband	Others
Example: Car	[]	[]	[]	[]
0.1. Chop/food money	[]	[]	[]	[]
0.2 . School fees	[]	[]	[]	[]
0.3. Rent	[]	[]	[]	[]

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0.4. Kerosene	[]	[]	[]	[]
0.5. Electricity	[]	[]	[]	[]
0.6. Water	[]	[]	[]	[]
0.7. Charcoal	[]	[]	[]	[]
0.8. Children's Clothing	[]	[]	[]	[]
0.9. Own Clothing	[]	[]	[]	[]
10. Medical expenses	[]	[]	[]	[]
11. Remittances to relatives	[]	[]	[]	[]
12. Transportation	[]	[]	[]	[]

23. What are your plans toward your old age? (Tick one or tow)

- i. Rely on remittances from children ii. Rely on social security []
 iii. Rely on investment in business [] iv. Rely on husband/ []
 v. Rely on relatives [] vi. No plans for the future at the moment []
 vi. Others, please (specify) -----

SECTION C: CONTRACEPTIVE USE

24. Have you ever heard of any method to delay pregnancy i.

- Yes [] ii. No []

25. Knowledge of Contraceptive method you know (heard about) Tick the box []

01. Diaphragm [] 02. Pill [] 03. IUD []
 04. Withdrawal [] 05. Female condom 06. Sterilization []
 07. Rhythm [] 08. None []

09. Other (name it) -----

26. Do you approve of married couples using any method to delay or space the birth of a child? i. Yes [] ii. No []
27. Have you ever used contraceptive? i. Yes [] No [] (Go to 32)
28. If yes, did you consult your partner before using the contraceptive?
29. Which methods are you using now? I. Female condom [] ii. IUD []
iii. Foaming tablet [] iv. Pill [] v. Diaphragm []
vi. Female sterilization [] vii. Other (specify) -----
30. What the reasons for using the method? i. Health reason [] ii. To space birth [] iii. To stop child birth [] iv. To go to school []
v. not married now [] vi. Have enough children []
vii. Others (specify)-----
31. Who recommended the use of the contraceptive method to you?
i. Myself [] ii. Friend [] iii. Nurse [] iv. Partner [] vi. Doctor []
vii. PPAG [] viii. Other NGOs []
ix. Other specify -----
32. Why have you not used any method?-----

SECTION D: FERTILITY BEHAVIOUR

33. Do you have children of your own? (Have you given birth)
i. Yes [] ii. No [] (Go to 37)
34. At what age did you have your 1st child?-----
How many children have you ever had throughout your life time?
35. How many are still alive?-----

36. © University of Cape Coast <https://erl.ucc.edu.gh/ispui>
Would you feel secure if you do not have a child in your marriage?

Yes [] No []

37. Give reasons for your answer?-----

38. Have you ever been influenced by anybody to have children?

i. Nobody [] ii. Parents [] iii. Friends [] iv. In-laws []

v. Other (please specify)-----

39. What benefits do you derive from having children?

SECTION E: FERTILITY PREFERENCE

40. In your opinion how many children should one give birth to?

i. Male ----- ii. Female -----

41. What should determine the number of children you have stated?

42. What should be the age interval between the birth of the 1st and 2nd child

43. If you were to give birth to an only child, what sex will prefer (Tick the box) i. Boy [] ii. Girl []

44. Give reasons for your answer -----

45. How many children would you like a daughter or son of yours to have?

i. Daughter ----- ii. Son -----

SECTION F: COMMUNICATION

46. Do you discuss any of the following issues with your husband/partner

(Tick one box)

Yes

No

i. Children's education matters

[]

[]

(school fees, clothing etc)

ii. Acquisition of household items [] []

iii. Acquisition of physical property [] []

Tick where application (one box per item)

Not at all Seldom Often

Regularly

47. Ever discussed with spouse/partner

a. Example: Feeding [] [] [] []

i. Family size [] [] [] []

ii. Birth spacing [] [] [] []

iii. Breast feeding [] [] [] []

iv. Contraceptive [] [] [] []

48. Have you ever discussed pregnancy prevention with partners?

i. Yes [] ii. No []

49. If yes, what did you discuss? -----

50. Couples should discuss the number of children to have

51. Give reasons for your answer (two reasons) -----

52. Couples should discuss the use of family planning methods

53. Give reasons for your answer (two reasons)-----

SECTION G: DECISION-MAKING

54. How do you arrive at the following decision? (Final decision taken by)

	Husband	Wife	Both spouses	Outside
	Alone	Alone	(joint)	influence

Example (Car) [] [] [] []

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Children's education	[]	[]	[]	[]
Acquisition of household items	[]	[]	[]	[]
Acquisition of physical property	[]	[]	[]	[]

Fertility Issues

Family	[]	[]	[]	[]
Birth size	[]	[]	[]	[]
Breast spacing	[]	[]	[]	[]

Contraceptive

To use a method	[]	[]	[]	[]
Choice of method	[]	[]	[]	[]
Decision to discontinue	[]	[]	[]	[]
Method	[]	[]	[]	[]

55. What will enhance a female's decision-making on an issue like family size?

- i. Income generating ability or income level (money) []
- ii. Occupation type []
- iii. Age difference of spouses []
- iv. Educational status []
- v. Marriage type []
- vi. Family type []
- vii. Contribution of upkeep of children []
- viii. Other (specify) -----

56. What will enhance a female's decision-making on an issue like

contraceptive use?

i. Knowledge of contraceptive

ii. Occupation type

iii. Educational status

iv. More children

v. Occupation

vi. Other (specify)-----

57. What will give more authority or power to a woman in marriage?

i. Money

ii. Higher education

iii. Less age difference husband and wife

iv. More children

v. Occupation

vi. Other (specify)-----

INTERVIEW SCHEDULE FOR MALES

Section A: Background of Respondents

1. How old are you? -----
2. Religious Affiliation (church you attend)
 - i. Traditional [] ii. Catholic [] iii. Anglican [] iv. Methodist []
 - v. Presbyterian [] vi. Moslem [] vii. Pentecost []
 - viii. Charismatic [] ix. Other (please specify)
3. Ethnicity (Tribe)
 - i. Guan [] ii. Ga-Adangbe [] iii. Fanti [] iv. Ewe []
 - v. Ashanti vi Akuapem [] viii. Krobo [] ix. Hausa []
 - x. Dagomba []
 - xi. Other (please, specify)-----
4. Place of Birth:-----

SECTION B: SOCIO-ECONOMIC STATUS

EDUCATION STATUS

5. What is the highest level of school you attended?
 - i. No formal education [] ii. Primary [] iii. J.S.S./Middle/Primary []
 - iv. Secondary/Technical/Vocational [] v. Polytechnic []
 - vi. Nursing []
 - vii. Teaching Training [] viii. University Diploma/Specialist []
 - xi. Other (specify) -----
6. Do you know how to read and write?
 - i. Yes [] ii. No []

7. What is your wife's (partner, fiancee) level of education?
- i. No formal education [] ii. Primary []
 - iii. J.S.S/Middle/Primary []
 - iv. Secondary/Technical/Vocational [] v. Polytechnic []
 - vi. Nursing []
 - vii. Teaching Training [] viii. University Diploma/Specialist []
 - ix. Other (specify) -----
8. Marital Status
- i. Single [] ii. Married [] iii. Divorced/separated []
 - iv. Widowed []
9. What was your age at first marriage? -----
10. What is the form of your marriage?
- i. Customary [] ii. Ordinance [] iii. Church []
 - iv. Ordinance/Church [] v. Islamic []
 - vi. Consensual []
11. How was your current partner chosen?
- i. Entirely by me alone [] ii. With help of family []
 - iii. Consent of family []
12. At what age do you think a man or woman should marry?
- i. Man ii. Woman
13. Can you give one reason for the age you have stated? -----
14. Why did you marry? (Rank)
- i. To give birth [] iii. For prestige []
 - iii. It is a must for all [] iv. For companionship [] v. For love []
 - vi. Money/Material benefit [] vii. Religious injunction []
 - viii. Social pressure [] ix. Other specify -----

FAMILY TYPE

15. Do you stay with any kin member (family member) i. Yes ii. No
16. Whose kin (family member) are you staying with?
- i. Myself [] ii. Wife []

OCCUPATION/INCOME

17. Have you worked for pay in the last one-year?
- i. Yes [] ii. No [] (Go to 20)
18. If yes what is your occupation? (Work you do)? -----
19. What is your source of income? (What you do to get money)
20. What is your husband's occupation:-----

Contribution to household expenditure

21. Who Bear(s) the Expenditure on the following:

Expenditure	Mainly Myself	Both Spouses (joint)	Mainly Husband	Others
Example: Car	[]	[]	[]	[]
0.1. Chop/food money	[]	[]	[]	[]
0.2 . School fees	[]	[]	[]	[]
0.3. Rent	[]	[]	[]	[]
0.4. Kerosene	[]	[]	[]	[]
0.5. Electricity	[]	[]	[]	[]
0.6. Water	[]	[]	[]	[]
0.7. Charcoal	[]	[]	[]	[]
0.8. Children's Clothing	[]	[]	[]	[]
0.9. Own Clothing	[]	[]	[]	[]
10. Medical expenses	[]	[]	[]	[]

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11. Remittances to relatives	[]	[]	[]	[]
12. Transportation	[]	[]	[]	[]

22. What are your plans toward your old age? (Tick one or tow)
- i. Rely on remittances from children
 - ii. Relay on social security []
 - iii. Relay on investment in business []
 - iv. Rely on husband/ []
 - v. Relay on relatives []
 - vi. No plans for the future at the moment []
 - vi. Others, please (specify) -----

SECTION C: CONTRACEPTIVE

23. Have you ever heard of any method to delay pregnancy?
- i. Yes []
 - ii. No []
24. Knowledge of Contraceptive method you know (heard about)
- Tick the box []
01. Condom [] 02. Vasectomy [] 03. Abstinence []
04. Withdrawal [] 05. Other (name it) -----
25. Do you approve of married couples using any method to delay or space the birth of a child?
- i. Yes []
 - ii. No []
26. Have you ever used contraceptive? i. Yes [] No [] (Go to 32)
27. If yes, did you consult your partner before using the contraceptive?
28. Which methods are you using now? 01. Condom []
- 02 Vasectomy[] 03. Abstinence [] 04. Withdrawal []
05. Other (name it) -----
29. What the reasons for using the method?
- i. Health reason []
 - ii. To space birth []
 - iii. To stop child birth []
 - iv. To go to school []
 - v. not married now []
 - vi. Have enough children []
 - vii. Others (specify)-----

30. Who recommended the use of the contraceptive method to you?

- i. Myself []
- ii. Friend []
- iii. Nurse []
- iv. Partner []
- vi. Doctor []
- vii. PPAG []
- viii. Other NGOs []
- ix. Other specify -----

31. Why have you not used any method?-----

SECTION D: FERTILITY BEHAVIOUR

32. Do you have children of your own? (Have you given birth)

- i. Yes []
- ii. No [] (Go to 36)

33. At what age did you have your 1st child?-----

34. How many children have you ever had throughout your lifetime? -----

35. How many are still alive?-----

36. Would you feel insecure if you do not have a child in your marriage?

- Yes []
- No []

37. Give reasons for your answer?-----

38. Have you ever been influenced by anybody to have children?

- i. Nobody []
- ii. Parents []
- iii. Friends []
- iv. In-laws []
- v. Other (please specify)-----

39. What benefits do you derive from having children?

SECTION E: FERTILITY PREFERENCE

40. In your opinion how many children should one give birth to?

- i. Male -----
- ii. Female -----

41. What should determine the number of children you have stated?

42. What should be the age interval between the birth of the 1st and 2nd child

43. If you were to give birth to an only child, what sex will prefer

(Tick the box) i. Boy [] ii. Girl []

44. Give reasons for your answer -----

45. How many children would you like a daughter or son of yours to have?

i. Daughter ----- ii. Son -----

SECTION F: COMMUNICATION

46. Do you discuss any of the following issues with your husband/partner

(Tick one box)	Yes	No
i. Children's education matters (school fees, clothing etc)	[]	[]
v. Acquisition of household items	[]	[]
vi. Acquisition of physical property	[]	[]

Tick where application (one box per item)

Not at all Seldom Often

Regularly

47. Ever discussed with spouse/partner

a. Example: Feeding	[]	[]	[]	[]
i. Family size	[]	[]	[]	[]
ii. Birth spacing	[]	[]	[]	[]
iii. Breast feeding	[]	[]	[]	[]

iv. Contraceptive [] [] [] []
48. Have you ever discussed pregnancy prevention with partners?

- i. Yes [] ii. No []

49. If yes, what did you discuss? -----

50. Couples should discuss the number of children to have

51. Give reasons for your answer (two reasons) -----

52. Couples should discuss the use of family planning methods

53. Give reasons for your answer (two reasons)-----

SECTION G: DECISION-MAKING

54. How do you arrive at the following decision? (Final decision taken by)

	Husband Alone	Wife alone	Both spouses (joint)	Outside influence
Example (Car)	[]	[]	[]	[]
Children's education	[]	[]	[]	[]
Acquisition of household items	[]	[]	[]	[]
Acquisition of physical property	[]	[]	[]	[]

Fertility Issues

Family	[]	[]	[]	[]
Birth size	[]	[]	[]	[]
Breast spacing	[]	[]	[]	[]

Contraceptive

To use a method	[]	[]	[]	[]
Choice of method	[]	[]	[]	[]

Decision to discontinue [] [] [] []

Method [] [] [] []

55. What will enhance a female's decision-making on an issue like family size?

i. Income generating ability or income level (money) []

ii. Occupation type []

iii. Age difference of spouses []

iv. Educational status []

v. Marriage type []

vi. Family type []

vii. Contribution of upkeep of children []

viii. Other (specify) -----

56. What will enhance a female's decision-making on an issue like contraceptive use?

i. Knowledge of contraceptive

ii. Occupation type

iii. Educational status

iv. More children

v. Occupation

vi. Other (specify)-----

57. What will give more authority or power to a woman in marriage?

i. Money

ii. Higher education

iii. **Less age difference husband and wife**

vii. **More children**

v. **Occupation**

vi. **Other (specify)**-----

APPENDIX D

OCCUPATIONAL CLASSIFICATION

High Professional: doctors, lawyers, army officers, university lecturers, managers, head of institutions

Low Professionals: teachers, nurses

Clerical: Clerks, other ranks of the army, police, fire service, typist

Commercial: Petty traders, food sellers

Skilled manual: Carpenters, dressmakers, fitters, and drivers

Unskilled manual: Labourers, watchmen, and sweepers

Agriculture: Farmers, farm labourers,

Not working: Housewives, pensioners

HYPOTHESIS TESTING

$$H_0: \bar{X}_1 = \bar{X}_2$$

Where \bar{X}_1 , is the population mean of sample 1 and \bar{X}_2 the population mean of sample 2.

$$H_1: \bar{X}_1 \neq \bar{X}_2$$

The appropriate test statistic is

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma^2}{N_1} + \frac{\sigma^2}{N_2}}}$$

The critical region is $Z \geq \pm 1.96$

$$Z = \frac{3.1 - 2.7}{\sqrt{\frac{2.3^2}{154} + \frac{2.0}{63}}}$$

$$\sqrt{\frac{2.3^2}{154} + \frac{2.0}{63}}$$

$$= \frac{0.4}{\sqrt{0.097}}$$

$$= \frac{0.4}{0.31}$$

$$= 1.29$$

$$Z = 1.29$$

$$Z = 1.29$$

$$Z = 1.29$$

**TESTING ON MEAN NUMBER OF CHILDREN EVER HAD BY
RESIDENCE**

\bar{X}_1 is the population mean of sample 1 and \bar{X}_2 population mean of sample 2

The appropriate test statistic is

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma^2}{N_1} + \frac{\sigma^2}{N_2}}}$$

The critical region is $Z \geq \pm 1.96$

$$Z = \frac{3.5 - 2.4}{\sqrt{\frac{2.8^2}{143} + \frac{2.0^2}{223}}}$$

$$Z = \frac{1.1}{0.27}$$

$$Z = \underline{\underline{4.07}}$$

APPENDIX G

TESTING ON MEAN NUMBER OF CHILDREN EVER HAD BY FAMILY TYPE

\bar{X}_1 is the population mean of sample 1 and \bar{X}_2 population mean of sample 2

The appropriate test statistic is

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma^2}{N_1} + \frac{\sigma^2}{N_2}}}$$

The critical region is $Z \geq \pm 1.96$

$$Z = \frac{3.2 - 2.9}{\sqrt{\frac{2.4^2}{105} + \frac{2.0^2}{108}}}$$

$$Z = \frac{.3}{\sqrt{.09^2}}$$

$$Z = \frac{.3}{.303}$$

$$Z = .990$$

APPENDIX H**TESTING ON MARRIAGE TYPE AND CHILDREN EVER BORN**

\bar{X}_1 is the population mean of sample 1 and \bar{X}_2 population mean of sample 2

The appropriate test statistic is

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma^2}{N_1} + \frac{\sigma^2}{N_2}}}$$

The critical region is $Z \geq \pm 1.96$

$$Z = \frac{3.5 - 3.1}{\sqrt{\frac{2.3^2}{49} + \frac{2.1^2}{145}}}$$

$$Z = \frac{.4}{\sqrt{\frac{5.3}{49} + \frac{4.4}{145}}}$$

$$Z = \frac{.4}{\sqrt{.138}}$$

$$Z = \frac{.4}{.371}$$

$$Z = 1.088$$

TESTING ON MEAN AGE AT FIRST CHILD BY RESIDENCE

\bar{X}_1 is the population mean of sample 1

\bar{X}_2 population mean of sample 2

The appropriate test statistic is

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma^2}{N_1} + \frac{\sigma^2}{N_2}}}$$

The critical region is $Z \geq \pm 1.96$

$$Z = \frac{23 - 20.5}{\sqrt{\frac{2.5^2}{117} + \frac{1.9^2}{90}}}$$

$$Z = \frac{2.5}{\sqrt{\frac{6.25}{117} + \frac{3.61}{90}}}$$

$$Z = \frac{215}{.784}$$

$$Z = 3.188$$

$$Z = 3.189$$