# FAMILY SIZE AND ITS SOCIO-ECONOMIC IMPLICATIONS IN THE SUNYANI MUNICIPALITY OF THE BRONG AHAFO REGION OF GHANA, WEST AFRICA

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#### **EXECUTIVE SUMMARY**

The general objective of the study was to identify whether families in the Sunyani Municipality are small or large sizes. The study assessed the basic factors for choice of family size in the Municipality as well as the socio-economic implications of such choices.

The study covered 150 respondents in the Municipality.

Specific objectives were:

- Assess the relationship between family size and economic life.
- Evaluate the link between family size and social life.
- Assess the extent of the influence of education on the choice of family size.
- Assess family size in relation to access to health.
- Evaluate the factors that influence family size.
- Examine the economic implications of family size.
- Provide suggestions and recommendations.

Relationships between family size and health of the family, educational background of respondents, religious background and duration in employment of respondents were observed.

A conceptual framework by Becker (1991) as expatiated in <a href="www.hhs.gov(2005">www.hhs.gov(2005</a>) shows that family size is an important determinant of whether a family or individual is in poverty because the official poverty measure incorporates family size. The framework as used identifies that family size depends on: family income, cost of children, wages, government transfers, and Preferences.

It was realised that choice of family size is influenced by the socio-economic variables in the Municipality.

It is recommended that to ensure smaller family sizes with the better option, educational campaigns should be actively pursued in order to ensure smaller family sizes and improve socio-economic status of people in the Sunyani Municipality.

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#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Background

The size of the family is a matter of great importance not only for the country as a whole but also for the welfare and health of the individual, the family and the community.

Pessimism has been expressed about the trend of family sizes and its tendency for a probable world population explosion which could plunge poor developing countries into further poverty and helpless wretchedness,

Traditional perceptions of women's role in society make it difficult for them to contribute to population control. The belief still persists among most women, especially illiterates that the most important role for a woman is to have as many children as one can continue to bear any number of children.

In industrialised countries, large family sizes and the resultant high birth rates accompanied rapid population growth during the industrial revolution are mainly because of improved public health. As countries became more prosperous, both death and birth rates decreased, resulting in low population growth rates. Today, most of the developing world is characterized by high birth rates for much the same reasons as in the industrialised countries in the past. At the same time, death rates have fallen dramatically, mainly because of improvements in health care, education and sanitation. Even though birth rates have declined substantially in many developing countries during the past 25 years, they still remain high, mainly for the following reasons:

- ➤ Whenever agriculture is an important activity for poor households, they have an incentive to invest in children to serve as farm labour and assist with household tasks, such as fuel wood and water collection and childcare.
- ➤ When large families provide social security through the extended family, investing in children becomes a way of ensuring care in old age.
- ➤ When there is lack of knowledge about family planning.

Africa, the second-largest of the earth's seven continents, with adjacent islands covering about 30,330,000 sq km (11,699,000 sq mi), including its adjacent islands comprises 22 per cent of the world's total land surface area. At the end of the 20th century, more than 13 per cent of the world's population lived in Africa (Encarta Encyclopaedia 2005).

Most of Africa's population lives in the region south of the Sahara, known as sub-Saharan Africa. On the whole, Africa encompasses about 50 nations, ranging from Nigeria, a country of an estimated 136,353,130 (2004 estimate) to small island republics such as Comoros, which

has a population of 651,901 (2004 estimate). Tropical Africa is amongst areas in Africa with higher family sizes; hence high population figures (Microsoft Encarta Encyclopaedia, 2005). These figures as indicated are still on the ascendancy indicating a purposeful concern for population studies.

The population of Ghana is unique in a number of ways. An examination of available literature shows that although it is relatively sparsely populated, Ghana is more densely populated with high family sizes than most countries of tropical Africa. The population is young and dynamic; more

than 50 per cent are aged 20 years or less; total male ratios are above par, birth rates are high and seem to be rising above all, the population is growing fast and doubling itself in less than 30 years- a situation parallel in much of modern Africa.

Ghana's population stood at 288,000 in 1846; 661,000 in 1883; and 1,600,000 in 1890. This stood at 4,118,450 for 1931-48. At the time of independence Ghana's population stood at barely 6million. This increased to 6,726,815 in 1960 when the first post-independence census was taken and 8,559,313 in 1970. The last census of 1984 gave the country's population at 12,296,081 and 18,912,079 in 2000 which show that Ghana's population doubled within 24 year period . Projections show that population is likely to reach 27million in 2010, and 33.6milloin by the year 2020.

Ghana's population can best be described as young; with a substantial part of the population below 15 years. In the 2000 census, it was identified that about 50% of the population were below age 25 with only 5.3% at age 65 and above. Various estimates of Ghana's fertility rate indicate that it has been fairly high over a long period. The reported total fertility rate (TFR) ranged between 6 and 7 for the period of between 1980 and 1988. The 1993 Ghana Demographic Health Survey report (GDHS) showed that there has been a slight reduction in TFR from 6.4 to 5.5 as compared to the TFR of most developed countries that stood at 2. This invariably shows a higher figure for Ghana and in 2003 the TFR was still high at 4.4.

The choice of family sizes in Ghana has been influenced and supported by various sociocultural factors and beliefs. Marriage is still contracted at very early ages and by age 30; almost all females have married at least twice (Ghana Population Council, 1996). A notable factor worthy of concern is the very low level of contraceptive usage. Results of the 1988 DHS indicated that only 5 percent of currently married women between the ages of 15 to 49 were using any modern forms of contraception thus indicating that the pro-natalist value system still persists widely throughout the population as indicted in the national population policy (Ghana Population Council, 1996). Recent death rates in Ghana also show persistent declines due to a combination of several factors such as improvements in public health, sanitation, medical facilities, increasing education and modernization in general.

#### 1.2 Statement of the Problem

Some schools of thought also consider it on the basis of a family number that is difficult to cater for in terms of the provision of food, education, health and nutrition including others. Large family size to this study would be basically a family of above six siblings. Such family

size comes with its attendant implications of poor health, inability to provide adequately for the education of the siblings, low standard of leaving and the inability to fulfil one's dreams.

A small family size on the other hand is seen as a family with about an average of three siblings. More so, such a family may be considered on the grounds of the ability to adequately cater for the needs of the family with a touch of some luxury. Implications of a small family size are the ability for one to enjoy the necessities of life with the choice to afford and enjoy certain luxuries of life. Consideration for a small family size would consequently be considered between 1-6 children.

Notwithstanding the undesirable effect of a larger family size, most people are still giving birth to large families as a result of factors such as ignorance, culture and demographic factors.

Notwithstanding the above, one can witness low family sizes in certain categories of families due to high levels of education, health, income accommodation, access to capital, potable water including others. Such families are basically of good social standing as well as being economically stable.

The study would thus seek to answer the following questions.

- To what extent is the populace in the Sunyani Municipality committed to small family size?
- To what extent is one's level of education related to his perception of family size?
- Is culture a determining factor in the choice of family size?
- Does sex influence the choice of family size?
- To what extent does education affect choice of family size?
- Is employment an influencing factor in the choice of a family size?
- Does urbanization affect ones selection of a family size?
- Is the level of education of children influenced by the number of siblings in the family?
- Does family size have an effect on a family's income?
- Is poor health related to family size?
- To what extent is the populace committed to the national population policy?

## 1.3 Objectives of the Study

Specific objectives are to:

- Assess the relationship between family size and economic life.
- Evaluate the link between family size and social life.
- Assess the extent of the influence of education in the choice of family size.
- Assess family size in relation to access to health.
- Evaluate the factors that influence family size.
- Examine the economic implications of family size.
- Provide suggestions and recommendations.

# 1.4 Hypotheses

- 1. Large family size does not significantly impact on the health of the family.
- 2. There is no significant relationship between level of education and choice of family size.
- 3. There is no significant relationship between religion and family size.
- 4. There is no significant relationship between family size and duration in employment.

## 1.5 Significance of the Study

The study will help to identify various strengths and weaknesses of the choice of family size on the economic as well as the social life of people. It would provide first hand insight into some of the problems faced by families with smaller sizes as well as those with larger family sizes in order to determine the appropriate family sizes as well as guidelines to make families have appreciable social and economic standards.

#### **CHAPTER TWO**

#### LITERTURE REVIEW AND CONCEPTUAL FRAMEWORK

- 2.1 Literature Review
- 2.2 Factors Influencing Family Size

In Sutton's (1994) project report on "The relation of family size to women's occupations circa 1851", she identified in her findings that in Ruddington, where women worked in textiles, proved to have slightly smaller families than Kinoulton, the agricultural area, in 1851. This difference is insignificant. She could however not prove her hypothesis that the number of children born to textile workers in Nottinghamshire was lower than to women of other classes except wives of skilled professionals and businessmen. However, this she did not refute either. She, however, stated that it is possible that her predecessor McLaren's hypothesis (Mclaren, 1977) may need to be modified to specify women working in factories, rather than textiles, as the source of family size regulation. She recommended that to test the modified hypothesis it would be necessary to compare family sizes of factory textile workers with home textile workers. She also added that it would be useful to check other variables such as whether agricultural areas were healthier, the factory environment was hazardous to health, or people married later in a particular area. All these factors she said could result in more or less births.

Moore (1997) identifies a linkage between family size and ethnic groups. It was identified that there was a difference between family sizes of the Asians and the Blacks in Britain. Factors that resulted in varying family sizes as identified are the culture of the country from which they come from, and the age and sex distribution. The Culture of most of ethnic minorities stresses the importance of many children, in much the same way as the Britain culture did before the welfare state was introduced. The reasons he identified were the same: children looking after their parents in old age. Secondly, the religion of most migrants frowns upon birth control, particularly amongst the Muslims of Pakistan and Bangladesh. He further added that with the influence of British culture on these families and their ideologies, the resultant family sizes of these migrants became influenced by the British; hence a drop in the family sizes of these migrants.

Moore (1997) opines that the declining birth rate has resulted in smaller families in Britain. He further states that in 1990, for example, an average family had 3.4 children. Today, the size is almost halved. However, this reduction in family size is not the same across the social classes since the middle class is always ahead of the working class by about 20 years. The reason seems to be because they first saw the advantage of smaller families and were more likely to know about, and want to use contraceptive.

Information provided in the "African Perspective of Development" shows that studies in Kenya in the mid-nineties had it that women in childbearing years could not only expect to have about eight children at the end of their reproductive years, but they could also expect the number to rise in future (Himmelstand,1994). The study also identified that 1962, 1969, 1972, 1989 censuses had total fertility in Kenya being 6.8, 7.6, 8.1 and 7.7 respectively (Central

Bureau of Statistics, Kenya 1980; 1989). Out of the data, it was also espoused that 76% of women of childbearing age desire 6 or more children and out of the number about 87% had never used efficient contraceptive methods. These observations as stated represent patterns of demographic development to be found in most sub-Saharan countries. Areas with high and continuing high family sizes have adverse land carrying capacity-land use and population, even in the absence of out migration as quoted in Himmelstrand et al (1994).

Ominde et al (1972) also indicate reasons for choice of family size in their writing, 'Population growth and economic development in Africa'.

Reasons indicated for fertility (family size) are differences in age at marriage and in numbers marrying, prevalence of polygamy in African marriages with the possibility of favouring some wives in the making of love. High divorce and widow rate also has been espoused as a factor for the relative family size. As a result of prolonged lactation, ill health, malnutrition and life of hard labour were also some of the factors attributed to the various family sizes identified within the African societies.

Berger (1980) noted that children today are no longer perceived as economic asset. Indeed, in the United States, each child represents a financial liability of approximately \$167,000 between birth and the end of high school. It was added that it has thus become uneconomical to have large families in places like the U.S. since such large families' disadvantages will outweigh the benefits.

Glick (1984) also contributes to the above in the dimension that, psychologists and any people alike acknowledge that having children does not necessarily guarantee fulfilment, nor does not having them necessarily prelude it. In some cases, in fact, non-parents are not envied but rather pitied. Largely as a result of these changes, adults in developed nations are having their first child later, and are currently limiting their family size to an average of 1.8 children as compared to 3.8 in 1957.

Blaney (1980) identifies that high fertility rates have historically been strongly correlated with poverty, high childhood mortality rates, low status and educational levels of women, deficiencies in reproductive health services, and inadequate availability and acceptance of contraceptives. Falling fertility rates and the demographic transition are generally associated with improved standards of living, such as increased per capita incomes, increased life expectancy, lowered infant mortality, increased adult literacy, and higher rates of female education and employment.

Even with improved economic conditions, nations, regions, and societies will experience different demographic patterns due to varying cultural influences. The value placed upon large families (especially among under-privileged rural populations in less developed countries who benefit least from the process of development), the assurance of security for the elderly, the ability of women to control reproduction, and the status and rights of women within families and within societies are significant cultural factors affecting family size and the demand for family planning services. Even with a demand for family planning services, the adequate availability of and access to family planning and other reproductive health services are essential in facilitating slowing of the population growth rate. Also, access to education and

the ability of women to determine their own economic security influence their reproductive decisions (U.S. National Security council, 1974)

Family size as indicated in 'Population and Socio-Economic Characteristics'; Master Land Use Plan and Historic Population Trends also state that, the average population per household has dropped from 2.80 in 1970 to 2.46 in1990. In effect, the added population from new housing is being offset by lower population numbers within existing housing units. This trend is consistent with state and national trends. Average population per household for the United States of Michigan has declined from 3.27 in 1970 to 2.66 in1990. The trend in household size during the next 20 to 30 years will be as big of an influence on future City population counts as continued infill of residential construction. It is difficult to predict whether this long downward trend in household size will continue or whether it has bottomed out. This difficulty lies in the fact that people are responding to so many societal factors in making their decisions relative to family size. The general trend throughout the County toward an aging population will be a factor in keeping the average population per household low. (1990 U.S. Census 1994 Estimates provided by West Michigan Shoreline Regional Development Commission)

Mueller et. al. (1999) in their study on family size identify that prior person perception studies exposed normative expectations about family size such that voluntary child-free and single-child women were stigmatized and large-family mothers were glorified. In contrast, self-reports find no differences in subjective well-being among these non-normative and 2 to 3 child, normative women. To explore mostly white, college-educated, employed women's experiences with their real-life family size choices, interviews were conducted with 15 voluntary childfree, 15 one-child, and 15 super normative mothers of 4+ children, and 15 normative mothers completed a comparison survey. Quantitative and qualitative analyses revealed patterns of universal satisfaction, yet stigmatization across the three non-normative groups, such as pressure from outsiders (including medical professionals) to stay within normative parameters persisted. One-child and super normative mothers reported that others are critical of their child's well-being, intimating selfishness and neglect respectively. These findings help coalesce the conclusions of earlier studies.

Golden Essays (2005) write that family size in Vietnam is fairly large. Back in the days, 12-16 was normal family size. However, as poverty and population has increased, so the family size has decreased to 3-4. On other hand side, in Pakistan typical family size is about 3-5. In Pakistan and in Vietnam parents prefer to have sons than daughters. In both cultures parents expect their children to be perfect and obedient.

Sharon (1996) writes that a substantial body of literature suggests that peoples' fertility-related attitudes affect their family planning practice and, ultimately, their fertility (Bongaarts, 1991). More important by our understanding of fertility preferences in Nepal, and other countries in South Asia could be misleading if a pervasive and strong preference for sons is not taken into account. The mechanism linking son preference to fertility and contraceptive use is logical: A strong preference for children of one sex can be a constraint on fertility decline if couples who have achieved their preferred family size continue childbearing until they have achieved their desired number of sons or daughters. A test of this hypothesis now in South Asia is timely, because recent evidence suggests that fertility is coming increasingly under conscious control by means of effective family planning methods. The findings of this study clearly indicate that a preference for one and sometimes two sons is a prevalent consideration at work in couples'

fertility decision making in Nepal, a country that bears many similarities to other countries in South Asia.

Zabin (1999) states that the relationship between fertility intention and childbearing—and the link between fertility intention and contraceptive use—are strongly affected by other, independent attitudes, such as the attitude toward contraception itself. Therefore, I would suggest that measures of intention have been used to predict what can only be predicted in the presence of cogent measures of contraceptive attitudes, and that the data available on the intention status of births in the United States today may not represent as serious a failure in contraceptive practice as is often supposed. Rather, they may tell us that timing intentions are not compelling. When childbearing is related more to social relationships than to economic necessity, as may be the case today, its timing within the limits of small family size may not be salient.

Malhi, et. al. (1999): in their study of child sex preference and family size identify in sum that, preference for male children exerts a substantial impact on the fertility desires and family planning behaviour of women in urban Himachal Pradesh. Fertility behaviour appears to be influenced by a strong desire to acquire a minimum number of at least two surviving sons. In the light of these findings, it appears that despite the declining fertility level in Himachal Pradesh, further reductions in fertility may become increasingly more difficult to achieve unless there is a concomitant decline in the preference for male children. Since son preference is linked to women's status in society, there is an urgent need to bring about widespread structural changes to enhance the status of women in the state. It is therefore imperative that the Indian Government instead of propagating the two-child family norm across the board, emphasizes programmes and policies that actively improve the status of women and change attitudes towards female children.

## 2.3 Socio-Economic Implications

McLaren (1977) investigated working class women working in textiles in the mid-19th century with the conclusion that women in such areas took control of themselves; hence limiting their family size as investigated in the Lancashire textile mills. McLaren (1977) said that women working in textile mills in Lancashire had smaller families than any other class except skilled professionals and businessmen. He also said that women were able to spread the knowledge of controlling family size amongst each other and give support, and that 'contraception' was often abortion.

Kessel D.(1991) wrote on Economics on Birth Order, Family Size, and Achievement: Family Structure and Wage Determination and cited his findings in the Journal of Labour, that, first, neither birth order nor childhood family size significantly influences the level or growth rate of wages and a result that is consistent with previous research. Second, family size is both a statistically and economically significant determinant of women's employment status: women from small families work less than women from large families when they are young and more than women from large families when they are more mature.

Blake (1989) as cited in Weeks (1999) makes mention of a "dilution factor". That is, the more children there is in a family, the more diluted is the amount of attention that each child will receive from parents. He further adds that the lower the level of adult interaction seems to affect verbal performance, in particular, which in its turn is related to student achievement an ultimately to educational attainment.

Belmont and Marolla (1973) were able to utilize data gathered from nearly 400,000 men in the Netherlands or in 1944-47 who were examined at age 19 to determine their fitness for military service. Intelligence was measured for the study using the Raven Progressive Matrices, which in this case was a 40-item written test. Their findings were that the averages IQ for men from large families were invariably lower than the average for men from small families. Out of their finding as well, they came out with the fact that IQ for successive children decreased from child one to the next.

Downey (1995) and Steelman and Powell 1989 also advance the argument that differences in IQs of children within a family as dependent on their placement in birth are due to differences between interpersonal and economic resources. From their analysis of longitudinal data, they indicated that parents spend more time with the first child, but spend more money (especially for college) on the last child.

It was also sited at www.impact.html, 2004 in "The impact of livestock ownership and technology use on child technology" that the growth rates of most children in developing countries are below but parallel to the National Centre for Health Statistics (NCHS) reference values. Factors that affect child growth include: parental education, household income, types of agricultural production activities, economic and agricultural policies, family size, childcare, taboo and feeding practices, diet quantity and quality, processing and storage of food, water supply, hygiene and sanitation, health services utilization, epidemics and political upheaval. An integrated intervention is therefore necessary to produce the highest impact on children's nutritional status (www.impact.html, 2004).

Hetherington et. al. (1993) also show that as family size increases, opportunities for extensive contact between the parents and the individual child decrease, but opportunities for variety of interactions with siblings increase. It was also indicative of the fact that a parent's attitude towards child-rearing and circumstances under which a child is reared will change as more children are added to the family. Rutter & Madge (1976) as sited in Hetherington et. al. (1993) also adds that parents become increasingly dissatisfied with both their marital relationship and their parenting as their families expand.

Mention is also made by Wagner et. al. (1985) to the effect that, frequently older siblings are assigned the supervisory and disciplinary roles maintained by parents in smaller families. It also adds that as the size of the family increases, the parents busy themselves in activities to aid in catering for the added 'mouths' whilst leaving some of their previously held chores like bathing, feeding, and cleaning the home to the older children. Wagner et. al (1985) also add that girls are more likely than boys to play active caretaking and helping role with their siblings. A first born 12 year-old girl in a large family may warm bottles, burp babies, change diapers, and sooth a squalling infant with the alacrity and skill of a young mother.

Due to the fact that parents in large families cannot interact as closely with their children as those in smaller families, there is less opportunity for overprotection, infantilizing, constant harassing, or close supervision of children. The results of this relationship are reflected in the greater independence, anti-social behaviour and delinquency, but lower self-esteem and academic achievement of children from large families (Blake, 1989: Wagner et. at., 1985).

Rutter et. al.(1976) further re-iterate that larger families are poorer than smaller families and many of the observed outcomes found in children in large families may be related to factors associated with economic duress-from living in high-crime neighbourhoods and crowd inadequate housing, to malnutrition, unemployment and parental stress.

Beth (1988) argues that middle-class students also benefit from fewer siblings than is typical for working-class families. This as indicated is as a result of the extra attention, time and adequate resources that will be channelled to their education.

Zajonc(1986) and Ernst and Angst(1983) also support the argument of Beth (1988) with the addition that if children develop verbal and cognitive skills through interaction with parents, those from small families will spend more time with parents than with peers and siblings, as compared to children from large families. In furtherance of the above, it was indicated that children will enjoy spending time with their parents since they can be assured of the undivided attention of their parents. More so, parents are able to keep track of their kids' and their discussions to ensure prompt attention. Such parents even go the extent of helping their children with their homework including others.

Family size often weighs the effect of social class, as seen in the achievement of working-class youth from small families (Alvin and Thorton 1984, Blake 1985). They further argued out that if the above was so, then the general societal trend toward small families should weaken the advantages currently enjoyed by middle-class students.

William et. al.(1983) in his statement on the causes of malnutrition stated that innumerable studies pointed to social and environmental factors associated with poor nutrition status in children, such as poverty(especially with misdistribution of wealth and with inflation), family size, mother's literacy level, single parent households, maternal deprivation, and many other factors including child neglect or abuse. This as indicated will further lead to inadequate food intake in the planting season in particular when the problem is compounded by food shortage, high incidence of infections, especially malaria. During the planting season child neglect can be an additional problem. In certain instances as asserted by William et. al (1983), there may be sufficient food available but the quality may be undesirable hence leading to kwashiorkor.

Alvin et. al.(1984) on family size postulate that regardless of ability, youth from the higher social strata compared to the other students do better in school, stay there longer, and are ultimately prepared to move into higher status occupations. Although family size appears to have a stronger direct effect on school performance in early childhood than in late adolescence, the advantages end to be cumulative.

Most research findings indicate that abused children tend to come from relatively large families. Although only 20% of families in the United States today have four (4) or more children; they account for 40% of the cases of abuse as sited in Cicchetti et. al.(1989).

Furthermore, it was identified that most of child abuse cases correlate with families with more siblings and this is not different from the situation in most places.

Young (1964) reveals more dramatic findings on families' size and child abuses. In his findings, it came out that only 20 out of 180 abusing families studied had fewer than three children; 37% had between six and twelve. In the light of the research carried out it was identified that the findings yield lesser results in places like the Unites States and New Zealand and, to a lesser extent, for England.

Cicchetti et. al. (1989) again note that sometimes one child in a family is singled out for abuse while the other siblings are treated well. He describes this as a vicious cycle in which for instance, an unattractive child, targeted for abuse by parents, becomes more alienated and unattractive with repeated abuse, and as a result is subjected to still more ill treatment. Frequently, the youngest child is the one singled out for abuse (Zigler, 1976 as sited in Cicchetti et. al. (1989)

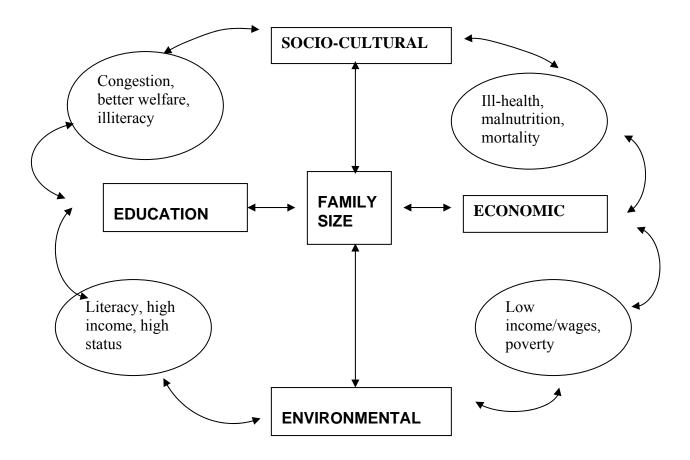
Nutall et. al. (2000) in their study on family size and academic achievement selected a sample of 306 girls and 247 boys from the Boston area. The sample was divided into small family (two kids) and large family (5+ kids) groups. Academic achievement was examined using school records and IQ tests. Nutall et al concluded that boys from small families tended to have better academic achievement than boys from large families because boys in the larger families are probably more influenced by peer groups who tend to have anti-academic values.

## 2.4 Conceptual Framework

Some conceptual frameworks have also been developed on family size related implications. Becker (1991) as expatiated in <a href="www.hhs.gov(2005">www.hhs.gov(2005</a>) shows that family size is an important determinant of whether a family or individual is in poverty because the official poverty measure incorporates family size. Family size depends on: family income cost of children, wages, government transfers, and Preferences.

Becker's (1991) theory of the demand for children predicts that the number of children in a family will depend on family income and the costs of children. Income plays a role in determining family size because families with higher incomes are more able to afford additional children. In terms of the cost of children, direct costs associated with having children include, among others, food, clothing, and health-care expenses. In addition to these direct costs, there is also the *relative* cost. The relative cost of having a child is affected by the opportunity cost of child rearing as measured by the female wage, to a lesser extent the male wage, and government transfers. Government transfers may affect the number of children and adults in a family by altering the relative cost of having a child and creating incentives or disincentives to marry. Finally, individual preferences will affect family size.

Family size is also noted for its influence on variables like poverty, literacy, health education including others. These results are also base wise caused by environmental, economic, cultural, and social factors. This is diagrammatically shown below.



Source: Author's Construct

The diagram identifies the socio-economic implications of family size. Family size as shown is influenced by factors such as economic, socio-cultural, environmental and education; that is, be it religious, occupational, social and economic status of the family as well as its members. Family size is also influenced by the various factors already enumerated. The choice of family size on the other hand determines the level of benefit or shortcoming the individual or family will enjoy. A smaller family size may be privy to better levels of education, incomes, health and economic life. A higher family size will ultimately lead to low levels of education, income, health, welfare and economic status. To ensure a better social as well as economic standing, one would need to choose a family size that would lessen the burden and effect of family size on the family as well as the individual members.

## **CHAPTER THREE**

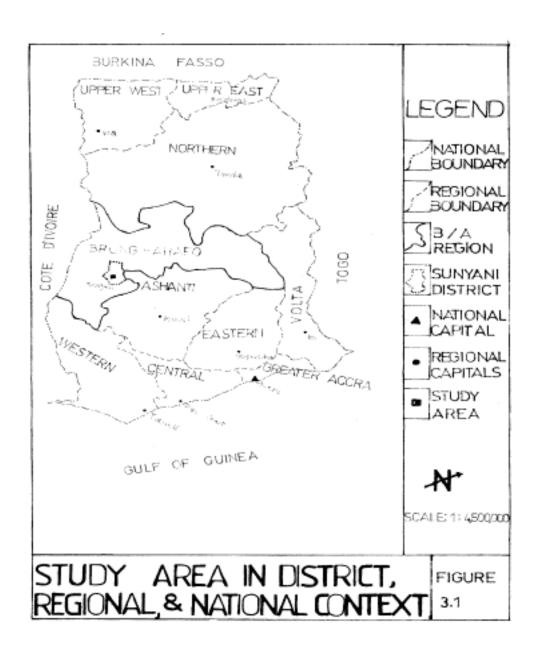
#### STUDY AREA AND METHODOLOGY

## 3.1 Study Area

The target population for study is made up of families within Sunyani Municipality. The study covered a total target population of about 70,869(Population census, 2000).

The Sunyani District is located in the heart of the Brong Ahafo Region between latitude  $7^0$  55" and  $7^0$  35" N and longitude  $2^0$  W and  $2^0$  30"W. It shares boundaries with the Wenchi District to the north, Berekum and Dormaa Districts to the west, Asutifi District to the South, and Tano District to the east (Figure 3.1). It has a total land area of 2488 square kilometres.

Fig 3.1 Map of Ghana with Sunyani Insert



Sunyani is the capital of the District. It is located at the centre of the district and shares boundaries with Odumasi, Fiapre, Kotokrom and Abesim in the west, north, east and south respectively. Figure 3.1 illustrates the location of Sunyani in the district, regional and national context, whereas Figure 3.2 shows the location of Sunyani in the political map of the district.

Figure 3.3 also shows the different settlement as they occur within the Sunyani Municipality. It also shows the study area; that is, Newtown, New Dormaa, South Ridge and Zongo. The Zongo community is shown as inclusive the Central area of the map.

Figure 3.2 Map of Brong Ahafo with Sunyani District Insert

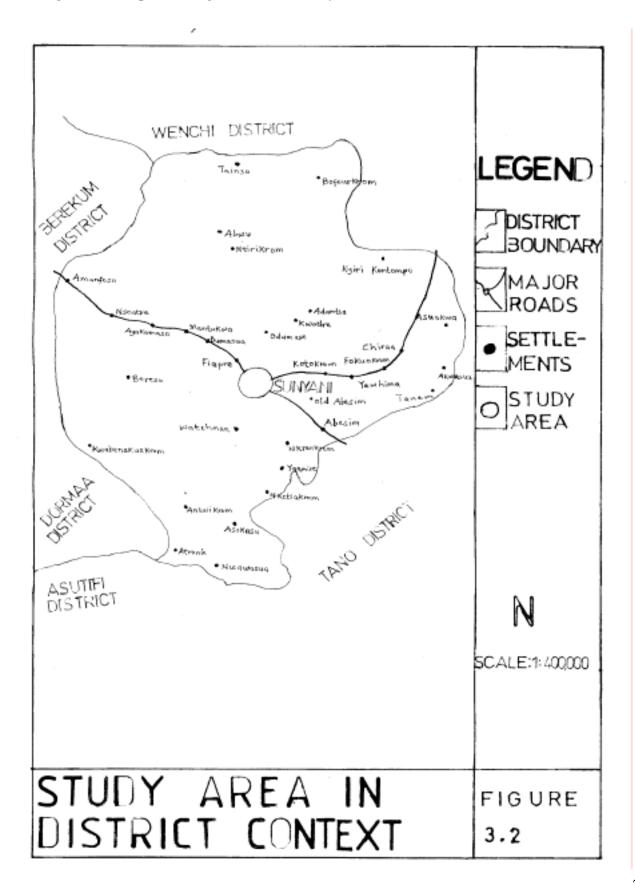
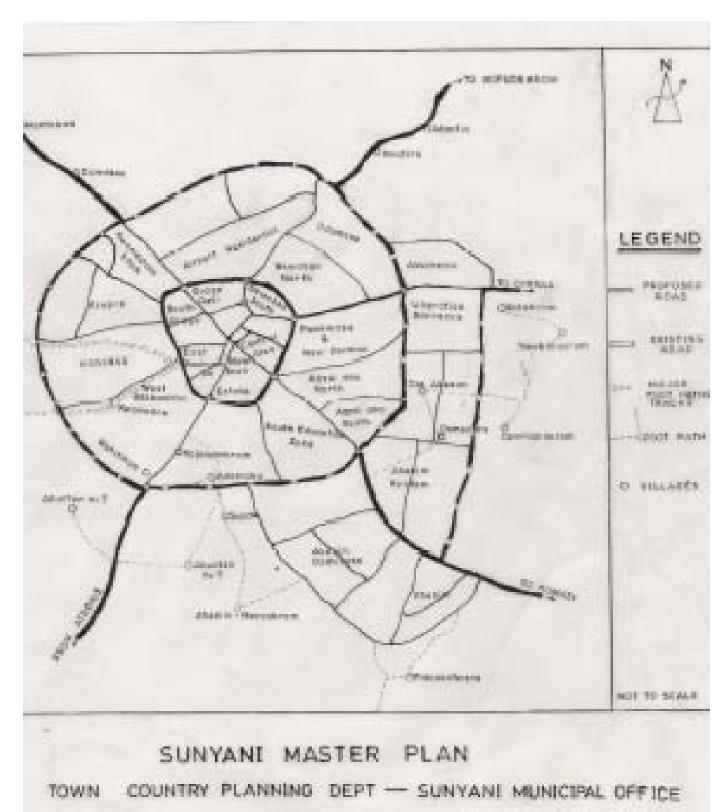


Figure 3.3 Map of Sunyani Municipality



The original settlers of Sunyani were from Kumasi Amakom. They migrated under the leadership of Nana Boahen Korkor who was a royal of Amakom.

They first settled at Tanoso before later moving to Odumase. They were welcomed and hosted by the then chief of Odumasi called Nana Atepim.

Nana Boahen Korkor came with a hunter called Bofotia who used to hunt at the present day Sunyani. On one of his hunting expeditions, he killed an elephant at River Aboabo near the present location of the Sunyani Prison Service. From hence, River Aboabo became Bofotia's hunting spot where he hunted for elephants and processed their meat.

There was drought at Odumase so Bofotia advised Nana Boahen Korkor and they all migrated to Sunyani. They first settled near the present location of the Goil Filling station.

The area

was marshy so they later moved to the old cemetery near Bakoniaba. The colonial officer in charge of Sunyani then moved them to the present day central business district of Sunyani because of the undulating topography of Bakoniaba that impeded expansion.

Geologically, Sunyani is underlain by Precambrian Birimian formation, which is believed to be rich in mineral deposits. Associated with the Birimian formation are extensive masses of granite like the Cape Coast granite complex.

Soil in the township is generally fertile. There are three major soil groups namely Birim Chichiwere Association, Bekwai Association and Kumasi Association.

Sunyani lies in the middle belt of Ghana with heights ranging from 750 feet (229 metres) to 1235 feet (376 metres) above sea level. Fast flowing rivers drain the township.

Sunyani lies within wet semi - equatorial climate with mean monthly temperature of 23° C. Relative humidity averages from 75 to 80 percent during the rainy season and 65 to 70 percent during the dry season. Mean annual rainfall is between 125 to 200 centimetres.

The vegetation of the town is the moist semi – deciduous forest with portions reduced to near secondary forest and patches of grass.

Sunyani District is divided into twenty-three sectors and out of this, eight lie within the township. Sector one is made up of Nkwabeng North and New Dormaa Extension. Sector two is the core of the township. Penkwase and New Dormaa make up Sector Three [Nana Korang and Nana Baanee (Akyeamehene of Sunyani Traditional Council), Alex Collins Arthur, Sunyani, 19<sup>th</sup> April, 2002] whereas Newtown and Estate forms Sector Four. Sector Five is the Ridge Residential area. The rest of the sectors are Sector Six, which is the South Ridge area, and Sector Seven, which comprises Agyeiano North, Agyeiano South and South Industrial Estate. Kwadwofoa and the educational areas of Sunyani Secondary School and Sunyani Polytechnic make up Sector Ten.

The population size of Sunyani and Sunyani district for 1984 and 2000 are as shown in Table 3.1.

Table 3.1 Population of selected areas in Sunyani

Year	1984	2000	
Area			
	38,834	70,869	
Sunyani Township			
	98,183	179,176	
Sunyani District			

Source: Ghana Population Census Report; 1984 and 2000

Sunyani District has a growth rate of three point seven six. The population aged zero to fourteen constitutes 35.1 percent of the total population. The gender split is 48.5 percent for males and 51.5 percent for females. The dependency ratio is 1:1.8, average household size is 6.3 percent. Ethnicity is fairly homogenous. The Akan population is 85.4 percent of the total population.

The economy of Sunyani District is dominated by Agriculture. It accounts for 73 percent of the active population. Main crops grown are maize, yam, cassava, cocoyam, plantain, cocoa, oil palm, beans and vegetables. The Extension Officer to farmer ratio is 1:3530. Most of the farmers use simple farm tools like hoes, cutlasses and axes.

Industry employs 10 percent of the active population. Agro- based industry, Forest or Wood-based, Service - based, Metal- based and Art - based industries account for 39.6 percent, 37.9 percent, 10.6 percent, 2.6 percent and 9.2 percent respectively of the labour in industry.

Seventeen percent of the active population is employed in the commercial sector. They engage in activities like the sale of clothing, grocery and building materials.

Mean annual per capital income was & 170,967 and mean annual per capita expenditure was & 215,256 as at 1996. More so, 34.1 percent and 15.7 percent constitute the population below the poverty line and the hard core poverty line respectively.

There are 124 primary schools, eighty-seven junior secondary schools, eight senior secondary schools, two private technical schools, and one polytechnic. There are a total of 1501 teachers and a teacher- pupil ratio of one to forty, for primary, one to sixteen for junior secondary school and one to seventeen for senior secondary school. Literacy rate is 79 percent, with school participation rates of 83.5 percent and 70.6 percent for basic and senior secondary schools respectively.

There is one regional hospital at Sunyani with 150 beds, three health centres at Chiraa, Nsoatre and Antwikrom. Also, there are four rural clinics at Abesim, Fiapre, Kwatire and

Bofourkrom. There are a total of twenty-one doctors and 174 nurses. The doctor – population ratio is 1:8,537.

The sources of water supply for Sunyani is 36 percent, 30 percent, 19.3 percent and 14.4 percent for stand pipe, stream, boreholes and other sources respectively.

There are a total of 404.5 kilometres of roads in the Sunyani District. Out of this, 87.8 kilometres are tarred or asphalted whereas 316.7 kilometres are motorable feeder roads.

The land use pattern in Sunyani is dominated by Residential, which accounts for 50.8 percent. The rest are Educational 10.8 percent, Civic and Culture 5.3 percent, Commercial 4 percent, Open Spaces 4.4 percent, Industrial 4.2 percent, Sanitation 1.5 percent, undeveloped land 2 percent and Roads 17 percent (Fig. 3.4).

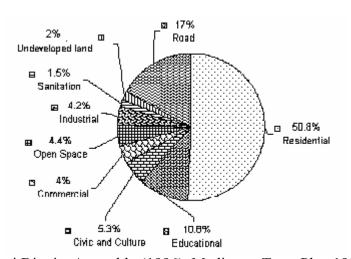


Figure 3.4 Land use pattern of Sunyani

Source: Sunyani District Assembly (1996). Medium – Term Plan 1996 – 2000.

Sunyani has a room occupancy rate of two point two, which is fairly below the United Nations standard of two point five. The owner occupier of houses is 59 percent. Majority of the houses have kitchen, water closet, and bathrooms. The low to medium income earning house owners have kitchens and bathrooms and almost, all of them use public toilets.

#### 3.1 Data Collection

#### 3.2.1 Sample

A sample of about 150 families was selected from the population. This was to ensure the effectiveness of the research work, since involving all the population would have been impossible due to the largeness of the population. The one hundred and fifty persons were to provide a larger sample in order to reduce the level of error and increase the level of precision.

## 3.2.2 Sampling Technique

The nature of the population which is made up of different categories of people in different residence necessitated the use of stratified sampling. For each stratum simple random sampling was used. The percentage allotted to each stratum took into consideration the size of the strata and impact of the study on each grouping. The population was divided into three major groups; that is, modern, semi-modern and deprived residential areas. The areas under modern residential area included Ridge residential, South Industrial, South Ridge Estate and Airport residential areas. Semi-modern residential area had the following areas-Nkwabeng north, Newtown, new Dormaa and Penkwase. The deprived communities had the following communities; New Dormaa Extension, Zongo, Kwadwofoa and Agyeiano North and South. By random sampling, an area was selected out of each of the larger groups with the Newtown, South Ridge and New Dormaa emerging out of the modern, semi modern and deprived communities respectively. The Zongo community was purposively selected due to its strategic position as being in the centre of the town as well as having relevant traits valuable to the study. The systematic sampling procedure was used to select the individual households for the distribution of the questionnaire. Each community was allocated thirty six (36) questionnaires with the Zongo community taking a share of 40.

In the compound houses, simple random was used to select respondents. In all, 150 households were questioned. Out of the 150 questionnaires sent out, four (4) could not be recovered indicating that the analysis was based on 146 answered questionnaires.

## 3.3 Analysis of Data

The data collected at the end of the study was edited. The completed questionnaires were serially coded. The final analysis was tabulated. Since the researcher used descriptive research design, descriptive statistical analysis was used. The main statistical tool used for analyzing the data was Statistical Package for Social Sciences (SPSS).

#### **CHAPTER FOUR**

#### **DETERMINATION OF FAMILY SIZE**

## 4.1 Family Size

It was found out that 74(50.7%) of the respondents in the Sunyani municipality are committed to small family size (Figure 4.1). With 1(0.7%) of respondents with family size of over 10, it can be inferred that only a few of the population is in support of large families notwithstanding the fact that 71(49%) responded in favour of family size of above 4 but less than 10 children. The analysis invariably shows that people in the Sunyani Municipality are committed to a smaller family size; an indication of the consciousness of giving birth to numbers they could easily cater for.

Table 4.1 Family Size by Sex of Respondents

	Sex of respondents		Total
Family Size	Male	Females	
1-3	51.0%(53)	50.0%(21)	50.7%(74)
4-6	39.4%(41)	47.6%(20)	41.8%(61)
7-10	8.7%(9)	2.4%(1)	6.8%(10)
Over 10	1.0%(1)	-	0.7%(1)
	100.0%(104)	100.0%(42)	100.0%(146)

Source: Field Work 2005

Out of the 104 male respondents, 51.0% had 1-3 children, 39.4% with 4-6 children, 8.7% with 7-10 children and 1.0% with over 10 children. Of the 42 female respondents 50.0% had 1-3 children, 47.6% with 4-6 and 2.4% with over 10 children (Table 4.1).

## 4.2 Ideal Family Size

Further investigation into the respondents' commitment to an ideal family size indicated that 76% of respondents would have opted for 1-3 children as their ideal family size. Less than 30% opted for a total of more than four (4) children as their ideal family size (Fig 4.1). Various reasons were given for the choice of ideal family size including health, education, income, culture, accommodation and others as shown in Table 4.2.

Fig 4.1 Ideal Family Size

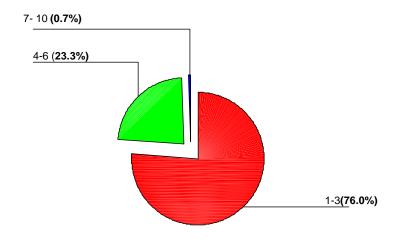


Table 4.2 Reasons for Choice of Ideal Family Size

	Frequency	Percent	Cumulative Percent
Health	14	9.6	9.6
Education	62	42.5	52.1
Income	55	37.7	89.7
Cultural	6	4.1	93.8
Accommodation	8	5.5	99.3
Others	1	0.7	100.0
Total	146	100.0	100.0

Source: Field Work 2005

It was found out that 9.6% of the 146 respondents would have changed their family sizes as a result of health, 42.5% due to education, 37.7% for income, 4.1% due to cultural factors, and 5.5% for accommodation. One (1) respondent cited a political reason (Table 4.2). Out of the 111 respondents who indicated that they will give birth to 1-3 as their ideal family size as in Table 4.3, 58.6% of them have 1-3 children with none with over one (1) child. Out of 34 respondents who responded in favour of an ideal family size of 4-6 births, 11.8% have 7-10 children and 2.9% (has over 10 children).

Table 4.3 Actual Family Size against Ideal Family

Actual		Ideal Family Size		
Family Size	1-3	4-6	7-10	Total
1-3	58.6%(65)	26.5%(9)	-	50.7%(74)
4-6	36.9%(41)	58.8%(20)	-	41.8%(61)
7-10	4.5%(5)	11.8%(4)	100.0%(1)	6.8%(10)
Over 10	-	2.9%(1)	-	0.7%(1)
Total	100.0%(111)	100.0%(34)	100.0%(1)	100.0%(146)

The respondents who preferred ideal family size of 7-10 had given birth to 7-10 children. The resultant analysis shows that respondents are not satisfied with their current family sizes and would have wished to have relatively moderate family sizes.

# 4.3 Knowledge of National Population Policy

On commitment to national population policy, the outcome indicated that 62.3% of respondents had some knowledge on the national population policy (Table 4.4).

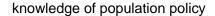
Table 4.4 Knowledge of Population Policy

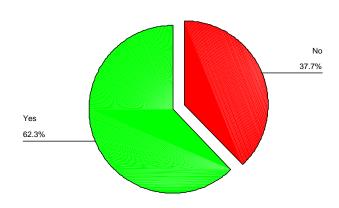
	Frequency	Percent	Cumulative percent
Yes	55	37.7	37.7
No	91	62.3	100.0
Total	146	100.0	100.0

Source: Field Work 2005

Figure 4.2 further elaborates on the outcome of their response to knowledge on Ghana's population policy.

Fig 4.2 Knowledge of National Population Policy





Respondents who indicated some knowledge in the population policy specified such areas as fertility, types of contraceptives, population census, and gender as components of the policy as areas to which they have some knowledge.

The results of the outcome (Table4.5) shows that knowledge on national population does not necessarily influence family size since the difference in family size of respondents with knowledge in the policy does not marginally differ from those without such knowledge on the policy.

Table 4.5 Family Size against knowledge of Population Policy

Knowledge of	Ideal Family Size			
Population	1-3	4-6	7-10	Total
Policy				
No	36.5%(27)	39.3%(24)	40.0%(4)	37.7%(55)
Yes	63.5%(47)	60.7%(37)	60.0%(6)	62.3%(91)
Total	100.0%(74)	100.0%(61)	100.0%(61)	100.0%(146)

Source: Field Work 2005

The outcome thus deviates from Zabin's (1999) which states of a relationship between fertility intention and childbearing and the link between fertility intention and contraceptive use as strongly affected by other, independent attitudes, such as the attitude toward contraception itself.

## 4.4 Contraceptive Usage

## 4.4.1 Ever Used Contraceptive

Furthermore, 60.3% of the respondents indicated that they have ever used some form of contraceptives. Forty percent said that they have never used any form of contraceptive (Fig 4.3).

90 80 70 60 Yes No

Fig 4.3 Ever Used Contraceptives (in percentages)

Ever used contraceptives

Source: Field Work 2005

The analysis continues to show that most of the respondents have stopped the usage of the various forms of contraceptives (Fig 4.4). A further study resulted in the fact that people who have ever used any form of contraceptive generally have small family sizes compared with respondents who have never used contraceptives in the same family size category (Table 4.6)

Table 4.6 Family Size against Ever Used Contraceptives

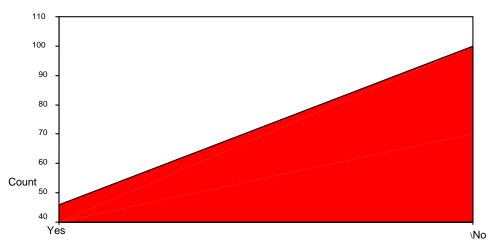
	Ever Used Contraceptives			
Family Size	Yes	Yes No		
1-3	51.1%(45)	50.0%(29)	50.7%(74)	
4-6	42.0%(37)	41.4%(24)	41.8%(61)	
7-10	5.7%(5)	8.6%(5)	6.8%(10)	
Over 10	1.1%(1)		0.7%(1)	
Total	100.0%(88)	100.0%(58)	100.0%(146)	

Source: Field Work 2005

The outcome supports the proposition of Blaney (1980) which identified that high fertility rates have historically been strongly correlated with poverty, high childhood mortality rates, low status and educational levels of women, deficiencies in reproductive health services, and inadequate availability and acceptance of contraceptives.

# 4.4.2 Currently Using Contraceptives

Fig 4.4 Present Usage of Contraceptives (in Percentages)



Present usage of contraceptive

Source: Field Work 2005

On the other hand, it was identified that some respondents are still using contraceptives such as I.U.D., condom (male and female), pills, provera and the withdrawal method. This accounts for the drop in contraceptive usage to a 31.5%. A 68.5% indicated that they are presently not using any form of contraceptives (Figure 4.4).

#### 4.5 Sex Preference

Table 4.7 identifies that out of 74 respondents with 1-3 children, 89.9% of them have 1-2 males and 10.2% with 3-6 males. The 60 respondents who also have 4-6 children had only 1.7% with above 6 males.

Table 4.7 Family Size and Number of Male Children

	Number of Male Children			
Family Size	1-2	3-6	Above 6	Total
1-3	89.8%(53)	10.2%(6)	-	100.0%(59)
4-6	70.0%(42)	28.3%(17)	1.7%(1)	100.0%(60)
7-10	50.0%(5)	40.0%(4)	10.0%(1)	100.)%(10)
Over 10	-	100.0%(1)	-	100.0%(1)
Total	76.9%(100)	21.5%(28)	1.5%(2)	100.0%(130)

Source: Field work 2005

Considering Table 4.8, it was identified that out of 59 families with 1-3 children, 93.9% of them have 1-2 females , 4.1% with 3-6 females and 2% above 6 males. The 61 respondents who also have 4-6 children had almost an equal share between 1-3 and 3-6 female children alone. In the study, it was realised that 2 of the 5 respondents with 7-10 children had 1-2 females of above 6 in number, 6 with 3-6 males and 2 with more than 6 males. The last within the list with over 10 children registered between 3-6 females.

Table 4.8 Family Size and Number of Female Children

	Number of Female Children			
Family Size	1-2	3-6	Above 6	Total
1-3	93.9%(46)	4.1%(2)	2.0%(1)	100.0%(49)
4-6	46.7%(28)	53.3%(32)	-	100.0%(60)
7-10	20.0%(2)	60.0%(6)	20.0%(2)	100.)%(10)
Over 10	-	100.0%(1)	-	100.0%(1)
Total	63.3%(76)	34.2%(41)	2.5%(3)	100.0%(120)

Source: Field Work 2005

Tables 4.7 and 4.8 indicated that large family sizes had sex of the children invariably skewed in a direction, an indication of a possible need for a representation on a particular sex in the family and for whose absence childbirth had to continue until the satisfaction is made. The outcome furthers Malhi et. al.'s (1999) research which identified that, preference for male children exerts a substantial impact on the fertility desires and family planning behaviour of women in urban Himachal Pradesh. Fertility behaviour appears to be influenced by a strong desire to acquire a minimum number of at least two surviving sons.

#### 4.6 Family Size and Residence of Respondents

Table 4.9 indicates 67.8% acceptance of the respondents' place of residence as a determining factor in their choice of family size. From the same Table 4.9, 32.2% of the respondents indicated that their place of residence were either less or had no influence on the choice of their family size.

Table 4.9 Family Size and Residential Influence

	Frequency	Percent	Cumulative
			Percent
Very Important	44	30.1	30.1
Important	55	37.7	67.8
Less Important	28	19.2	87.0
Not Important	19	13.0	100.0
Total	146	100.0	

Source: Field Work 2005

Table 4.10 Family Size and residence of Respondents

Family		Total			
Size	South Ridge	Zongo	New Dormaa	Newtown	
1-3	47.2%(17)	47.5%(19)	45.7%(16)	62.9%(22)	50.7%(74)
4-6	41.7%(15)	47.5%(19)	42.9%(15)	34.3%(12)	41.8%(61)
7-10	8.3%(3)	5.0%(2)	11.4(4)	2.9%(1)	6.8%(10)
Over 10	2.8%(1)	-	-	-	0.7%(1)
Total	100.0%(36)	100.0%(40)	100.0%(35)	100.0%(35)	100.0%(146)

With the 146 respondents sampled, 24.7 % (36) were from a modern residential community, 51.4% (75) from a deprived community and 24.0% (5) from a semi-deprived community (Table 4.10). This is indicative of a fairly equal representation of the different groupings thereupon a fair assessment.

In addition, it was realised that over 92.5% of respondents from the different types of residence had family sizes of 1-6. Less than 8% went to respondents with over 6 children. The analysis therefore shows that residence does not necessarily impact on family size and this is evident in the result of the Sunyani municipality (Table4.10). This debunks the general ideal that people living in modern or semi-modern residential areas give birth to relatively smaller number since the analysis does not show same.

The responses of the respondents were indicative of their desire to stay in highly modern places such as Accra, Kumasi, Obuasi, Koforidua and Sunyani municipalities due to available employment opportunities, educational opportunities for their children and the social status attached to such residential areas. Other respondents also indicated their wish to be in their present communities despite its deprived nature. Their reasons were that of peace, absence of noise, and availability in those communities of cheap sources of certain basic necessities such as food, clothing and accommodation.

## 4.7 Ethnicity

Table 4.11 shows that out of the total 74 respondents with 1-3 children, 57 were Akans with the rest ranging between 2 and 5. The chunk of the ethnic groups with 4-6 family size also went to the Akans with none other than the same Akan ethnic group registering something for 7-10 family size. The only respondent with over 10 family sizes was an Akan.

Table 4.11 Family Size and Ethnic Background of Respondents

Family	Ethnic Background of Respondents						
Size	Akan	Ga	Ewe	Dagomba	Guan	Other	Total
1-3	77.0%(57)	4.1%(3)	6.8%(5)	5.4%(4)	2.7%(2)	4.1%(3)	100.0%(74)
4-6	62.3%(38)	9.8%(6)	8.2%(5)	4.9%(3)	4.9%(3)	9.8%(6)	100.0%(61)
7-10	100.0%(1)	-	-	-	-	-	100.0%(10)
Over 10	100.0%(1)	-	-	-	-	1	100.0%(1)
Total	72.6%(106)	6.2%(9)	6.8%(10)	4.8%(7)	3.4%(5)	6.2%(9)	100.0%(146)

Moore's (1997a) indication of a linkage between family size and ethnic groups was not the clear case with ethnic groups in the Sunyani Municipality since family sizes were relatively equally shared. Moore (1997a) also identified that there was a difference between family sizes of the Asians and the Blacks in Britain. Factors that resulted in varying family sizes as identified are the culture of the country from which they come from, and second the age and sex distribution. Culture of most of ethnic minorities as was mentioned stresses the importance of many children, in much the same way as the Britain culture did before the welfare state was introduced. The reasons he identified were the same: children looking after their parents in old age. Secondly, the religion of most migrants frowns upon birth control, particularly amongst the Muslims of Pakistan and Bangladesh. This assertion was inconclusive with the ethnic groups in the Sunyani Municipality (Table 4.11) since there was no significant difference in the family sizes of the respondents and the different ethnic groupings represented in the research.

## 4.8 Family Size and Religion

Indicative of the outcome in Fig 4.5 is the fact that out of the 74 respondents with 1-3 family size, 67 are Christians, 5 Moslems, and 2 traditionalists. Also those with 4-6 children had 42 Christians, 15 Moslems, 3 traditionalists and 1 in other religions. The 7-10 family size respondents also had 9 Christians and 1 in other religion. The only respondent with a family of over 10 also responded in favour of Christianity.

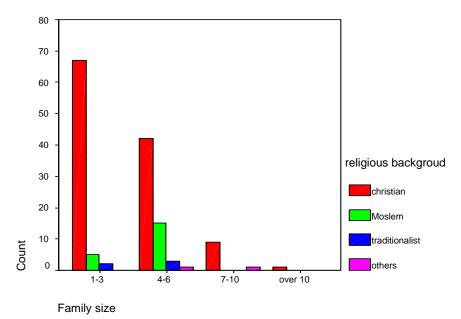


Fig 4.5 Family Size against Religion of Respondents

The outcome reveals an insignificant relationship between family size and religion of respondents (Appendix D). This situation is espoused as a result of the marginal differences between the different types of relation and their family sizes. This also confirms the fact that one's choice of religion will determine to a larger extent the size of the family. A link can thus be drawn between the outcome of the study and a research carried out by Golden Essays (2005) to the effect that family size in Vietnam is fairly large that is, around 12-16 which was considered a normal family back in the days. On other hand side, in Pakistan typical family size is about 3-5. In Pakistan and in Vietnam parents prefer to have sons than daughters. Fig 1 as shown indicated a stronger influence of culture over family size and on especially respondents with family sizes of 1-3.

## **CHAPTER 5**

## SOCIO-ECONOMIC IMPLICATIONS OF FAMILY SIZE

## 5.1 Family Size and Health

Table 5.1 Family Size against Family's Frequency of Attending Hospital

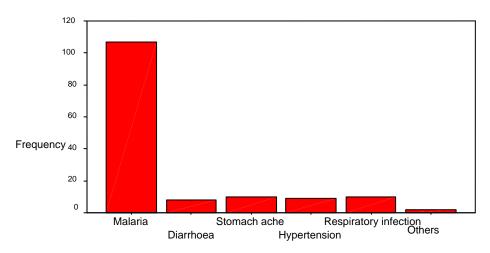
Family		Family's Frequency of attending Hospital									
Size	Weekly	Monthly	Quarterly	Yearly	Others	Total					
1-3	-	72.2%(13)	58.5%(24)	41.2%(14)	44.2%(23)	50.7%(74)					
4-6	-	27.8%(5)	36.6%(15)	47.1%(16)	48.1(25)	41.8%(61)					
7-10	-	-	4.9%(2)	11.8%(4)	7.7%(4)	6.8%(10)					
Over 10	100.0%(1)	-	-	-	-	0.7%(1)					
Total	100.0%(1)	100.0%(18)	100.0%(41)	100.0%(34)	100.0%(52)	100.0%(146)					

Source: Field Work 2005

The research identified that the only respondents with a family size of over 10 has the family visiting the hospital for treatment weekly. On monthly basis, it was identified that 18 respondents have their families visiting the hospital. Quarterly as well 95.1% respondents with 1-6 children visit the hospital with 4.9% respondents with 7-10 children answering same (Table 5.1). Out of the data, it was further identified that 88.3% respondents with 1-6 children visit the hospital yearly with 11.8% respondents with family size of 7-10 also confirming their families' position to yearly hospital consultations. More so, 92.3% respondents with family size of 1-6 and 7.7% with over 10 children indicated that they only visit the hospital when they are sick but not on any regular basis. The data identified that large family size does not significantly impact on the health of the family (refer-Appendix B). The data on health further showed that malaria sends 73.3% of respondents to the hospital, diarrhoea with 5.5% follows, stomach ache (6.8%), hypertension (6.8%), respiratory infections (6.8%) and other illnesses registering 1.4 %( Fig 5.1).

The analysis shows that families with 1-3 children do not visit the hospital regularly for treatment since they are capable of catering for themselves. This is not the case with most of the families that lie above 6 family sizes.

Fig 5.1 Common Illness (es) Identified



Common illness (es) that you/families send to hospital

Source: Field Work 2005

The research confirms the fact that people with larger family sizes are those who frequently visit the hospital with the probability of a higher expenditure on health. A larger family size in effect is a fertile ground for disease prevalence hence expenditure on health (William et. al. 1983). William et. al. (1983) in his statement on the causes of malnutrition stated that innumerable studies pointed to social and environmental factors associated with poor nutrition status in children, such as poverty (especially with misdistribution of wealth and with inflation), family size, mother's literacy level, single parent households, maternal deprivation, and many other factors including child neglect or abuse, food shortage, high incidence of infections, especially malaria.

In certain instances as asserted by William et. al. (1993) there may be sufficient food available but the quality may be undesirable hence leading to kwashiorkor. In the research, the assertion of William et. al. (1993) is confirmed thus showing a close relationship between the size of a family and the quality of health of the family as well as the family's expenditure on health (Appendix B).

The author's construct as sited under the conceptual framework for the research is further supported by the analysis between health and family size (Figure 5.1). The framework indicated that a smaller family size may be privy to better level of education, incomes, health and economic backing. On the other hand, a higher family size will ultimately lead to low levels of education, income health welfare and economic status. To ensure a better social as well as economic standing therefore, one would need to choose a family size that would lessen the burden and effect of family size on the family as well as the individual members.

## 5.2 Educational Attainment of Children

This research identified that out of the responses the highest form of education of the respondents' children were 2.1% with no formal education, 22.6% at primary level, 13.0% at basic level, 23.3% at secondary/technical level, 8.9% for post secondary, 26.0% at tertiary and 4.% for others (Table 5.2)

Table 5.2 Family Size against Highest Form of Child (ren) Education

Family	Highest Form of Child(ren) Education								
Size	No	Primary	Basic	Secondary	Post	Tertiary	Others		
	Formal	Education	Level	/Technical	Secondary			Total	
	Education			Level					
1-3	4.1%(3)	28.4%	17.6%	17.6%	8.1%	16.2%	8.1%	100.0%	
		(21)	(13)	(13)	(6)	(12)	(6)	(74)	
4-6	-	18.0%	8.2%	31.1%	9.8%	32.8%	-	100.0%	
		(11)	(5)	(19)	(6)	(20)		(61)	
7-10	-	10.0%	10.0%	20.0%	10.0%	50.0%	-	100.0%	
		(1)	(1)	(2)	(1)	(5)		(10)	
Over 10	-	-	-	-	-	100.0%	-	100.0%	
						(1)		(1)	
Total	2.1%(3)	22.6%	13.0%	23.3%	8.9%	26.0%	4.1%	100.0%	
		(33)	(19)	(34)	(13)	(38)	(6)	(146)	

Source: Field work 2005

More so, Table 5.2 shows that out of 74 respondents who had family size of 1-3, 4.1% of them had their children without formal education, 28.4% at primary level, 17.6% with basic level, 17.6% with technical education, 8.1% for post secondary , 16.2 with tertiary and 8.1% registering others. It

was identified that relatively families of smaller sizes; that is, 1-3 and 4-6 had most of their children at either the tertiary or post-secondary levels notwithstanding the fact that respondents with family size exceeding 10 children had also educated at least a child to the tertiary level.

This is further supported by Blake (1989) as cited in Weeks (1999b) which makes mention of a "dilution factor". That is, the more children there is in a family, the more diluted is the level of adult interaction; thus affecting verbal performance, in particular, which in its turn is related to student achievement and ultimately to educational attainment. Berth (1988) argues and supports the above by identifying that middle-class students also benefit from fewer siblings than is typical for working-class families. This as indicated is as a result of the extra attention, time and adequate resources that will be channelled to their education. The study itself as shown in Table 5.2 shows that comparatively respondents with smaller families are able to educate their children to very higher levels of academic excellence.

# 5.3 Family Size and Expected Educational Levels of Children

Considering the educational levels of children in the families and the expected levels at which respondents would like to educate their children, it was clearly shown that 3 out of the 146 respondents didn't expect to give their children any form of education. More so, a respondent indicated the wish and capability to give the children basic education only (Table 5.3).

Table 5.3 Expected Level to Educate Children against Capability of Educating Children to Expected Level

Expected Level	Capability of Ed	lucating Children	to Expected level	
To Educate Children	Yes	No	Total	Total
No Formal Education	66.7%(2)	-	33.3%(1)	100.0%(3)
Basic Level	100.0%(1)	-	-	100.0%(1)
Secondary/Technical Level	66.6%(4)	33.3%(2)	-	100.0%(6)
Post Secondary	87.5%(7)	12.5%(1)	-	100.0%(8)
Tertiary	95.2%(118)	4.8%(6)	-	100.0%(124)
Others	100.0%(4)	-	-	100.0%(4)
Total	93.2%(136)	6.2%(9)	0.7%(1)	100.0%(146)

Source: Field Work 2005

In addition to the above analysis, Table 5.3 shows that out of 6 respondents who wish to educate their children to the secondary/technical level, 66.7% stated their capability of achieving their objective. Out of the 8 respondents who wish to educate their children to the post secondary level, 12.5% stated the inability to achieve it. A chunk of 93.2% respondents indicated their readiness to educate their children right to the tertiary level but 6.2% expressed their inability to achieve same. Reasons for their inabilities included financial constrains, low intelligence of their children, and absence of any better employment. Those who answered in the positive indicated their preparedness in terms of a prior or purported savings towards that as well as being better employed, spousal financial contributions and their small family size that comes with a lesser burden in terms of expenditure as the reasons for their capability of achieve same. This shows that in the presence of adequate resources and a lesser number of children in the family, they could have adequately catered for their children's education to any level

Comparing the number of children per educational levels of respondents, the outcome identified that out of the 74 respondents who have 1-3 children, 1 has no formal education, 1-functional literacy, 2-primary education, 4 basic education, 8- secondary/technical education, 9 with post/sec and 49 with tertiary education. Also, respondents indicating 4-6 family size, 2 have no formal education, 4-functional literacy, 3-primary education, 4 basic education, 8- secondary/technical education, 18 with post/sec and 22 with tertiary education (Table 5.4).

Table 5.4 Family Size against Educational Background of Respondents

Family		Educ	cational E	Background of	f Respondent	S		
Size	No	Primary	Basic	Secondary	Post	Tertiary	Others	
	Formal	Education	Level	/Technical	Secondary			Total
	Education			Level				
1-3	1.4%	1.4%	2.7%	5.4%	10.8%	12.2%	8.1%	100.0%
	(1)	(1)	(2)	(4)	(8)	(9)	(6)	(74)
4-6	3.3%	6.6%	4.9%	6.6%	13.3%	29.5%	-	100.0%
	(2)	(4)	(3)	(4)	(8)	(18)		(61)
7-10	20.0%	10.0%		-	40.0%	10.0%	-	100.0%
	(2)	(1)			(4)	(1)		(10)
Over 10	-	-	-	-	-	-	100.0%	100.0%
							(1)	(1)
Total	3.4%	4.1%	3.4%	5.5%	13.7%	19.2%	50.7%	100.0%
	(5)	(6)	(5)	(8)	(20)	(28)	(74)	(146)

Table 5.4 further shows that with 7-10 family size respondents, 1.4%% has no formal education, 1.4%-functional literacy, 0-primary education, 2.7% basic education, 10.8%-secondary/technical education, 1 with post/sec and 66.2% with tertiary education. The only respondents with over 10 children also indicated the attainment of university education. The outcome further showed that there is a significant relationship between the levels of education of respondents and choice of family size (Appendix C). Respondents level of education as cross tabulated with their family size relatively shows that larger family sizes of above 6 were registered by respondents with very low levels of education. This adds to the fact that education can influence people to have smaller family sizes.

#### 5.4 Income

The analysis shows that out of the 74 respondents who had 1-3 children, 93.2% were influenced by their incomes with 6.8% indicating a little or no influence at all. The 95.1% respondents with children of 4-6 were particular of their incomes in the selection of their family sizes whilst 4.9% indicated the negative. The 90% respondents with 7-10 children in their families were largely influenced by their incomes with 10% of respondents having a lesser or no influence of their incomes on their choice of their family sizes. The only respondent with a family size of above 10 also indicated that the choice of his family size was influenced significantly by his income (Fig 5.10).

Table 5.5 Family Size and Salary/Income

Family Size	Very	Important	Less	Not	
	Important		Important	Important	Total
1-3	63.5%(47)	29.5%(22)	2.7%(2)	4.1%(3)	100.0%(74)
4-6	67.2%(41)	27.9%(17)	3.3%(2)	1.6%(1)	100.0%(61)
7-10	60.0%(6)	30.0%(3)	-	10.0(1)	100.0%(10)
Over 10	100.0(1)	-	-	-	100.0%(1)
Total	65.1%(95)	28.8%(42)	2.7%(4)	3.4%(5)	100.0%(146)

The results of the study deviate from the findings of Becker's (1991) theory of the demand for children. He predicts that the number of children in a family will depend on family income and the costs of children. Income as further added by Becker (1991) in the conceptual framework is suggestive of the fact that it plays a role in determining family size because families with higher incomes are more able to afford additional children. In terms of the cost of children, direct costs associated with having children include, among others, food, clothing, and health-care expenses. The analysis really debunks the fact that a family's income necessarily implies a larger family size. Rather, it indicates the opposite since families who indicated the roles of their incomes on family size relatively have 1-6 children, an indication of smaller family sizes.

## 5.5 Years in Employment

Analysis of Table 5.6 shows that respondents with family size 1-3 had 55.1% of them with less than 11 years in present employment. Above 11 years on present employment under the same family size were 44.6%. Out of the data, it was also realised that under 4-6 family size 43.3% of the respondents had less than 11 years in present employment with 56.6% of them registering over 11 years in present employment. For 7-20 family size under 11 years duration in present employment had 20.0% responses, and 80.0% for above 11 years. The only respondent with over 10 children showed that he has 11-20 years working experience in his present employment.

Table 5.6 Family Size by Years in Employment

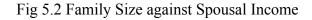
	Duration in E				
Family Size	0-5 Years	6-10 Years	11-20 Years	Over 20 Years	Total
1-3	33.5%(25)	21.6%(16)	27.0%(20)	17.6%(13)	100.0%(74)
4-6	23.3%(14)	20.0%(12)	38.3%(23)	18.3%(11)	100.0%(60)
7-10	-	20.0%(2)	50.0%(5)	30,0%(3)	100.0%(10)
Over 10	-	-	1	-	100.0%(1)
Total	26.9%(39)	20.7%(30)	33.8%(49)	18.6%(27)	100.0%(145)

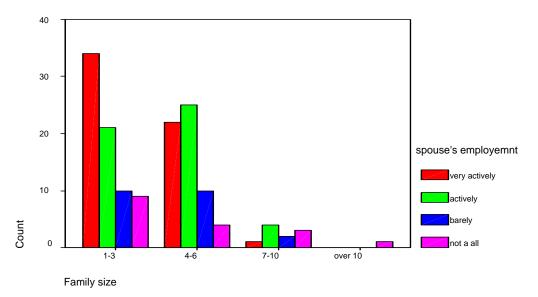
The results above relatively showing more years in employment are an indication of experience, responsibility as well as maturity. It therefore shows that there is a significant relationship between family size and duration in employment (Appendix E). It identified a linkage between the occupational background of respondents in relation to the total period in employment and family size. Moreover, it showed that people who are in better employment positions as well as in senior positions are able to trim their family sizes to relatively small sizes. Those with many years of working experience are also identified with small family sizes.

McLaren (1977) investigated working class women working in textiles in the mid 19th century with the conclusion that women in such areas took control of themselves; hence limiting their family size as investigated in the Lancashire textile mills. The research confirms the results of McLaren (1977) identified that women working in textile mills in Lancashire had smaller families than any other class. This assertion by McLaren (1977) is also supported by the fact that respondents' occupation in relation to the type as well as years in employment affected to a larger extent their family sizes. Those in stable employments, such as, public servants and civil servants were the respondents who mostly have 1-3 and 3-6 children. Farmers, businessmen and others in unstable employments were basically within 4-6 and 7-10 family size groups. The analysis thus supports McLaren (1977) in proving that relatively people who are better employed in terms of having stable jobs and high working experiences give birth to relatively small number of children than their compatriots in other employment conditions. The study thus shows a very strong correlation between family size and duration in employment.

## 5.6 Spousal Income

On spousal income contribution to the family and family size it was indicated that 55 of respondents with family sizes of 1-3 had their family sizes actively influenced by their spousal incomes. The rest of 19 rather indicated that the spousal incomes had a lesser or rather insignificant bearing on their choice of family size (Fig 5.2).





Considering family sizes of 4-6, 47 respondents showed that spousal incomes were an important factor in the choice of their family size with 14 respondents showing an insignificant influence. Those with 7-10 family sizes had 5 indicating that the incomes of their spouses determined to a larger extent their choice of family size. An additional 5 also show that the incomes of their spouses had a lesser influence of their family size. The only respondent with over 10 family size stated that the spousal income wasn't a contributory factor to his choice of family size (Fig 5.2). A resultant outcome leads to the fact that where spouses contribute substantially to the family's income, the particular family is able to have a small family size as compared to a with little spousal income contribution.

## **CHAPTER SIX**

# SUMMARY, POLICY IMPLICATIONS, CONCLUSIONS AND RECOMMMENDATIONS

## 6.1 Summary

A larger section of residents in the Sunyani Municipality are ignorant of the national population policy and rather committed to a smaller family size since over 80% of respondents have 1-6 family sizes. This in effect has had lesser influence on family size because it culminated into relatively small family sizes in the municipality. Most of the respondents either do not like or are ignorant of contraceptive usage since most people have rarely used or never used contraceptives.

It was resolved that family size has determined to a larger extent the economic background of the populace. Families with relatively small sizes (1-6 children) do not visit the hospital for treatment regularly; hence a lesser expenditure on health. Most of the sickness that send such category of families to the hospital is malaria, a sickness that could easily be avoided with basic preventive measures such as better lifestyles, nutrition and improve sanitation. This was not the case with family sizes of above 6 children since they do frequent the hospital for medication as a result of poorer nutrition, low incomes and lesser spousal support in terms of income. This has made those with smaller family sizes better-off economically.

More so, families of less than 7children had comparatively been able to educate their wards to higher levels of the educational attainment as compared to their compatriots with larger family sizes (7-10 children). It was further concluded that in as much as a larger percentage of the respondents wish to educate their children to the highest levels, factors such as low incomes and large sizes of their families cannot make so a reality.

Levels of educational attainment of respondents was also seen as possessing a positive influence on their respective family sizes since educational levels of respondents indicated a positive influence on their family sizes, that is, towards a smaller family sizes(3 children). Notwithstanding the fact that over 50% respondents have tertiary educational backgrounds, their children are destined not to be as lucky as they were since a gloomy future awaits them. It was also proved that the level of education of siblings is influenced by the number of children in the family. Instances of higher family sizes have resulted in lower educational attainment of children in such families whilst the opposite holds for families of smaller sizes.

Outcomes of the research also concluded that family size in the Sunyani Municipality is influenced mainly by socio-economic factors such as level of contraceptive usage, sex preferences, income levels as well as spousal contributions to the family's income. It is gainsaying the fact that these factors are not exclusive in its influence on family size. The duration in employment also was seen to have contributed to family size within the municipality. It was identified that people in the municipality with higher years of experience

in employment had smaller family sizes as compared with those with few years of experience in their employment.

Data sampled in reference to the municipality also showed that the sexes of children in the family influenced the choice of family size for those families. It was realised that families with highly biased sex proportions in the family registered higher family sizes as compared to those of the opposite. This showed that people are reluctant to stop giving birth in the phased of giving birth to marginally only males or females.

Majority of residents in the Sunyani municipality did opt for highly urban residences that are quite different from their present residence. It is therefore ironic since the research identified that family size has no direct linkage with the residential status of respondents. Responses showed that a place of residence does not necessarily influence the family size of respondents.

## 6.2 Policy Implications

Assessing family size in the Sunyani Municipality, it is needless to say that it calls for proper policy formulation and implementations in respect thereof. It is therefore prudent that the government, Metropolitan, Municipal and District Assemblies, health institutions and schools for that matter are cautioned on the policy implications in respect of the outcomes of the research.

Comparing present family sizes in respect of ideal family sizes, it could be identified that the people in the Sunyani Municipality are positively changing their fertility trends in favour of smaller family sizes. This shows that such policy formulating bodies should intensify their educational campaigns in lieu of such. More so, the national population council would have to make available relevant digestible sections of the population policy to conscientise people on the need to having smaller family sizes.

Health institutions should also be proactive in encouraging reproductive rights and health as modes for encouraging smaller family sizes since the higher levels of hospital consultancy calls for an attention. Most people with larger family sizes frequently suffer from malaria which in effect could easily be controlled with proper nutrition and sanitation. To reduce the patient doctor/nurse ratio therefore, health institution should be actively seen in such spheres, which is, promoting health in the phase of smaller family sizes.

It is also of grave concern to decipher the trends in children's education in relation to family sizes. Figures show that either education is getting costly or the people are getting poorer; therefore their inability to adequately school their children. More so, a cause may be the absence of adequate educational institutions to aid the training of such children. These trends if uncontrolled may lead to a cycle of persistent reduction in levels of educational attainment as generations go by.

Respondents with tertiary education were seen to represent those with smaller family sizes. This really calls for more effort in respect of educating adults. This calls for more institutions

such as non formal education division of the Ministry of Education to intensify its activities since their efforts are definitely yielding results.

Considering the reasons for respondents' quest for living in very modern residence such as Accra, Kumasi and Takoradi, it is notable therefore that Town and Country planning and for that matter Assemblies reconsiders community demarcations and planning to ensure that people live in neighbourhoods that positively influence their choice of family sizes. This is so since most of the respondents stated reasons for their decisions as assess to better education, income generating jobs and opportunities in their ideal places of residence. Churches, population related institutions, voluntary service organizations (VSOs) including others, have a case to grapple with since families are very particular about the sexes of their children. People keep giving birth until they acquire their ideal number of the different sexes of children. It is therefore the duty of such institutions to evaluate their activities in since the results ultimately show that their efforts are not meeting the desired results.

The Ministry of Local Government is also either failing to provide employment or cutting down on employment opportunities and this has had a negative effect on family size since families with more income and notable spousal contributions to incomes have relatively smaller family sizes. Governments and the private sector may thus be failing in their roles of ensuring jobs; hence promoting smaller family sizes.

## 6.3 Conclusions

In the study, it is evident that most families in the Sunyani Municipality have small family sizes; that it, less than 6 members.

A larger section of families in the study area are influenced by their culture, incomes and residence including others in the choice of their family size.

Closer relationships were identified between family size and health of the family, educational background of respondents, religious background and duration in employment of respondents. It was also realised that educational campaigns on family planning have not been yielding much efforts since most respondents are still not using contraceptives. In addition, respondents with some form of higher education have smaller family sizes hence having educated their children well.

Respondents with smaller family sizes were also seen to enjoy better social and economic life as compared to their counterparts with relatively large family sizes. This is so since families of less than six have been able to educate their children well, provide better medical care as well as giving them better housing and welfare services.

## 6.3 Recommendations

Knowledge of the national population policy and its appendages such as contraceptive usage are vital for attaining smaller family sizes. It is therefore recommended that such areas of interest should be frequently taken up by The Ghana Health Service and The National

Population Council in terms of publishing in the dailies as well as capturing them on the radio and television station. Such areas could also be included in the curricula of schools by the centre for Curriculum Development Division of the Ghana Education Service and Ministry of Education since an early understanding of issues of population can go a long way to making us conscious of its effect earlier.

In addition, incentives such as lower school fees, lower hospital fees including others should be extended to families with smaller sizes through opportunities such as the Special Health Insurance schemes (Government) and the Free or reduced cost of Education (Ghana Education Service) so as to motivate others towards having small families. The other side is to demand full payments for services provided in respect of the above from larger family sizes. People should also be allowed to freely abort unwanted pregnancies since the faith awaiting such foetus if born is worst than allowing them to be aborted before birth. Educational concerts and theatres should also be promoted in schools and community centres to re-echo the need for smaller family sizes. These could even be in terms of cinema vans being used for such campaigns in certain deprived communities.

It is also relevant that psychologists are specifically secured by the Ghana Health Service for our health institutions to cater for the social dimensions of people's health. This will adequately inform such patients and their families on how best to save their families from frequent sickness, poverty including others.

Making people economically independent should also be seen as a major dimension to encouraging smaller family sizes. When people are employed, they are in the position to offer better education to their children; hence making them aware of the implications of a large family. When spouses are also gainfully employed and contributing their quota to the family's income, it puts the families in better positions to adequately cater for their children. More time is also spent away from home thus discouraging the frequency of sex at the home; hence the tendency for possible pregnancies. The government should thus be active in helping to provide jobs for majority of the populace.

Religious institutions, counsellors at hospitals, voluntary organizations and non-governmental institutions should intensify their education on the need to maintain smaller families even in the phase of having either more males or females in the family. These could go a long way to promoting the worth and capability of both sexes as is being done by proponents of girl-child education. Churches should also stop to propagate the message of encouraging people to populate the earth since psychologically people are motivated as such to give birth to large family sizes.

In Ghana and for that matter the Sunyani Municipality, couples are not legally prevented from giving birth to large families and this in effect is having its negativities on such areas. Many writers have spoken in respect of such. It is therefore prudent that the national population policy is abridged and made easily digestible by the majority of the population. It could also be translated into the local languages to cater for the needs of the illiterate communities.

It is also recommended that more educational campaigns are held by the Ghana Health Service, Schools and Churches on the potentials of either boys or girls in the family since most people keep giving birth until they obtain a substantial share of both sexes in the family.

Smaller family sizes as well as larger family sizes have their resultant socio-economic implications for the Sunyani Metropolis but the obvious is its negativities in respect of a larger family size. This definitely culminates into poor health, lower incomes, lower social life as well as economic life.

#### **BIBLIOGRAPHY**

- An Agenda of Science for Environment and Development into the 21st Century, based on a conference convened by the International Council of Scientific Unions in Vienna, Austria, in November 1991, Cambridge University Press, 1992;
- Alvin, D. F., A. Thornton (1984) "Family Origins and the Schooling Process; Early versus Late Influence of Parental Characteristics. American Sociological Review 49(6); 784-802
- Amuzu M., Daily Graphic, Aug 12 1996 "Controlling Population Growth-The Role of Women"
  Belmont, L. and F. Marolla. 1973. "Birth order, Family size and intelligence." *Science* 182:1096-1101
  - Arthur, A. C., (2002). The Impact of Development control systems on land use in Sunyani, A special study submitted to the Department of Planning Kwame Nkrumah University of Science and Technology, Kumasi in partial fulfilment of the requirements for the degree of Bachelor of Science in Planning 2002.
- Belmont, L. and F. Marolla. 1973."Birth order, Family size and intelligence." Science 182:1096-1101
- Berger K. S. (1980). The developing person through childhood and Adolescence. Worth Publishers Inc., U. S. A.
- Beth B. H., E. W. Markson, P. J. Stein(1988), Sociology, Macmillan Publishing Company, New York.
- Blake J. (1985) "Number of Siblings and Educational Mobility" American Sociological Review 50(1); 84-94.
- Blake, J.(1989). Number of siblings educational attainment. Science, 245, 32-36.
- Blaney H. C. (1992), III World Scientists' Warning to Humanity, statement signed by 1600 scientists, Union of Concerned Scientists,
- Bongaarts, John. 1991. "Do Reproductive Intentions Matter?" *Research Division Working Paper* No. 30. New York: The Population Council.
- Capdevielle P. (2002) <u>Providing comparable international labor statistics</u>; <u>BLS adjusts foreign data to a common conceptual framework, thereby aiding users in making meaningful</u>
  Monthly Labor Review, June 1, 2002
- Cicchetti D., V. Carlson (1989). Child Maltreatment, Theories and Research on the causes and Consequences of Child abuse and neglect, Cambridge University Press, U. K.
- Downey, D (1995). "When Bigger is not Better: Family size, Parental Resources, and Children's Educational Performance" *American Sociological Review* 60:746-761.
- Ernst C., J. Angst (1983).Birth Order: Its influence on personality, Springer- Verlag, New York
- Furtado J. I.et. al. 2000, Economic Development and Environmental Sustainability, World Bank, Washington D.C.
- Ghana Population Council, Daily Graphic, Nov 20, 2002 "Ghana's Population Policy"
- Ghana Statistical Service (1984) Ghana Population Census Report; 1984. Accra, Statistical Service
- Ghana Statistical Service (2000) Ghana Population Census Report; 2000. Accra, Statistical Service

- Glick P. C. (1984). Marriage, Divorce, and Living arrangements; Perspective changes. *Journal of Family Issues*, 5, 7-26.
- Hetherington, E. M., R. D. Parke, (1993). Child Psychology: A contemporary viewpoint, McGraw-Hill, Inc, U.S.A.
- Himmelstrand, K. Kinyanjui, E. Mburugu, (1994), African Perspectives on Development, James Currey Ltd, London.
- Kessel D., (1991). *Economics on Birth Order, Family Size, and Achievement*: Family Structure and Wage Determination, university of Chicago Press, U.S.A.
- Malhi, P., Raina G., Malhotra D., Jerath J.,(1999) Preferences for the Sex of Children and its Implications for Reproductive Behaviour in Urban Himachal Pradesh. The Journal of Family Welfare. 45(1). www.hsph.harvard.edu/organization/healthnet.htm
- McLaren A. (1977) "Women's Work and Regulation of Family Size: the question of abortion in the nineteenth century" History Workshop Vol 4.
- Moore, S. (1997) Sociology Alive, Scotprint Ltd, Musselburgh, Great Britain.
- Mueller K. A. J. D. Yoder (1999) Stigmatization of Non-Normative Family Size Status -<u>Sex</u> Roles: A Journal of Research, Dec, 1999.
- Nuttall E., R. Nuttall, D. Polit, and J. Hunter, (2000). The Effects of Family Size, Birth Order, on the Academic Achievement of Boys and Girls American Educational Research Journal, Summer 1976, 13(3)
- Ominde, S.H. and C. N. Ejiogu. 1972, Population Growth and Economic Development in Africa, Population Council, New York, U. S. A.
- Opler, E.M. (1965). *Apache life way*. New York: Copper Square Publishing Population and Socio-Economic Characteristics1990 U.S. Census 1994 Estimates provided by West Michigan Shoreline Regional Development Commission
- Population Growth, Resource Consumption, and a Sustainable World, a joint statement by the officers of the Royal Society of London and the U. S. National Academy of Sciences, 1992;
- Rutter, M & Madge, N.(1987). Cycles of disadvantage. London: Heinemann.
- Statement Issued by the International Conference on Population, Natural Resources, and Development, organized by the Royal Swedish Academy of Sciences and the Swedish Council for Planning and Coordination of Research, Stockholm, Sweden 30 September 3 October, 1991.
- Sharon S. (1996), Ideal-family-size and Sex-composition Preferences among Wives and Husbands in Nepal, www.hsph.harvard.edu/organization/healthnet.pakistans
- Steelman, L. C. and B. Powell. (1989) "Acquiring Capital for College: The constrains of Family Configuration." *American Sociological Review* 54: 844-855.
- Sunyani District Assembly (1996). <u>Medium Term Plan 1996 2000</u>. Sunyani, Development Planning Unit.
- Sutton E., (1994) "The relation of family size to women's occupations circa 1851
- Turnbull, A.P., Brotherson, M.J., & Summers, J.A. (1985). The impact of deinstitutionalization of families. In R. Bruininks & K. Lakin (Eds.) *Living and learning in the least restrictive environment*. Baltimore: Paul H. Brookes.
- U.S. National security council (1974) Implications of Worldwide Population Growth for U.S. Security and Overseas Interests, Washington, D.C.
- Wagner, N. E. Schubert, H. J. P., Schubert, D. S. P. (1985). Family size effects: A revision. *A journal of Genetic Psychology.* 146, 65-78.

- Weeks J.R., (1999), An Introduction to concepts and issues, Wadsworth Publishing Company, U. S. A.
- William C. D., N. Baumslag, D. B. Jelliffe (1983). Mother and Child Care-Delivering Services, Oxford University Press.
- www.aspe.hhs.gov/hsp/poverty (2005) Causes of Seasonal Food Shortage in Other Countries
   www.edu.org/GLG/NHEA/concept.html (2005). A Conceptual Framework for Understanding
   How Health and Nutrition Factors Influence School Achievement: The Active
   Learning Capacity Model
- www.goldenessays.com(2005) Culture of Vietnam and Pakistan
- <u>www.hhs.gov/dynamics/poverty</u> (2005) Transition Events in the Dynamics of Poverty Conceptual Framework
- <u>www.yahoo.impact.html</u> (2004).impact of livestock ownership and livestock technology use on child nutrition
- www.goldenessays.html(2005), Culture Of Vietnam and Pakistans
- www.encarta.org(2004), Microsoft Encarta Encyclopaedia Deluxe
- www.encarta.org(2005), Microsoft Encarta Encyclopaedia Deluxe
- Young (1964). Wednesday's Children; A study of Child neglect and abuse. New York; McGraw-Hill, U. S. A.
- Zojonc R. B.(1986)"Mining gold from Old Research" Psychology Today, February 1986 pp.47-50.
- Zabin L. S. (1999) Forum: Ambivalent Feelings About Parenthood May Lead To Inconsistent Contraceptive Use—and Pregnancy www.agi-usa.org/pubs/journals

## **APPENDIX A**

# UNIVERSITY OF CAPE COAST CENTRE FOR DEVELOPMENT STUDIES M.A. ENVIRONMENTAL MANAGEMENT AND POLICY

The following questionnaire forms part of a study being undertaken on "Family size and its socio-economic implications in the Sunyani Municipality". I shall be grateful if you would answer them to the best of your ability.

This is purely an academic exercise and your anonymity is guaranteed. Indicate your answer(s) by a tick like this ( ) Thank you.
Questionnaire number SOCIAL/DEMOGRAPHIC BACKGROUND OFRESPONDENTS
2. Occupation A- Civil servant ( ) B- Health personnel ( ) C- Market woman ( ) D- Industrial Worker ( ) E- Farmer ( ) F- Driver ( ) G- Businessman ( ) H- Businesswoman ( ) I- Public Servant ( )
J- Others ( ) Please specify
3. Rank/Position of Respondent (If you chose A, B, D, or I above)  Junior Level ( ) Middle Level ( ) Senior/Management ( )
4. Duration in present employment 0-5 yrs ( ) 6-10 yrs ( ) 11-20 yrs ( ) Over 20 yrs ( ) DEMOGRAPHY AND FAMILY SIZE
5. Sex: Male ( ) Female ( ) 6. How many children do you have? 1-3 ( ) 4-6 ( ) 7-10 ( ) Over 10 ( )
7. What is (are) the sex (es) of your children?  Males 1-2 ( ) 3-6 ( ) above 6 ( )  Females 1-2 ( ) 3-6 ( ) above 6 ( )
8. To what extent has(have) the sex (es) of your children influenced your choice of family size?
Very much () much () Indifferent () Negligent () COMMITMENT TO FAMILY SIZE
9. To what extent is family size important to you?  Very Important ( ) Important ( )  Less Important ( ) Not Important ( )
10. Have you ever used contraceptives? Yes ( ) No ( )
11. Do you still use any form of contraceptive?
Yes ( ) Please specify which types No ( )
12. How many children would you expect to give birth to if you are to start giving birth?

1-3 ( ) 4-6 ( ) 7-10 ( ) Over 10 ( )
13. What is your reason (s) for choice of Question 12?
Health () Education () Income ()
Cultural ( ) Accommodation ( )
Others () please specify
EDUCATION AND FAMILY SIZE
14. What is your educational background?
No formal education ( ) Functional Adult Literacy( )
Primary Level ( ) Basic level ( )
Secondary/technical level ( ) Post Secondary level ( )
Tertiary ( ) Others ( ) Please specify
15. To what extent has your education influenced your ideal family size?
Very extensive ( ) extensive ( )
Less extensive ( ) Indifferent ( )
16. What is the child (ren)'s highest form of education
No formal education ( ) Functional Adult Literacy ( )
Primary Level ( ) Basic level ( )
Secondary/technical level ( ) Post Secondary level ( )
Tertiary ( ) Others ( ) Please specify
17. To what extent do you wish to educate your child (ren)?
No formal education ( ) Functional Adult Literacy ( )
Primary Level ( ) Basic level ( )
Secondary/technical level ( ) Post Secondary level ( )
Tertiary ( )
Others ( ) Please specify
18. Are you capable of achieving the above? Yes ( ) No ( ) please specify reason(s)
CULTURE AND FAMILY SIZE
19. What is your religious background?
Christian ( ) Moslem ( ) Traditional religion ( )
Others ( ) Please specify
20. What is your ethnic background?
Akan () Ga ()
Ewe () Dagomba () Guan ()
Others () Please specify
21. To what extent does your religion influence your ideal family size?
Very Important ( ) Important ( ) Less Important ( ) Not Important ( )
22. To what extent has your customs and traditions influenced your ideal family size?
Very much () much () Indifferent () Negligent ()
EMPLOYMENT/INCOME AND FAMILY SIZE
23. What is the occupation of your spouse(s)?  A- Civil servant ( ) B- Health personnel ( )
C- Market woman ( ) D- Industrial Worker ( )
E- Farmer () F- Driver ()
Limited () i bliver ()
G- Businessman ( ) H- Businesswoman ( )

I- Public Servant ( ) J- Others ( ) Please specify
24. To what extent does your salary/ income influence your ideal family size?
Very Important ( ) Important ( )
Less Important ( ) Not Important ( )
25. What is the nature of employment of your spouse?
Full time ( ) Part time ( ) Casual ( )
Seasonal ( ) Others ( ) Please specify
26. To what extent has your wife's employment influenced your choice of family size?
Very actively ( ) actively ( )
Barely ( ) Not at all ( )
HEALTH AND FAMILY SIZE
27. From where do you/family seek medication when sick?
Herbalist () Hospital () Self medication ()
Family doctor ( ) Others ( ) Please specify
28. To what extent has your expenditure on health influenced your ideal family size?
Very Extensive ( ) Extensive ( )
• • • • • • • • • • • • • • • • • • • •
Less Extensive ( ) Not Extensive ( )
29. How often do you visit the hospital?
Daily () Weekly () Bi-weekly ()
Monthly ( ) Quarterly ( ) Yearly ( )
Others ( ) Please specify
30. How often does your family visit the hospital?
Daily ( ) Weekly ( ) Bi-weekly ( ) Monthly ( ) Quarterly ( ) Yearly ( )
Others () Please specify
31. What is (are) the common illness (es) that you (family) often receive medication?
Malaria ( ) Diarrhoea ( ) Stomach ache ( )
Hypertension ( ) Respiratory infections ( )
Others ( ) Please specify
URBANIZATION AND FAMILY SIZE
32. In which part of the Sunyani Municipality do you live?
Nkwabeng North ( ) New Dormaa Extension ( ) Estate ( ) New
Dormaa () South
industrial Estate ( ) Penkwase ( )
Ridge Residential() Agyeiano North () Newtown () Agyeiano
South ()
South Ridge ( ) Kwadwofoa ( )
Others () Please specify
33. Do you stay in the same place with your spouse(s)?
Yes () No () Please specify
34. To what extent has your place of stay influenced your ideal family size?
Very Important ( ) Important ( )
Less Important ( ) Not Important ( )
35. IN which community or town in Ghana would you choose to stay and Why?
55. It which community of town in Ghana would you choose to stay and wify?

# **APPENDIX B**

Table 5.7 Family Size and Health of the Family

# Paired Samples Test

	Paired Differences							
	Mean	Standard	Std.	95% Confidence				
		Deviation	Error	Interva	l of the			
			Mean	Diffe	rence			
				Lower	Upper	t	Df	Sig.
								(2-
								tailed)
Pair Family								
Size-								
Family's								
Frequency of	-4.2260	1.2305	0.1018	-4.4273	-41.0248	-41.499	145	0.000
Attending								
Hospital								

Source: Field Work 2005

The above table indicates a paired correlation between the number of children and the rate at which the family attend the hospital hence their expenditure on health. The calculated t-test of -41.499 at 145 degree of freedom(df) and 95% confidence level is greater in absolute terms than the  $t_{\alpha}$  of 1.98 showing that the null hypothesis that large family size does not significantly impact on the health of the family is rejected.

t <sub>cal</sub>>t<sub> $\alpha$ </sub>, null hypothesis is rejected.

## **APPENDIX C**

## 5.8 Family Size and Educational Background of Respondents

# Paired Samples Test

	Paired Differences							
	Mean	Standard	Std.	95% Co	95% Confidence			
		Deviation	Error	Interva	l of the			
			Mean	Diffe	rence			
				Lower	Upper	t	df	Sig.
								(2-
								tailed)
Pair Family								
Size-								
Educational								
Background	-4.2466	1.92107	.15899	-4.5608	-3.9323	-26.710	145	0.000
of								
Respondents								

Source: Field Work 2005

Comparing the number of children per the educational levels of respondents the outcome identified a critical t ( $t_{cal}$ ) of -27.71, at df 145 and confidence interval of 95%. This is far greater in absolute terms than the  $t_{\alpha}$  of 1.98 and a further indication that the null hypothesis that there is no significant relationship between the level of education of respondents and choice of family size is rejected.

t <sub>cal</sub>>t<sub> $\alpha$ </sub>, null hypothesis is rejected.

## APPENDIX D

## 5.9 Family Size and Religious Background of Respondents

# Paired Samples Test

	Paired Differences							
	Mean	Standard	Std. Error	95% Confidence				
		Deviation	Mean	Interv	al of the			
				Diff	erence			
				Lower	Upper	t	df	Sig.
								(2-
								tailed)
Pair Family								
Size-								
Religious								
Background	.3288	.7975	6.600E-02	.1983	.4592	4.981	145	.000
of								
Respondents								

Source: Field Work 2005

A critical t-test analysis of the relationship between family size and religion of respondents identified a  $t_{cal}$  of 4.981 at df of 145 and 95% confidence interval. The  $t_{cal}$  is greater rather greater than  $t_{\alpha}$  of 1.98 indicating the rejection of the null hypothesis stating that there is no significant relationship between family size and the religion of respondents, i.e.  $t_{cal} > t_{\alpha}$ , therefore the null hypothesis is rejected.

## **APPENDIX E**

## 5.10 Family Size and Duration in Employment

# Paired Samples Test

	Paired Differences							
	Mean	Standard	Std.	95% Confidence				
		Deviation	Error	Interval of the				
			Mean	Difference				
				Lower	Upper	t	df	Sig.
								(2-
								tailed)
Pair Family								
Size-								
Duration in								
Employment	.8690	1.15021	.09552	.6802	1.0578	9.097	144	0.000

Source: Field Work 2005

The calculated critical t ( $t_{cal}$ ) for the paired values of duration in employment and number of children indicated 9.097 at 144 degree of freedom and 95% confidence interval. This is greater that the t-test from the table results ( $t_{\alpha}$ ) which is 1.98 at 144 degree of freedom (df) and 95% confidence level;

 $t_{cal} > t_{\alpha}$ , therefore the null hypothesis stated that, there is no significant relationship between duration in employment and family size is rejected.