THE SOCIO-ECONOMIC AND DEMOGRAPHIC IMPLICATIONS OF SEX PREFERENCE IN PLATEAU STATE, NIGERIA

BY

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DECLARATION

I declared that the work in this dissertation entitled "THE SOCIO ECONOMIC AND DEMOGRAPHIC IMPLICATIONS OF SEX PREFERENCE IN PLATEAU STATE, NIGERIA" has been carried out by me in the department of Geography. The information derived from literature has been acknowledged in the text and list of references provided. No part of this project thesis has been previously presented for another degree or diploma at this or any other institution.

_____ _____

Gladys SANI Date

CERTIFICATION

This thesis titled “THE SOCIO-ECONOMIC AND DEMOGRAPHIC IMLICATIONS OF SEX PREFERENCE IN PLATEAU STATE, NIGERIA” by Gladys Sani meets the regulation governing award of Master of Science (M.Sc) degree in Demography and Populations studies, Ahmadu Bello University and its approved for its contribution to knowledge and literacy presentation.

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DEDICATION

This thesis is dedicated to God Almighty, my beloved parents Mr and Mrs J.S Yashim whose generosity and encouragement provided the strongest foundation for my education.

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My humble gratitude goes to the omnipotent, Omniscient Omnipresent God Almighty for all has bestowed on me to make this study a success. It is rare privilege that I enjoined in presence in spite of my weaknesses.

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ABSTRACT

High fertility has become an increasingly important concern for many governments in developing countries. One of such causes that have been identified has taken up for study is sex preference. This was achieved through the following objectives: examine the extent of sex preference in Plateau State, examine the factors influencing sex preference in the study area, discuss the demographic implications of sex preference in the study area, discuss the socio economic implications of sex preference in the study area and also identify the most preferred sex in Plateau State. The study made used of primary data from the administration of questionnaire and Focus Group Discussion also secondary data from literatures and journals. From the study it shows that where there was a strong preference by couples for a particular sex, there was also a resultant increase in family size. The study also found that, where there was a strong preference of a particular sex in marital unions, the marriage was likely to be unstable. Once union in which the preferred sex was not born, especially in the later stages of marriage, sex preference become a factor in marital stability. The study therefore recommend that female children should be adequately empowered culturally and otherwise to assume most roles traditionally performed by the male so as to curb that aspect of the culture that support sex preference, high fertility and marital instability. This, it is believed, will enable the populace to stick to a particular number of children irrespective of their sex as well as enhance the stability of marital unions.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY AREA

The implications of Sex preferences on fertility have been widely observed around the globe. Considerable attention has been devoted to the issue of sex preference because parental sex preference can cause discriminatory practices against children of the less-desired sex, and these practices can have unfavorable socio-economic and demographic consequences. For example, pronounced sex preference in fertility can lead to sex-selective abortion (Goodkind, 1996). Population is a vital component of the resource base of any country; the world population was doubled in early 90s and later tripled after more than 3 decades. Moreso, according to the Population Reference Bureau (PRB, 2013) report, the world population is currently put at 7.2billion.

With a population of a little above 140 million people and an annual growth rate of 3.3 percent (NPC, 2007), Nigeria is ranked the eight most populous nation in the world, the growth in Nigeria's population which is attributable to high rate of both desired and actual fertility. The Federal Ministry of Health in Nigeria and the United Nations Agency for International Development (UNAID, 2003) report a total mean number of desired children of 6.7. Whereas, the National Demographic Health Survey (2013) report put the figure at 5.5 per woman which is significantly high compared with developed countries like Russia and United State of America with 1.2 per woman for both countries, according to the report by Central Intelligence Agency (CIA) World Fact book 2013.

High fertility has become an increasingly important concern for many governments in developing countries. It has been noted that relative to women, Nigerian men want more children and are less likely to approve of family limitation (Isiugo-Abanihe, 2003). The higher male ideal number of children could be attributed to polygyny since they may expect a large family size from two or more wives. Even the practice of polygyny in some cases is brought about by the desire for male children, since is a patriarchal society with predominant cultural practise.

Sex preference means the preference for a particular sex over the other (Adeleye, 2010). It is generally the desire, expressed or implied by parents in time to have a child of a particular sex (Leone, Zoe and Gianpiro, 2003). It is a form of gender discrimination and it is based on the belief that it is more socially, economically, religiously and politically advantageous to have at least a son or a daughter. It usually encompasses a variety of ways of treating boys differently from girls and can lead some families to undertake measures to ensure that at least one boy or girl is born. For example, Son preference is a common characteristic of most cultures and countries. The strength of the preference varies by culture,

class and point in history, and can be expressed in overt and subtle ways, ranging from more familial support and approbation for boys to less food, education and health care for girls.

Moreso, sex preference depends on stereotyped ideas that boys and girls are limited in what they can do based on their biological sex. These practices may vary based on the intensity of preference to a particular sex, public policies and social attitudes related to population control and fertility, the state of economic development, the availability of the technologies, and the access to those technologies (Fuse, 2010). For example, in India and China people were more interested in ensuring they had at least one son when the government was encouraging and/or mandating only one or two children per family.

Furthermore, the individual's socio-economic status can have consequences on sex preferences for children (Becker, 2006). If socio-economic development changes people lifestyles, one's fertility preferences may be influence by the level of development of the society in which they reside in particular, industrialization, urbanization and educational expansion accompanying socio-economic development may alter the relative value of sons and daughters because desired qualities of a child may differ in a more developed societal context (Barrett, 2004).

It is also possible that socio-economic development may alleviate sex preferences because sex roles grow more ambiguous with modernization. In more developed societies, individuals are also less tied to the traditional values associated with sex roles with family and kinship system that influence their sex preferences. Therefore, there is higher demand for children in pre-modern societies because children were considered assets and contributed labour on the farm and within the family (Ibanga, 2001). It can be assumed that in these societies, there are prescribed sex preferences for children where sons and daughter may contribute differently to farm and domestic labour. Specifically, sons may be demanded for physical labour while the daughters are expected to help around the house and with child care (Coleman, 2007).

Socio-economic development produces lifestyle changes for both children and adults. This not only means that children no longer work and contribute to the family, but also that there are less prescribed expectations for children according to sex (Akpan, 1998). The expansion of the modern sector of the economy may also change the nature of children's contributions in a way that makes daughters valuable (Hilke, 2001). A pronounced preference of parents to have male children has been noted in a number of countries, although a desire for a balanced number of sons and daughters is also common (Arnold and Kuo, 1984; Williamson, 1976). Sex preference is particularly prevalent in some countries with strong Confucian traditions, which is also known as one of China's indigenous religious believes (Cleland,Verrall and Vaessen 1983).

Across the world, studies have confirmed existence of parental child sex preference. For instance, in developed countries like United State of America (USA), United Kingdom (UK) among other, there has been a shift from specific sex preference to no gender preference (Marleau and Saucier, 2002). Whereas, across Asian the continent, Son preference is especially prevalent in countries such as Bangladesh, China, India, and Pakistan, Serbia, Belarus Abzerbaijan, Singapore, thereby leading to sex ratio disparities (Chowdhury, 1994; Zafar, 1994; Graham, Larsen and Xux, 1998; Xu , Rimpela, Jarvelin and Abreyaya, 2008). Also, Arnold and Kuo's (1984), reported a tendency towards daughter preference in a few Southeastern Asian countries with a Malayo-Polynesian background, including Indonesia, Philippines and in the countries of Southern Asia, Western Asia, and Northern Africa. Elsewhere in Africa, countries with son preference include Egypt, Kenya, Rwanda and Burkina Faso etc. while those with daughter preference are Mozambique, Zambia, Zimbabwe and Namibia among others (Fuse, 2010).

In Nigeria son preference is dominant among couples (Gupta, 1997). Though the preference for a male child over the female varies between tribes, regions and religious beliefs etc., however, in those parts of the country where son preference is dominant, it is so deeply rooted to the extent that a husband may decide to divorce/marry another wife, if the wife is unable to give birth to male child, this is so because in most household, the husband dominates and directs the affairs of the family. In Nigeria, the custom and tradition accord a low status to the female and prime status to the male. The man is recognised as the one who marries the woman and in most cases the decision to have children is that of the man. In the traditional setting, his decision most of the time, favour more children especially sons as more children further enhances his status as a man in the society (Otong, 1997).

In Plateau State like in Nigeria, studies have also indicated the preference for son over daughters as Hyeladi, Gyang and Chuwang in their 2014 studies linked family planning and sex preference as determinant factors to family size. It was also noted in the same report that family size is a complex issue to control in a society where religion, culture and education were tied to belief. In addition, Saheed (1994) noted that sex preference for children in Muslim society may be shaped by cultural factors arising from the family law which have remained unchanged over the centuries and have been buttressed by Islamic doctrines. Musa (2010) emphasized that there are some differences in the Muslims family law across some local government in the northern part of Plateau State, though with several common features. Although the law gives women the right to own property, they are entitled to inherit less properly than men. The law grants men unconditional right to divorce their wives, but make divorce right conditional for women to obtain permission from their father or husband to marry (Ahmad, 2009). A child guardianship is automatically granted to the father or to the father's family. Moreover, polygamy whereby men can take up to four wives is still legal in the traditional Islamic world. In more extreme cases, veiling and sex-segregation have also been legitimated, on the basis of Islamic doctrine (Shelley, 2000).

A circumstance where Muslim women are disadvantaged from birth and it is no surprise that a son preference is prevalent in predominantly the northern part of Plateau State. It is also conventionally assumed that Muslim women experience more constraint inside and outside the home, resulting in lower female autonomy in a highly sex stratified setting (Ahmad, 2009). Women had greater pronatalyst behaviour, and attitudes when compared to non-Muslim women within the same State. However Muslim women did not differ much from their non-Muslim counterparts on the measures of women's autonomy (Morgan, Philip, Herbert and Karen, 2002).

Couples once married want to have children. This is expected because of the need for expansion of lineage demographic strength. Men and women have different reasons for wanting some off spring. Women's primary reasons as traditionally conceived are to prove that they are fertile and can physically produce children. According to Fapohunda (1997) child bearing has traditionally been the most important way a woman could prove her value to family continuity for men, their reasons include among others, tradition, religion and to prove sexual prowess. These reasons help in no small measures to keep Nigeria fertility rate as high as it is. The high fertility according to the United Nations Economic Commission for Africa (UNECA, 2006) is caused, particular in Nigeria by a broad mix of economic, social and cultural factors including early age at marriage, diminishing practise of prolong breast feeding, limited used of modern contraceptives, relative low status of women and relative lack of a clear population policy.

Williamson (1977) has linked the preferences which parents make about the sexes of their children to the preferences which people make about whether; people cannot control the events hence they learn to adapt to them. Those adaptive behaviour of parents include attempt to predict and control the sex of their choice, rationalise what they have, raise the child as if it where what they wanted, adopt a child of preferred sex and engage in repeated trails of procreation in search of preferred sex.

Increasingly, sex preference is generating particular interest in different groups of people. On this issue Williamson, (1977) noted that some demographers and family planning programmed administrators fear that sex preferences, especially for son may keep fertility high in some developing countries. Feminist see widespread preference for son as continuing evidence of male domination and sexism and want to promote policies to reduce boy preference. Biological controlling research on sex control wonder what societal changes might come if the discovered practical and effective methods of sex control. Family counsellor's wonder what to say to prospective parents who very much want a child of particular sex. Finally, there is the average person who wants to keep up on what is going on, perhaps with a mind to effecting his or her own family composition (Bairagi, 2001).

According to Ibanga (2008) sex preference has enormous implications for the society. These implications are social, economic, physiological and demographic in their

manifestation. For example a society where sons are strongly preferred is one where families are traced through the males, and where the men have more prestige, and more political and economic power than women, and also where women status is low. Hence, sex preference simply reflects sex roles in the society.

In a sons preferring society like Nigeria, a woman marital security depends on her giving birth to male children (Bairagi, 2001). Similarly, a wife status and respect among in laws, neighbours and friends depend on her having sons, to extent that marital instability is easily traceable to sonselessness in marriage (Bairagi, 2001). However, the public ridicule and loss of respect are not restricted to the female partner only. For instance, a rich man without a son is taunted for "having wealth without mouth to eat" whereas a poor man without a son is sarcastically "excused" for not creating wealth without the eater (Ibanga, 2008). In almost every case the concerned about family wealth flow haunt the dreams of sonless fathers in Nigeria. Similarly, Ibanga (1996) pointed out the popular help view in Africa which sees children as insurance against old age.

With regards to psychological implication of sex preference, children of unwanted sex may suffer from a feeling of neglect and other forms of emotional disturbance; whereas children of the preferred sexes enjoy tremendous self esteem. In Nigeria male children enjoy optimum pampering from both the parents and female siblings in the family (Harris, 2005).

Demographic implications of sex preference are manifested mostly in the form of fertility behaviour of parents and the consequences of such behaviour for the society. But it must be pointed out that the situations in the industrialized societies are different from the situation in the developing countries. For example in the United State, the tendency of couple to continue procreation in search of the desired sex is modified by their desire to attain and maintain popular replacement level of fertility (Welch, 1974).

Williamson (1977) maintains that the influence of sex preference on fertility level depends upon four factors namely; the strength of the preferences, the amount by which the preferred ration deviates from the natural sex ratio, the total number of children desire and the availability of effective birth control. However, in addition to these and with specific reference to Nigeria, Ibanga (1996) also speculated that social press is a possible operative factor behind sons' preference in the society. Therefore all these factors considered together, provide the framework for analysis of the socio economic and demographic implication of sex preference in the Nigerian community.

1.2 STATEMENT OF THE RESEARCH PROBLEM

Today, no problem seems more urgently important to well-being of mankind than the control of the population growth (Curie, 1992). However, many people see the population in the context of number of people versus available food. But it could be seen from many other dimensions, such as undue growth rates versus cultural as well as material resources. Society must do more than feed, clothe and house its people. It must also satisfy man's mental, emotional and spiritual needs and aspirations. The full solution depends also on society's ability to meet man's higher, non-material needs, to offer every child an opportunity to achieve in life more than mere existence, a chance to live as well as survive (Akpan, 1998).

Studies have confirmed the existence of parental child sex preference in less developed countries, but with variation in patterns (Pong, 1994; Arnold, 1997). For instance, son preference is more prevalent in countries like Bangladesh, China, India and Pakistan (Zafar, 1994; Graham, 1998). In countries with matrilineal cultures, daughters are preferred to sons (Cleland, 1984) such countries includes, Sri Lanka, parts of the Caribbean and South America Continent, whereas, parental sex preference is gender-neutral in some other parts of the world (Krishnan, 1993; Arnold, 1997). Motivations underpinning parental child sex preference include abeyance of traditional cultural beliefs and social customs, and potential economic utility. Sons are often preferred for family labour, for the income they can earn, the financial security they can provide to the elderly parents, their continuance of family lineages, or to follow religious teachings (example for Hindus, sons kindle the funeral pyre of deceased parents) (Krishnan,1993). Daughters importantly perform familial duties or household chores (Cambell, 1991).

It is contended that son preference partly explains low contraceptive use and high total fertility rates (TFRs) prevails in less developed countries. Desire for sons affects preferred family size, in turn influencing contraceptive use. Couples continue bearing children despite attaining their desired family size because they are dissatisfied with their offspring's sex; there is a need for additional sons. The relationship between son preference and reproductive behaviour in less developed countries is, however, ambiguous. Earlier works by Dubuc and Coleman (2007) observed a biased sex ratio at birth (number of boys per number of girls) among Indian immigrants in the UK. This bias against girls was particularly pronounced at higher birth orders and concomitant with the availability of pre-natal sex selection techniques (ultrasound), mirroring findings in India where female selective abortion is well documented.

These findings provided the first quantitative evidence in a Western country of sex selection against females, raising ethical concerns about this practice among health professionals, academics, politicians and the wider public. Ongoing works on this subject focuses on the ethical implications of sex selection against females and the developments of novel demographic methodologies to monitor gender imbalances in the UK. This work is funded by a Welcome Trust award to Sylvie Dubuc. There is increasing evidence for sex

selection against females in many Asian countries and among Asian Diasporas in developed countries and the *missing girls* in China and India are turning into an increasing deficit of women, a serious concern for those societies. Understanding the motives of son preference and the reasons of prospective parents for selecting against females is a first step to address selection against females and are of policy concern. The UK socio-economic context is different to that of India and China, thus an understanding of the extent of gender imbalances among ethnic groups in the UK can help to disentangle the complex motivational factors associated with son-preference (economic, cultural, religious) and is of interest to a number of stakeholders in the UK including women's groups (Sylvie, 2011).

Globally, intra-country variations in the direction of gender preferences do occur. In India, for example, a strong preference for male children has been shown to be associated with a low status of women, contraception and fertility, but the pattern varies widely from region to region (Arokiasamy, 2002). Moreso, according to Hank and Kohler (2000) report, couples in the eastern part of Germany had female child preference, while those in the western part had male preference. Marleau and Saucier (2002) study also confirmed that western societies appear to have experienced a transition from male first child preference to no gender preference. Elsewhere, in a study conducted in Nyeri District, Kenya, women's preference for male children was shown to be associated with high parity. The investigators attributed the son preference to possible fear among the women that they would have no share in the inheritance if they had no sons through whom they would access the inheritance (Kiriti and Tisdell, 2005).

In Nigeria like in most African countries, studies have also confirmed the existence of sex preference amongst couples. Also, in Plateau State like in most states in the northern part of Nigeria, the trend of family sizes has been drastically increasing, even with the awareness of family planning and policies of precise number of children a household should have, still number of children is on an increase per head. This is however attributable to among other factors relating reproductive issues like age of marriage, sex preferences, education, residence, wealth, maternal and child health, and level of awareness as well as the adherence to one religion or the other (NDHS, 2008).

Specifically, across the country, studies relating to sex preference have been carried out. For instance, Omokhoa, Adeleye and Okonkwo (2010) investigated men's gender preferences and the possible association with their knowledge of related maternal mortality indices. Using a cross-sectional design, a structured questionnaire was administered to 369 randomly selected males aged 18-75 years in Ekiadolor, Nigeria. The study found out that a total of 47.7% respondents had gender preference, with 36.6% preferring sons. Also 71.3% of respondents were aware that pregnancy and delivery could put a woman's health at risk out of which 58.6% had no gender preference compared to 36.8% of those who lacked this awareness.

Also, Ushie, Enang and Ushie (2013) examined the effects of child sex preference on population growth and maternal health. With the respondents drawn from the rural areas of Obudu and Obanliku LGA in Cross River State using questionnaire as the instrument of data collection and administered to 500 respondents. The findings revealed that sex preference has an encouraging effect on population growth and exposes women to a prolong period of childbearing which has significant health implications for the health of not just the mother but also the infants. The study went on to recommend that the problem cannot be legislated; but sustained period of reorientation and emancipation of women has the strongest hope of addressing the problem.

Plateau state is also not left out in studies on issues relating to sex preference as Hyeladi, Gyang, Chawang (2014) carried out a study to determine the relationship between family size and family planning, child-sex preference, family size determinant factors in relationship to family size. The study used a well-structured questionnaire/interview to elicit information from the sample respondents of 200 household from among the Mwaghavul ethnic group. The study revealed that family planning, child-sex preference and determinant factors of family size were found to be significant at P> 0.05 (95% confidence level). Which to the researcher, means that family planning contributes to child spacing to a great extend but not to reduce size of family. Family size is a complex issue to control in a society where religion, culture and education were tie to belief. However, it recommended that families be sanitized on the need to adapt to small size of family to mitigate the effect of large family.

In summary, Omokhoa, Adeleye and Okonkwo (2010) study focused more on men's sex preference in relation to maternal mortality indices. Hyeladi, Gyang and Chuwang (2014) focused on the relationship between family size and family planning in Plateau State. The study by Ushie, Enang and Ushie (2013) focused on the effects on sex preference with more emphasis on population growth and maternal health in Cross River State.

It can be seen to the best knowledge of the researcher that from the previous studies reviewed above, limited research were carried out on sex preferences but the researcher will focus on the demographic and socio-economic implications of sex preference in Nigeria in general and Plateau state.

In order to fill this existing gap in knowledge, this study will seek to address the following research question:

1. To what extent is preference for a particular gender in the study area?

2. Is sex preference influenced by socio-economic development in the study area?

3. What are the demographic implications of sex preference in Plateau State?

4. What are the socio-economic implications of sex preference in study area?

5. Which sex is most preferred by couples in study area and why?

1.3 AIM AND OBJECTIVES

The aim of the study is to examine socio-economic and demographic implications of sex preference with a view to isolating factors which may be of importance to planners and policy makers in addressing fertility behaviour in Plateau State. Specifically the study aim will be achieved through the following objectives which are to:

i. examine the extent of sex preference in Plateau State.

ii. examine the factors influencing sex preference in the study area.

iii. discuss the demographic implications of sex preference in the study area.

iv. discuss the socio-economic implications of sex preference in the study area.

v. identify the most preferred sex in plateau State.

1.4 HYPOTHESIS

There is no significant difference in the incidence of sex preference among socio economic and demographic groups in Plateau State. The research hypothesis will be tested at 0.05 significance level

1.5 SCOPE OF THE STUDY

This study which is on socioeconomic and demographic implications of sex preference in Plateau State, will concern with the role the preference for sex of child plays in shaping fertility in the state. Special interest will be paid to the lineage system to unravel its connection with property, title inheritance, propagation of lineage name and fertility in the society. The study location is Plateau State, which comprise of 17 Local Government Areas (LGAs), submerged into the existing three senatorial Districts in the State. The study is limited to three LGAs of Shendam, Mangu and Jos North (i.e. one each from the three senatorial zones of the State). The study is expected to cover a period of six months (May to October 2014).

1.6 JUSTIFICATION OF THE STUDY

The importance of studying socio-economic and demographic implication of sex preference is potentially very important in shaping the fertility behaviour of the society. Information on reproduction attitude and motivation may be helpful in understanding the factors that affect fertility behaviour of a society. The study of fertility is often linked to the

population problem; the relationship between number of people with their social and economic resources. Population increase has been the central concern of population analyst, economist and social scientists. The concern has been acknowledged mostly if there is a high rate of fertility without a corresponding increase in economic production. It has been generally accepted that the growth, stability and development of any nation is anchored on the marriage and family.

The findings of this study may be relevant in establishing the mechanism for influencing the fertility behaviour in Plateau State in particular and in Nigeria general. It is intended to draw the attention of researchers, policy makers and other interested in population studies to another direction in our effort at finding lasting solutions to the problems of high fertility and increasing cases of divorce and separation in Nigeria. This study has the potential to provide information in the field of demography and sociology as well as contribute to knowledge which others may share. It may also serve as a model for survey on fertility in Nigeria and beyond. It has the potential to draw the attention of public policy makers to rising problems of divorce, broken homes and increase marital instability in our society due to the problems associated with sex preference

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Social differences between men and women have long translated into significant variations in occupational, economic, political or educational outcomes for them. A somewhat invariant trait of social structures is the gender gap in the access to resources and opportunities to the detriment of women and girls. However, the rapid social and economic advances in many countries, most especially in some parts of Asia, have generated a gradual change in this unequal distribution of resources between men and women. Through various processes linked to economic growth, such as improving access to education, urbanization and development of the service sector, many women have been able to obtain better jobs and strengthen their social and economic autonomy. In addition, changes in legal systems are challenging the most resistant forms of discrimination. In demographic terms, this improvement in the status of women has been accompanied by a gradual reduction in the number of pregnancies, lower maternity risks, as well as by significant gains in life expectancy. Even though there is still a large number of women who have not benefitted from these shifts and remain excluded, women today live longer than men on average almost everywhere in the world (UNDP, 2010).

These well-documented advances in women's position and status have, however, coincided with darker aspects of demographic changes in several parts of the world. Starting from the 1990s, the proportion of girls among children began declining sharply in many countries due to son preference. This process, caused to a large extent by the emergence of

prenatal sex selection, has intensified and expanded over more than two decades. As result, age pyramids are now increasingly skewed towards males among the younger generations, leading to a growing number of "missing girls". This historically unprecedented development is leading to an irreversible demographic masculinisation, which is bound to influence the future of affected countries over the next half century (UNFPA, 2012).

This research offers a review of conceptual issues on sex preference as well as literatures on the various implications of sex preference practices across the world, more especially in those parts of the world where the prevalence is pronounced. It starts with a brief overview of the concepts of sex preference before examining in greater detail the demographic and socio-economic implications of sex preference across the globe as.

2.2 CONCEPT OF SEX PREFENCE

Sex preference means the preference for a particular sex over the other. It is generally the desire, expressed or implied by parents in time to have a child of a particular sex. It is a form of gender discrimination and it is based on the belief that it is more socially, economically, religiously and politically advantageous to have at least a son or a daughter. It usually encompasses a variety of ways of treating boys differently from girls and can lead some families to undertake measures to ensure that at least one boy or girl is born.

Sex reference generally is the desire expressed or implied by parent, in time, to have a child of a particular gender. It is universal phenomenon in a sense that it characterizes parents worldwide. Sex preference therefore is a specific type of the general sex preferential attitude and behavior found among parents, who desire to have male siblings in their families (Ibanga, 2008). In the case of sex preference in children, the adaptive behaviors of parents include attempt to predict and control the sex of their choice, rationalize what they have, raise the child as if it were what they wanted, adopt a child of a preferred sex, engage in repeated trails of procreation in search of the preferred sex, or simply accept the situation as a reality

Across the world studies have confirm the existence of parental sex preference. For instance, in South Asia, sex preference is mainly manifested in the form of excessive mortality of female children. The excessive mortality of female children relative to males is found to be due to the discrimination against females in the allocation of food and health care within the household. In many South Asia societies, sons are the parent's only source of security in old age. This is particularly so where women have little economic independence or cannot inherit property. Son preference is also strong when daughters are more expensive to marry off than sons owing to the dowry system; in addition, women have few opportunities to earn income and invest household resources in female children (Cain, 1984).

In Pakistan, strong son preference has been noted because sons are regarded as economic assets and old-age security (Khan and Serageldin, 1977). More recent data from Pakistan further confirms the continued desire for sons In South Asia, cultural factors such as kinship systems and religious traditions also tend to value males more highly than females. In India and Bangladesh for example, traditional patrilineal kinship systems require women to marry out of their families of origin and after marriage not provide financial or even emotional support to their parents (Greenhalgh, 1991). In the Hindu tradition, only sons can pray for and release the souls of dead parents, and only males can perform birth, death and marriage rituals (Benjamin, 1991). An extensive social science literature documents that existence of son preference in south and east Asia and the implications of this child gender bias for fertility marriage and the relative well-being of boys and girls. There is little evidence, however, of parental discrimination in favours of sons in most of the developed world. Fertility patterns and surveys from many countries reflect a widespread desire for "Balanced families" with at least one boy and one girl. The observable allocation of resources within families is not strongly discriminatory: recent cohorts of young men and women receive comparable levels of education and sons and daughters appeal to be treated equally in term of parental transfers of wealth. (taubman, 1991).

Another socio-cultural explanation of sex preference and high fertility in certain societies was revealed by Wale (1997). In the study of the Yoruba people of Western Nigeria, families of fewer than four children and with no sons were looked upon with horror. Wale reports that even if it could be guaranteed that two children would survive to adulthood, Yoruba parents would find such a family very lonely and would always prefer that the two survivors be males so that they can get married in the future and bring in more members for the family. Because, many of the features of larger family sizes which have come to be negatively valued in the west, such as noise and bustle, are positively valued by them.

The reasons why people want children vary from society to society. They could be economic, social, political, traditional as well as religious. These reasons help to guide couples in deciding on the sex and number of children the desire. In most traditional societies, manhood is defined in term of the number of male children a man is able to have. Other factors he noted include variation in the average age at marriage, changes in marriage rate such as those resulting from alteration in the balance of the sexes, trends in divorce, medical advances and many other factors. Chow (1998) writing about fertility in Taiwan observed that tradition has been one of the factors inhibiting reduction in fertility rates in most countries of the world. According to him, wealth, longevity and many children (sons in particular) have been regarded as the three major sources of happiness in Taiwan.

The relative value of male and female children is the outcome of many economic, social, cultural and demographic factors as well as the role assigned to sexes by the society. Further, it has been pointed out that in many third world countries patrilocal residence male inheritance, and payment of dowry as a prerequisite for marrying one's daughters are

generally associated with son preference while in a few societies which follow matrilineal system and where payment of bride price rather than dowry is customary, the daughters are preferred. A review of literature shows that preference for predominance of sons with atleast one daughter is very common around the world. Studies about U.S.A., Latin America, Middle East, India, Pakistan, Bangladesh and Far East were conducted but sub-Saharan Africa was excluded because data for these areas were 'either insufficient or nonexistent'.

Results of some of the studies from the Middle East and North Africa summarised reveals that there is a strong son preference in rural areas of Algeria, Egypt and Tunisia. For Turkey and Lebanon some preference for male children was indicated, while for Morocco no evidence of preference for male children was found. It was further, revealed that North African countries had a stronger son preference than the Middle East, and rural areas had stronger son preference than the urban areas. In Latin American countries an overwhelming preference for boys was found in men. Religious differences were not clear since in Middle East countries the preference for sons was equally strong in Christians and Muslims. In some countries, higher education was related to lower son preference but in Korea, India and Taiwan preference for male progeny was found to be equally prevalent in all educational groups. Some other studies from India have also revealed that desire for sons is relatively stronger in males, -'lower income groups and those living in rural areas.

The high premium placed on sons as against daughters in the developing societies, is due to a variety of economic, religious and social reasons. Sons are considered important for help in agricultural production, security in times of old age or sickness, performance of prescribed religious rituals and kinship continuity. The preference for male progeny is, however, not unique to the developing societies. To some extent the preference for a son also exists in the developed countries. The difference is thus only a matter of degree. Although not much empirical evidence is available, it has been suggested that with regard to children tropical Africa has pursued a strategy of maximum growth in which no particular preference was given to the children of either sex. In order to operate a system of bride wealth transactions daughters are needed to bring in wealth if sons are to acquire brides. According to Goode however, the high emotional significance of the son-mother relationship seems to be salient in the African societies and this is "probably in part an outgrowth of the impact of polygamy on the son-mother tie; the son was emotionally dependent on his own mother whose uniqueness was emphasized by the existence of other members and other sons in the family. Further, it has been reported that sons are the support of their fathers. Chiefs in particular, stress this. The more sons and son's sons a chief has, the more secure does he feel... they support him in all circumstances. The economic importance of male children in Ghana is also obvious from the fact that while less pressure is put on the daughters to make contributions towards the support of their parents. Sons are morally obligated to take care of their parents in old age or in sickness and if compared with daughters, they can put more hard work on fishing and farming for providing support to their parents and other relatives. In such tribal societies a person who

abandons his relatives is considered as 'good for nothing. The effect of sex preference on the desired number of children or actual fertility is available from some studies but evidence in this regard is less conclusive. With simulation models it has been shown that in the face of high mortality rates, parental desire for surviving sons would be sufficient explanation of high observed fertility in the developing countries.

On the basis of analysis of data from the United States it has been found that birth intervals were largest for women having equal number of boys and girls, intermediate for those having more boys than girls and shortest for those having more girls than boys. If birth intervals could be taken as an index of fertility, then it seems that unbalanced sex composition of the children tends to increase fertility levels. Based on the analysis of American fertility data, in another study, it has been observed that sex preference operates to affect family size if the desired sex composition is not readily achieved.

Though the above studies, among others, have found a positive effect of boy preference on reproductive desires and behaviour, there are also studies which have failed to find any such relationship. In order to see the relationship between desire for sons and fertility behaviour, four bodies of data have been analysed in another study - two from North India, one from East Pakistan (now Bangladesh) and one from Morocco. Further to test the hypothesis that in countries with strong son preference, limitation of family is constrained by the strong desire to ensure the survival of one or more sons. The evidence to the contrary was found and families having no sons or a predominance of daughters tended to have fewer children. In another

Study carried out in Kenya, East Africa, it was observed that the desire for additional children was not a function of parental preference for one sex. In this study the desire for additional children was found to be equally strong in those having only male children and those with only female children. Although the subject of sex preference of children has been studied by many scholars in diverse cultures, there is no systematic study of correlates of parental sex preference. Furthermore, the studies of this kind are very few in Africa. As mentioned before, Williamson (1976) who studies sex preference of children all over the world excluded sub-Saharan Africa because of either insufficient or nonexistent data. There is thus a need for studying sex preference among African populations where fertility rates are very high. In addition, the attitudes of both husbands and wives should also be taken into account in order to conduct the study of this kind to serve the Population policy best.

2.3 SEX PREFERNCE AND DEMOGRAPHIC IMPLICATIONS

In Nigerian, and indeed African culture, almost every one values sons above daughters. However, a family with at least one boy in the midst of many girls is considered not too bad. There is also a situation whereby if all the children are boys, the women would

keep trying for girls and men marry second, third or even fourth wives just to get a male child. Yet, it is difficult to find a man who takes a second wife because the first wife could not have a baby girl. It is often said that no matter the number of children one has, there is no satisfaction if he/she does not have a boy. Generally, since majority of men have the conception that women are responsible for the sex of children they born, they are usually at the receiving end when a family has no male child - they have to keep trying until they either have one or are finally unable to do so. In the process of doing this, they often open themselves to all manners of health hazards resulting from pregnancy complications. Moreover, the women have to endure long childbearing periods in search of a male child to secure their marriages as there are other women very ready to take one's place in the marital home. While the women are usually worried about their, marriage security and stability, the men is more concern about issues such as successor to continue bearing the family name in a male dominated society, breadwinner, and .and social respect among others.

It has been argued that the reason why parents prefer sons to daughters is that they are typically supported in their old age by son(s), whereas girls usually move away from their families. Hence, a son is more desirable as an investment and "the traditional idea that a boy belongs to us and a daughter to someone else" has become wide spread (Odimegu, Omideyi and Okemgbo, 2001; Eguavoen, Odiagbe and Obetoh, 2007). The other explanation is that sons are needed to maintain the family line. This definitely has implication for fertility. If families desire one or more sons, then they may have larger families than would otherwise have been the case, and this would create, according to Rahman and Davanzo (1993), "a significant barriers to further fertility decline" in many countries. It is also worth to note that the desire of parents to have any particular sex of a child has serious implication for fertility and the health of the mothers. Even though the traditional value attached in" many African societies to male children as a source of old age security is being brought to question as Isiugo-Abanihe (2003) found that though among the Igbos of eastern Nigeria males are preferred, it is daughters who actually fetch parents heavy wealth by way of bride-wealth. No matter the level of awareness created and legislation on the desirability and equality of the sexes. No doubt, the process of attempting to realize the ideal family composition has serious fertility and health implication for the society, especially women who must pass through the harrowing experiences of pregnancy and childbirth.

In an earlier study, Arnold and Kuo (1984) observed that cultural traditions and random biological process, rather than the general levels of development determine sex preferences. Oreland (1983) observed the effect of sex preference in fertility behaviour and found that preference for a particular sex sustains higher level of childbearing than would be the case if parents were indifferent to the sex of their children. He also observed that couples continue to bear children beyond their overall desired family size in order to achieve some favoured sex.

According to Isiugo-Abanihe (2003) the reasons for son preference range "from concern over successor ship which is influenced by exogamous and virilocal patterns of marriage, to the persistent belief in the breadwinner system, inheritance rights, and the coarse utilitarian needs for manual labour on the farms". Isiugo-Abanihe further agreed that both male and female children are important in their own right because of the different roles they perform, yet the participants emphasized the need for a balance between sons and daughters, the necessity of having somebody to carry on the family name compel parents to prefer sons to daughters. The seriousness of having a son is very strong in most parts of Nigeria where a male child is held in very high esteem. It is not surprising therefore that parent invest more in male children than female ones, so that in many households, male children attend school while the female are given in marriage.

Many people are usually of the opinion that investment on a daughter is lost once she marries but investment on a son is permanent in the family. The "Preference for sons on grounds of their economic role indicates that the current generation of spouses is poised to perpetuating the bread winner system and to recycle sexual inequality, their level of education and enlightenment not withstanding" (Eguavoen, *et al.,* 2007). This means that there is not going to be any significant difference between the old generation and the new one in terms of fertility. It follows therefore that sex preference holds important implication not only for fertility and maternal health, but also for female equality and liberation struggles. This attitude also has very serious implications for women empowerment programmes of action, especially when women are the vessels used during socialization process to perpetuate this ideology of inequality of the sexes.

Studies have shown that sex of children is the highest determinant of family size. Normally, families may decide to have a particular number of children, say 2 or 3, however, the reality may present all together different results as unmet needs in the sex composition of the children places more demands on couples to satisfy their desires. The continued fertility activity has the potential to encourage population growth and undermine the health and safety of women. This has the capacity to impact negatively on the quality of the population; as the fertility increases the tendency is that amenities are not going to be enough for the teeming population, such as hospitals, schools etc.

A preference for boys that may result in sex selective practices is a powerful social and cultural force in many countries and communities in the world of which Nigeria is not left out. Sex preference especially male child, has a huge and harmful impact on the lives of women and girls, both during a woman's pregnancy and after a daughter is born. And it has an equally important impact on family life, demographics, health care and public policy at the regional and national levels. For instance, strong son preference, particularly in north and northwest India, has been associated with practices of female infanticide, discrimination against daughters, and recently, sex-selective abortion, which account for millions of 'missing' girls in India's population (Sen, 1990; 2001). Guilmoto (2009) speculated that the perseverance of

son preference, and the unprecedented pace of 'demographic masculinization' as indicated by increasingly skewed sex ratios at birth, in urban, relatively affluent, low fertility in northern part of India. Jesuden (2009) opined that sex selective practices and sex ratio disparities are rooted in and expressions of son preference and sexism, and perpetuate the stereotypes and prejudices that lead to increasing gender-based discrimination and disparities.

2.4 FACTORS INFLUENCING SEX PREFERNCE

The issue of sex imbalances received wide publicity for the first time in 1990 when Nobel Prize winner AmartyaSen drew attention to the apparent deficit of women in many parts of Asia. His analysis emphasized that a large number of women were "missing," as evidenced by the millions of women that should have been found in Asian countries had their distribution by sex been similar to what was observed elsewhere in the world. In the late 1980s, this gender gap was chiefly determined by excess female mortality, a testimony to the unequal benefits of the progress in health conditions during the twentieth century. As the results of the new round of censuses in China and India came out in the 1990s, statisticians started to notice that the proportion of young boys among children was swelling, an increase that could not be attributed to mortality differentials. In the following years, fieldwork surveys and in-depth statistical analyses demonstrated that the new sex imbalances were caused by selective abortions of female foetuses (Das Gupta and Bhat, 1997; Park and Cho 1995; Attané and Guilmoto, 2007).

According to Chahnazarian(1988) and Waldron (1998)selective pre-implantation diagnosis, sperm sorting, abortion after prenatal sex determination, infanticide caused by relative neglects and selective migration are factors that are directly related to social decisions and ultimately to gender preferences, including active and passive discrimination against girls.

Moreso, many factors affecting the proportion of the sexes are obviously unconnected to gender discrimination. Among them, biological factors play a central role. To start with, Parazzini*et al*, (1998) and Grech*et al*, (2003) noted that the probability of conceiving a male embryo is slightly higher than that of conceiving a female embryo in the human species. In spite of the fact that intra-uterine mortality (spontaneous abortions) appear to be slightly more frequent for male foetuses, the resulting sex ratio at birth in the absence of social manipulations is usually close to 105 male births per 100 female births.

On the other hand, the sex distribution of the child population has long been distorted by the presence of higher mortality among girls, especially during the first two years of their life. These higher mortality risks are the results of many factors usually captured under the label of girl neglect. They relate to various discriminatory attitudes vis-à-vis girls in postnatal care, breastfeeding, food allocation (both quantity and quality), proper clothing, parental surveillance, recourse to health facilities (frequency and expenses), immunization, etc. As for deliberate female infanticide, which was earlier reported in parts of China and India, it has

mostly disappeared during the last two decades thanks to the relentless fight conducted by local authorities and civil society, and the emergence of prenatal selection as an alternative method to prevent unwanted female births. In the absence of specific discrimination against girls, mortality rates among boys across the world tend to be on average higher by about 20-25 per cent. As a result, the mere fact that female mortality rates observed in one area may be equal to or higher than equivalent male rates signals the presence of discriminatory behaviour against girls (Hill and Upchurch 1995; United Nations, 1998; Fuse and Crenshaw, 2006; United Nations, 2011).

The biological and environmental female advantage in mortality has not resulted in a global predominance of women because of the severely distorted population structures in many countries, especially in Asia. In the past, the female biological advantage in survivorship has been negated by active discrimination and the differential mortality between men and women which has been the main driver behind sex imbalances. Women's lives were shorter than men's in many countries; excess female mortality is, in fact, a telling manifestation of the lower value of women and the corresponding preference for the male sex. Traces of such discriminatory attitudes and their impact on mortality risks are still clearly visible in many Asian societies in particular and African countries in general (UNFPA, 2012).

Across the country, in spite of the significant campaign for the equality and desirability of both sexes of children, empirical evidence and reality indicate that the practice of child-sex preference is still rampant in Nigeria (Eguavoen*et al*, 2007), especially in the rural areas. Data available from the Nigerian National Demographic and Health Surveys are silent on the issue of sex preference; attention is paid mainly to family size and not to the preferred sex composition of the family. The problem with this is that the preferred family size is usually mediated by the actual sex composition of the children. For example, a couple who wishes to have just three or four children may have to alter this preference if the actual fertility outcome does not satisfy their hopes and aspiration with regards to sex composition. According to the Nigerian Demographic Health Survey (NDHS) (2003), rural women want an ideal number of 7.0 while the urban women want 6.0 children with the men preferring 9.8 and 6.6 respectively, for rural and urban areas. However, the actual fertility outcome oftentimes exceeds the expectation of couples.

It has been noted that relative to women, Nigerian men want more children and are less likely to approve of family limitation (Isiugo-Abanihe, 2003); the higher male ideal number of children could be attributed to polygyny since they may expect a large family size from two or more wives. Even the practice of polygyny in some cases is brought about by the desire for more male children since this is a patriarchal society with predominant cultural practice.

Although reliable and comprehensive data are still very scanty in most African countries, evidence abound to show that the preference for a particular sex among couples

(especially male child) is prevalent and has been found to have contributed immensely to large family size being experienced in most developing countries. The value traditionally placed on a particular sex is higher for one sex than the other. This, according to Ahmed (1984), was the reason for the low status accorded to the females relative to the males in many African societies.

On the surface, gender discrimination often boils down to the fact that a girl constitutes a source of "impoverishment" for her family, while delivering a boy is seen as more rewarding. This suggests a simple cost-benefit framework applied within a patriarchal system in which gender roles and trajectories diverge, opposing the specific "costs" related to girls and the "benefits" accruing from boys. What makes transnational comparisons difficult is that gender discrimination is always expressed in a local cultural idiom coloured by enduring social, ethnic or religious traditions peculiar to specific settings. For instance, in South Asia, girls are perceived to be especially vulnerable as they carry the family honour. This pressure explains the emphasis on early marriage, including among children, and accounts also for a high level of violence against women and wife-battering.

In such an environment, raising sons appears a more sound social and economic option than having daughters, who will end up living in and working for another family. As a result, each cultural setting is replete with customs and sayings celebrating the birth of a son, lamenting that of daughter, and mocking the upbringing of daughters by describing it as "watering a flower in the neighbour's garden". Husbands may be entitled to divorce sonless women and take a second wife. Sonless parents may therefore feel permanent anguish in the face of their entourage's reaction, which ranges from discriminatory customs when a girl is born to constant pressure applied by mothers-in-law, the extended family, the community, friends, and colleagues. Very often, when asked why they prefer sons to daughters, women and men mention social pressure as their main motive, rather than economic benefit.

Moreso, Wood and Bean (1977) emphasized that parent's gender preferences for children are embedded in cultural and religious traditions and community norms, shaping individual attitudes and behaviour. Children of a particular sex are often desired in order to provide certain utilities or to minimize financial or psychological costs. In traditional societies, male offspring are presumed to have greater economic net utility than daughters, since they provide assistance in agriculture, as well as a primitive social security system. In some situations, however, daughters are thought to be more reliable in providing old age assistance, particularly emotional support. They are also frequently desired in order to help with household tasks or to care for younger children. Sons, on the other hand, quite often fill sex-specific religious roles and insure kinship continuity in patrilineal societies. There is some evidence that the desire for additional children (if there is any at all) is curtailed once the minimum number of surviving male children is achieved. To support the above statement, Hoffman and Hoffman (1973) developed a detailed theory of the value of children. They list a number of categories, describing potential values that parents' might attribute to their

children, such as: expansion of the self, affiliation, accomplishment, social comparison, economic utility. Thus parents may desire a sex mix because of the different benefits that accrue from each sex for each of the categories.

Also, Jacobsen, Moller and Engholm (1999) noted that each partner, for example, might prefer to have at least one child of his or her own sex for the purpose of companionship. Further evidence that psychological factors are associated with gender preferences is provided by Bulatao (1981), who discussed values and disvalues attached to children across different parities in the Philippines, Korea, and the United States. His findings suggest a multistage pattern: At low parities, emotional and psychological rationales for having any children at all dominate. At higher parities, balancing the family becomes important. In particular, specific gender preferences are found to be most prominent at the third and fourth child. Finally, parities above five are characterized by potential economic benefits from children.

On the other hand, Pande and Malhotra (2006) were of the view that the preference for sons is motivated by economic, religious, social and emotional desires and norms that favour males and make females less desirable: Parents expect sons but not daughters to provide financial and emotional care, especially in their old age; sons add to family wealth and property while daughters drain it through dowries; sons continue the family lineage while daughters are married away to another household; sons perform important religious roles; and sons defend or exercise the family's power while daughters have to be defended and protected, creating a perceived burden on the household. Motivations underpinning parental child sex preference include abeyance of traditional cultural beliefs and social customs, and potential economic utility. Sons are often preferred for family labour, for the income they can earn, the financial security they can provide elderly parents, their continuance of family lineages, or to follow religious teachings (e.g. for Hindus, sons kindle the funeral pyre of deceased parents). Moreso, to Campbell, 1991; Niraula and Morgan 1995) daughters importantly perform familial duties or household chores. Parents' preference for sons is common in countries in East Asia through South Asia, to the Middle East and North Africa. There are also specific local reasons for son preference, in India, such as lack of ability to save or national pensions, the poor reliance on children for old age support, a task that under patriarchal norms falls on sons as well as high and rising dowry payments are argued to place families with daughters at a disadvantage, and it has even been argued that families depend on males for physical protection (Chung and Das Gupta, 2007).

The most commonly mentioned reason for women wanting to bear sons according to Hesketh, Li and Zhu (2011), centers on obligations to the husband and his family, in addition to motivations of personal feelings of responsibility and duty, husbands and mothers-in-law apply pressure for women to bear sons. Men and women also occasionally sanctions against women who do not comply with the wishes of their husbands or husbands' families regarding childbearing. However, some of the potential consequences for wives failing to produce sons include divorce, expulsion, beating, or having the husband take a second wife.

A second often-noted social justification for son preference involves the importance of sons for the continuation of the family line. Where multigenerational patrilineal households are common, resources are pooled between parents and their male children. As a result, the income from married sons and their spouses will also benefit their parents. It is a crucial dimension of the traditional economy, since sons usually work on their family's land or take up their father's business. Multigenerational cohabitation also means that parents may enjoy constant financial, emotional and other kinds of support from their sons' families. In contrast, married daughters are not supposed to contribute to their parents' expenses after marriage; when they do, even substantially, their contribution goes almost unacknowledged as if support from married girls constituted a potential source of discredit.

For instance, the patrilineal nature of Nigerian society dictates that family name, and with its material resources and the existence of the family itself, is passed down from father to son. Resultantly, when women marry, they become members of the family of the husband and cease to be part of the father's family. This influence on desired sex composition is very much related to pressure from husbands, as continuing the family line and passing on material resources is noted to be especially important to men. Pande and Malhotra (2006) in their found in India found that mother's education is the single most significant factor in reducing son preference, and access to media, also significantly reduces son preference, whereas, wealth and economic development do not reduce son preference.

2.5 SEX PREFERENCE AND SOCIO-ECONOMIC IMPLICATIONS

Women are best understood as illuminating the extraordinary pressure (including verbal and physical abuse) that some women face to have sons, and their relative powerlessness in their own family and social circles (Puri, Adams *et al*. 2011).Malhotra and Pande (2006) attributed son preference phenomenon in India to implications that range from skewed sex ratios, female feticide and higher child mortality rates for girls. It is also noted that son preference has a huge and harmful impact on the lives of women and girls, both during a woman's pregnancy and after a daughter is born as well as the fact that it has an equally important impact on family life, demographics, healthcare and public policy at the regional and national levels.

DeSilva (1993) contended that son preference partly explains the low contraceptive use and high total fertility rates (TFRs) in less developed countries. The researcher explained that the desire for sons affects preferred family size, in turn influencing contraceptive use. For instance, couples continue bearing children despite attaining their desired family size because they are dissatisfied with their offspring's sex; there is a need for additional sons, not until the desire for sons is satisfied, the fertility preferences and contraceptive behaviour will remain unchanged. This above emphasis is further confirmed by Das (1986) who reported that

contraceptive use among Indian couples rose with an increase in the number of existing sons and the exception being couples with only sons. Ushie, Enang and Ushie (2003) contended that as people continue to reproduce in the hope of getting the required number of children, the health of the woman is constantly at the threat posed by pregnancy related complications, and at the same time, the population growth rate of the country increases constantly. The researchers further noted that the problem of continued reproduction in the hope of getting the desired child-sex composition is that the longer it takes to produce a child with favoured sex, the more children are born to that family and the more the aggregate national population. Moreover, the more the health of the women is put at risk. Predisposition of mothers to continuous trials and struggles to achieve the desired sex has consequences and places the health of mothers at risk in every attempt; such as miscarriages or loss of pregnancies.

According to Sen (2003) for centuries, son preference has led to postnatal discrimination against girls; this has resulted in practices ranging from infanticide to neglect of health care and nutrition, often ending in premature mortality. In the 1980s, ultrasound technology started to become available for diagnostic purposes in many Asian countries, and the opportunity to use the new technology for sex selection was soon exploited. In countries where there is a combination of son preference, a small-family culture and easy access to sex-selective technologies, very serious and unprecedented sex-ratio imbalances have emerged. These imbalances are already affecting the reproductive age groups in a number of countries, most notably China, South Korea and parts of India (Hesketh and Zhu, 2006; Sen 2003; Park and Cho 1995).

For instance, an overview of the consequences of sex preference on sex ratio at birth across Asia by Park and Cho (1995) showed that Sex ratio at birth (SRB) which is defined as the number of boys born to every 100 girls, and is remarkably consistent in human populations at around 105 male births to every 100 female births, with South Korea being the first country to report a very high SRB, because of the widespread uptake of sex-selective technology in South Korea which preceded that of other Asian countries. The SRB started to rise in South Korea in the mid-1980s, and by 1992 the SRB was reported to be as high as 125 in some cities. China soon followed. Here, the situation is complicated by the one-child policy, which has undoubtedly contributed to the steady increase in the reported SRB from 106 in 1979, to 111 in 1990, 117 in 2001 and 121 in 2005 (Zhu, Li and Hesketh, 2005). Because of China's huge population, these ratios translated into very large numbers of excess males. In 2005 it was estimated that 1.1 million excess males were born across the country, and that the number of males under the age of 20 years exceeded the number of females by around 32 million (Zhu, Li and Hesketh, 2005). However, in China, there is now clear evidence that sex-selective abortion accounts for the overwhelming number of "missing women" (Das Gupta, Jiang and Xie2002; Sen, 2003; Zhu and Hesketh 2009).

According to Buss and Schmitt (1993) prenatal determination of sex became accessible only in the mid-1980s, and later than that in rural areas; therefore, the large cohorts

of surplus young men have only now started to reach reproductive age. Because of this, the consequences of this male surplus in the reproductive age group are still largely speculative. However, there is no disputing that over the next 20 years in large parts of China and India there will be a 10%–20% excess of young men. These men will be unable to marry, in societies where marriage is regarded as virtually universal, and where social status and acceptance depend, in large part, on being married and creating a new family.

Moreso, Zeng, Tu and Gu (1993) emphasised that when there is a shortage of women in the marriage market, women have the opportunity to "marry up," inevitably leaving the least desirable men with no marriage prospects. To them, the result is that most of these men who are unable to marry are poor, uneducated peasants and in China these men are referred to as "guang gun," meaning "bare branches," signifying their inability to bear fruit. This is further supported by Hudson and Den Boer (2002) who noted that in China, 94% of all unmarried people aged 28–49 are male, and 97% of them have not completed high school.

For example son preference which often results to male surplus also comes with its own social consequences and a number of assumptions have been made about the effects of the male surplus especially on those men who are unable to marry. First, it has been assumed that the lack of opportunity to fulfill traditional expectations of marrying and having children will result in low self-esteem and increased susceptibility to a range of psychological difficulties (Hudson and Den Boer, 2002). It has also been assumed that a combination of psychological vulnerability and sexual frustration may lead to aggression and violence in these men (Barber, 2000).

There is good empirical support for this prediction: cross-cultural evidence shows that the overwhelming majority of violent crime is perpetrated by young, unmarried, low-status males (Messner and Sampson, 1991). To further buttress the above point Hudson and Den Boer (2002) hinted that in China and parts of India the sheer numbers of unmated men are a further cause for concern. Because they may lack a stake in the existing social order, it is feared that they will become bound together in an outcast culture, turning to antisocial behaviour and organized crime, thereby threatening societal stability and security.

It is also thought that large numbers of excess men will lead to an expansion of the sex industry. The sex industry has expanded in India and China in the last decade (Dandona, Dandona, Kumar, 2006; Tucker, Henderson and Wang 2005). However, the part played by a high sex ratio in this expansion is impossible to isolate; there is no evidence that numbers of sex workers are greater in areas with high sex ratios. The recent rise in numbers of sex workers in China has been attributed more to increased socioeconomic inequality, greater mobility and a relaxation in sexual attitudes than an increase in the sex ratio (Hesketh, Zhang and Dong, 2005).

Conversely, there may also be positive aspects to sex preference practices. First, access to prenatal sex determination probably results in an increase in the proportion of wanted births, leading to less discrimination against girls and lower female mortality (Goodkind, 1996). As Sen (2006) noted that India, South Korea and China have all reported reductions in differential mortality in the last decade. Secondly Arnold (1997), also argued that an imbalance in the sex ratio could be a means to help to reduce growth in the population and thirdly South and Trent (1988) also opined that as the numbers of women in society fall, they become more highly valued and their social status increases, not only will this benefit the women's self-esteem, mental health and well-being, but the improved status of women should result in reduced son preference, with fewer sex-selective abortions and an ultimate rebalancing of the sex ratio.

Amin and Mariam (1987) opined that sons or daughters preferences in a society or among individual couples may lead to differential treatment of children according to their sex. In most cases where differential treatment has been observed, female children are disadvantaged. Discrimination may affect care, educational opportunities, feeding practices, household chores and the distribution of family resources. Discrimination against girls has been widely reported in countries where son preference is strong, whereas, serious discrimination or outright neglect of female children has been documented in a number of studies, particularly in South Asia, the Middle East and North Africa.

Strong son preference in some countries has been found to lead to the discriminatory distribution of food resources in favour of boys and to the disproportionate malnutrition of female children. Even when girls and boys are provided with an equal amount of food, boys may be given more nutritious and protein-rich food. There is some disagreement about whether discrimination in feeding practices in itself causes excess female mortality in children, but SundariRavindran cites over-whelming evidence that differential feeding leads to differential nutritional status between boys and girls in societies where son preference is strong. The duration of breastfeeding may also be affected by the sex of the child. Women who bear a child of the less preferred sex may stop breastfeeding earlier to increase the probability of getting pregnant again sooner, or may try to get pregnant sooner if they have had a child of the less preferred sex and then stop breastfeeding as soon as they succeed. Once mothers have reached the desired sex composition of their children, they might breastfeed their final child of the desired sex for a longer period. On the other hand, some mothers may wean children of the preferred sex earlier or provide them with supple- mental food at an earlier age in the belief that such practices are advantageous to the child.

In a nutshell, Guilmoto (2013)outlined the implications of sex preference that favours the male child to include the following; delayed marriage among men which results to increased resort to prostitution, trafficking, increasing competition among unmarried men which impact on savings and education investments, increase in involuntary non-marriage which results to inability to perpetuate the family line, as well as increased frequency of

exploitation of women, female trafficking, gender-based violence, pressure on women to marry and bear children, Less political voice, change in marriage patterns and family structures, potential increase in antisocial behaviour, social unrest, crime, aids prevalence, uncontrolled migrations, violence

CHAPTER THREE:

STUDY AREA AND RESEARCH METHODOLOGY

3.1 Location.

Plateau State is located in the Middle Belt Zone of Nigeria and lies between latitudes $8^0$37″N and $10^0$30″N and longitudes $7^0$30″ and $8^0$37″E. The state shares common boundaries with Bauchi State in the north, Taraba State in the east, Nasarawa State in the south and Kaduna State in the west. The State has an area of land covering 26,899square kilometres (Timothy, 2006), (See figure 3.1)

Presently, Plateau state comprises of 17 local government areas which include Bassa, Jos-North, Jos-East, Jos-South, Riyom, Barkin Ladi, Bokkos, Mangu, Pankshin, Kanke, Kanam, Langtang-North Langtang-South, Mikang, Wase, Shendam and Qua'an Pan LGAs.

3.1.1 Geology and Relief

Geologically, the Jos-Plateau is a part of the Precambrian to Cambrian and Jurassic Northern Nigerian Crystalline Complex. There is nothing specific, nothing particular to the Jos Plateau which cannot be observed in other parts of the Nigerian Crystalline Complex. In other words the Jos Plateau is not geological unit because it cannot be demarcated on the basis of the geological criteria. It is a purely geomorphologic or relief unit with elevation above sea level as the only feature distinguishing it from the rest of the crystalline area.

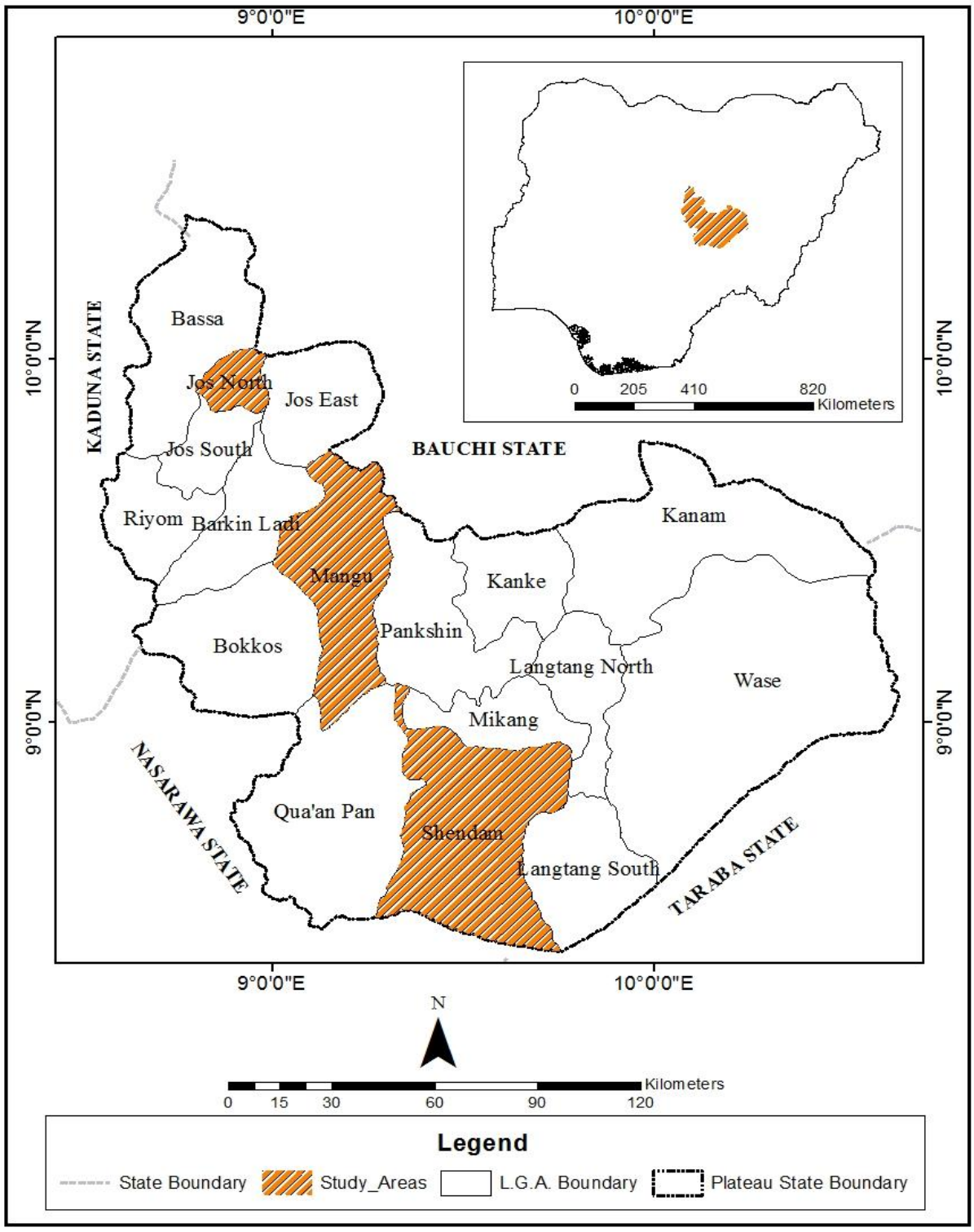


Fig. 3.1: Study Area and selected LGAs

Source: Adopted from Map of Plateau State (2004)

In the Late Precambrian, from 1 billion to 650 million years ago, the area which is now the Jos Plateau formed geosynclines – a sea similar to the present Cambrian Sea or seas of Indonesia. To this sea, rivers deposited sand and clay from the surrounding land. During hundreds of millions of years on the continuously subsiding bottom of this sea was formed a sedimentary sequence, something like cretaceous sediments of Benue Trough probably more than 10km thick. The whole sedimentary series was "sucked down" by the slow, downwards directed tectonic movements, probably at a rate 1 – 5mm per year, to the depth of, probably again, some 50km. At this depth, under high pressure of the rock overburden (about 12,000kg/cm^2 equivalent to the column of water 120km deep) and high temperatures somewhere between 1,000 to 3,000^{0}C, particles of sandstones and clay stones recrystallized forming all the variety of metamorphic rocks, the most common being gneisses, granite-gneisses and migmatites. "You will easily recognise a metamorphic rock in the field from its banded texture. (Note the terminology: texture is the special arrangement of crystals forming the rock, while the term "structure" refers to the size of crystals; for example – coarse grained structure). So, in the metamorphic rocks of the Jos Plateau – quartz, feldspar and biotite are arranged in pararrel bands.

Still in late Precambrian, also during early and middle Cambrian, several intrusions of magma took place emplacing within the metamorphic rocks the so called "Older Granites". The intrusion of the granites could be accompanied by volcanism; if so, the volcanic cones – together with the products of this vulcanism lavas and ashes – were long ago removed, during a long period of denudation, from the late Cambrian almost to the present. During this long period of denudation, the next (second) phase of intrusions took place during the Jurassic period (some151 to 162 million years ago) leaving so called Younger granites. One can easily recognise granite in the field. It consists of the three minerals, the same which are present in the metamorphic rocks but this time not arranged in an orderly way. Quartz from smalls crystals slightly blue and "greasy"; feldspar is usually larger than quartz, white or pink and "glassy". The third mineral mica is represented either by black biotite or more seldom by white, silvery glittering scales of muscovite. There are also very rare grains of other black minerals – among them diminutive black grains of tin ore (cassiterite), but it is not possible to differentiate them from biotite in the field. One also cannot easily recognise the difference between "Younger Granite" and "Older Granite" in the field.

The area which is now the Jos Plateau, it seems that from the time of the intrusion of Younger Granite until the present day 2 to 3km of rocks were weathered and subsequently removed. In the late Jurassic and early Cretaceous eroded material was carried by rivers to the Atlantic Ocean which had just started to open; in the late Cretaceous, after the Benue Trough and Niger Basin were filled by sediments, eroded material was carried to the Chad and Sokoto Basins. During the Tertiary, probably early in the Miocene there was an episode of vulcanism on the Jos Plateau resulting in deposition of so called Older Bassalts. These cover a very small area. Denudation continued during this time of volcanic activity. At the end of the Tertiary

period, which probably lasted for about 3 million years, rives filled their valleys with clayey alluvium up to 50 meters thick. Soon however, probably in the late Pliocene or early Quaternary, the area was elevated to form the present Jos Plateau and denudation resumed. Elevation of the Jos Plateau was accompanied by volcanism which left the so called Newer Basalt, dating from 2 to 0.5 million years ago (Timothy, 2006).

3.1.2 Geomorphology of Plateau

The land surface of the Jos Plateau consists of plains, hills and depressions. The plain spotted by isolated hills and occasionally dissected by river valleys, was formed towards the end of the Tertiary period, during the Miocene and Pliocene and immediately after the extrusion of the Older Basalts, probably between 5 and 2 million years ago. It was a swampy lowland, probably elevated not more than 100 to 200 meters above sea level, with isolated rocky hills called "inselbergs" rising up to 100m above the plain. Rivers meandered between swamps leaving alluvium up to 50m thick in places. In the upper part of this clayey alluvium a duricrust was formed (also called laterite).

About two million years ago the whole area of the present Jos Plateau was uplifted and the Jos Plateau came into existence. This occurred shortly before the end of the Tertiary. The uplift was accomplished by volcanism and denudation. There are still several well preserved volcanic cones on the Jos Plateau, from 0.5 to 2 million years old (potassium-argon analysis by quoted Morgan et al., 1979). Basaltic lava flows, the Newer Basalt, fill the earlier eroded valleys, often modifying pre-existing drainage networks. During and after extrusion of Newer Basalt, rivers dissected the depositional plain of the Jos Plateau which is called "the Lateritic Surface or the Lateritic Summit Surface". The rate of erosion was low and valleys which are located on the plain are characterised by broad, shallow, saucer-shaped cross-sections. Only in the more recent centuries, probably due to man-made deforestation, has the process of river erosion accelerated, resulting in rejuvenation of many river valleys. Valleys cut in outcropping crystalline rocks are mostly v-shaped. Wherever a river eroded its channel in a tectonically fractured zone, river valleys are mostly "box-shape".

Above the plain rise hills of three types. The first type is volcanoes, about 0.5 to 2 million years old, all located the older Granites or Precambrian metamorphic rocks. It is interesting that no single volcano is located on the Younger Granites. The other hills are of mesa type. They are relics of the late Tertiary depositional surface, so called (lateritic summit surface). They are formed of clayey soft 'overburden' which is partly a product of weathering in situ of crystalline rocks and partly alluvium and diluvium deposited in the Pliocene at the same time as the formation of the depositional lateritic surface. All mesa hills are capped by laterite (also known as duricrust or curirase). Mesa hills are located almost exclusively on

Precambrian rocks where the soft overburden is thickest, and only very few of them can be found on the Younger Granites where the overburden is normally thinner. It is unlikely that the mesas owe their existence to protection of laterite cap-the laterite cap was almost continuous. It is therefore reasonable to assume that mesas represent ruminants of the duricrust geostional surface preserved from denudation due to their location on the watershed. Nevertheless, the characteristic flat topped shape of mesas is caused by the presence of the lateritic protective cap. Otherwise mesas would be dome-shaped.

The last one of the three types of hills on the Jos Plateau is the inselberg. Inselbergs are exclusively granitic hills formed rather from the Younger or the Older granite. No inselberg on the Jos Plateau is formed of metamorphic rocks. The origin of inselbergs is not yet clear, but there are two main theories. According to the erosional theory the top of the crystalline complex is undergoing deep, differential chemical weathering. In some places the weathered clayey material "saprolite", is deeper than in others. The denudation removes the clayey material and exposes elevations of non-weathered hard rock in the form of an inselberg (a German term meaning "Island hill"). Several erosional theories are shown. Whilst "three types of Hills present on the Jos Plateau" represents the isostactic theory. It emphasizes the difference in densities between lighter granite forming the inselberg, and heavier metamorphic rock in which inselberg is embedded. Light granite is "floating" in the heavier metamorphic rocks like an iceberg floats on water. The inselberg is aerodynamically shaped due to the process of protruding upwards through more dense rocks.

In addition to the isolated inselbergs there are also inselberg-type granitic hills which are located exclusively on the Younger granite complexes. The question of their origin is not yet answered. They could result from erosion-in this case Younger Granite should be less weatherable than Precambrian metamorphic and granitic rocks. According to thus theory, Younger Granites form a 'hard core' etched by weathering from the more weatherable metamorphic and granitic Precambrian rocks. But there is also another non-erosional possibility, namely that lighter younger granites were "squeezed" isostatically from heavier Precambrian rocks (Timothy, 2006).

3,1,3 Drainage

The Jos- Plateau which dominates Plateau state has been described as the hydrological centre of Northern Nigeria. This is because most of the rivers in the northern part of Nigeria originate from the Jos-Plateau. The rivers arise from the Plateau and radiate out in different directions (radial drainage pattern). To mention a few, these rivers include, Dilimi, Kaduna Shimankar, Wase, Ankwe, Mada, Gongola. (Timothy, 2006)

3.1.4 Climate

The climate of Plateau state is dominantly influenced by its relief and position along the passage of the inter-tropical convergence zone. The high altitude of the Jos- Plateau area

has so much moderated its temperature which has been described as "temperature-like". The approximate maximum high temperature is about 22^0C while the mean minimum low temperature is about 18^0C. The weather on the Jos- Plateau is therefore generally cold especially between December and February as a result of the harmattan (North East trade) winds. Generally, Jos- Plateau has been claimed to be the coldest area in Nigeria.

The adjoining lowland area of Plateau state however has contrasting climate from that of upland Plateau. The lowland areas are marked by relatively hot temperatures with means maximum of about 32^0C and mean minimum of 22^0C.

Plateau state enjoys two types of climate – the dry climate and the wet climate. These two climates are mainly influenced by the movement of the ITCZ. From April when the ITCZ moves northward the state is dominated by the wet southwest trade winds or the tropical maritime wind which bring rains up to October. From November to March however, the ITCZ moves southward and the dry Northeast trade (harmattan) winds or the tropical continental winds dominate the state characterized by dryness and dust. Generally, the mean annual rainfall varies from 131.75cm in the southern part of the state (leeward side of Jos Plateau) to 146cm on the Jos-Plateau.

3.1.5 Soils

The interaction of the pedogenic factors (climate, biota, parent material, topography and time) has produced a series of soils that reflect the particular influence of parent material, (in terms of texture and nutrient status) and topography (in terms of drainage). Hill & Rackham identified three distinct soil associations on the Plateau which have developed in response to these factors.

1. Soil on Unconsolidated deposits: On Interfluves soils associated with rock outcrops or lateritic ironpan are common. These grade downslope deeper well to imperfectly drained, strongly mottled soils, often with a surface layers of gravel or ironstone are common in the surface horizons. These soils form the main agricultural soils.
2. Soils on Newer Basalt: A variety of soils occur on this material, some, particularly on steeper slopes and footslopes of volcanic cones, are deep, well drained and well structures. On shallow slopes soils vary in depth and are strongly mottled. All however, are more base rich than those on either the unconsolidated deposits or granite.

3. Soils on granite: These are invariably coarse textured, well drained, shallow soils. To these associations can be added a fourth.

4. Soils on the basement Complex: the pattern and type of soils found in this association are very similar to those found in the unconsolidated deposits. The principal difference is that these 'basement' soils are usually only 1.0-1.5m deep over decomposing bedrock.

3.1.6 Vegetation

The natural vegetation of the Jos Plateau is perhaps closest to the Guinea savanna, characterized by scattered trees, shrubs and grass savanna. However, the Plateau is distinct from the rest of the Gulf Savanna in the rarity of woodland and peculiarity of floristic composition. The original vegetation has however, been almost entirely destroyed by the impact of human activities except at the Jos Plateau edges and slopes of some hills.

Timothy 2006) recognized the following vegetation complexes:

a) Plateau Complex of grass communities in the central zone where means annual rainfall is about 1,000, 400mm;

b) The South-West Complex, covering the wetter south-western part of the plateau, with mean annual rainfall greater than 1,400mm

c) West Escarpment Complex of Woodland over the Assob area

d) East Escarpment Complex between the main Plateau and the Toror plains to the north-east.

e) Toro complex consisting mainly of Combrellum Savanna and Parkia daniella parkland.

Jumbo described the vegetation on the hill ranges and less accessible margins, vegetation on the plains, mine dumps and mine tailings, forest reserves and fallow vegetation. Timothy, 2001 had identified on the Plateau vegetation typical of the Northern Guinea Savanna, the endemics related to eastern and southern Africa, East-African highlands and the Cameroon, and exotic plant species.

3.1.7 AGRICULTURE

i Farming

Agriculture has remained the dominant economic activity of the people of the Jos Plateau despite the introduction of commercial tin mining in the first decade of the 20th century. The mining industry has not only markedly transformed but also created several opportunities for the agricultural economy. Agricultural activities have remained the predominant socio-economic activities of the people in the State, despite the introduction of commercial mining in the first decade of the 20th century. However, the agricultural activities in the State is mainly practised on subsistence levels, usually rain fed and thus, seasonal, under rotational bush fallow system, the crops cultivated includes, millet, acha, (hungry rice), guinea corn, maize, cocoyam, Irish and sweet potatoes. Though the economy of Plateau State is largely agrarian, commerce goes alongside this. Commercial activities are predominant in the capital city, and local government council headquarters, even down to the smallest hamlet, one form of commercial activity exists.

ii **Pastoralism**

The size of the cattle population that graze the Jos Plateau is estimated to be around 400,000 although this number may fluctuate greatly, affected by outbreaks of render pest disease and periodical influx of Fulani herdsmen into the region from the drought –afflicted arid zone of the North. However, only about 10 percent of the regions estimated cattle population graze there permanently. The rest graze the region either only in the rainy season when the grazing lands in the Benue valley become waterlogged and infested by tse-tse-flies, or in the dry season when water and pasture are scarce in the High Plains of Hausa land. The latter area is essentially the main rainy season grazing area. In addition, the Jos Plateau is used as transit grazing ground by a large number of cattle migrating into and out of the Benue valley at the beginning and end of the dry season.

iii Poultry Farming

Poultry farming is undertaken largely on a part-time basis within the urban-rural fringes of Jos, in small units of only several thousand birds, to produce eggs and/or broilers.

iv Integrated Farming

On the farm rain fed and irrigated cultivation are to be practiced while most or the farming operations, notably clearing, seeding, ploughing, ridging, harvesting and initial processing are mechanized.

v Fruit Growing

Another recent development in the agricultural economy of Jos Plateau increase in fruit tree farming especially in the fadamas. The favourite fruit trees are the mango, guava, banana, pawpaw, avocado and citrus. The Jos Plateau is a surplus mango and guava producing region. The surplus is sold in the main urban centres of northern Nigeria.

3.1.8 Manufacturing industries

Manufacturing simply refers to the processing of raw materials into finished products in a factory. There are two types of manufacturing industries in Plateau State: (1) Local craft and traditional food processing industries and the modern manufacturing industries or factories. The local craft industries are those industries that engage in local production in which mostly local raw materials are used. The industries make use of simple tools thereby specializing in particular product based on their artistic quality. The commonest local craft industries in Plateau State include pottery, wood carving, leather works; metal works and blacksmithing; textile and cloth weaving, dyeing, mat and basket weaving local musical instrument (melo and cheche) industries etc. The traditional food processing industries on the other hand specialize in processing of various foods and drinks. The commonest are the cassava processing industries, groundnut oil, palm oil, and olive oil processing, etc. the local craft and food processing industries are wide spread over the entire Plateau State. Virtually every locality visited specializes in one or several craftwork, and food processing depending on the availability of the raw materials and skills developed. Most of the products of the local craft and food processing industries are sold in local markets.

The modern manufacturing industries of factories are the recent plants which specialize in large scale processing. These industries use modern improved technology such as modern sophisticated machines that use electricity and other new sources of power for their production. Although their raw materials could be obtained locally, it is possible to assemble raw materials from elsewhere for their production. A good example of such modern large scale manufacturing industries in plateau State are Jos Steel rolling company, Jos International breweries, grand cereals company, Tin Smelting Company, Fertilizer Blending Company, Integrated Animal feed Mild, NASCO Group of Companies (Fibre, Foods, Household products, Confectionery, Beauty and Body Care), standard Biscuit Company, Bakeries, Flour Mills, Pioneer Milling Company, Europharms Laboratories, West African Milk Company, Pamtronic Company, Champion Aluminum Metal company, Associated Best Foods Company, Madara Company, Joagson Company, Nigeria Mining Corporation etc.

Most of these industries are located in the capital city, Jos metropolis with some few in other local government areas of the state.

3.1.9 HEALTH SERVICES

Plateau State is reasonably well covered with health facilities as a of the active participation of government, private individuals and voluntary agencies in the health sector. There are two

broad categories of health facilities in the state. The first category, known as primary health facilities, is the most ubiquitous and comprises dispensaries, maternal and child welfare clinics and health centres. The services provided include the treatment of common diseases and routine immunization. The second category of health services available in Plateau state consists of cottage and general hospitals where both routine and more complex health care services are provided. At the apex of the health care facilities in the state is the University of Jos teaching Hospital, a Federal Government Funded referral hospital.

In all, the Plateau State Government has fifteen hospitals, forty-eight maternal and child welfare clinics, fifty-nine general clinics and 285 dispensaries. Private individuals have forty-seven hospitals, six maternal clinics, sixty-two child welfare clinics, 310 general clinics and 119 dispensaries. Voluntary agencies own and operate five hospitals, three maternal clinics, sixty-two general clinics and forty-five dispensaries. Although the number of variety of health facilities in Plateau state are impressive, there is still a need for improvement, especially in the areas of building more facilities in the remote areas of the state and recruiting and training of more health workers.

3.1.10 PEOPLE AND POPULATION

The 2006 census shows that Plateau State had a population of 3,206,531, comprising of 1,598,998 males and 1,607,533 females. The state has been described as a miniature Nigeria because it contains within itself almost, if not all, the various tribes or ethnic groups in Nigeria. The state has over 50 indigenous ethnic groups, each with a proud cultural heritage with no single group large enough to claim majority position. The people are hospitable and accommodating and have similar cultural and traditional ways of life. People from other parts of the country coexist peacefully with the indigenous. Some of the tribes in the state among others are Berom, Ngas, Taroh, Goemai, Yuom, Montol, Rukuba, Kwaglak, Piapung, Buji, Irigwe, Mushere, Jarawa (Afizere), Anaguta, Gashish, Pyem, Amo, Chip, Miryang, Fier, Bogghom, Mwaghavul, Ron, Kulere, Aten, Tal, Challa, Mupun, Jorto, Jere, Janji Iguta, Iguta, Horom, Firan, Guguri, Duguza, Ass, Che, Chala. There are other tribes that came to settle in state as a result of historical events. These include the Hausa, Fulani, Igbo, Yoruba, Tiv, Idoma, etc. Plateau state is a state where unity is seen to be very much compatible with diversity. (Timothy, 2006)

3.2 RESEARCH METHODOLOGY

3.2.1 Reconnaissance Survey

A reconnaissance survey was conducted to explore the extent of sex preference practices and distribution as well as to identify the factors that fuel the act in the State. During the brief visit, oral interviews were carried out with ever married men and women in order to ascertain their fertility behaviour which is number of living children, willingness to continue child bearing without the preferred sex of child, family size, sex roles and attitude towards

children in the study area, this to determine the relevant issues to address in the questionnaire and also to ascertain the most appropriate sampling techniques to be used in selecting the sampling areas.

3.2.2 Types of Data

In order to achieve the set objectives of this study, information were collected from couples resident in the sampled area. The data required for this study will include information on:-

1. Socio-economic and demographic characteristics of the respondents such as sex, age, marital status, household size, level of education and occupation.
2. Sex preference and behaviour.
3. Sex preference and marital stability
4. The role of sex preference and family size.
5. Sex role performance and sex preference.
6. The role of socio-cultural factors and sex preference
7. Sex preference and desired family size.

3.2.3 Sources of Data

The primary sources of data to be used in this research were obtained from individuals/respondents who provided information through the questionnaire and Focus Group Discussions (FGDs). All these were obtained directly from the respondents.

Secondary data were obtained from books, journals, published and unpublished texts, documents, magazines, conference articles, government ministries and agencies, such as National Population Commission (NPC) for population and household census of 2009.

3.2.4 Sample Design and Questionnaire Administration

In order to select respondents for questionnaire administration survey, a multi-stage sampling procedure was used. The first stage involved identifying the 3 senatorial zones of the State after which purposive sampling technique was used to select one LGA from each of the three senatorial zones which makes up the 17 LGAs of the State. The selected LGAs are, Shendam, Jos North and Mangu. The selected LGAs from each of the 3 senatorial zones are based on the LGAs with the highest population (See Table 3.1).

Table 3.1: Population and Percentages of LGAs for Questionnaire Administration

S/N	Senatorial Zones	LGAs	Selected LGAs	Population
1	Plateau North	Jos North	Jos North	437,217
2		Jos South		311,392
3		Jos East		88,301
4		Riyom		131,778
5		BarkinLadi		179,805
6		Bassa		189,834
7	Plateau Central	Bokkos		179,550
8		Kanam		167,619
9		Kanke		124,268
10		Pankshin		190,114
11		Mangu	Mangu	300,520
12	Plateau South	Langtang North		142,316
13		Langtang South		105,173
14		Shendam	Shendam	205,119
15		Wase		159,861
16		Qua'an pan		197,276
17		Mikang		96,388
Grand Total				**3,206,531**

Source: Compiled by Authors from NPC, 2009

Secondary, to determine the proportion of copies of questionnaires to be administered in the selected LGAs, Yamene T. (1967) formula for sample size selection was used.

$$SS = \frac{N}{1+N(e)^2}$$

Where:

N = Total population under study

e = Acceptable error size.

Therefore, using the above formula, 400 respondents will be sampled in all. More so, to obtain the proportion of questionnaire to be administered in the selected LGAs, Yamene T. (1967) formula was used

$$\frac{n \text{ x } 400}{N}$$

Where

n = Total population of the each selected LGA

N = Total population of the entire population under study.

A heterogeneous society like Plateau State where occupation and income level to a large extent determine the socio economic and demographic characteristics; and probably have implications for sex preference.

A random sampling technique was use to select the target respondent of married men and women in selected households of the study area for questionnaire administration. This was done to ensure that effective spatial coverage and as well as to ensure that valid responses from the respondent so as to avoid biasness in the questionnaire administration process and thereby ensuring adequate representation of the population under study.

Also, Focus Group Discussion (FGDs) was conducted to elicit additional information from the respondents who are ever married persons (males and females) that is, whether currently married, widowed, separated, or divorced. Two FGDs was conducted in each of the three (3) selected LGAs and involved the bringing together of 6-8 ever married men and women to explore their opinions on the issues.

Table 3.2: Selected LGAs and Populations for Sampling

Senatorial Zones	**Selected LGAs**	**Pop of the Selected LGAs**	**Percentage of the Pop**	**Proportion of Respondents to be sampled**
South	Shendam	205,119	21.8	87
Central	Mangu	300,520	31.9	127
North	Jos North	437,217	46.3	186
Grand Total		942,856	100	400

Source: Computation of Author from NPC, 2009

3.2.5 Data Analysis

Information collected from the interview was summarized by means of descriptive and inferential statistics. Descriptive statistics technique were employed to summarize data collected in percentages, pie charts, bar charts, frequency tables and using the statistical package for social scientist package (SPPS). Characteristics such as maternal age at birth, sex of child, birth interval, maternal education level, paternal education, level of income, occupation (employment) wealth index was examined through the use of descriptive statistics. Other social parameters such as religion and marital experience of the parent were also examined through the use of chi square as to examine the relationship between the independent and dependent variables. All tests would be at 0.05 significant levels.

CHAPTER FOUR

DEMOGRAPHIC AND SOCIO-ECONOMIC ANALYSIS

4.1 INTRODUCTION

This chapter examines the findings of the research based on the demographic and socio-economic implications of sex preference in Plateau State. The chapter discusses the socio-demographic characteristics; working profile, fertility preference, contraceptive use as well as socio cultural factors and sex preference in Plateau State.

4.2. DEMOGRAPHIC AND SOCIO ECONOMIC CHARACTERISTICS OF RESPONDENTS

4.2.1 Age

Table 4.1 shows the distribution of respondents by age. Majority of the respondents are in the age group 25-29 years (30 percent), followed by those in the age group 30-34 years and 40-44 years (16.8 percent) each. The age groups of, 15-19 years, 35-39 years and 45-49 years have 1.0 percent, 14.5 percent and 8.0 percent respectively. Those with 50 years and above make up 2.0 percent.

Table 4.1 Distribution of Respondents by Age

Age range	Frequency	Percentage
15-19 years	4	1.0
20-24 years	44	11.0
25-29 years	120	30.0
30-34 years	67	16.8
35-39 years	58	14.5
40-44 years	67	16.8
45-49 years	32	8.0
50 years and above	8	2.0

Age range	Frequency	Percentage
15-19 years	4	1.0
20-24 years	44	11.0
25-29 years	120	30.0
30-34 years	67	16.8
35-39 years	58	14.5
40-44 years	67	16.8
45-49 years	32	8.0
50 years and above	8	2.0
Total	**400**	**100.0**

Source: Field Survey, 2014

More than half of the respondents are aged between 25 -44 years, compared to those aged 24 – below and 45 – above. Hence, the respondents can be considered to be young and active. This is because the age bracket is considered in demographic studies to be reproductive and sexually active and particularly because the unit of analysis comprised of ever married persons, and more importantly because in this society cases of under aged marriages are rare, though cases of teenage pregnancies abound (Agbor, 2011).

4.2.2 Sex

Fig 4.1 shows the distribution of respondent by sex. A little over half of the sampled respondents (59 percent) are males this implies that more of the respondent were heads of household so it is possible that there will be dominance of males as against the 41 percent that are females indicating a gender difference of 17.5 percent. The disparity in gender is due to the fact that most women in Jos North LGA which are mostly Muslim are not allowed to go out except for concrete reasons and also girls who are particularly vulnerable to various forms of exploitation and abuse such as rape and violence against women and girls, that is as a result of the present situation of the "study area.

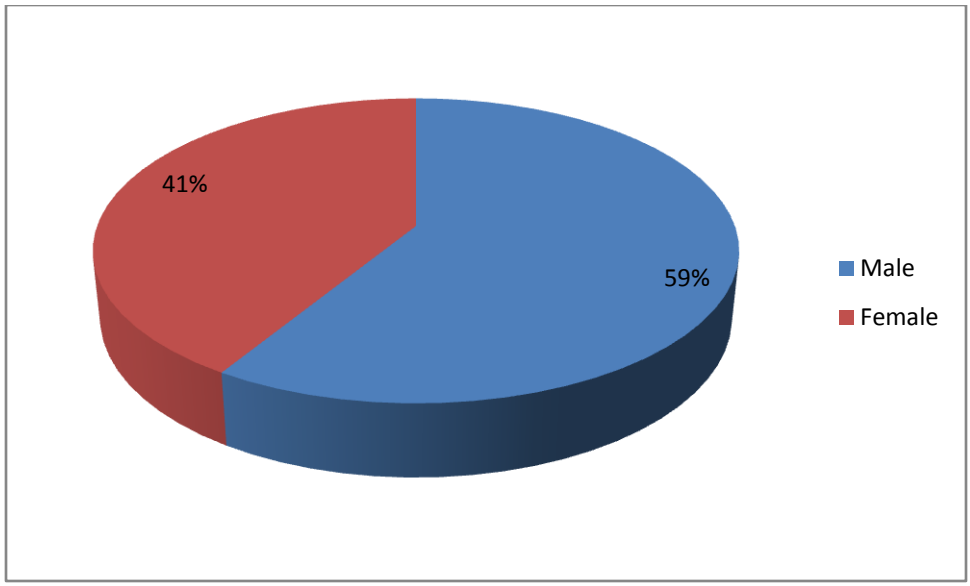


Fig 4.1 Percentage Distribution of Respondents by Sex

Source: Field Survey, 2014

This result is to be expected as the respondents were heads of households and most household heads are men. It may be possible again to conclude that the reason for the dominance of males over the females may be attributed to the gender bias where women are not allowed speaking without the consent of the head of the house.

4.2.3 Marital Status

Table 4.2 shows the distribution of respondents by marital status. It shows that 62.2 percent of the respondents are married, while 12 percent are single parents.

Table 4.2 Distribution of Respondents by Marital Status

Marital Status	Frequency	Percentage
Single Parent	48	12
Married	249	62.2
Widow	60	15
Divorced	23	5.8
Separated	20	5
Total	**400**	**100**

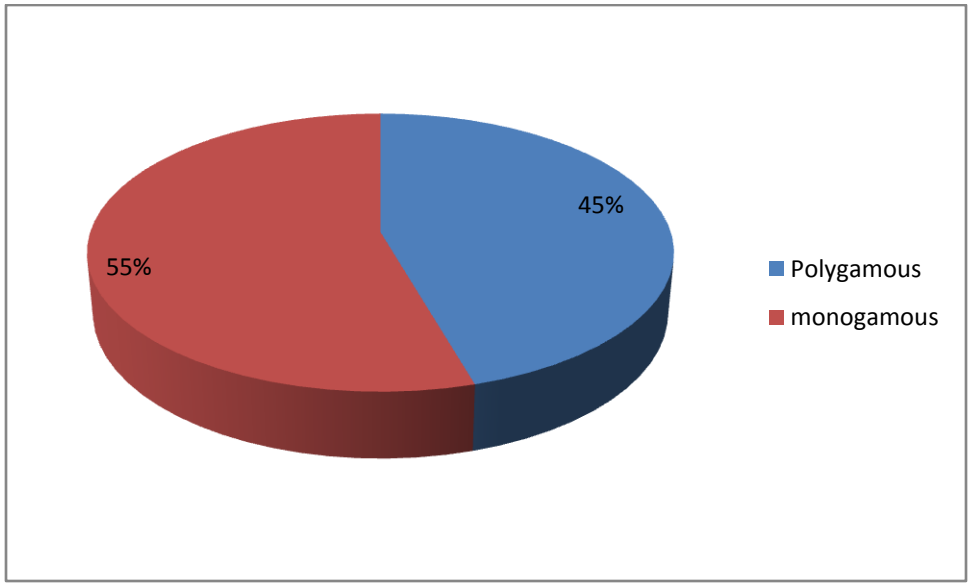
Source: Field Survey, 2014

Also, 15 percent of the respondents are widowed while 5.8 and 5 percent divorced and separated respectively. It is obvious from the findings that majority of the respondents are married. The findings also agree with the response from most of the respondents interviewed during Focus Group Discussion, as stated by a female discussant:

> *''It is a shameful thing for a girl to give birth to a child at home, our society will called the child a bastard or illegitimate child. So to avoid these ugly names, we ask our girls to get marry or sometimes we force them to get married outside their wish and also to avoid giving the family a bad name''.* (Female discussant Shendam, 14th October 2014)

4.2.4 Marital Union

Fig 4.2 shows the distribution of respondent according to marital union. Majority of the respondents are in monogamous union with a proportion of about 55 percent, followed by 45 percent that are polygamous.



Source: Field Survey, 2014

Fig 4.2: Respondents by Type of Marital Union

The dominance of monogamous union is not as expected, as it is generally believed that polygamous union is the dominant type of union in the northern part of the country where Islam permits the marriage of more than one wife. However, this may be attributed to the dominance of Christians among the sampled respondents

4.2.5 Religion

Religion plays a vital role in fertility decisions; three different religious groups were identified in the study area as follows Christian, Muslim and Traditionalist. Table 4.3 shows the distribution of respondent by religion. The distribution by religion shows that majority of the respondents (73.5 percent) are Christians, 22.5 percent are Muslims while 4.0 percent are traditional /pagan worshippers.

Table 4.3 Distribution Respondents by Religion

Religion	Frequency	Percentage
Christian	294	73.5
Muslim	90	22.5
Traditional	16	4.0
Total	**400**	**100.0**

Source: Field Survey, 2014

Many fertility decisions are taken against the backdrop of religious belief and practices. Religion is widely accepted as an important predictor of demographic behaviour in every society, it influences social and cultural beliefs of the people. It serves as a significant medium through which traditional cultural values are learnt and some biases acquired (Godswill, 2010).

4.2.6 Educational Attainment

Table 4.4 shows the distribution of respondent according to educational attainment. It reveals that most of the sampled respondents are highly educated being that only 3.5 percent has no any form of education. The distribution reveals that only 6.0 percent has Quranic education which is also a non formal education; however the possible reason for low level of Quaranic education may likely be due to the dominance of Christians in the study area. This is closely followed by those that have attained primary school education with 6.5 percent.

Table 4.4 Distribution by Level of Educational Attainment

Level of education	Frequency	Percentage
No schooling	14	3.5
Quranic	24	6.0
Primary	26	6.5
Secondary	89	22.2
Tertiary	221	55.2
Others	26	6.5
Total	**400**	**100.0**

Source: Field Survey, 2014

A significantly high proportion of respondent 55.2 percent have tertiary education followed by those who attain secondary school with 22.2 percent. It is expected that educated parents will have better and improved knowledge on the implications of sex preference. Education is critical to the future of the individual beneficiary and the society (country) concerned. According to the World Bank (1988) without education, development will not occur

4.2.7 Occupation

Table 4.6 shows the distribution of respondents according to their occupations. Most of the respondents are engaged in business or petty trading with 49.3 percent while 35.5 percent are civil servants. Only 9.3 percent say they are engaged in farming. This is contrary to the previous studies by Timothy, 2006 which says Agriculture has remained the dominant economic activity of the people of the Jos Plateau despite the introduction of commercial tin mining in the first decade of the 21th century. However this could be as a result of the quest for white collar jobs and improvement in the levels of education.

Table 4.5: Distribution of Respondents by Occupation

Occupation	Frequency	Percentage
Civil/public servant	154	38.5
Farming	37	9.3
Artisan	12	3.0
Business/petty trading	197	49.3
Total	**400**	**100.0**

Source: Field Survey, 2014

One of the most widely used indices of socio-economic status in demographic analysis is occupational level, as it is expected to play significant roles in the sex preference practice. In this research attempts have been made to determine how occupation influences the number and sex of children one desires. Occupation is a regular activity performed for payment that occupies one's time. It can also be referred to as the activity which one regularly devotes oneself, especially one's regular work, or means of getting a living (Wickleby, 1992)

4.2.8 Place of Residence

As shown in Fig 4.3, about one third of the respondents are urban settlers as seen from the response of 65 percent respondents, while only 35 percent are rural settlers. The distribution by type of settlement, whether rural or urban it is well established in literature that type of settlement plays very important role on the preference of sex in different communities. Hence, sex preference practices and other fertility related issues tend to differ between the rural and urban areas

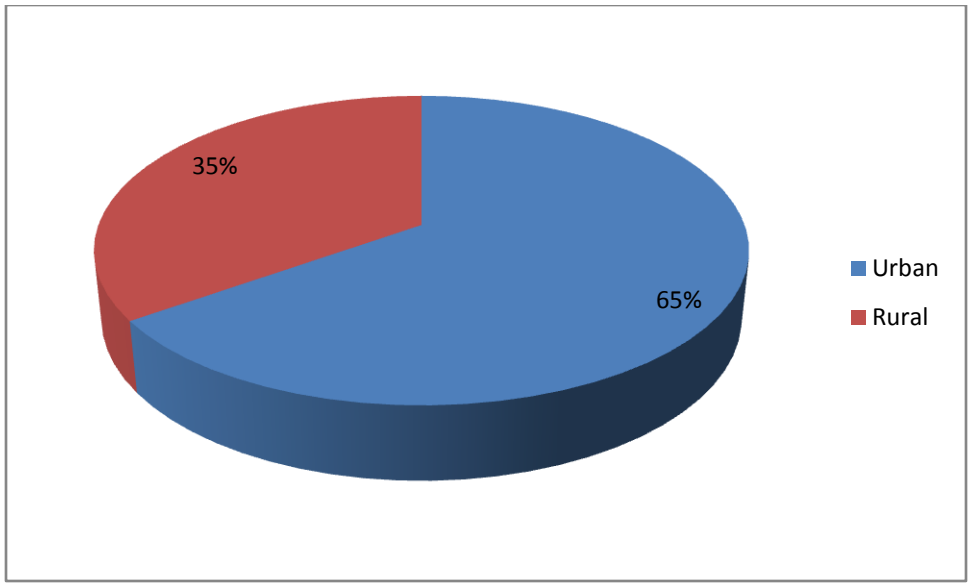


Fig: 4.3 Distribution of Respondent by Place of residence

Source: Field Survey, 2014

Place of residence like the socio-demographic variables discussed earlier, is probably one of the most widely accepted change-inducing indices in demographic studies, especially when it comes to assessing its impact on fertility and mortality behavior (Agbor ,2011).

4.2.9 Income levels

Income like every other socio-demographic variable plays a vital role in fertility decision. Its impact on the number and sex of children desired or preferred can be enormous. Table 4.6 reveals that majority of the respondents (38.3 percent) receive less than N10, 000 monthly as income. This is less than the Federal Government minimum wage of #18,000 paid to Nigerian workers

Table 4.6 : Distribution of Income levels

Income level	Frequency	Percentage
< N10,000	153	38.3
N11,000-N20,000	58	14.5
N21,000-N30,000	32	8.0
N31,000-N40,000	60	15.0
N51,000-N60,000	48	12.0
N61,000-N70,000 and above	49	12.3
Total	**400**	**100.0**

Source: Field Survey, 2014

This indicates that majority of the respondents are relatively low income earners, given the fact that most of the respondents earn less than ₦10,000 (less than US $70 at ₦160 exchange rate). This figure is invariably tied to the level of education and place of residence in which quite proportion have no form of education (3.5 percent) and 33.0 are rural settlers which engage mostly in farming activities since farming is done on a small scale with rudimentary tools. Also 14.5 percent earn ₦11000-₦20000 closely follow by 15.5 percent with earnings of ₦31000- ₦40000 per month.Those who earn beyond ₦70,000 per month constitute 12.3 percent of the respondents. Income is one of the most important determinants of the standard of living, economic and social welfare. The level of income has an effect on the child's health and wellbeing. Without money the mothers cannot provide adequate, rich nutritional food for the child. According to Kayode and Omole (2011), there is a positive relationship between educational attainments, occupation and income to sex preference.

4.3 FERTILITY PREFERENCE

4.3.1 Number of Children Ever Born

Table 4.9 shows the distribution of respondents according to the number of children ever born; it is obvious that most of the respondents have given birth to 3-4 children which constitute 58.8 percent, followed by respondents with 1-2 children with (23.5 percent). Meanwhile, 14.5 percent of the respondents have 5- 6 children ever born, while respondents with 7+ children has 3.2 percent.

Table 4.7 Distribution of Respondents by Number of Children Ever Born

Number of children	Frequency	Percentage
1-2	94	23.5
3-4	235	58.8
5-6	58	14.5
7+	13	3.2
Total	**400**	**100.0**

Source: Field Survey, 2014

The total number of children ever born by the respondents includes those living and those that are dead. It was revealed during of the Focus Group Discussions that the number of children ever born does not affect sex preferences. According to a discussant:

> *''number of persons ever born does not really affect the desire of some people who desire a particular sex of child especially where children are seen as insurance for the future as well as for old age support''.*(A female discussant, Eto baba 11th October 2014)

Table 4.3.2 Number of Children Ever Born by Sex

Table 4.8 shows the total number of children ever born by sex. It is obvious from Table 4.8 that most of the respondents have 1-2 number of children which constitutes the highest percentage of 50.5 percent for males and 51.3 percent for female preference.

Table 4.8 Distribution of Respondents by Number of Children Ever Born by Sex

Number of children	Male Children		Female Children	
	Freq	Perce (%)	Freq	Perce (%)

None	88	22.0	98	24.5
1-2	202	50.5	205	51.3
3-4	86	21.5	65	16.3
5-6	4	1.0	8	2.0
7-8	0	0	4	1.0
9-10	4	1.0	4	1.0
11 and above	16	4.0	16	4.0
Total	**400**	**100.0**	**400**	**100.0**

Source: Field Survey, 2014

Moreso about 21.5% have preference for male children while 16.3% have preference for female children. From those who have between 5-6 children, there are more females 2.0 percent compare to males 1.0 percent.

Table 4.3.3 Desire for More Children

From Figure 4.4 It shows that majority (47.5 percent) of the respondents still desire to have additional children, about 27.5 percent are yet to decide on the issue of having additional children while 25.0 percent do not desire having additional children irrespective of the sex.

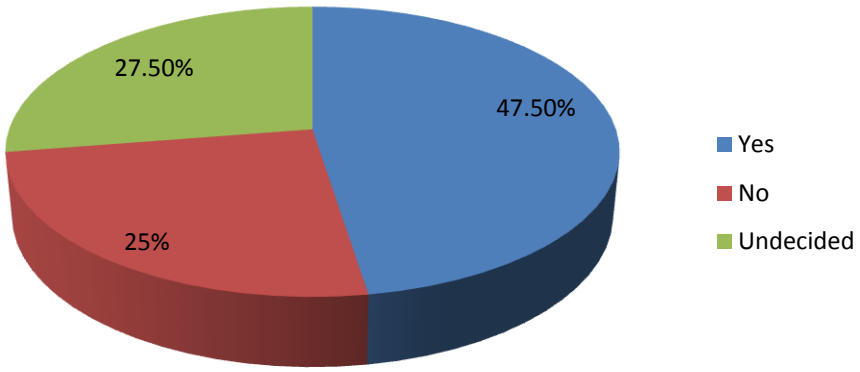


Fig 4.4:Respondents who Desire for More Children

Source: Field Survey

However, majority of the respondents still have the intension of giving birth to more children compare to those who are no longer interested or undecided. The continued fertility activity has the potential to encourage population growth and undermine the health and safety of women. This has the capacity to impact negatively on the quality of the population; as the fertility increases the tendency is that amenities are not going to be enough for the teeming population, such as hospitals, schools etc.(Argbo, 2011).

It is justifiable from the finding to conclude that sex preference practices contributes significantly to high birth rate as in most cases, couples may continue to give birth to children until the desired child sex is achieved and this in return helps to keep birth rate high. This is supported by Oreland (1983) who observed the effect of sex preference in fertility behaviour and found that preference for a particular sex sustains higher level of childbearing than would be the case if parents were indifferent to the sex of their children. They author also observed that couples continue to bear children beyond their overall desired family size in order to achieve some favoured sex. Studies have also shown that sex of children is the highest determinant of family size. Normally, families may decide to have a particular number of children, say 2 or 3, however, the reality may present all together different results as unmet needs in the sex composition of the children places more demands on couples to satisfy their desires.

4.3.4 Number of Children Desired

Table 4.9, shows the distribution of number of children desired. Majority of the respondent desire 1-2 number of children which constitutes 56.4 percent for male and 49.7 percent for

female. According to Ibanga (1996) preference for boys could be attributed to family name and wealth flow and lingering traditional religious ritual of forbidden female children and the widow(s), in some of the communities, from witnessing of the interment of their late father's or husband corps.

Table 4.9: Distribution of Desire Number of Children by Child Gender

No of desire children	Boys		Girls	
	No	**(%)**	**No**	**(%)**
None	25	12.8	44	22.6
1-2	110	56.4	97	49.7
3-4	22	11.3	26	13.3
5-6	18	9.2	12	6.2
7-8	16	8.2	4	2.1
9 children and above	4	2.1	12	6.2
Total	**195**	**100.0**	**195**	**100.0**

Source: Field Survey, 2014

While respondent with 9 children constitutes 2.1 percent preference for male and 6.2 percent preference for female, which shows high preference for girls. According to Goode (2001), in order to operate a system of bride wealth transaction, daughters are needed to bring it wealth, if sons are to acquire brides.

4.3.5 Desire Number of Children by Sex

Table 4.10, reveals the distribution of respondents on desire number of children by sex. This Table shows that most respondent desire 1-4 number of children which accounted for 80.5 percent with female preference while 76.3 percent with male preference. On the other hand, the result further reveals that 3.0 percent and 0 percent for male and female preference (15 and above) respectively.

Table 4.10: Distribution According to Desired Number of Children by Sex

Desire number of	Male	Female

Children	No	(%)	No	(%)
None	47	11.8	50	12.5
1-4	305	76.3	322	80.5
5-9	32	8.0	16	4.0
10-14	4	1.0	12	3.0
15 and above	12	3.0	0	0
Total	**400**	**100.0**	**400**	**100.0**

Source: Field Survey, 2014

However, in terms of having 5-9 children and 15 children and above, male children are highly desired by the respondent with 8.0 and 3.0 percent this could be tie to provide continuity of family name, inherit family wealth and protect it from outsiders and provide physical defense mechanism (Ibanga, 1996)

4.3.6 Preferred Sex in Option for One Child

In the survey questionnaire the respondents were asked questions on the sex of children they will prefer if they were to have only a child in their life time. Fig 4.5 shows that 57 percent of the respondents prefer male children as against 43 percent of the respondents that prefer female children.

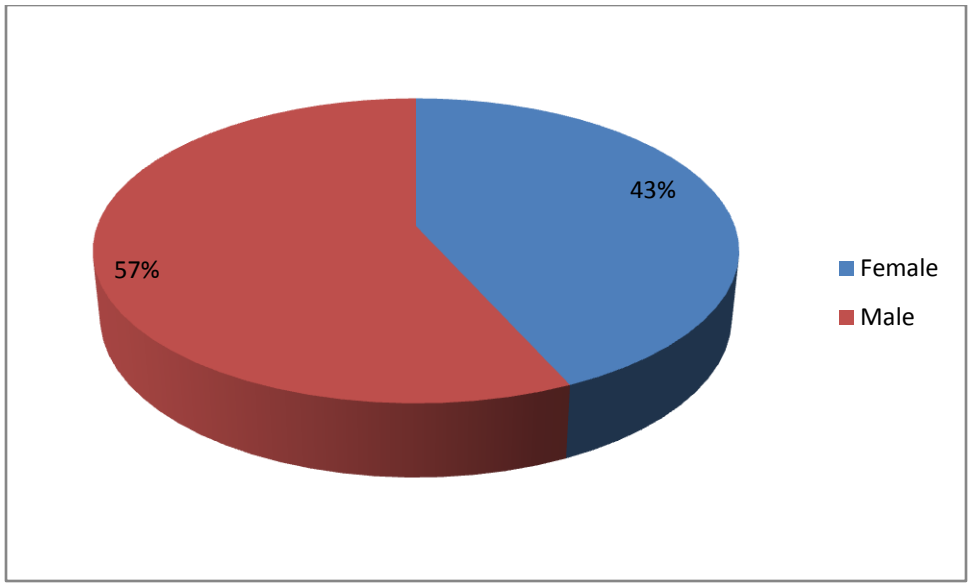


Fig: 4.5 Distribution by Preferred Sex for a One Child Option

Source: Field Survey, 2014

Most of the respondents prefer males; this situation is common in a patriarchal society such as the one under study are where the security of the marriage is built on the number of surveying sons one gives birth to (Chung and Das Gupta, 2007). The picture became clear in one of the focus group discussions with a group of young women who are still within the child bearing age. According to a middle age female discussant:

> *"Women are always at the receiving end when it aims at sex of a child, men tend to maltreat women just because she was unable to give birth to a preferred sex (male) even their own in-law tends to fuel the situation" (*Middle Aged female, Duu 10th October 2014)

4.3.7 Sex Preference Practices

Fig 4.6 shows respondents who have preference for a particular sex which constitutes 62 percent while 38 percent of the respondents have a strong sex preference practices.

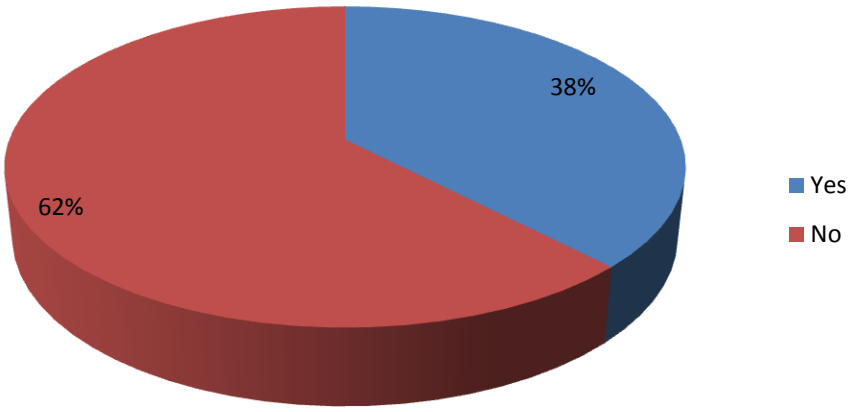


Fig 4.6: Percentage Distribution of Sex Preference Practices

Source: Field Survey, 2014

According to female discussant gave reasons in pidgin, English:

> *''If you want make your husband love and give you attention, you must born boy for am o. If not, he go send you go your papa house and he go marry another woman sharp sharp wey go born boy for am''.* (Female discussant, Apata, 10th September, 2014)

4.3.8 Reasons for Preference of Male Children

Table 4.13 shows respondent's reasons for wanting or preferring a male child. As indicated above most of the respondents (42.8 percent) to perpetuate lineage, 28.3 percent respondents wanted a male child for the fear of what will likely happen in future so they prefer male children for old age security

Table 4.11 Distribution by Preference of Male Children

Response	Frequency	Percentage
To perpetuate lineage	171	42.8
Old age security	113	28.3

To perform traditional rites when I die	33	8.3
Others	83	20.8
Total	**227**	**100.0**

Source: Field Survey, 2014

About 21 percent respondents have "others" on the category of responses with reasons like provision physical defense mechanism and bring respect to the community while 8.3percent want to perform their traditional rites when the die which is probably inheritance of their wealth or other valuable assets when they die and also taking care of some members of the family.

The implication of this is that respondents agree that sex preference for a child affects the fertility behavior of the people of Plateau State. The findings further consolidate the findings of previous studies carried out in the same area (Ottong 1989; Akpan 1998 and Isuigo 2005). Also drawing from Caldwell's theory of inter-generational wealth flow, a male child in wanted for reasons relating to the continuity of a family lineage.

4.3.9 Preference for Female Children

Table 4.12 shows that, the major reason why respondents prefer female children to male children is because women are sober as such tend to be more caring for their parents, this is deduced from the response of 43.0 percent respondents, girls care more for their parents than boys.

Table 4.12: Distribution on the Reason for Preference of Female Children

Reasons	**Frequency**	**Percentage**
Girls care more for their parent than boys	172	43.0
Women place is no longer in the kitchen only	47	11.8
What a man can do a woman can do also	60	15.0
Others	121	30.3

Reasons	Frequency	Percentage
Girls care more for their parent than boys	172	43.0
Women place is no longer in the kitchen only	47	11.8
What a man can do a woman can do also	60	15.0
Others	121	30.3
Total	**400**	**100.0**

Source: Field Survey, 2014

In addition, the preference of female children is in line with a saying that "what a man can do a woman can do also" which accounted for 15.0 percent. Only 11.8 percent believed that women place is no longer in the kitchen while 30.3 percent have other reasons for female child preference. These findings further consolidate the opinion of Ankwai speaking indigenous people as stated by most of them during FGD.

> *Daughters bring peace to the home because they are quite and not as troublesome as the boys. They can keep the family together, take care of their parents when they are old as well as their younger siblings and generally just keep the home together.* (Male discussant, shendam 14th Oct 2014)

Also most respondents during the FGD agreed that the preference for a particular sex of child can lead to increase in the number of children as stated by a male participant.

> *When we got married we have agreed that we are going to have just three children, that is two boys and one girl, but when the children started coming the first three were girls and so we didn't have any option but to continue trying to see if we could get a boy and before we know it, we have six children it is only this last one that is a boy. So you see that it is not our fault, but what God gave us*. (A male discussant, 11th October 2014)

The position of these respondents is not peculiar to them alone as it is a reflection of the general situation in the area of study and even the country at large where the search for a male heir can become a do or die affair. People tend to increase the number of their children due to be search for a particular sex.

4.3.10 Views on Continuity in Child Birth in the Absence of Preferred Sex

Table 4.15 reveals that majority of the respondents (51.5percent) do not agree that couple should continue child bearing if they do not have male child. This may be as result of realization of possible dangers women are usually exposed due to continues child bearing (Omokhoa, Adeleye and Okonkwo (2010))

Table 4.13: Distribution Views on Continuity in Child Birth in the Absence of Preferred Sex

Response	Frequency	Percentage
Yes	80	20.0
No	206	51.5
Undecided	114	28.5
Total	**400**	**100.0**

Source: Field Survey, 2014

However only 20 percent support that child birth should continue until the desired gender is gotten In the traditional setting, decision most of the time, favours more children especially sons as more children further enhances the status of a man in the society (Otong, 1997).

4.3.11 Types of Marital Stability

Table 4.14 shows the distribution of responses on instability of marriage. Table 4.14 reveals that abandonment (22.5 percent) is the commonest type of instability experience in marriages followed by fighting (18 percent), while divorce and financial deprivation have 17 percent and 15.2 percent respectively.

Table 4. 14 The Distribution of Responses on Types Marital Instability

Types of Marital Instability	Frequency	Percentage
Malice	22	5.5
Fighting	72	18
Separation	48	12
Abandonment	90	22.5
Financial Deprivation	61	15.2
Sexual Deprivation	39	9.8
Divorce	68	17

Total	400	100

Source: Field Survey, 2014

Also separation, sexual deprivation and malice constitutes 12 percent, 9.8 percent and 5.5 percent respectively. However it is important to note here that while some respondents have been thrown out of marriages, others are still within the marriage and experiencing varying degrees of instability in their marriages as express by this female discussant:

> *For the past two years or so my husband and I have been living under the same roof without sleeping together, we barely manage to talk to each other, he goes out and comes back when he likes and does not even bother about what happens around the home. If I try confronting him it always ends in a fight and he will be telling me to give him a son so he can have someone to play with when he comes home. It's really been difficult but what can I do*. (A female discussant Mangu, 2014)

This position was corroborated by another young female participant who said:

> *''It is no longer news here to hear or see most women fending for themselves and their children. Our husbands are quick to abandon us and refuse to provide for their children, even to pay their fees. Since my husband decided to stop giving me money, I have been doing everything alone because he says he cannot spend his money to train prostitutes who would sooner or later leave his house and go to bear someone else's name''.* (A female discussant Mangu, 2014)

The interview sessions also revealed a similar pattern of sex preference among the key informants. The female respondents were more likely than their male counterparts to express a lack of preference expect for the issue of the security of their marriage. Some participants said that male children were more productive, helpful, supportive and caring than the female children, while others disagreed and cited examples from their locality to buttress their claims as quoted from one middle aged female interviewee.

> *''For us in my family the sex of the children does not matter at all, my husband loves our three daughters very much. In fact he dots on them and cannot do without them. We believe in my family that whether male or female, anybody can become anything in life with proper upbringing and adequate training. So for us we are putting in all our best to make sure that our children become their best in life. As much as I know my husband has not showed me any sign of displeasure.''* (Female discussant Jenta, 2014)

Much of the problems associated with marital instability were highlighted during the focus group discussion and in depth interviews with a clear division between those who think that marriages should break as a result of no male children and those who think otherwise, but the most striking discovery came from a male participant who said:

> *''Why should I divorce my wife or even think of marrying another one, in fact I won't mind if I have all female children in my house, they are a blessing. If you have daughters you don't suffer at old age, they (girls) are always there for you, while the male will get married and forget their families, all their attention will be shifted to their wives and children. In fact in my family the women do better than the men and they are the ones holding and keeping the family together.* (A male discussant, Odus, 2014)

4.3.12 Cause of Marital Stability

Table 4.15 shows various causes of instability in marriage. It reveals that 72.8 percent of respondent say bareness/infertility is the cause of marital instability; about 11.3 percent believe that nagging wife can cause instability in marriage. Also, other factors are lack of male child, drunkenness and lack of female child with 6.5 percent, 6.0 percent and 3.5 percent respectively.

Table 4.15: Distribution of Respondents on Sex Preference and Marital Stability

Causes	Frequency	Percentage
Lack of male child	26	6.5
Lack of female child	14	3.5
Barrenness/infertility	291	72.8
Drunkenness	24	6.0

Wife nagging	45	11.3
Total	**400**	**100.0**

Source: Field Survey, 2014

However it is important to note here that while some respondents have been thrown out of marriages, others are still in marital union but are experiencing varying degree of instability in their marriages as express by this Female Discussant During FGD.

> *''It is no longer news here to hear or see most women fending for themselves and their children. Our husbands are quick to abandon us and refuse to provide for their children, even to pay their fees. Since my husband decided to stop giving us money and drinks a lot of alcohol, I have been doing everything alone because he says he cannot spend his money training prostitute who would sooner or later leave his house and go to bear some ones else's name''. (*A female discussant , Mangu 05th October 2014)

Much of the problems associated with marital instability were highlighted during the Fgd with a clear division between those who think that marriages should break as a result of no male children and those who think otherwise but the most striking discovery came from a respondent. According to a male participant,

> *If you have daughters you don't suffer at old age, they (girls) are always there for you, while the male will get married and forget their families, all their attention will be shifted to their wives and children. In fact in my family women do better than the men and they are the ones holding and keeping the family together. So in essence why should I divorce my wife or even think of marrying another one, in fact I won't mind if I have all female children in my house they are blessings. (*A male respondent, shandam 13th September 2014)

4.3.13 Desire for Another Wife in the Absence of Preferred Sex

Table 4.15 shows that, husbands are still comfortable with their wives even if they (wives) do not give birth to a male child. The table revels that 71.1 percent will not marry another wife even if they do not have the desired sex.

Table 4.16: Distribution of respondent Desire for Another wife

Response	**Frequency**	**Percentage**

Yes	55	23.0
No	170	71.1
Undecided	14	5.9
Total	**235**	**100.0**

Source: Field Survey, 2014

On the other hand, few of the respondents (23.0 percent) stated that they will marry another wife in the absence of a male child from their wife and 5.9 percent are undecided.

4.3.14 Having a Second Wife in the House

Table 4.16 shows that 33.7 percent women are sure that if they do not give birth to a male child their husbands will marry another wife while only 17.8 percent women believes that their husbands are comfortable with them even without a male child.

Table 4.17: Distribution of Respondents Having a Second Wife in the House

Response	**Frequency**	**Percentage**
Yes	55	33.7
No	29	17.8
Undecided	79	48.5
Total	**165**	**100.0**

Source: Field Survey, 2014

This situation is likely to occur especially in a partrilinal society like Plateau State in which the pertuation of family line is strongly emphasized and having a biological child is seen as a factor in this achievement. Indeed this pronatalist view of people leaves women who are unable to give birth to children of preferred sex exposed to the risk of martial instability, Bareness, summed up by three discussants during a session of the FDG with a group of aged women who have completed child bearing.

> *I was thrown out of my own house because I could not give my husband a son even though it was not my fault, but nobody, even my husband, would listen or even understand. He kept blaming me for not bearing a son and anytime I said, I did or asked for anything, he will just tell me, give me a son and I will do anything for you. He was so obsessed with this situation that he just started misbehaving until I was thrown out (*A female respondents, Namua 16th October 2014)

In addition another female participant related

> *"In this part of the world, marriage is just for you to give birth to children and failure to do that can lead to you losing your marriage, especially if you do not have the sex of children your husband wants. I have seen a woman who was thrown out by her husband because she did not have son and according to her husbands' people, their brother is the only son, he must have a son who will carry on the family name and take care of his property. (*A female discussant, Gada Biu 15th October 2014)

However, another key informant, who had all female children but had no problem in her marriage also expressed her feelings thus

> *''I don't see anything wrong in having all female children after all. It is the husbands who determine the sex of the child. So I don't think that my husband will now say I should pack out or he is going to marry another wife when he known that he has not given me a male child to bear for him''.*(A middle age female discussant, Delimi 15th October 2014).

4.3.15 Factors that Decide Gender Preference

Table 4.17 shows the distribution of factors that decide gender preference, out of the factors stated, majority of the respondent 53.8 percent stand the roles they (gender) perform is the major factor that decide gender preference.

Table 4.18: Distribution Influence in Deciding Gender Preference

Influence	Frequency	Percentage
The roles they (gender) perform	215	53.8
The rate of mortality	40	10.0
Security of marriage	145	36.3
Total	**400**	**100.0**

Source: Field Survey, 2014

However, 36.3 percent of the sample population considered security of marriage while the rate of mortality constitutes 10.0 percent. In a sons preferring society like Nigeria, a woman marital security depends on her giving birth to male children (Bairagi, 2001).

4.4:1 SOCIO-CULTURAL FACTORS AND SEX PREFERENCE

The issue of sex preference is one of those decision influences primarily by where a person comes from. In Nigeria as in many countries in Africa and Asia, high fertility is considered a blessing and a man with many children particularly sons seems to command much respect and prestige (Benedict, 1998). Also Noted by Mcsweeny (1993) is the fact that, in many cultures, people feel that life is incomplete without a son to carry out the family name. She further stressed that a more serious problem is the traditional legal system that does not allow females to inherit property in most culture and that although the husband and wife may be quite contented with girls, most times the relative persistently make life unbearable for the husband until he marries another wife to continue the search for a male child.

4.4.2: Regard Given to Women Married for Several Years without Preferred Sex

Table 4.18 reveals that women married for several years without the preferred sex, shows that majority of the respondents with 40.8 percent indicated that women married for several years without the preferred sex are pitied; this is because there is every tendency for external problem which might eventually lead to marital instability or dissolution.

Table 4.19: Conditions of Women Married for Several Years without Preferred Sex

Regards	Frequency	Percentage
Pitiful	163	40.8
Scornful	25	6.3
Pity mixed with scorn	61	15.3
object of mockery	151	37.8
Total	**400**	**100.0**

Source: Field Survey, 2014

Also 37.8 percent of respondents indicates that such women (married for several years without the preferred sex) are object of mockery while others reveals that they are pitied mixed with scorn as well as scornful which constitutes 15.3percent and 6.3 percent respectively.

4.5 CONTRACEPTIVE KNOWLEDGE AND USE

4.5.1 Knowledge and Use of Family Planning

Fig 4.7 shows that about 93 percent of the respondents reported that they know about or had heard of family planning. Family planning practice is a decision on the number of children in a family and the intervals between their births particularly by means of artificial contraceptive or voluntary sterilization.

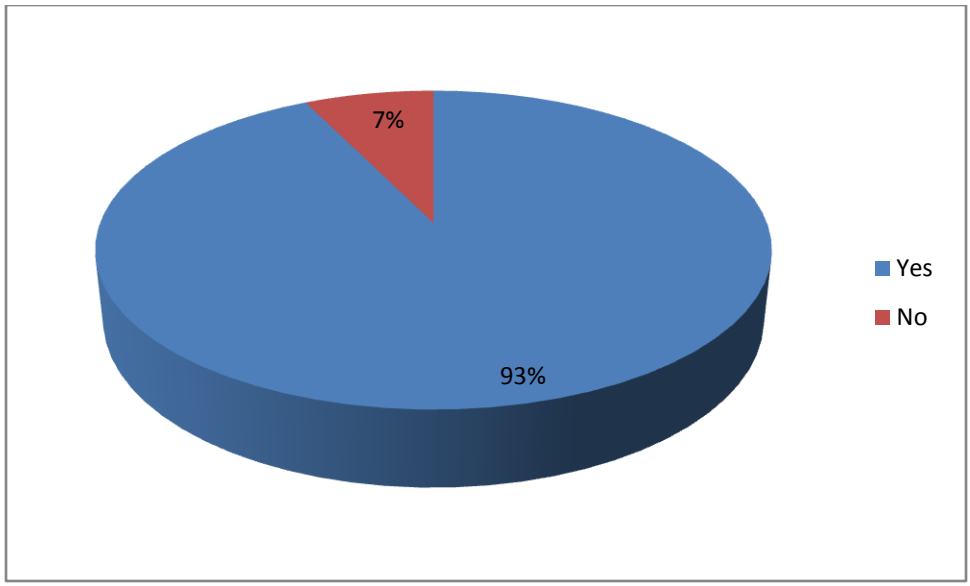


Fig 4.7 Knowledge of Family Planning

Source: Field Survey, 2014

However, 7.3 percents also reported that they don't know or heard about family planning. Analysis shows that respondents have high knowledge of family planning compare to those who claim they don't have the knowledge and use of family planning.

4.5.2 Family Planning Methods

Figure 4.8 shows the distribution of different types of family planning methods known and methods used. However, the common method known and used is the condom (Durex) (28.1 percent) followed by pills with 15.2 percent and then some other respondents tend to practice withdrawal method which constitutes 13.8 percent.

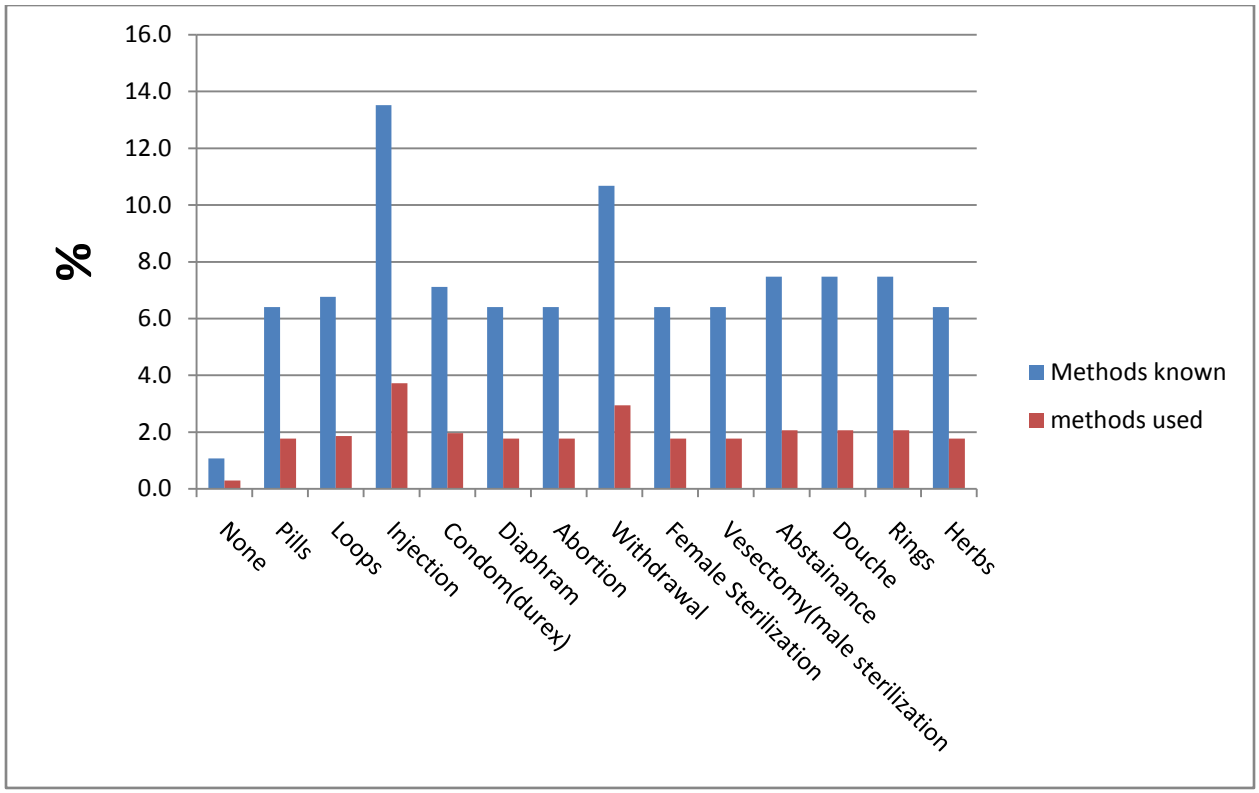


Fig. 4.8 Distribution of Respondents of Types of Family Planning Methods Known and Used

Source: Field survey 2014

This group is followed by injection and loops which constitutes 8.0 percent each, abortion 6.9 percent, diaphragm 6.1 percent, rings and herbs also constitutes 2.8 percent each. Nevertheless, it is evident that the knowledge of and use of contraceptive in the society is high. Generally question on contraceptives seems to attract a high degree of 'no response'. Given a moral background of many (who came from rural areas), a sense of guilt normally surrounds the practice of contraception, and this would affect acceptance of knowledge and contraceptive methods (Mamman, 1992).

4.5.3 Approval of Family Planning Usage

Table 4.20 shows that, majority of respondents strongly recommends the use of family planning which constitutes 67.0 percent. Also, 14.3 percent disapprove the use of family planning closely follow by 13.5 percent respondent who can't say anything about the use of family planning, Others on the category of responses which made up of 5.3 percent could not give a definite reason on family planning usage.

Table 4.20: Distribution of Family Planning Usage

Approval	Frequency	Percentage
Strongly approve	268	67.0
Disapprove	57	14.3
Can't say	54	13.5
Others	21	5.3
Total	**400**	**100.0**

Field survey, 2014

Nevertheless, it is evident that the knowledge and use of family planning in the society is high. Generally question on family planning seems to attract 'no response', sometimes a sense of guilt normally surrounds the practice of family planning and this would affect acceptance of knowledge and practices of contraceptive methods. In agreement with the findings, from the Focus Group Discussion conducted most of the male discussants stated:

> *We believe in child spacing because that will give you room to plan for yourself and the future of our children. We don't believe to bring children to this earth that we cannot raise them and finance their education including their basic needs such as food, shelter and clothe. So family planning has done a lot and still doing us good*. (Men in Jenta Mangoro, 24th September 2014)

4.5.4 Sources of Information on Family Planning

Table 4.21 shows sources of information on family planning. Most respondents get their information from the hospital through doctors or nurses as affirm by 47.0 percent of respondents closely follow by Family Planning Units (govt.) church/mosque organized) which constitute 22.0 percent

Table 4.21: Distribution of Sources of Information on Family Planning

Sources of knowledge	Frequency	Percentage
Through discussion with friends	26	7.6

Personal reading from related literature	28	8.2
Media (Television, Radio, Newspaper	37	11.0
Family planning unit (govt.) church/mosque organized)	76	22.0
Hospital through Doctor or Nurse	162	47.0
Others	13	3.8
Total	**342**	**100.0**

Source: Field Survey, 2014

However, other sources are through, Media (Television, Radio, Newspaper) 11.0 percent, personal reading from related literature with 8.2 percent, discussion with friends and others with 7.6 percent and 3.8 percent respectively

Table 4.5.5 Refusal to Use Family Planning

Table 4.23 shows distribution refusal to use family planning. From amongst respondent who disapprove the use of family planning, most of them about 52.3 percent indicated that the main reason is because of their religious believe. Religion plays a significant role in influencing decisions about birth control use. Religious view on birth control vary widely, and even those religions that seem to be the most opposed to birth control has traditions that allow the use of contraceptive (Musa, 2010)

Table 4:22 Distribution of Respondent on Refusal to Use Family Planning

Reasons	**Frequency**	**Percentage**
Family reasons	15	17.9
Religious reasons	44	52.3
Self decision	25	29.8
Total	**84**	**100**

Source: Field Survey, 2014

However 29.8 percent that it is a self decision the reason was that, their wives health is in danger because the react to the family planning methods they adopt (pills and injection).

While 17.9 percent pointed out that it because of family reasons though there was high percentage of no response among the Muslims, rural dwellers and some few Christians.

CHAPTER FIVE

FACTORS INFLUENCING SEX PREFERENCE

5.1 INTRODUCTION

This chapter is focused on the cross-tabulation and discussion of the results on the demographic and socio-economic characteristics of the respondents. The cross-tabulations is done based on the dependent variables of preferred sex, numbers of children of such participation and independents variables of age, sex, type of marital union, size of family desire, reasons for engaging in sex preference, number of children ever born, knowledge of family planning, socio-economic statuses as well as other socio cultural factors and sex preference

5.2 Place of Residence and Preferred Sex

Table 5.1 shows the distribution of respondents by place of residence and preferred sex. This shows that majority of the respondents (56.2 percent) reside in the urban area have preference for both male and female children, compared to their counterpart who resides in the rural area with preference for male and female which constitute 43.8 percent.

Table 5.1 Distributions of Respondents by Place of Residence and Preferred Sex

Place of Residence	**Preferred Sex**				**Total**	
	Male		**Female**			
	No.	**%**	**No.**	**%**	**No.**	**%**
Urban	173	64.6	52	39.4	225	56.2
Rural	95	35.4	80	60.6	175	43.8
Total	**268**	**100.0**	**132**	**100.0**	**400**	**100.0**

Pearson Chi-Square =21.735, Df=1, P Value=0.001

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Source: Field Survey, 2014

The result further reveals that more respondents show preference for males among urban residents which constitutes 64.6 percent as against 35.4 percent for males for rural resident. The case of female preference is 39.4 percent in the urban and 60.6 percent in the rural

The chi-square test yielded a calculated value of 21.735 with 1 degree of freedom and having a significance level of 0.001. There is a significant statistical association ($p<0.001$) between place of residence and preferred sex of the offspring. Therefore there is a higher preference for male children among the urban settlers than those in the rural setting.

5.3 Age and Preferred Sex

Table 5.2 shows distribution of age by preferred sex. Among the age groups, most respondents from 25-29 year which constitutes the highest percentage of 30.0 followed by those with age group 30-34 years, 40-44 years that comprises of 16.8 percent and the least among the respondents is ranged 15-19 years which constitutes 1.0 percents.

Table 5.2 Distributions of Respondents by Age and Preferred Sex

Age Groups	Preferred Sex				Total	
	Male		Female			
	No.	%	No.	%	No.	%
15-19 years	4	1.8	0	.0	4	1.0
20-24 years	29	12.9	15	8.6	44	11.0
25-29 years	71	31.6	49	28.0	120	30.0
30-34 years	33	14.7	34	19.4	67	16.8
35-39 years	22	9.8	36	20.6	58	14.5
40-44 years	36	16.0	31	17.7	67	16.8
45-49 years	27	12.0	5	2.9	32	8.0
50 years and above	3	1.3	5	2.9	8	2.0
Total	225	100.0	175	100.0	400	100.0

Pearson Chi-Square =26.037, Df=7, P Value=0.001

Source: Field Survey, 2014

However, the result further reveals that majority of respondents of within the age group of 25-29 years with preference (Male and Female) constitutes 31.6 percent and 28.0 percent. The Chi Square gave a calculated value of 26.037 with 7degree of freedom and having a level of significance of 0.001. This shows that age and preferred sex has a significance relationship. This implies that age have a significant impact on preferred sex.

5.4 Marital Union and Preferred Sex

Table 5.3 shows that majority (54.5 percent) of the respondents are in monogamous union compared with those who are in polygamous union which constitutes 45.5 percent. Male and female analysis in Table 5.3 shows higher proportion of respondents who have preference for

male constitutes 34.2 percent and 65.8 percent respectively. Also the preference for females constitutes 60.0 percent and 40.0 percent both in monogamous and polygamous union.

Table 5.3 Distributions of Respondents by Type of Marital Union and Preferred Sex

Type of Marital Union	Preferred Sex				Total	
	Male		Female			
	No.	%	No.	%	No.	%
Polygamous	77	34.2	105	60.0	182	45.5
Monogamous	148	65.8	70	40.0	218	54.5
Total	225	100.0	175	100.0	400	100.0
Pearson Chi-Square =25.349, Df=1, P Value=0.001						

Source: Field Survey, 2014

The Chi Square test yield a calculated value of 25.349 with 1 degree of freedom and having a level of significance of 0.001. In this vein, the result shows that there is significant relationship between marital union and preferred sex

5.5 Education Attainment and Preferred Sex

Table 5.4 shows a cross tabulation of educational attainment and preferred sex. The table reveals that majority of the respondents with tertiary education with male preference constitutes 65.8 percent follow by those with preference with the same tertiary education which constitutes 41.7 percent. Respondents with secondary education with preference for both male and female constitutes 20.9 percent and 24.4 percent respectively

Table 5.4 Distributions of Respondents by Educational Attainment and Preferred Sex

Educational Attainment	Preferred Sex				Total Male	
	Male		Female			
	No.	%	No.	%	No.	%
No scholling	6	2.7	8	4.6	14	3.5
Quranic	16	7.1	8	4.6	24	6.0
Primary	4	1.8	22	12.6	26	6.5
Secondary	47	20.9	42	24.0	89	22.2
Tertiary	148	65.8	73	41.7	221	55.2
Others	4	1.8	22	12.6	26	6.5
Total	**225**	**100.0**	**175**	**100.0**	**400**	**100.0**
Pearson Chi-Square =29.768, Df=4, P Value=0.001						

Source: Field Survey, 2014

The chi square analysis on the relationship between education and preferred sex indicates that there is significant relationship between educational attainment and preferred sex with χ^2 value 29.768, degree of freedom 5 and the p value 0.001

5.6. Occupation and Preferred Sex

Table 5.5 shows the distribution of respondents by occupation and preferred sex. The table reveals that business/petty trading have the highest preference (male/female) of 49.2 percent followed by civil/public servant with 38.5 percent.

Meanwhile farming, artisan among the occupation accounted for 9.2 and 3.0 percent respectively. Furthermore, business/petty trading ranked the highest among respondents of preferred sex in both male and female with 49.3 percent and 49.1 percent in that order. In addition, artisan happens to be the least which constitutes 5.3 percent of male and 0 percent of female preference.

Table 5.5 Distributions of Respondents by Occupations and Preferred Sex

Occupations	**Preferred Sex**				**Total Male**	
	Male		**Female**			
	No.	**%**	**No.**	**%**	**No.**	**%**
Civil/public servant	80	35.6	74	42.3	154	38.5
Farming	22	9.8	15	8.6	37	9.2
Artisan	12	5.3	0	.0	12	3.0
Business/petty trading	111	49.3	86	49.1	197	49.2
Total	225	100.0	175	100.0	400	100.0

Pearson Chi-Square =29.735, Df=3, P Value=0.001

Source: Field Survey, 2014

The Chi Square gave a calculated value of 29.768 with 3 degree of freedom and having significant level of 0.01. This shows a statistically significant relationship between occupation and preferred sex. This implies that occupation has a strong relationship with preferred sex.

5.7 Surviving Children and Preferred Sex

Table 5.6 reveals the respondents by surviving children and preferred sex. Out of the entire sample respondents, majority 53.8 percent gave reasons for sex preference as the roles they (gender) perform followed by security in marriage with 36.2 percent. That with option of rate of mortality comprises 10.0 percent. Sex preference among male and female shows that male respondents comprise of 58.7 percent dominated their female counterpart with 46.7 percent among the role they (gender) perform. More so, security in marriage among males constitutes 31.5 percent while the female counterpart with 43.0 percent preferred sex.

Table 5.6 Distributions of Respondents by Surviving Children and Preferred Sex

Reasons For Sex Preferences	**Preferred Sex**				**Total Male**	
	Male		**Female**			
	No.	**%**	**No.**	**%**	**No.**	**%**
The roles they (gender) perform	138	58.7	77	46.7	215	53.8
The rate of mortality	23	9.8	17	10.3	40	10.0
Security of marriage	74	31.5	71	43.0	145	36.2
Total	235	100.0	165	100.0	400	100.0
Pearson Chi-Square =6.209, Df=2, P Value=0.0045						

Source: Field Survey, 2014

The Chi Square Test yields a calculated value of 6.209 with 2 degree of freedom and having a level of significance of 0.045. In this vein, the result shows that there is significant relationship between surviving children and preferred sex. This implies relationship that surviving children have an impact on preferred sex

5.8 Children Ever Born and Preferred Sex

Table 5.7 shows the cross tabulation of children over born and preferred sex. 56.4 percent of respondents with 3-4 children ever born with preference for male out of which 61.7 percent have preference female. Also the least of respondents among the preferred sex both

male and female constitutes 1.8 percent and 5.1 percent respectively also have the least number of children of children ever born (74 children)

Table 5.7 Distributions of Respondents by Number of Children Ever Born and Preferred Sex

Children Ever Born	Preferred Sex				Total	
	Male		Female			
	No.	%	No.	%	No.	%
1-2	63	28.0	31	17.7	94	23.5
3-4	127	56.4	108	61.7	235	58.8
5-6	31	13.8	27	15.4	58	14.5
7 +	4	1.8	9	5.1	13	3.2
Total	225	100.0	175	100.0	400	100.0

Pearson Chi-Square 8.512, Df=3, P Value=0.037

Source: Field Survey, 2014

The Chi Square analysis on the relationship between children ever born and preferred sex indicates that there is significant relationship between children ever born and preferred sex indicates that there is significant relationship between ever born and preferred sex with χ^2 value 8.512, degree of freedom 3and p value of 0.03

5.9 Surviving Children and Preferred Sex

Table 5.8 shows the distribution of respondents surviving children and preferred sex. Analysis of surviving children (1-2) shows that 52.0 percent and 50.5 percent have preference for male and female respectively while 0 percent and 2.3 percent have 7-8 surviving children.

Table 5.8 Distributions of Respondents by Surviving Children and Preferred Sex

Surviving Children	**Preferred Sex**				**Total Male**	
	Male		**Female**			
	No.	**%**	**No.**	**%**	**No.**	**%**
None	45	20.0	43	24.6	88	22.0
1-2	117	52.0	85	48.6	202	50.5
3-4	43	19.1	43	24.6	86	21.5
5-6	4	1.8	0	.0	4	1.0
7-8	0	.0	4	2.3	4	1.0
9+	16	7.1	0	.0	16	4.0
Total	225	100.0	175	100.0	400	100.0

Pearson Chi-Square =23.228, Df=5, P Value=0.001

Source: Field Survey, 2014

The chi square gave a calculated value of 23.228 with 5 degree of freedom and having a level of significance of 0.001. This shows a significant relationship between surviving children and preferred sex

5.10 Knowledge of Family Planning and Preferred Sex

Table 5.9 shows the proportion of respondents who have the knowledge of family planning and preferred sex. This shows that majority 92.8 percent have knowledge of family planning and have a preferred sex of 9.2percent male and 93.1 percent female

Moreso the remaining 7.2 percent of the sampled respondents say they don't have knowledge of family planning, with 7.6 percent majority being male and 6.9 percent are female with preferred sex.

Table 5.9 Distributions of Respondents by Knowledge of Family Planning and Preferred Sex

Knowledge of Family Planning	Preferred Sex				Total	
	Male		Female			
	No.	%	No.	%	No.	%
Yes	208	92.4	163	93.1	371	92.8
No	17	7.6	12	6.9	29	7.2
Total	225	100.0	175	100.0	400	100.0
Pearson Chi-Square =0.00531, Df=1, P Value=0.942						

Source: Field Survey, 2014

The chi square test gave a calculated value of 0.005 with 1 degree of freedom and having a level of significance of 0.942. In this vein, the result shows that there is no significance relationship between the knowledge of family planning and preferred sex. This implies that knowledge of family planning does not have an impact on preferred sex.

5.11 Those Currently Using Family Planning and Preferred Sex

Table 5.10 shows the distribution of respondents by those currently using family planning and preferred sex. From the analysis, it can be seen that majority (59.5 percent) are currently using family planning method. Out of this, 56.0 percent have preference for male while 64.0 percent have preference for female. Among the respondents who are currently using family planning constitutes 44.0 percent with male preference and 36.0 percent with preference for female.

Table 5.10 Distributions of Respondents by Those Currently Using Family Planning and Preferred Sex

Currently Using Family Planning	Preferred Sex				Total	
	Male		Female			
	No.	%	No.	%	No.	%
Yes	126	56.0	112	64.0	238	59.5
No	99	44.0	63	36.0	162	40.5

Total	**225**	**100.0**	**175**	**100.0**	**400**	**100.0**

Pearson Chi-Square =2.293, Df=1, P Value=0.130

Source: Field Survey, 2014

The chi square gave a calculated value of 2.293 with 1 degree of freedom and having a level of significance of 0.13. This shows that those currently using family planning and preferred sex have an insignificant relationship.

5.12 Sex and Preferred Sex

Table 5.11 reveals the distribution of respondents by sex and preferred sex. Majority of the respondents 58.8 percent have preference for male compare to those with female preference that constitutes 41.2 percent. The results further reveals that more of the respondents among males with 64.4 percent and 35.6 percent prefer male and female children respectively, compared with their female counterparts that constitutes 51.4 percent and 48.6 percent for the preference for females.

Table 5.11 Distributions of Respondents by Sex and Preferred Sex

Respondents Sex	**Preferred Sex**				**Total**	
	Male		**Female**			
	No.	**%**	**No.**	**%**	**No.**	**%**
Male	145	64.4	90	51.4	235	58.8
Female	80	35.6	85	48.6	165	41.2
Total	**225**	**100.0**	**175**	**100.0**	**400**	**100.0**

Pearson Chi-Square =6.355, Df=1, P Value=0.012

Source: Field Survey, 2014

The chi square gave a calculated value of 6.355 with 1 degree of freedom and having a level of significance of 0.012. This shows a significant relationship between sex and preferred sex.

5.12 Greatest Source of Influence in Determining Number of Children

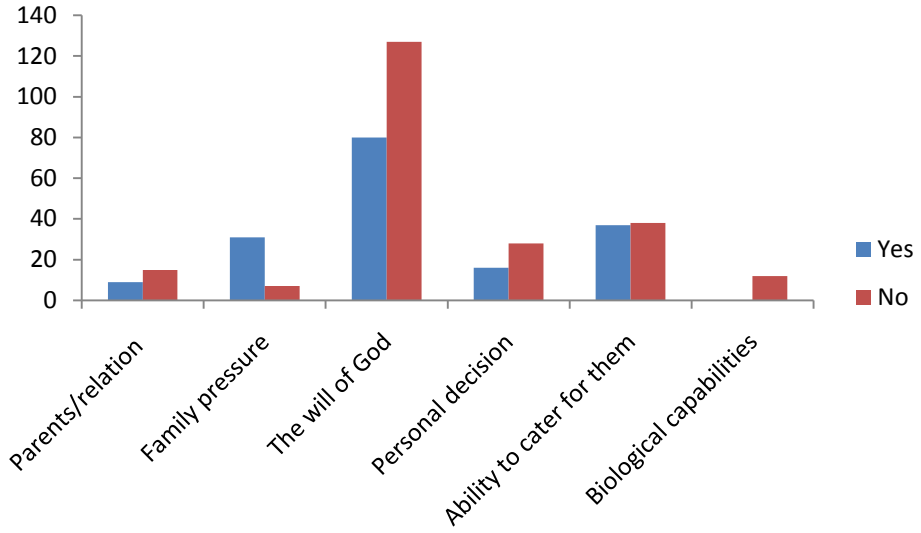


Fig 5.2: Pearson Chi-Square = 35.981, df = 5, p-value = .000

Source: Field Survey, 2014

The greatest source of influence in determining the number of children by the respondents was the will of God followed by the ability to cater for them (χ^2= 35.981, df = 5, p-value = .000). Biological capabilities had little or no contribution

CHAPTER SIX:

SUMMARY, RECOMMENDATION AND CONCLUSION

6.1 INTRODUCTION

This study concluded with the major aim of collecting and analyzing data on the socio-economic and demographic implications of sex preference in Plateau State. Sex preference here refers to the preference of a particular sex over the other especially the preference of a male child. This study set for itself the task of determining whether sex preference affects the fertility behavior of people as well as the level of marital stability. The indices that generally affect sex preference were identified and reviewed; they include socio-cultural, socio-economic, demographic, size of family planning and mortality factors among others.

The result of the demographic characteristics of the respondents in the study area shows that majority are within the age of 25-29 years which accounted for 30.0 percent, compare with those less than 15 years with 1.0 percent and 50 years above with 2.0 percent indicating that majority of the respondents were still within their active productive age, hence may influence decision participate in sex preference within the study area. A majority of respondents were ever married men and women. Educationally, most of the respondents have been educated beyond primary levels. The result on the religion shows that majority 73.5 percent are Christian. Occupationally, most of the respondent (38.5 percent) is civil servant.

On the other hand, income level shows that 38.3 percent less than N8,000 minimum wage for Nigerian workers. The distribution of place of residence shows that majority 67.0 percent resides in the urban area of the state.

Analysis of respondent on fertility preference in the study area shows that majority comprised of 58.8 percent want to have 1-4 numbers of children ever born. Out of the entire sampled respondent on the desire for more children 47.5 percent desire to have additional children irrespective of the sex. Of those that preferred sex in option of one child, 56.8 percent say it doesn't matter the sex of the child either all boys or girls and this is reflected also for preference of female children which shows that majority 43.0 percent girls care more for their parents than boys. On the type of socio-cultural factors and sex preference, majority of the respondent 40.8 percent indicated that women married for several years with no issue are pitied this is because there is every tendency for external problem as tie to instability in marriage.

It was also revealed that their knowledge on family planning show that majority 92.8 percent have the knowledge of family planning. It is also revealed that there approval of family planning usage show that, high frequency of respondents strongly recommends the use of family planning 67.0 percent.

Chi-square analysis on dependent variable such as, cross tabulation and discussion of results on demographic and socio-economic characteristics of respondents. The cross tabulations is done based on the dependent variables of preferred sex, number of children of such participation and under pendent variables of age, sex size of family desire, reason for engaging in sex preference. While the chi square result on preference of female children to male shows no statistical relationship.

6.2 Discussion of key Findings

This section discusses the major findings of this study which are based on the specific objectives of the study. Analysis of data on sex preference and fertility shows a high preference for boys over girls, especially by the female respondents. This was however not expected as one would have thought that preference for male would have been expressed more by the male respondents than their female counterparts. But when the reasons tendered were considered such as the security/stability of the marriage, it became more meaningful especially in a culture where the security of the marriage is built on the number of surviving sons (Ottong, 1997).

Moreover a high male preference was expected among the male respondents given the social security expectations of parents in Nigeria. In a system with no social welfare/security system for the aged, sociologists and indeed demographers have often argued that it is because parents look up to their children, especially perpetuate lineage, that is why there is a strong parental preference for sex (Caldwell 1997) . This attitude is also strengthened by the need for the continuity of the lineage going by Olusanya (1989).

On further enquiry on the issue of the one child most respondents who wanted a male child gave their reasons as to keep the family line and the continuity of the lineage, for recognition and prestige, to inherit their properties when they die and take care of them when they are old. This goes to confirm the position of the wealth flow theory as put forward by Caldwell, (1997) and Isiugo- Abanihe (2003) where they observed that in Nigeria, men place a high premium on children because of the tangible or emotional benefits derived from them; children (especially sons) bring a high sense, of satisfaction or success to a man, even if he is materially poor, they provide help around the home and on the farm, as well as the family's petty business. And in the absence of social welfare and security programs they give support and care at old age. Children constitute an important source of parental old age support, which includes giving them a befitting burial when they die.

Children, especially sons are agents of continuity for the family name, a characteristic that encourages both polygamy and prolific child bearing, to ensure that sons survive to perpetuate the lineage. In spite of his wealth, fame or accomplishments, a man without a son is of all men the most pitied, since the branch of his family tree ends with his death (Godswill, 2010). Thus female fertility attitudes and behaviors are mostly dictated by masculine and

patrilineal traditions. Thus men's reproductive motivation to a large extent affects the fertility behaviour of their wives. Given this web of pervasive gender-based fertility traditional values and attitudes in Nigerian society, it is understandable when people exhibit a strong preference for male children and large families. Indeed, Caldwell and Caldwell (1997) have argued that the persistence of high fertility in sub-Saharan Africa as a whole can be explained neither by the absence of socio-economic development nor by the ineffectiveness of family planning programs but by the persistence of socio-cultural and traditional practices that hamper the implementation of programs geared towards fertility reduction.

Another important area that the study sought to provide answers to was in the area of sex preferences and marital stability. When asked how many children they would prefer to have in their life time, some respondents gave non-numeric responses preferring to indicate "as many as God gives' or 'as God wishes'. This is because in the traditional African society, people are always very reluctant to give the exact number of children they desire because they feel they do not have any control over it as well as the fatalistic and providentialist nature of their world view. The analysis indicates that respondents who gave non-numeric responses are more likely to be rural residents, non literate and within the low income bracket. According to Isiugo-Abanihe (1997) family size does not matter especially with respect to whether a person gives an "up to God" answer or not, because in the Nigerian culture it is not only family size that is up to God but also other essentials of life such as wealth, ability to purchase a car, own a home or even see the next day are equally up to God. Moreover motivation for large/small family sizes as well as sex preference reflects various levels of influences as noted in this study which include social and cultural norms and values, socioeconomic status, as well as parental and family pressures.

According to Gupta, (1997) male preference is always in the interest of the lineage, whose continuity depends on males alone. It is also in the interest of the household, for whom daughters are transitory members. For every individual, brothers and sons are more valuable than sisters and daughters. This does not mean that sisters and daughters may not be loved as much as brothers and sons. However, in the traditional setting people tend to values their brothers more than their sisters because the former will do much for her throughout life, while the later will effectively disappear after marriage. Similarly, a woman values her sons more than her daughters because the former will be her major source of support. Indeed, a woman's position in her husband's home is not consolidated unless she produces at least one son, (Gupta. 1997).

Occupation and fertility followed almost the same pattern as educational attainment and sex preference. In almost all the cases, it is always the higher the educational attainment, the higher the income level. Apart from people who are engaged in trading and large businesses, the high income people which equate higher education have fewer numbers of children. However, there are people with low level of education but higher income and large number of children. It was equally observed that there are those with better jobs who have attained some level of education that have more children (actual family size) than they anticipated at the beginning of their reproductive lives. This in fact is attributed most of the time to the social and cultural forces operating in the area. For instance a culture where having a male child is equated with life, or the security of marriage, people will do anything within their power to make sure they have at least one son even at the expense of their lives.

Interestingly, it was discovered that knowledge of family planning was high but knowledge alone seems not to be enough motivation for use as evidenced in the fact that some of the respondents reported that they never used any method apart from the natural method, though they did not see anything morally wrong with using them. Evidently, it might be right to conclude that low and non use of family planning methods and services is not attributable to ignorance given the level of awareness. The low level of use to a great extent might be a function of the people's perception of family planning and attitude towards children as further influenced by the social and cultural environments, which not only affect their use or non use but also their choice of family size on the one hand and the sex preference on the other.

Contrary to wide spread assumptions, the findings of this study suggest that cultural and attitudinal factors such as sex preference, desire for more children, concerns about the health effects of family planning methods are as important as cost and access. In this study, most respondents cited religious injunctions as well as attitudinal factors as reasons for not subscribing to family planning methods.

6.3 Conclusion

While population is natural resource, if its growth rate is not properly managed it could be one of the constraints to development, improved quality of live and standards of living for the people of Nigeria. The consequences and implications of rapid population growth occasioned by socio-cultural factors such as sex preference and high fertility will need to be considered in the national effort to achieve sustainable development. High fertility and consequent large family size places pressures on families, households, environment and general development. A large family size makes it difficult for families especially families in the rural areas to provide adequate nutrition, education, health care, shelter and support for all the family members. In the urban areas, high fertility contributes to overcrowding and poor living conditions.

Sex preference has implications for the status of women. The status of women in Nigeria is lower than that of men due to prevailing cultural norms that places superior emphasis on the male child in all aspects of the socio-cultural life. The female child is not given the same opportunities in the family, education and even in growth and development, particularly in the rural areas and among couples of lower socio-economic status which has continued to make the desire for male children stronger and pervasive.

The findings of this study therefore reveals that contrary to findings from studies in the same area, that women were on the whole more likely to prefer more male children than their male counterpart due such reasons as the security and stability of their marriage and not necessarily the prevailing cultural norms which places so much emphasis on the male child for the continuity of the family. It is important to emphasize that sex preference is a strong factor in determining the people's fertility behavior as well as the stability of marital unions. It was also revealed from the study that, the number of children increases (family size) due to increasing desire for male children and that of marital unions can be unstable in the absence of a male child.

However, there is a lot of awareness about people desiring smaller family sizes but such desires are yet to be backed by practices which could reflect in actual reproductive behavior. It would take some time for the awareness to weaken the roots of cultural beliefs and practices, because fertility change is seen as an aspect of traditional and cultural change. This change would come only when there is a substantial change in the cultural values and norms that affect sex preference and fertility. It is therefore concluded that what is needed is development that can bring about cultural change. Once the cultural norms/values that favour male child preference are changed, the much needed preference reduction would follow and marital unions would be strengthened.

6.4 Recommendations

The socio-economic and demographic implications of sex preference for a particular sex of child and its attendant effect on marital stability cannot be overemphasized. The task here therefore is to recommend possible ways by which these effects could be curbed. The expectation is that if the recommendations are implemented, it will help government in its attainment of the policy objective of the National Population policy.

The problems associated with population are recognized the world over particularly as they affect developing countries of Africa, an organized world effort is therefore needed to change the attitude of people towards sex and fertility preferences, family size, marital stability and other fertility related issues. Based on the factors that enhance sex preference, fertility as well as marital stability already identified. The following recommendations are therefore made.

1. Men are currently inadequately targeted in all reproductive health programmes. This situation needs to be addressed as it is believed that the sexual behavior of men has

implications for the health and well being of the family. Also the men play a dominant role in decision making about reproduction and sexual matters in the family, thus, it is pertinent to involve them in all reproductive health programmes both for their own benefits and that of other family members.

2. It is also design and promotes behavioral change communication programmes to increase reproduction, sexual health knowledge, awareness and behavioral change among Nigerians.

3. Moreover, population education should be encouraged and promoted. Government should draw up and include in the curriculum of primary and post primary education issues of population. It is believed that if young people become acquainted with population issues early enough, it will help in no small measure to reduce the fertility rate.

4. The fact that the rate of mortality could have an effect on the fertility rate calls for health measures in line with the millennium development goals (MDG) that will aim at a drastic reduction in infant mortality rate. The present government emphasis on a comprehensive health care system aimed at the reduction of infant and child mortality should be enhanced. Since this has the potential of reducing infant deaths, couples can be more certain about the survival of the number of children they wish to have.

5. Government should put in place an initiative such as the proper education of the girl child, which will improve the status of women and enhance their role and participation in the development process. Rural based programs geared toward bettering the lot of the rural women should be vigorously pursued. This is sure to affect the social and economic forces which would further help, to change the character of marriage and fertility in Nigeria.

6. Given the findings of the study that sex preference and socio-economic implications varies according to levels of education, occupation, income, places of

   Residence as well on the socio-cultural and religious environment of the people, it is recommended that subsequent studies on fertility should be sensitive to the difference that normally exist between groups that exist under the same environment. This is bound to be of much demographic significance rather than treating them as though everybody possessed uniform demographic patterns.

7. Improvement in the status of women is very crucial in the task of reducing population growth rate. In empowering the women, they could assume and perform most of the roles performed by men in the society, which includes title inheritance, and carrying on the lineage. To improve the status of women will require the government and non-governmental organization (NGOs) to increase alternatives to marriage, such as

education and employment which not only leads to delayed age at marriage but also provides them with choices as well as the confidence that they can achieve anything whether they are male or female.

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8. Much importance is placed on the male child in Nigeria and indeed in Plateau State. The position of the male is generally important in the society due to the patriarchal and patrilineal system of kinship and inheritance, the male child becomes very essential to any couple. The female child should be adequately empowered culturally and otherwise to assume most roles traditionally preformed by the males. By so doing, parents would be assured of their security at old age and the continuity of the lineage.

9. The call for more development of the rural areas will help to reduce the norms and values that lay emphasis on the male children and a society that places so much importance on the position of the male in the society.

10. Given the desire for male children by most couples in Plateau State, it will be almost impossible to reduce the number of children a couple desires without strict government enactments. Therefore incentives should be given to those who adhere to the policy goals.

11. Alongside the emphasis and attention by government and nongovernmental organizations (NGOs) on family planning campaign, there is an equally urgent need to pursue those polices that will lead to the upliftment of the people's socio-economic conditions where it is hoped that this will lead to the appreciation of small family sizes at the individual level. If therefore, government ever aims at changing the demographic culture especially in the rural areas, then rural development programs and efforts must assume an aggressive dimension, it is in fact in the opening of the rural areas that family planning and population regulation programs and campaigns can be more easily and positively enhanced.

6.5 Areas of Further Research

The above discussion provides some clues about profitable ways to address the socio economic and demographic implications of sex preference in Plateau State, such that we can better address the issue of prospects for fertility declines. Without pretending that the following is exhaustive in scope, these represent useful areas to consider for future research.

1. Of great importance is the fact that the incorporation of men in the analysis of fertility and related behaviour in Nigeria should become the norm. Further work should

explore the importance of introducing parties who hold significance for fertility decisions e.g in-laws of the male spouse particularly mothers in-laws. Couple analysis can also clarify the nature and extent of gender inequality in Nigeria.

2. The interest in determinants of sex preference should continue. Of particular importance is the need to clarify the role or impact of spousal discussion or communication on number and sex of child preferred as well as family planning use. Fast becoming a policy tool that is presumed to enhance the uptake of family planning, recent findings suggest that spousal discussions may actually not have the expected causal impact on fertility behavior, (Dodoo et al 2001)but understanding how valid or robust this relationship is, is important in a situation of depreciating resources and funding.
3. Progress can be made by understanding areas of differentials in male and female behavior by including specific questions that address individual needs particularly in surveys, with the sole aim of developing a comprehensive understanding of the various influences and motivation that affect fertility preferences which could include social, cultural, physiological and environmental.
4. Greater advancement can be made in providing a scientific framework for understanding motivation to sex preferences among males and females in areas considered to be culturally weak, urbanized and highly literate.

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APPENDIX I

QUESTIONNAIRE SCHEDULE

Department of Geography,

Faculty of Science,

Ahmadu Bello University,

Zaria.

I am a MSC student of the above named department carrying out a research on the socio-economic and demographic implications of sex preference in Plateau State. The research is strictly academic and will be used entirely for that purpose; you are assured of anonymity as your responses will be handled with strict confidence.

Thank you

SECTION A: SOCIO-ECONOMIC AND DEMOGRAPHIC DATA.

1. Age (a) < 15 [ ] (b) 15 – 19 [ ] (c) 20-24 [ ] (d) 25-29 [ ] (e) 30-34 [ ] (f) 35-39 [ ] (g) 40-44 [ ] (h) 45-59 [ ] (g) 50 and above

2. Sex (a) male [ ] (b) female [ ]

3. Types of Marital Union? (a) Polygamous [ ] (b) Monogamous [ ]

4 Types of Marital status (a) Single parents [ ] (b) Married [ ] (c) Widow [ ] (d) Divorce[] (e) Separated [ ]

5. What is your tribe? (Specify) ----------

6. What is your religion? (a) Christian [ ] (b) Muslim [ ] (c) Traditional [ ] (d) No religion [ ] (e) others (Specify) ----------

   (b) If Christian, what denomination or church do you belong to?

   (a) Catholic [ ] (b) Protestant [ ] (c) Pentecostal (d) others specify----------

7. What is the highest level of school you attended? (a) No schooling [ ]

   (b) Quranic [ ] (c) Primary [ ] (d) Secondary [ ]

(e) Tertiary [ ] (f) others specify ----------

8. What is your occupation? (a) Civil/Public Servant [ ]

(d) Farming [ ] (e) Artisan [ ] (f) Business/petty trading

9. Place of residence? (a) Urban [ ] (b) Rural [ ]

10. How much is your income level per month in Naira?(a) Below 40,000 [ ]

(b) ₦41, 000 ₦60, 000 [ ] (c) ₦61, 000-₦80, 000 [ ] (d) ₦81, 000 – ₦100, 000

(e) ₦101, 000 – ₦120, 000 [ ](f) ₦120,000 and above.

11. Types of dwelling unit? (a) Rooms (multifamily unit) (b) Flat [ ]

(c) Bungalow [ ] (d) Duplex [ ] (e) others (specify) ----------

12. Is this house/apartment owned by you or do you rent if from someone else?

(a) Owned by respondent [ ] (b) Rented by respondent [ ]

(c) Rented by employer for respondent [ ] (d) own by relative [ ]

(e) Others (specify).

FERTILITY PREFERENCES

13. Number of children ever born? (a) None [ ] (b) 1-4 [ ] (c) 5-9 [ ]

(d) 10-14 [ ] (e) 15-20 (f) 20 and above

14. Number of males? (a) 1-2 [ ] (b) 3-4 [ ] (c) 5-6 [ ] (d) 7-8 [ ] (e) 9-10 [ ] (f) 11 and above [ ]

15. Number of Females? (a) 1-2 [ ] (b) 3-4 [ ] (c) 5-6 [ ] (d) 7-8 [ ]

(e) 9-10 [ ] (f) 11 and above.

16. How many are living? (a) Male [ ] (b) female [ ]

17. Do you want to have another child in addition to the one(s) you already have? (a) Yes [ ] (b) No [ ] (3) Undecided [ ]

18. Does any of your parents want you to have more children in addition to the one(s) that you already have? (a) Yes [ ] (b) No [ ] (c) parents undecided [ ] (d) don't know parents opinion [ ]

(a) If yes, how many children altogether do you parents want you to have? (a) Sons [ ] (2) Daughters [ ]

19. If you could choose exactly the number of children to have in your whole life, how many boys and how many girls would you like to have? (a) Boys [ ] (b) Girls [ ]

20. Does it matter whether you have all boys or all girls?

(a) It matters [ ] (b) Doesn't matter [ ]

21. If respondent prefer more boys than girls, why? (a) To perpetuate lineage [ ] (b) old age security [ ] (c) to perform traditional rites when I die [ ] (d) others

(Specify)----------

22. If respondent prefer more girls than boys, why? (a) Girls care more for their parents than boys [ ] (b) Women's place no longer in the kitchen only [ ] (c) What a man can do a woman can also do [ ] (d) others (Specify) ----------

23. Do you think that a couple who have no male child should continue child bearing until they have one? (a) Yes [ ] (b) No [ ] (c) undecided [ ]

24. Do you think marriage can be unstable as a result of the absence of a male child? (a) Yes [ ] (b) No [ ]

25. Do you think marriage can be unstable in the absence of a female child? (a) Yes [ ] (b) No [ ]

26. Types of marital instability (a) Malice [ ] (b) Fighting [ ] (c) Separation [ ] (d) Abandonment [ ] (e) Financial deprivation [ ] (f) Sexual Deprivation [ ] (g) Divorce

27 What causes instability in marriage? (Men only) (a) Lack of male child

[ ] (b) lack of female child [ ] (c) Barrenness/infertility [ ] (d) drunkenness [ ] (e) wife nagging [ ]

28. Would you marry another wife if your wife does not give birth to a male child? (Men only) (a) Yes [ ] (b) No [ ]

29. Would your husband marry another wife if you do not give birth to a male child? (Women only) (a) Yes [ ] (b) No [ ]

30. What size of family do you strongly desire? (a) More males and few females [ ] (b) few males and more females [ ] (c) equal number of males and females [ ] (d) only males/only females [ ] (e) others (Specify) ----------

31. What do you think is the greatest source of influence in determining the number of children you desire? (a) parents/relations [ ] (b) family pressure [ ] (c) the will of God [ ] (d) personal decision [ ] (e) Ability to cater for theme [ ] (f) the rate of mortality [ ] (g) biological capability [ ]

32. What is the greatest influence in deciding the preference for sex of child? (a) The roles they perform [ ] (b) the rate of mortality [ ] (c) security of marriage [ ]

SECTION C: SOCIO-CULTURAL FACTORS AND SEX PREFERENCE

33. Within your socio-cultural set up, how is a woman who has married for many years and has no children regarded? (a) Pitiful [ ] (b) scornful [ ] (c) pity mixed with scorn [ ] (d) object of mockery [ ] (e) others (specify) ----------

34. How are married couples without the desire sex of children regarded within your socio-cultural set up? (a) Unnecessary European [ ] (b) unfortunate [ ] (c) fortunate [ ] (d) pitied [ ] (e) others (Specify) ------

SECTION D: CONTRACEPTIVE KNOWLEDGE AND USE

35. Have you ever heard anything about family planning methods?

(a) Yes [ ] (b) No [ ]

36. Have you ever used any method(s) of family planning (a) Yes [ ]

(b) No [ ]

37. Do you approve of family planning use? (a) Strongly approve [ ] (b) Disapprove

[ ] (c) Can't Say [ ] (d) Others (Specify) ----------

38(A) Do you know of any place where you can get information on family planning (contraceptive use)? (a) Yes [ ] (b) No [ ]

(B) If yes, what is your source of knowledge of family planning?

(a) Through discussion with friends [ ]

(b) Personal reading from related literature [ ]

(c) Family planning unit (govt. organized) [ ]

(d) Family planning unit (church/mosque organized) [ ]

(e) Hospital through Doctor or Nurse (f) others specify----------

39. What are some of the method of family planning or concentration that you know and make use of?

Method		Methods Known	Methods Used
1.	None	[ ]	[ ]
2.	Pill	[ ]	[ ]
3.	Loop (IUD)	[ ]	[ ]
4.	Injection	[ ]	[ ]
5.	Condom (Durex)	[ ]	[ ]
6.	Diaphragm	[ ]	[ ]
7.	Abortion	[ ]	[ ]
8.	Withdrawal	[ ]	[ ]
9.	Female Sterilization	[ ]	[ ]
10.	Vasectomy (Male Sterilization)	[ ]	[ ]
11.	Abstaintion	[ ]	[ ]
12.	Douche	[ ]	[ ]
13.	Rings	[ ]	[ ]
14.	Herbs	[ ]	[ ]

15. Others (Specify) ----------

40. Who made the decision to practice contraception in the family?

(a) Husband only [ ] (b) Wife only [ ]

(c) Husband and wife jointly [ ] (d) Medical professional [ ]

Others (Specify) ----------

41 What determine the method of family planning?

(a) Cost [ ] (b) Convenience [ ]

Others (Specify) ----------

42. Where is your mail source of obtaining family planning service and supplies?

(a) Pharmacy [ ] (b) Private Clinic [ ]

(c) Hospital [ ] (d) Family Planning Clinic

Others (Specify) ----------

43. Are family planning services readily available in your locality?

(a) Easily available [ ] (b) Not easily available [ ]

Others (specify) ----------

44. Are you satisfied with the existing family planning services offered at the supply centers?

(a) Satisfied [ ] (b) Not satisfied [ ] (c) Not sure

Others (Specify) ----------

45. (a) As a ---------- do you approve the use of contraceptive as a means of birth control?

(a) Yes [ ] (b) No [ ]

b) If yes, what is your reason for approving the use of family planning?

(a) Wife's health in danger

(b) Want to delay next pregnancy

(c) Desired number of children achieved

(d) Want to enable wife to finish education

(e) Lack of economic resources

(f) Couple has problems

Others (Specify) ----------

APPENDIX II

FOCUS GROUP DISCUSSION GUIDES

ILLUSTRATIVE FGDs GUIDES AND PROBES

Core Questions	Related Probe Questions
1. What do you understand by the term sex preference?	Probe for: Preference for a particular sex over the other or preference for male child over female child or vis-à-vis
2. Do you think it exists within your community?	Probe for: Yes or No
3. Do you support the idea of sex preference	Probe for: Yes or No Seek the reason(s) for the answer
4. Does sex preference have any effect(s) on the fertility behavior of couples?	Probe for : Yes or No
5. If it does , what are the effect(s)	Probe for: Determines the following; - Number of children ever born, - Household sex composition, - Birth spacing practices, - Options for family planning practices - Number of wives to a husband - Desire for sexual intercourse between couples - Desired/preferred family size
6. Which is the most preferred sex?	Probe for: Male child or Female child
7. What are the factors influencing sex preference?	Probe for: - Sex preference in relation to role performance - Reasons for male preference - Reasons for female preference - Strongest influence in deciding sex of child preferred
8. What are the demographic and socio-economic implications of sex preference?	Probe for: - Increase in household size - Inequality in the ratio of males to the females in the family in particular and society in general - Gender stigmatization - Increased family poverty - Increased family instability - Increase in child/mother suffering and malnutrition
9. Do you practice family planning?	Probe for yes or no

	And the reasons for the answer
10. Who makes the decision on when and which method to use in family planning?	Probe for: - Husbands - Wives
11. Do you think that education, income, religion, culture, social status etc. play any role in the household reproductive behaviour?	Probe for yes or no And seek for the reasons for answers
12. Do you think that sex preference should be discouraged?	Probe for yes or no Seek for the reasons for the answer