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DETERMINANTS OF DESIRED FAMILY SIZE FOR YOUNG RURAL PARENTS IN NAKURU COUNTY; A CASE STUDY OF GILGIL AND NAIVASHA DISTRICTS

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DECLARATION OF ORIGINALITY

I hereby declare that this project is entirely my own work and to the best of my knowledge, it has never been presented anywhere in published or non-published work. I further declare that any additional sources of information have been duly cited as per the standard referencing procedure.

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ABSTRACT

Kenya's annual population growth rate is estimated at 2.462% (World Bank, 2011). With a current population of over 41.6 million, it is anticipated that the Kenya's population will reach 65 million by 2030 and reach 96 million by 2050 (KDHS, 2008/09). According to Global Health Facts 2010, the average number of children per woman is 4.19 against a global average of 2.46. This places Kenya among the top 35 countries with highest total fertility rates in the world. This rapid population growth poses a myriad of social and development challenges for the country. The country must devise strategies to address the rapid growth to achieve its vision 2030.

Desired family size in Kenya has been placed at between 3.8 to 4.3 children by various KDHS studies. Thus desired family size closely compares with the actual family size in many parts of the country. There is need to understand what determines desired family size for young parents so as to inform population growth control strategies.

The case study was conducted in Gilgil and Naivasha districts of Nakuru County. The objective was to establish the determinants of desired family size for young rural parents in Nakuru County. A questionnaire was used to collect data from Sixty Two (62) randomly selected respondents aged between 18 – 37 years. The respondents were drawn from four purposively selected sub-locations. Focus Group Discussion and key informant survey with purposively selected community leaders were conducted as well.

The average desired family size in the two districts is 3.84 and 4.08 for women and men respectively. The figures compare closely with the national average. It emerged that the key consideration young parents make in deciding their family size is the financial cost of bringing up the children. Societal influence by friends and family is an important consideration for women than for men. Other important considerations include the availability of resources like land and housing.

It was recommended that the government and development actors need to tailor family planning messages that ride on the determinants of desired family size. Family planning services also need to be integrated with HIV and AIDS programs to take advantage of the big number of community care givers already in the community. Moreover, there is need to institute reproductive   health   education   in   primary   school   curriculum.

CHAPTER 1: INTRODUCTION

1.1   Background of the Study

In July 2012, the government of Kenya through the Ministry of Planning and Vision 2030 launched a new population and development policy to manage the rapidly growing population which experts warn could pose a challenge to economic growth and reduce momentum for the attainment of Vision 2030. The Population Policy for National Development is a successor to the Sessional Paper No. 1 of 2000 on National Population Policy for Sustainable Development which guided implementation of population programmes up to 2010. The policy seeks to check the rate of population growth and thus enable Kenya to achieve its vision 2030.

The World Bank (2011), puts Kenya's annual population growth rate at 2.462%. With a current population of over 41.6 million, it is anticipated that the Kenya's population will reach 65 million by 2030 and reach 96 million by 2050. According to Global Health Facts (2010), the average number of children per woman is 4.19 against a global average of 2.46 which places Kenya among the top 35 countries with highest total fertility rates in the world.

In 1963, at its independence, Kenya's population was placed at 8.9 million. In 1979, Kenya recorded a population growth rate of 3.8% which is one of the highest recorded anywhere in the world, (Mati, 2010). Within 50 years of post-independence Kenya, the population has increased nearly fivefold to the current level. Between 1999 and 2009 population censa the population increased by an average of a million people per year as evidenced by the growth from 28.7 in 1999 million to reach 38.6 million by 2009 (Population Policy for National Development, 2012).

It is estimated that the national mean household size currently stands 5.1, against a rural household mean of 5.5. Moyale district in Northern Kenya has the highest mean at 7.3. On average, households with more than 7 members account for 27.6% of all households. However, in many resource poor rural districts, households with more than 7 members account for more than 40% of all households (Kenya National Bureau of statistics, 2006). Kenya's population below the age of 14 is estimated at 41.9%. However, in many resource poor districts, the population children below 14 account for more than 50% of the population. In a few years' time, the children graduate into adults and bear their own families.

This rapid population growth poses a serious risk to the country's aspirations to achieve upper middle level income status by 2030. An estimated 70% of the population is engaged in rain-fed farming as their key economic activity. Less than 20% of the country is arable with suitable climatic condition. The rest of the country is arid or semi-arid (ASAL). These ASAL areas can naturally only support pastoralism. The situation is further compounded by the effect of climate change which has led to accelerated desertification. Areas previously suitable for rain-fed farming are rapidly being marginalized. This has led to perpetual food insecurity in many parts of the country. In 2011, a severe famine hit parts of Northern Kenya and the coastal region. Billions of shillings were spent in relief efforts. Northern Kenya has the highest household mean size at 6.0. Food poverty in resource poor areas is estimated at around 63% (Tegemeo Institute, 2010)

In 2003, the government of Kenya implemented the universal free primary education (FPE). The country has achieved over 90% school enrolment which is among the highest in the region. However, overcrowded classrooms with very high teacher to pupils ratio are a major challenge to the FPE (Makori, 2010).

On provision of healthcare, the government spends about 7.9% to 9% of the entire budget on public healthcare (Wamai, 2009). Long queues of patients waiting to consult the doctors, shared hospital beds, long doctors' strikes and obsolete equipment are the order of the day in most public health facilities. This makes quality healthcare a far-fetched dream for most poor Kenyans.

The rapid population growth has resulted to recurring deadly conflicts pitting clans and communities over pastures in Northern Kenya. This is occasioned by the fact that as the number of people increase, there is need expand their resource base to support their livelihoods. This means keeping larger herds of animals for pastoralists, or opening new farms for farming communities. But since available land is not increasing, forces of survival for the fittest often come into play thus fuelling deadly conflicts.

In other parts of the country, the ballooning population has led to persistent food insecurity since the available land is outstripped of its carrying capacity. The job market is currently unable to absorb all the youths attaining working age thus resulting to high unemployment rates. This on the other hand fuels insecurity and social unrest.

Traditionally, Kenyan communities have favoured large families. Having many children and wives is seen as a status of power and influence. In many Kenyan communities, a man with many children is viewed with a lot of respect. A small family is seen as lacking – and the man often ridiculed by his peers. Polygamy is still widely practiced amongst pastoral and coastal communities (KNBS, 2006). According to National Association of Catholic Families (1994) desired levels of fertility are estimated to account for 90% of differences across countries in total fertility rates. In other words, people in developing countries have large families because they desire to have large families. They live in cultures and societies in which it may very well make sense for them to do so have large families. Data from Femiplan Kenya indicate that on average women in Kenya desire 3.9 children as compared to men who want an average of 4.3 children.

Children in rural areas are also seen as a source of the much needed farm labour. Children as young as six years are entrusted with herding livestock or taking care of their younger siblings as their parents engage in farm work. By teenage, rural children are expected to engage in productive work after school and during weekends. They are thus not entirely dependent on their parents, but actually contribute towards family resources (Moyi, 2010).

Besides, large families are also viewed as a source of social security among rural people. It is common belief that with many children, one is spreading the risk – the probability is that at least one of the children will be prosperous when they grow up, thus support the parents in their old age. While making a presentation to the Rio +20 Earth Summit in June this year, Lori Hunter a distinguished demographer pointed out that in many resource deficient parts of the world, people bear large families to provide the much needed labour and social security.

There is significant documented evidence on how rapid population growth affects development at a macro level. In its report titled "State of Kenya Population 2011" the National Coordinating Agency for Population and Development alludes to a documented body of evidence that strongly points to a much higher incidence of poverty in large families in most developing countries. This can be attributed to increased dependency burden, where more family members consume the same limited resources.

Since the 1980s, the government and civil society organizations have taken the message of family planning to the people. The Ministry of Planning and Vision 2030 has identified the rapid population growth as a key hindrance to achieving development goals (Mati, 2010). Today, all

government health facilities across the country distribute free male condoms. Some Non-Governmental Organizations have also been providing other contraceptives at very affordable rates. Such efforts to control population growth have been at best moderately effective.

The literacy rate in Kenya is estimated at 87.6%. This literacy level is among the highest in sub-Saharan Africa. Over 70% of households currently own a radio which is the medium used to promote family planning (KNBS, 2009). Most of the radio stations are vernacular. Thus, it can generally be assumed that a large percentage of the population has been reached by this message.

It would be overly prescriptive to assume that this prevailing high fertility rate is accidental. Paul Demeny, a renowned demographer and the editor of Population and Development Review, wonders whether two billion people born in the past 30 years were added to the world's population because their parents did not know the right thing to do (National Association of Catholic Families, 1994). If couples wish to regulate their fertility, they will always find a means to do so (Casterline and Sinding, 2004). It is thus apparent that the total number of children born in a family is mostly a conscious decision.

1.2 Problem Statement

Globally, several studies have been documented on what factors determine desired family size. Several determinants have been proposed including religion, benefit and cost of bringing children up, societal expectations and resource availability. Through these studies, it has been demonstrated that determinants of desired family size differ from one society to the other and from one generation to the other. Such studies have not specifically documented the determinants of desired family size for young rural parents in Kenya at a household level, yet most of Kenya's population is in the rural areas. Massive effort has been put into developing various strategies to control the rate of population growth, with very little corresponding effort to understand what determines desired family size for young parents in Kenya.

Where young parents desire a large family size, they are most likely going to bear a large number of children. This phenomenon is well documented through various studies across the globe. This in return aggregates to a high population growth rate. There is need to understand why a large family size is still viewed with prestige despite the conventionally acknowledged fact that it leads to higher dependence burden that in turn leads to higher poverty incidences. Previous

studies have documented the close relationship between actual family size and desired family size.

The average total fertility rate per woman has fallen from 8.1 recorded in 1979 to the current 4.19. The current total fertility rate is a significant increase from 3.31 recorded in 2004 (Index Mundi). At this rate, the population is expected to hit 65 million by 2030. Unless policy makers understand factors that underlie desired family size, national strategies to check the rate of population growth are unlikely to achieve desired results.

Despite the universally accepted fact by development practitioners that large families have a negative effect on household welfare, many rural parents in Kenya continue to bear large number of children. This is especially a big problem in the resource poor areas where the average family size is more than 7 members. The problem is further aggravated if these family members are below the age of 14 thus largely dependent on their parents. In such scenario, parents are expected to feed, clothe, buy school uniforms, provide medical care, provide shelter etc. most parents are unable to meet these demands.

Households with such dependence burden suffer from all forms of vulnerabilities which are manifested by increased food insecurity, school dropout (or in worse cases non-enrolment), increased incidences of disease due to malnutrition and lack of basic sanitation. High mortality rates are also prevalent. Women bear the brunt of the burden. They have to spend a lot of time nursing infants. Older siblings are expected to take care of their younger siblings – and are often forced to drop out of school.

Households with a big number of dependents are unlikely to experience appreciable change in asset accumulation. This is because they have very little savings. In many cases, there is reverse trend in asset accumulation as the family size grows.
At the national level, such households are also dependent on the government and other donors. Funds that would ideally have been used for other needs are spent on relief food, treating malnutrition and hygiene based diseases and providing other basic necessities.

1.3 Research Questions

The study sought to answer the following questions

I.   What determines the desired family size for young rural parents?

II. Why are large families still desirable to many young rural parents despite the high dependence burden they result to?

1.4 Research objectives

1.4.1 Overall Objective

To establish the determinants of desired family size for young rural parents in Nakuru County.

1.4.2 Specific Objectives

I.   To establish the desired family size for young rural parents in Nakuru County

II. To establish the social, cultural, psychological and economic factors young rural parents consider in determining their desired family size.

III. To establish whether rural parents see any association between family size and household welfare

1.5 Definition of Terms

Actual Family Size: the number of children already born in a family

Average Household Size: the ratio between the number of people (adult and children) living per household and the number of households

Desired Family Size: the number of children parents would want to have taking into consideration current and the foreseeable future conditions.

Fertility Rates: the ratio of live births in an area to the population of that area; expressed per 1000 population per year

Large Family: Family that has more children than the national average of 4.19

Population Growth Rate: the increase in the number of individuals in a population over a given time period as a fraction of the initial population. This is often expressed as a percentage of the number of individuals in the population at the beginning of that period.

Total Fertility Rate: the average number of children that a woman would bear over her lifetime if she were to experience the exact current age-specific fertility rates (ASFRs) through her lifetime, and she were to survive from birth through the end of her reproductive life.

1.6   Significance of the Research

From an elitist point of view, a large family means more expenditure on food, clothing, medical care, school fees and other basic necessities. It means less luxury, less savings and less cash is available for capital expenditure. In other words, unless one is endowed with a lot of income sources, the dependence that comes with a large family will make him remain poor.

The government, researchers and development actors largely agree that a high population growth rate negates national development. Kenya, intends to achieve a medium income development status as outlined in its vision 2030. However, policy makers agree that with the current rate of population growth, the vision 2030 will not be attained.

The issue of desired number of children in a family is intimate. It is unlikely to be influenced by a national policy, unless such a policy clearly takes into consideration the social, cultural, psychological and economic factors that influence desired family size.

This research sought to establish what the desired family size is for young rural parents in Nakuru. It further went into probing some of the social, cultural, psychological and economic factors that influence desired family size. This research also sought to understand whether young rural parents see any link between family size and household welfare. Whereas it is conventionally acknowledged that large family size has a negative effect on household welfare, there was need to establish whether young rural parents see any link between household welfare and family size looking at basic indicators like food security, housing and household asset accumulation.

Development policy makers will find this information important in repackaging information on why people need to plan their families.

1.7   Scope of Study

The study was conducted in Naivasha and Gilgil districts within Nakuru county. The two districts are cosmopolitan and host a big percentage of migrant communities. Naivasha and Gilgil districts give a good representation of the modern Kenyan society that has highly interactive communities with rapidly developing peri-urban centres. In addition, there are a small percentage of pastoral communities within the two districts thus generally giving a representation of communities in Kenya. The findings of the study can thus be generalized to any cosmopolitan society in Kenya.

Two sub-locations within each district were randomly selected (Eburru and Ol Jorai in Gilgil District and Ndabibi and Kasarani in Naivasha district). The study targeted married young parents between the age of 18 to 37 years. This is because this is the age group that is largely at the child bearing age.

A total of 62 respondents were interviewed from the four sub-locations.

1.8   Limitations of the Study

The study was limited to 4 sub-locations within the districts of Naivasha and Gilgil – though it would have been desirable to sample more districts within the county. In addition, the study was limited to a sample size of 62 respondents whereas it would have been desirable to have a bigger sample size.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter takes a review of related studies on determinants of desired family size in different parts of the world. The chapter also examines the relationship between desired family size and actual population growth trend in Kenya. The chapter also details sociological theories that provide an understanding of desired family size.

2.1.1 Population Growth Trend versus Economic Growth

In the year 2000, the government of Kenya launched the National Population Policy for Sustainable Development (2000 – 2010). In the Preamble, the Policy recognizes the population question as critical to State security with need for deliberate attention and care. This policy was succeeded by the recently launched Sessional Paper No. 3 of 2012on Population Policy for National Development. The new policy aims at ensuring that population growth does not outstrip economic growth impetus required to achieve Vision 2030's economic, social and political pillars. With Kenya's population which growth at 2.9% in the 1999-2009 period the policy recognizes that if population growth rate is not managed the Vision 2030 targets of transforming Kenya into a middle-income country will be difficult to realize (Mati, 2010).

Rapid population growth, if not accompanied by an even faster economic growth results into unsustainable competition for resources. This is because more people are forced to compete for resources that are not increasing to match the increased demand. In the Tana River Delta, farming and pastoral communities have co-existed peacefully for decades. The pastoral communities would get enough pasture land to support their livestock while the farming communities occupied land adjacent to the river. However, with a rapid population growth, the farming communities have been forced to open more farming land. On the other hand, the pastoralist community has been forced to increase the number of their stock so as to support the livelihoods of increased population. This has resulted in deadly conflicts as each community fights for its space (IUCN, 2013). This pattern of inter-community conflict is replicated in many other societies and has become a national security issue.

In terms of social services, rapid population growth poses a great risk to quality service delivery. For example, many towns and cities are grappling with acute water shortage, over loaded sewer systems, over-crowded schools, congested hospitals and persistent traffic jams.

In 2007 the government of Kenya launched the vision 2030 which is aimed at guiding Kenya achieve a middle income level status by the year 2030. However, economic analysts have consistently pointed out the fact that for the Vision 2030 to be realized there needs to be a decline in the current population growth rates (Population Policy for National Development, 2012). Economic planners have cited Singapore as an economic model Kenya should emulate with regard to the blue print of Vision 2030. Kenya's socio-economic status was considered approximately at par with Singapore at independence. In the 1970s the population of Singapore was about 2 million. Four decades later the population has only risen to about 5 million. In comparison, Kenya's population has quadrupled from about 10 million to over 40 million. This is a big variance in terms of population growth dynamics. The important issue to be addressed by this Policy is the high and unsustainable population growth rate which is likely to hinder the projected economic growth in Vision 2030 and its socio-economic and political implications. Singapore currently enjoys one of the highest Human Development Index at position 26 globally compared to Kenya's position 143 (UNDP, 2011).

In the 1970s, faced with rapidly growing population and widespread poverty, several Asian countries realized that the unsustainably growing population was impacting negatively on development. China, Hong Kong and Philippines promoted policies and legislations to control the number of children per household. China's famous One Child Policy was a population control policy of the People's Republic of China (PRC). Urban couples were restricted to only one child, while only allowing additional children in exceptional cases. This policy is widely credited to the current China's economic might and social well-being (Wikipedia).

2.1.2 Population Growth Trends in Kenya

At independence in 1963, Kenya's population was placed at 8.9 million. In 1979, Kenya recorded a population growth rate of 3.8% which is one of the highest recorded anywhere in the world (Mati, 2010). Within 50 years of post-independence Kenya, the population has increased fourfold to the current level. Between 1999 and 2009 population censa the population increased by an average of a million people per year as evidenced by the growth from 28.7 million in 1999 to 38.6 million in 2009 (Population Policy for National Development, 2012).

Various KDHS reports indicate that the total fertility rate in 1948 was 6.0. In 1979, the total fertility rate peaked at 7.9 and gradually slowed to 4.19 by 2011. On the other hand, the

population growth rate in 1948 was estimated at 2.5%. In 1979, the growth rate peaked at 3.8% and then gradually slowed down to 2.462% by 2011. Despite the significant decrease in total fertility rate from 7.9 in 1979 to 4.19 in 2011, the population growth rate has only reduced from 3.8 to 2,46 respectively. This is due to a decrease on the mortality rates as well as many people entering the reproductive stage (Mati, 2010).

Kenya's population is estimated to grow at 2.462% per year (World Bank, 2011). With a current population of over 41.6 million, it is anticipated that the Kenya's population will reach 65 million by 2030 and reach 96 million by 2050. According to Global Health Facts 2010, the average number of children per woman is 4.19 against a global average of 2.46 which places Kenya among the top 35 countries with highest total fertility rates in the world. Owing to the past growth rate dynamics, the population is dominantly youthful with nearly half being below 18 years. This has yielded to the so-called *demographic momentum*- a phenomenon that leads to continued population increase despite reducing fertility rates, as a result of waves of large populations of young persons entering reproductive years (age) in successive years as well as decreased mortality rates, (Mati, 2010)

2.1.3 Relationship between Desired Family size and actual family size

General ideal family size reflects child bearing preferences at the societal level. This is what is generally perceived as the right number by the society. Desired family size reflects childbearing preferences at the individual level. It is the number of children that an individual would prefer to bear under the right circumstances and environment. A woman's wanted or desired fertility is then the number of children a woman would choose to bear at the specific time of the material survey, based on her own cost-benefit analysis of childbearing and with complete control over her fertility, (Bongaarts, 1990).

Olaleye (1993) states that desired family size implies realistic desires. It presupposes the number of children parents would want to have taking into consideration current and the foreseeable future conditions.

According to Testa (2012), actual family size reflects the number of children already born in a family. In some countries in the developed world, the desired family size is higher than the actual family size. This is called unattained fertility.

According to Femiplan Kenya (2013), the desired family size in Kenya for women is 3.9 children as compared to men who want an average of 4.3 children. These figures compare closely with the current actual number of children per family which stands at 4.19. Thus there is a very small gap between the actual family size and the desired family size in Kenya. This means that the number of children currently born per family is reflective of the parents' desired family size. The narrow gap between actual and desired family size can be attributed to unwanted pregnancies, or in other case, unachieved fertility goals. In addition, the desires of older parents are more likely to be higher than the desires of younger parents due to various social, cultural and economic factors.

The Kenya Demographic and Health Survey 2008/2009 indicated that the percentage of married women who want no more children has constantly increased. This shows that increasing Kenyan women desire fewer children. The survey also showed that the average desired number of children for women is 3.8 and that of men is 4.0. Again these figures compare closely with the Femiplan Kenya report (3.9 and 4.3 for women and men respectively). The 3.8 average figure quoted by women is a marginal decrease from the 3.9 figure quoted in the 2003 KDHS. However, women with a high number of children have a higher family size preference. In the 2008/2009 KDHS, women with six or more living children have a desired family size of 5.4, compared with only 3.2 for those with one child. 4 children was the most desired number of children followed by 3.

In the 2003 KDHS survey, women in North Eastern province reportedly desired a family size of 11.1 children compared to the national average of 3.9. Fertility desires were also found to be much lower with higher levels of education. Desired family size was also higher for rural women compared to their urban counterparts (4.1 versus 3.4).

In some cases, parents desire a family size smaller than their actual family size. 56% of women with six or more children reportedly desired a lesser family size (KDHS 2008/2009). Probably this can be attributed to unwanted pregnancies or a change in attitude on family size. For example, a parent may have desired a large family in the past and actually gone ahead to bear a large number of children. But due to difficulties in bringing up the children, gradually he favours a smaller family size.

2.1.4 Impact of Desired Family size on National Development in Kenya

The government of Kenya desires to reduce the total fertility rate to a maximum of 2.6 to achieve vision 2030 (Kenya Urban Reproductive Health Initiative 2012). However, as long as parents continue to desire large families, they will continue to bear more children in order to reach their desired number. It is important to understand the underlying factors that inform a parent's desired family size. According to Mosena (1971), research conducted in Pakistan revealed that for women whose desired family size is less than or equal to their actual family size, they had a significantly greater use of contraceptives. Thus, once a woman had reached their desired family size, they started practicing birth control measures.

Fertility research identifies childbearing as sum outcome of a conscious process that involves biology (age and fecundity), control and access to contraception (availability, knowledge, cost and social factors), chance (fertility as unintended outcome of sexual activity and a person's desire or preference for children), (Heiland et al, 2007). Desired levels of fertility are said to account for 90% of differences across countries in total fertility rates. It is thus a conscious decision made by the parents to bear children. In many cases, such parents live in cultures in which it may very well make sense for them to do so, (National Association of Catholic Families, 1994).

It would be overly prescriptive to assume that this prevailing high fertility rate is an accidental happenstance. Paul Demeny, a renowned demographer and the editor of Population and Development Review, thinks that the two billion people in the past 30 years were added to the world's population not because their parents were too ignorant of the birth control choices available to them, but as a matter of conscious choice (National Association of Catholic Families, 1994). If couples wished to regulate their fertility, they would always find a means to do so, (Casterline and Sinding, 2004). It is thus apparent that the total number of children born in a family is mostly a conscious decision. This observation was reinforced by the research in Pakistan that noted that once women attained the desired family size, they started practicing birth control measures, Mosena (1971).

2.1.5 Comparative studies on Determinants of Desired Family Size

Globally several studies have been undertaken to explain determinants of desired family size in different parts of the world.

A study in Pakistan by Ali (1989) revealed that most women see children as a gift from God and wanted to get as many "gifts" as possible. The desired family size amongst educated and uneducated women varied greatly. There was a high preference of having sons within a family. According to Jensen (1985), a study among urban women in Nigeria noted that a significant number of women when asked what was their desired family size, responded that it was "up to God" to decide.

These studies portrayed parents as fatalistic and resigned to the acts of God. This could have been the scenario of the 1970s and 1980s in the traditional Muslim societies where women did not have a voice on issues concerning them. This is unlike modern Kenya where women have increasingly been empowered to make decisions regarding their lives.

In the USA, a study by Unger (1999) among the Latino community indicated that the community placed a high premium on a large family. Their culture placed a lot of importance on motherhood. Moreover, parents expected their children to provide social security during old age. Another study in the USA, Lehrer (2004) found that some religions accord high approval and blessings to large families. The Mormons and Catholics were noted as having a higher desired family size. In a study in Kerala region of India, Asari (1998) indicated that religion as the most important determinant of desired family size.

As illustrated in the studies above, religious and cultural beliefs have a great bearing in the family set up. Christianity promotes man's reproductive responsibility to "go fill the world" as indicated in the book of Genesis in the Bible. However, religion may have lesser influence on young Kenyan parents unlike their aged parents who grew up in a very religious society.

A panel study conducted in West Germany between 1988 and 1995, (Heiland et al, 2007) gave the factors below as determinants of desired family size among parents in various European countries;

a. Benefits and costs of children

Desire for more children may be attributed to resources that become available through greater social ties and social capita when individuals have a family (e.g., emotional, physical, or financial support from family members, other relatives and friends). On the other hand, bearing and bringing up children is associated with a number of costs that include but are not limited to parental time and economic resources required to raise the children. The value of these resources depends on what alternative uses are available to the parents, (Heiland et al, 2007).

b. Societal expectations and Norms

In many societies, there is what is widely seen as the ideal range of family size. Couples are generally expected to fall within this range. The characteristic distribution of family size is in most cases a norm in the specific society. Some societies favour large families more than others. Any couple which does not fit within the societal expectations is seen as lacking. As young people grow and socialize, they are likely to form an attitude that is influenced by these societal expectations, Heiland et al (2007).

c. Resources

The bigger the family, the more the resources required to sustain it. However, Becker and Lewis (1973) argue that prospects of greater income do not in any way lead to larger families. Resources only seem to play a factor where one may reduce his desired family size if his resources take a downward trend e.g. loses employment. Generally, this is in contrast with parents in many resource poor societies where the higher the poverty, the more the children desired.

The study above focuses on a modern European society where people are better educated, increasing standards of living and in a fast paced society. Parents are not influenced by out-dated traditions. In this society, economic factors regarding how to feed, house, educate and take care of the family are important in deciding how large the family should be. This is unlike rural Kenya where some communities are still deeply stuck in their cultural traditions.

In Spain, Adsera (2005) observed that unemployed women had significantly lower desired family size than their employed colleagues. This was attributed to the cost associated in bringing up children. In Kenya, poorer families tend to have a higher number of children.

In Ethiopia, Mekonnen and Worku (2011) found out that children are viewed as assets to their parents since they provide much needed farm labor. They are also seen as a form of social security during parents' old age.

Thus, desired family size globally is determined by various factors. The importance of these determinants seems to differ from one society to the other. As much as the determinants of desired family size have been documented in different parts of the world, it is apparent that findings have differed from one region to the other.

2.2　　　Theoretical Framework

In the discipline of sociology, several theories explain social behaviour. In this study, theories that provide an understanding of determinants of desired family size were identified in order to provide a deeper insight into the study.

2.2.1　Rational Choice Theory

Rational Choice Theory, also widely referred to as Rational Action Theory, assumes that that an individual compares all costs against benefits to decide on the course at action in order to maximize personal advantage (Friedman,1953). In making a decision, an individual acts in a way that considers the pros and cons of such a decision. He undertakes a "rational' process which is a property of patterns of choices.

The rational choice theory is unique from the other forms of theory in that it recognizes no other reason for the kind of action but deliberately calculative and rational choice. It argues that all action is rationally motivated – regardless of how irrational it may appear. In rational choice theories, individuals are motivated by personal goals and ambitions and this drives them to make the preferences that will facilitate them to reach their goals. The individual acts within the information available to them at that point, and within their contexts.
In its simplest form, preferences and constraints can be seen in the purely technical relationship of a means to an end Scott (2000).

Relating the rational choice theory and desired family size, it is apparent that parents make a rational decision on the number of children they would want to bear. There is a rational process that takes into account the costs and benefits of the desired family size. According to National Association of Catholic Families (1994) desired levels of fertility are estimated to account for 90% of differences across countries in total fertility rates. In other words, people in developing countries have large families because they desire to have large families. Desired family size is thus not an accidental or fatalistic phenomenon but a well-considered rational choice.

2.2.2 Structuration Theory

Giddens's Structuration theory notes social life as more than just random individual actions. It adds that social life is mostly determined by social forces. It is thus not a mass of "micro" level activities. Neither can you study it by merely looking at "macro" level explanations. Instead, Giddens suggests, human agency and social structure are in a relationship with each other. It is the repetition of individual acts that gives the social structure. This means that there is a social structure - traditions, institutions, moral codes, and established ways of doing things; but it also means that these can be changed when people start to ignore them, replace them, or reproduce them differently, Gauntlet (2002).

Thus, it is not enough to look at the issue of desired family size from a national perspective without studying it from an individual household perspective. Population trends in a country are a sum aggregate of patterns at each household level. To address the problem of rapid population growth in a country, policy makers need to look at the problem from both a macro and a micro level. It is the patterns of preferences at the household level that give rise to the societal patterns.

2.3   Conceptual Framework

Independent Variables

```
┌──────────────────┐
│ Economic Factors │
└──────────────────┘

┌──────────────────┐
│ Social Factors   │
└──────────────────┘

┌──────────────────┐                              Dependent Variables
│ Psychological    │                          ┌──────────────────────┐
│ Factors          │ ─────────────────────►   │ Desired Family Size  │
└──────────────────┘                          └──────────────────────┘

┌──────────────────┐
│ Cultural Factors │
└──────────────────┘
```

Intervening Variables

```
┌──────────────────────────┐
│ Development Policies by   │
│ government and other      │
│ actors                    │
└──────────────────────────┘
```
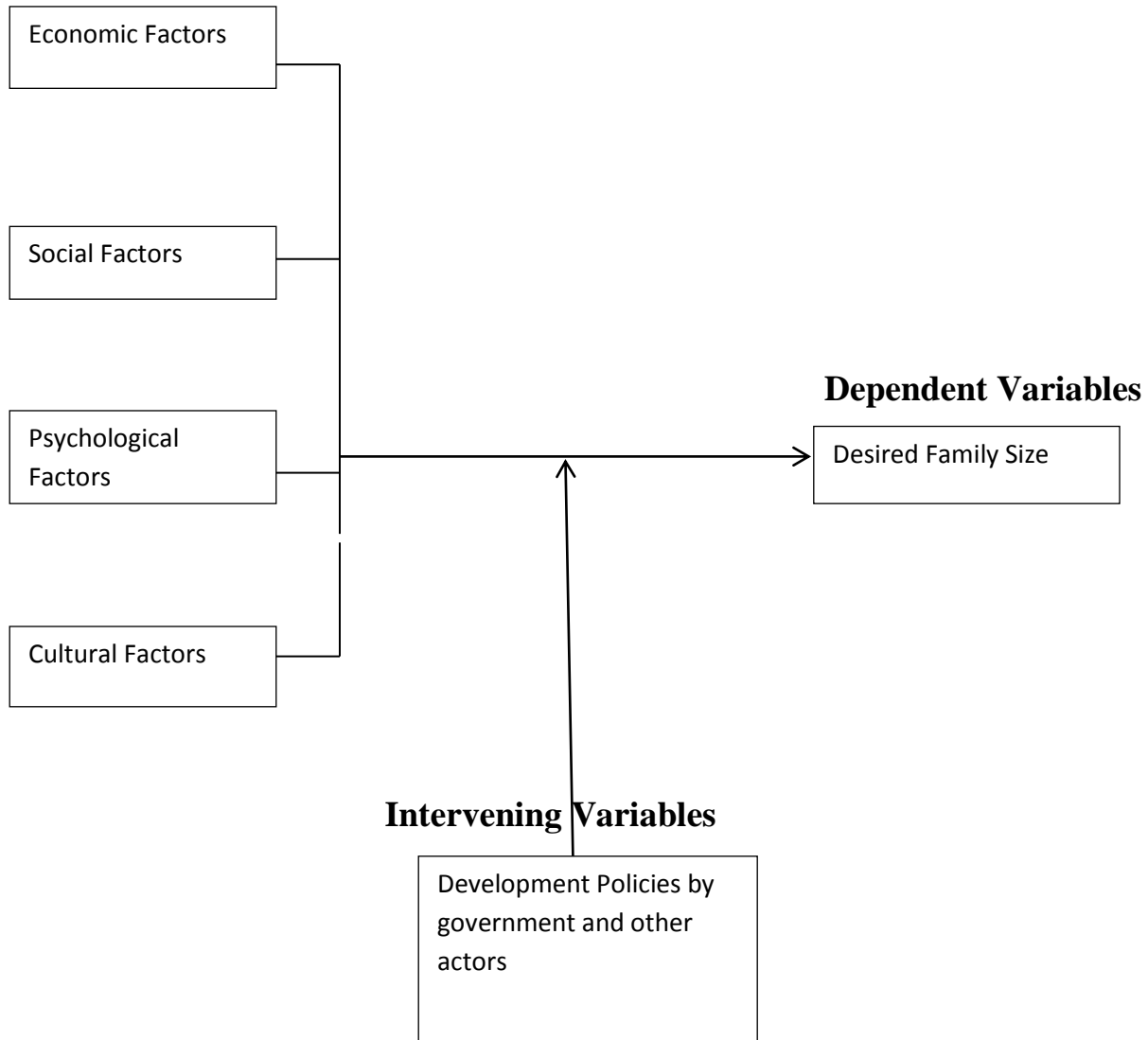
The researcher conceptualized that there are factors that determine desired family size for young rural parents in Kenya. These factors could be;

1. Economic factors e.g. financial cost of bringing up children. A parent may consider that he needs to feed the children, provide education, clothing, medical care etc. Another

economic factor could be the resources available to the family including land and other capital assets.

2. Social Factors – these include societal expectations, peer pressure and family ideals. Parents may also factor social security during old age.

3. Psychological Factors – these include religious beliefs and perceived health status of the parents

4. Cultural Factors – these include traditional beliefs and community ancestral practises.

These factors are independent variables that are likely to influence a parent's desired family size.

Development actors including the government have in the past initiated interventions aimed at controlling the rate of population growth. The researcher considered these policies as intervening variables. The policies include reproductive health education, reproductive healthcare, government birth control policies etc.

CHAPTER 3: RESEARCH METHODOLOGY

3.1   Introduction

This chapter details the research methods and procedures followed in undertaking this study. This research was conducted as a case study focusing on Gilgil and Naivasha districts in Nakuru County. The study collected both qualitative and quantitative data.

3.2   Site Description

Naivasha and Gilgil districts represent the rapidly urbanizing and highly integrated communities drawn from across the country. Nakuru County itself is arguably the most cosmopolitan county in the country. Naivasha and Gilgil districts give a good representation of the modern Kenyan society that has highly interactive communities with rapidly developing peri-urban centres. In addition, there are a small percentage of pastoral communities within the two districts thus generally giving a representation of communities in Kenya. The findings of the study can thus be generalized to any cosmopolitan society in Kenya.

Naivasha and Gilgil districts are part of the eleven (11) districts that constitute Nakuru County. Naivasha district was hived off from Nakuru district in 2007. It was made up of Seven (7) divisions including the present Gilgil district. It was until 2010 when Naivasha was divided into two (2) districts namely Naivasha and Gilgil districts. According to the 2009 national population census, the population of the larger Naivasha district was 376,205. The total number of households was 105,318. The two districts occupy 3,035 square kilometres. The population density in 2009 was 124 persons per square kilometre.

Until the just concluded general elections, the two districts made up the populous Naivasha constituency. However, Gilgil district currently forms Gilgil constituency. The two districts are made up of Sixteen (16) and Seven (7) sub-locations for Naivasha and Gilgil respectively. Of these sub-locations, four are located within the urban centres; Naivasha (three) and Gilgil (one)

The area lies at between 1800 to 2300 metres above sea level. Some of the key natural features include; Lakes Naivasha and Elementaita, Eburru hills (part of Mau ranges), Eburru forest, mount longonot (biggest crater mountain in Kenya), and Olkaria geysers (used for geothermal power generation). The higher elevation sub-locations e.g. Maraigushu and Karati (Naivasha), Eburru and Karunga (Gilgil) receive 900ml to 1250ml average annual rainfall. The lower lying

sub-locations are mostly dry and sparsely populated. Some of the drier sub-locations receive less than 750ml average annual rainfall.

The key economic activities in the area are; floriculture, tourism around lake Naivasha and Elementaita, pastoralism, fishing in lake Naivasha, subsistence farming and general commerce. Olkaria Geothermal power station in Naivasha is a key provider of electricity in the country.

Naivasha and Gilgil towns are the district headquarters of Naivasha and Gilgil respectively. They are also the leading urban centres. Naivasha town host a big migrant population that is employed in the neighbouring flower farms. Gilgil is primarily a military town and hosts various military camps, National Youth service training school, Kenya anti-stock theft police headquarters and administration police training school. The town owes its existence to these military facilities. Other noteworthy trading centres in the area include Maai Mahiu, Kikopey, Kinungi, Maraigushu, Longonot, Mbaruk, Suswa, Karunga, Kiptangwany and Kiambogo.

Kasarani sub-location hosts 5 larger flower farms and borders the lake Naivasha. Many of the residents are employed in the flower industry or are involved in other livelihood activities around the lake e.g fishing, hospitality and tour guiding. Eburru Sub-location borders the expansive Mau Forest. It is an agriculturally productive area due to its high elevation and conducive climatic conditions. Most of the residents are involved in small scale farming.

Ndabibi sub-location lies on the Southern tip of Naivasha district bordering Narok county. It is a semi-arid sub-location and most of the residents are livestock farmers. The sub-location harbours a big pastoral community. Ol Jorai sub-location was formerly a government owned Agricultural Development Corporation (ADC) farm. Since the collapse of ADC, the farm was used to settle landless people from diverse backgrounds.

3.3   Study Design

The researcher conducted a case study within two districts (Gilgil and Naivasha) in Nakuru County.

3.4. Data Collection Techniques

Various data collection techniques were used. These included; Focus Group Discussion (FGD), key informant interviews and household questionnaires.

To support in data collection, 3 enumerators were hired and thoroughly trained before embarking on data collection.

3.5   Data Collection Tools

A questionnaire was used to collect both quantitative and qualitative data from the selected respondents (see questionnaire in Annex 1).

A Focus Group Discussion (FGD) guide was developed to collect qualitative data from purposively selected respondents. The FGD targeted community leaders, health service providers and grassroots development actors (see FGD guide in annex 2). Fourteen (14) respondents participated in the Focus Group Discussion.

Further, key informant interview guide was developed. It was used to guide interviews with selected local provincial administrators and health service providers (see key informant interview guide in annex 3). A total of six (6) key informant interviews were conducted.

3.6   Units of Analysis

The unit of analysis was determinants of desired family size among young rural parents in Nakuru County. The determinants were broadly broken into economic, social, psychological and cultural factors.

3.7   Units of Observation

The unit of observation was young rural parents (aged between 18 to 37 years) in Nakuru county. In each of the Sixty-Two selected households, the household head or their spouse was interviewed using a questionnaire for quantitative data. This is because this is the age bracket where most people are in the child bearing phase. Interventions to control population growth are mostly needed at this age bracket.

3.8   Sampling Design and Procedure

Through purposive selection, four (4) sub-locations were identified out of the twenty-three (23) sub-locations that comprise Naivasha and Gilgil districts. None of the four sub-locations that fall within Gilgil and Naivasha towns were to be selected. The purposive selection was to ensure that the sub-locations selected portrayed the diverse socio-demographic characteristics of the two

districts. Such characteristics included multi-ethnic composition (both farming and pastoral communities), diversity in economic activities and diversity in social classes.

A list of all households in the 4 sub-locations was obtained from the local assistant chiefs' offices. The sub-locations selected were Eburru and Ol Jorai (Gilgil), Kasarani and Ndabibi (Naivasha). A list of young households (where household head is between 18 to 37 years) was extracted. Sample size for each sub-location was weighted against the total number of eligible households. Through simple random sampling, a total of Sixty-two (62) respondents from the four sub-locations were selected. The Household head or their spouses were interviewed in each of the sixty-two (62) households. For each of the respondents, a questionnaire was used to collect data. The questionnaire utilized both qualitative and quantitative questions.

3.9   Data collection methods

3.9.1: Household Interviews – A household interview was conducted with the sixty-two (62) selected respondents. A questionnaire was used for data collection.

3.9.2: Focused Group Discussion (FGD) was conducted bringing together community leaders and other community opinion leaders. These included community leaders, women leaders, and local development actors. A total of fourteen (14) respondents participated in the FGD. FGD guide was used to provide qualitative data to validate the quantitative data from the respondent interviews (see the list of FGD participants in Annex 4)

3.9.3: Key informants survey targeted six (6) individuals that have interacted with the target community and have very significant information regarding determinants of desired family size. These included Mr. Benson Njihia (Assistant Chief, Eburru Sub-location), Mr. Samuel Kantai (Assistant Chief Ol Jorai Sub-location), Mr. Gerald Kibugi (Assistant Chief Ndabibi Sub-location), Mr. Peter Mubea (Assistant Chief Kasarani Sub-location), Mr. Tito Were (Gilgil District Public Health Department) and Mr. Lucas Minae (Public Health Assistant).

3.10   Data Management and Analysis

After collecting the data, the researcher cross-checked it for completeness, validity, consistency and accuracy. Quantitative data were then subjected to computer based data analysis software SPSS. It has been presented through graphs, charts and tables for easy comparison and

understanding. Qualitative data were clustered according to the type of responses and then coded to interpret findings. Valuable conclusions have been drawn from the analysed data.

3.11 Ethical Considerations

Data collected in this research has been entirely used for academic study in fulfilment of the Masters Degree requirements of the University of Nairobi. This study observed all professional research ethics including objectivity, confidentiality, integrity and informed consent.

CHAPTER 4: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This study presents the data analysis and interpretation of the results. The main objective study is to investigate the determinants of desired family size for young rural parents in Nakuru County. The results are presented in figure and tables to highlight the major findings. They are also presented sequentially according to the research objectives of the study. The raw data was coded, evaluated and tabulated to depict clearly the results of determinants of desired family size for young rural parents in Nakuru County. Data was collected from households in Eburru and Ol Jorai sub-locations (Gilgil district), Kasarani and Ndabibi sub-locations (Naivasha district). 62 households were successfully interviewed. The table 4.1 below shows the respondents' rates per sub-location and their distribution by gender.

Table 4.1: Respondents distribution on basis of gender and sub-location

Sub-location	Gender				% of total households	Total Interviewed
	Male		Female			
	Frequency	Percentage %	Frequency	Percentage %		
Eburru	7	29.2	10	26.3	27.3	17
Ol Jorai	5	20.8	9	23.7	22.6	14
Kasarani	8	33.3	12	31.6	32.3	20
Ndabibi	4	16.7	7	18.4	17.7	11
Total	**24**	**100**	**38**	**100**	**100**	**62**

The results show that in Eburru the percentage of male respondents was 29.2% while that of their female counterparts were 26.3% of the total male and female respondents. Ol Jorai sub-location comprised of 20.8% male and 23.7% female, Kasarani had 33.3% male and 31.6% female while Ndabibi had 16.7% male and 18.4% female. The response rate shows that 61.3% of the respondents were female while 38.7% were male. This is because at the time of interview more women were available within their homesteads than men. Men are usually employed away from their homesteads, leaving women working on family farms or undertaking household chores.

4.1.2 Distribution of Age Group

The respondents were asked to disclose their age bracket. Table 4.2 below shows respondents' age bracket distribution disaggregated by gender.

Table 4.2: Distribution of Age Group of respondents

Age	Male		Female		Total	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
18-21 years	0	0	3	7.9	3	4.8
22-25 years	2	8.3	6	15.8	8	12.9
26-29 years	9	37.5	16	42.1	25	40.3
30-33 years	11	45.8	10	26.3	21	33.9
34-37 years	2	8.3	3	7.9	5	8.1
Total	**24**	**100**	**38**	**100**	**62**	**100**

In terms of age distribution the results show that majority (45.8%) of the men were aged 30 - 33 years, 37.5% were aged 26-29 years while 8.3% were aged 22-25 years and 34-37 years. Results for women show that majority of the women (42.1%) were aged 26-29 years, 26.3% were aged 30-33 years, 15.8% were aged 22-25 years, 7.9% were aged 34-37 years while 7.9% were aged 18-21 years. These results could indicate that majority of men start their family at late ages as shown by majority of those who have family are aged 30-33 years. Women start their families early and majority were aged 26-29. There were also a few who started their families early at the age below 20 years.

4.1.3 Level of Education

The respondents were asked to indicate their level of education. Table 4.3 shows levels of education of the respondents.

Table 4.3: Level of education of the respondents

Education level	Male		Female		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
No school attended	0	0	1	2.6	1	1.6
Primary not completed	6	25	4	10.5	10	16.1
Primary completed	7	29.1	15	39.5	22	35.5
Secondary	8	33.3	14	36.8	22	35.5
Tertiary	3	13.5	4	10.5	7	11.3
Total	**24**	**100**	**38**	**100**	**62**	**100**

Results show that 33.3% of the men had attained their education up to secondary school, 29.1% had completed their primary school while 25% did not complete their primary school. 13.5% had gone up to the tertiary level. Results for women show that majority 39.5% had only attained primary education. 36.8% had attained secondary education, 10.5% did not complete their primary education, 10.5% had attained their tertiary education while 2.6% did not attend school at all.

These results depict that women in the four sub-locations have relatively higher education levels than the men. While 25% of the men failed to complete their primary schooling, only 10.5% of the women did not complete their primary schooling.

4.1.4 Occupation

The respondents were asked to indicate their occupation. Table 4.4 tabulates respondents occupation.

Table 4.4: Occupation of respondents

Occupation	Male		Female		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
un-skilled labor	9	37.5	29	76.3	38	61.3
semi-skilled labor	11	45.8	5	13.2	16	25.8
skilled labor	4	16.7	4	10.5	8	12.9
Total	24	100	38	100	62	100

The results show that majority of the male were working in semi-skilled labour 45.8%. 37.5% of the men were working in un-skilled labour, while 16.7% were in skilled labour. The women respondents' results show that majority 76.3% were working in un-skilled labour. 13.2% were working in semi-skilled labor while 10.5% were working in skilled labour.

Despite their relatively higher level of education compared to men, 76.3% of the women are mostly engaged in subsistence farming, or in casual labor in neighboring flower farms. 45.8% of the men engaged in semi-skilled labor are often employed by flower farms on specific tasks e.g. crop sprayers, machine operators and construction, the women are usually engaged in non-specific duties thus requiring no specific skills e.g weeding and cleaning.

4.2 What is the Desired Family Size for Young Rural Parents

4.2.1 Desired Number of Children

The respondents were asked to indicate their desired number of children, Table 4.5 tabulates the findings.

Table 4.5: Desired number of children for the respondents

Desired number of children	Male		Female		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1 child	0	0	1	2.6	1	1.6
2 children	3	12.5	4	10.5	7	11.3
3 children	5	20.8	7	18.4	12	19.4
4 children	7	29.2	17	44.7	24	38.7
5 children	5	20.8	6	15.8	11	17.7
6 or more	4	16.7	3	7.9	7	11.3
Total	**24**	**100**	**38**	**100**	**62**	**100**

From the results shown above, the majority 29.2% of the male indicated they desire to have 4 children, 20.8% indicated they desire to have 3 or 5 children, 16.7% indicated they desire to have 6 or more children while 12.5% indicated they desire to have 2 or less children. On the female respondents 44.7% indicated they desire to have 4 children, 18.4% desired to have 3 children, 15.8% desired to have 5 children., 10.5% indicated 2, with 2.6% indicating their desired number of children as 1, while 7.9% indicated 6 or more children.

The **mean** desired number for women is 3.84 children while that of men is 4.08 children. These figures compare closely with the national average figures reported by Femiplan in 2012 (3.9 for women and 4.3 for men). These figures are still very high for the country, and will keep the population growth at economically unsustainable levels. There is need to bring the figure to an average of 2.46. It is also apparent that men desire a bigger family size than the women. The most desired number of children for both men and women is 4.

During the Focussed Group Discussions, it emerged that pastoral communities desire a bigger number of children as compared to farming communities.

4.2.2 Number of Children ever born

The respondents were asked to indicate the number of children they have ever born in their families. Table 4.6 shows the number of children born in the respondents households.

Table 4.6: Number of Children ever born within families of the respondents

Number of Children	Male		Female		Total	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
no children	2	8.3	4	10.5	6	9.7
1	5	20.8	1	2.6	6	9.7
2	3	12.5	7	18.4	10	16.1
3	3	12.5	12	31.6	15	24.1
4	4	16.7	7	18.4	11	17.7
5	3	12.5	5	13.2	8	12.9
6 or more	4	16.7	2	5.2	6	9.7
Total	**24**	**100**	**38**	**100**	**62**	**100**

Results show that 16.7% of the male respondents indicated that they had ever had 4 children, and another 16.7% reporting to ever born more than 5 children. 20.8% indicated they had 1 child.

On the other hand, 31.6% of the women have born 3 children, with 18.4% having born 4 children. Only 5.2% have born more than 5 children.

4.2.3 Number of Living Children

The respondents were asked to indicate the number of living children within their families. Figure 1 illustrates the study findings.

Figure 1: Number of Living Children per respondent
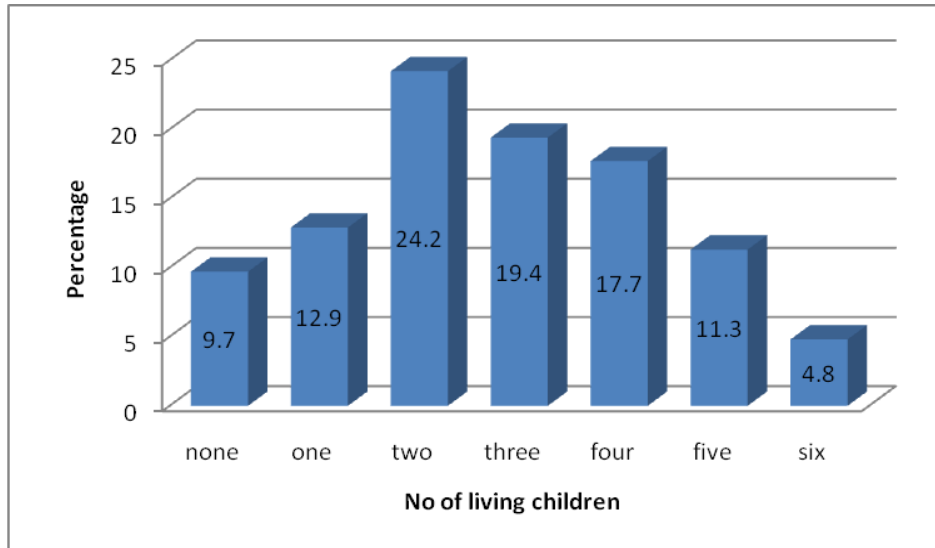
Results show that majority 24.2% indicated that they had two living children, 19.4% indicated they had 3 living children, 17.7% indicated they had 4 living children, 12.7% indicated that they had 1 living child. 11.3% indicated that they had 5 living children, 9.7% indicated none while 4.8% indicated 6 living children. The key difference between number of living children and children ever born could be as a result of deaths. for example, 10% of respondents reported having born 6 or more children but only 4.8% reported over 6 living children.

4.2.4 Spouse desired number of children

The respondents were asked to indicate their Spouse's desired number of children. Results indicated that majority of the respondents 47% reported that their spouse desired number of children was three to four. This was followed by another 27% who indicated their spouse desired to have more than four children. 19% indicated their spouse desired to have one or two children while 7% indicated that their spouse desired to have no children. Thus, 3 to 4 children remained the most favoured range. This matches closely with the mean desired family size of 3.84 for female respondent and 4.08 for male respondents. The closely matching figures for respondents and their spouses could be attributed to shared family size desires between many couples.

4.3 Considerations in Deciding Family Size

The respondents were asked to indicate the considerations they made in arriving at the desired number of children. It emerged that most parents consider material costs of bringing up children. However, a number of respondents indicated that societal or family expectations are an important consideration in arriving at desired number of children. A few respondents considered availability of resources like land as an important consideration since they need such resource to cater for their families. It was noted that majority indicated that the more resources they have available the bigger the number of children they should have.

Respondents were requested to indicate whether they thought the factors in the table below were important in deciding desired family size for young parents. The factors were ranked with 1 being least important and 5 being most important. Table 4.7 tabulates the results for male respondents.

Table 4.7: Considerations in deciding family size for respondents (young male parents)

Factors	N	Scoring					Mean Score
		1	2	3	4	5	
Financial cost of bringing the children (e.g. school fees, medical care, food, clothing etc)	24	1	0	2	4	17	4.51
Societal expectations (i.e. what the social class, extended family, peers see as an ideal family size)	24	10	3	4	4	2	2.27
Resources available (e.g. land, housing, hospitals)	24	0	5	5	5	9	3.77
Traditional and cultural beliefs (community ancestral beliefs, ethnicity etc)	24	14	1	4	3	2	2.06
Religious beliefs (fulfilling religious teachings on reproduction)	24	9	2	1	2	10	3.09
Social security during old age (children as caregivers to parents during old age)	24	4	3	3	6	8	3.48
Physical status of parents (health status, physical ability)	24	5	2	0	6	11	4.19

Results show that the Financial cost of bringing the children (e.g. school fees, medical care, food, clothing etc) is the main factor to consider since it was rated as very important m= 4.51, this was followed by Physical status of parents (health status, physical ability) which was rated important where m=4.19 and Resources available (e.g. land, housing, hospitals) m= 3.77. Social security during old age (children as caregivers to parents during old age) m= 3.48 and Religious beliefs

(fulfilling religious teachings on reproduction) m= 3.09 were rated neutral – although this particular factor yielded divided opinion. Societal expectations (i.e. what the social class, extended family, peers see as an ideal family size) m= 2.27 and Traditional and cultural beliefs (community ancestral beliefs, ethnicity etc) m= 2.06 were rated as not too important.

Table 4.8 tabulates results for female respondents

Table 4.8: Considerations in deciding family size for respondents (young female parents)

Factors	N	Scoring					Mean Score
		1	2	3	4	5	
Financial cost of bringing the children (e.g. school fees, medical care, food, clothing etc)	38	0	4	2	2	30	4.50
Societal expectations (i.e. what the social class, extended family, peers see as an ideal family size)	38	3	5	0	1	29	4.20
Resources available (e.g. land, housing, hospitals)	38	4	2	8	0	24	4.01
Traditional and cultural beliefs (community ancestral beliefs, ethnicity etc)	38	8	1	0	9	20	3.86
Religious beliefs (fulfilling religious teachings on reproduction)	38	5	1	8	0	23	3.59
Social security during old age (children as caregivers to parents during old age)	38	16	2	3	2	15	3.08
Physical status of parents (health status, physical ability)	38	0	4	2	2	30	4.59

Results show that women strongly agreed that Financial cost of bringing the children (e.g. school fees, medical care, food, clothing etc) m= 4.50 and Physical status of parents (health status, physical ability) m= 4.59. They agreed that Societal expectations (i.e. what the social class, extended family, peers see as an ideal family size) m= 4.27, Resources available (e.g. land, housing, hospitals) m= 4.01, Traditional and cultural beliefs (community ancestral beliefs, ethnicity etc) m= 3.86, Religious beliefs (fulfilling religious teachings on reproduction) m= 3.5901. The women were neutral on the statement that Social security during old age (children as caregivers to parents during old age) m= 3.08.

In comparison, women make many more considerations in arriving at their desired family size. This is probably because women bear a bigger responsibility in bringing up children compared to men. Social interactions, peer influence and family expectations are a more important determinant for women than for men. Women usually have less bargaining power in decision

making as compared to men. Physical status of parents is an important factor for both men and women. As long as parents remain physically fit, they may continue to desire a higher number of children. For women, it is even more important since child bearing requires physical strength during pregnancy, birth and infancy care.

There is thus need to tackle family planning issues from the perspective of the community since women value community expectations in arriving at their desired family size. Women groups, churches, community *barazas* would present a good platform to channel the message on the need to have lesser children.

Generally, financial implications of bringing up children are the most important consideration for both men and women. There is need to tailor a message that strongly links a big family size to vulnerability. The government and other actors need to come up with specifically targeted messages especially with the realities of rising cost of living.

4.3.1 Society Influence on Child bearing

The respondents were asked to indicate whether family, friends and people they interact with affect the number of children to bear. Figure 2 illustrates the findings of the study.

Figure 2: Society Influence on Child Bearing
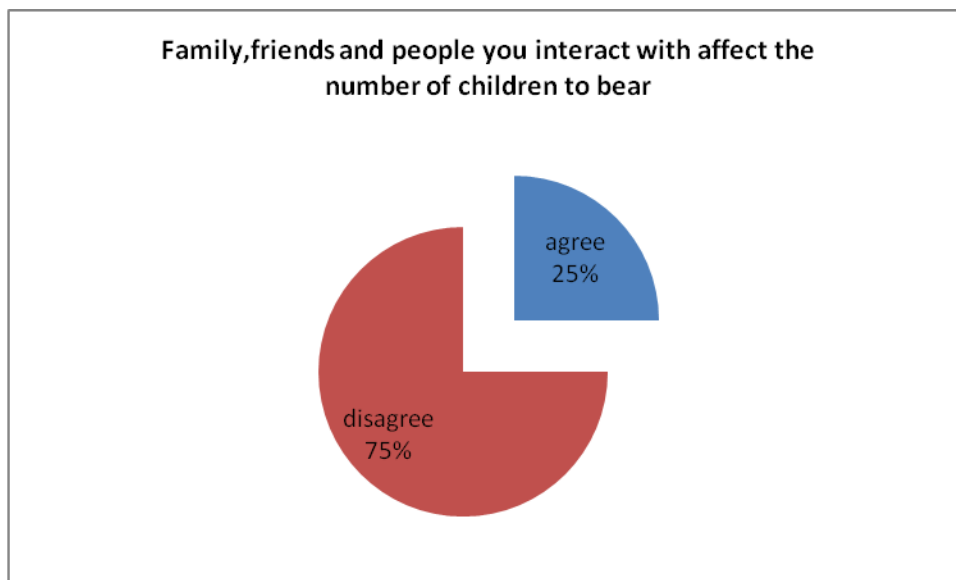
Results show that 75% disagreed that family, friends and people you interact with affect the number of children to bear while 25% agreed on Family, friends and people you interact with affect the number of children to bear.

This contrasts to the fact that women indicated that societal expectation as a major determinant in desired family size. This contrast could be as a result of the fact that societal influence may not be apparent to the respondents – though it remains important. On the other hand, men did not seem to consider peer and family influence as an important determinant of desired family size.

4.4 Family Size and Household Welfare

Respondents were asked to indicate whether family size affects the standard of living in a family. The respondents indicated that family size affects family and this is evident in big families where they lack the basic necessities like food clothes and shelter. The children are not able to attend school since the parents cannot afford the school fees. Others indicated that the cost of living has gone up and therefore there is need to have a family size that is manageable.

4.4.1 How Family Size Affects Household's Living Standard

Respondents were asked to indicate whether family size has any effect on household living standard. Figure 3 illustrates the findings of the study

Figure 3: Effect of Family Size on Standard of Living
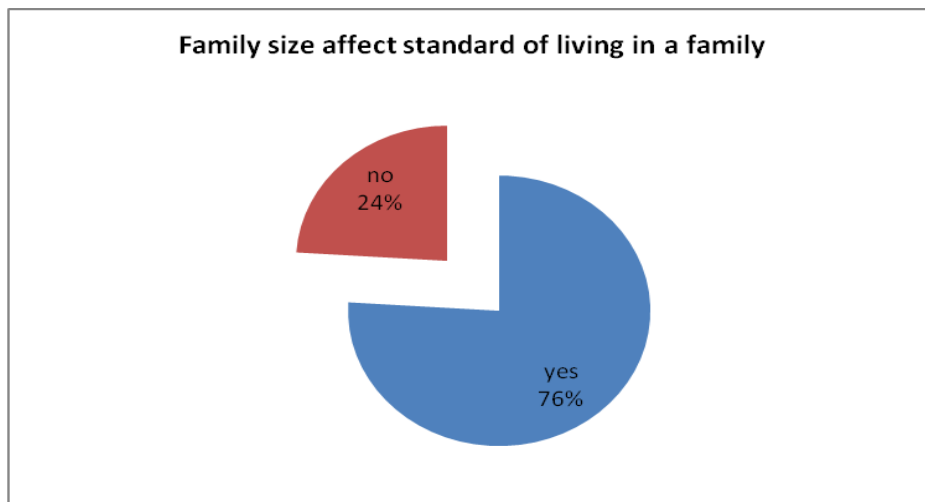
76% believe that family size affects standard of living. It thus shows that respondents are able to associate family size and vulnerability within households.

From the focus group discussion, it was said that a smaller family size, that include less than five children, mainly enjoy better standards of living including improved health care, better education and a general social wellbeing. Choosing to have large family sizes often results to lower standards of living due to the resultant increased dependence rates.

The focus group discussions further indicated relatively smaller families (1-3 children) who enjoy higher standards of living are less prone to sicknesses and thus spend less on health care. Larger families are more prone to diseases like malaria, a sickness that could easily be avoided with basic preventive measures such as better lifestyles, nutrition and improved sanitation. Thus, large families spend more time and relative resources on healthcare.

4.4.2   Large Families are More Likely to Have Insufficient Food

The respondents were asked to indicate whether large families are more likely to have insufficient food. Large family are likely to lack enough income and production of food and therefore they are not able to provide sufficiently for their children resulting to malnutrition and poor health. Insufficient food can also result to poor nutritional intake. Over time, this can lead to recurrent illnesses. In many instances, as a coping mechanism, family members in large families reduce food intake.

From the study, respondents were in agreement that large families are likely to suffer food insecurity. The service health providers also reported a higher prevalence of malnutrition amongst families with a large number of children especially if not adequately inter-spaced.
During the FGD, it further emerged that as a coping mechanism; large families have a less number of meals per day (skip meals), serve less quantities per meal per person or provide less quality meals.

4.4.3   Large Family affects Education

The respondents were asked to indicate whether children in large families are more unlikely to get quality education.

Figure 4: Children in Large Families are More Unlikely to Get Quality Education

Children in large families are more unlikely to get quality education

- disagree 11%
- neither agree or disagree 11%
- agree 78%
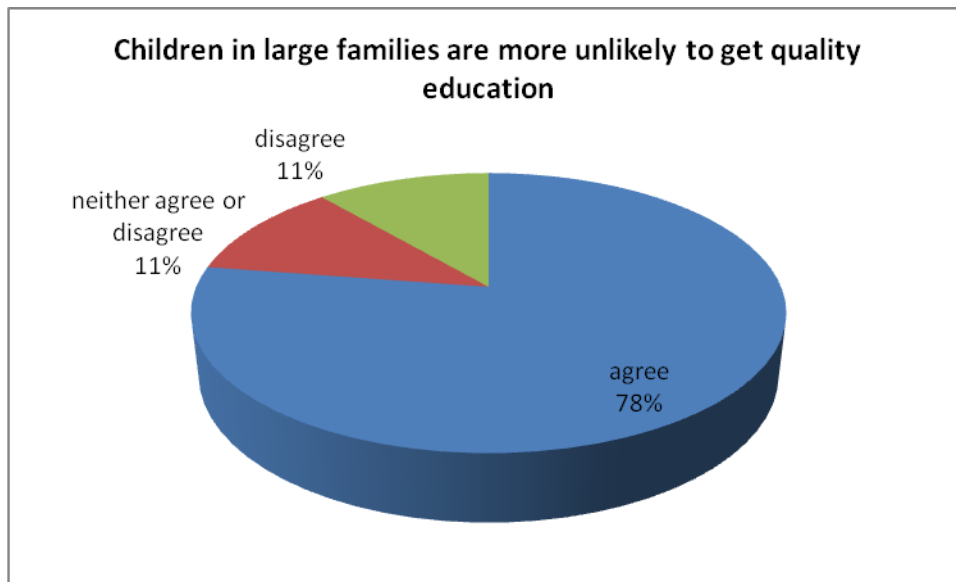
Results show that 78% of the respondents were in agreement that children in large families are more unlikely to get quality education. 11% did not agree on children in large families are more unlikely to get quality education. While another 11% neither agreed nor disagreed.

Small families enjoy better standards of living than large ones. In many cases, parents in smaller families are better educated and resourced than in large families. In many parts of the developing world, smaller families are more likely to access better education and economic opportunities. They can afford to expose their children to better schools, information technology, reading materials etc, all that give children some upstart compared to those from poorer families.

As a result of having the financial resources to participate and enjoy cultural and intellectual activities, children growing up in small families have excellent cultural and intellectual skills. Parents in small families are also able to accord each child the required guidance in school assignments.

In small families, parents can make future plans for their children's financial future. There is disposable income that can be used to make long-term investments and retirement plans. Children are more likely to receive college and postgraduate education without much struggle. The concept of education is and self-development is highly valued. This way, the children are motivated to realize their goals in future. However, for larger families with less disposable income, children have to struggle to achieve their potential with limited motivation.

4.4.4   Large Families Consume all their Income

The respondents were asked to indicate whether large families consume their income and are unlikely to have any savings and assets. Figure 5 summarizes the findings of the study.

Figure 5: Large Families consume all their Income (Female respondents)
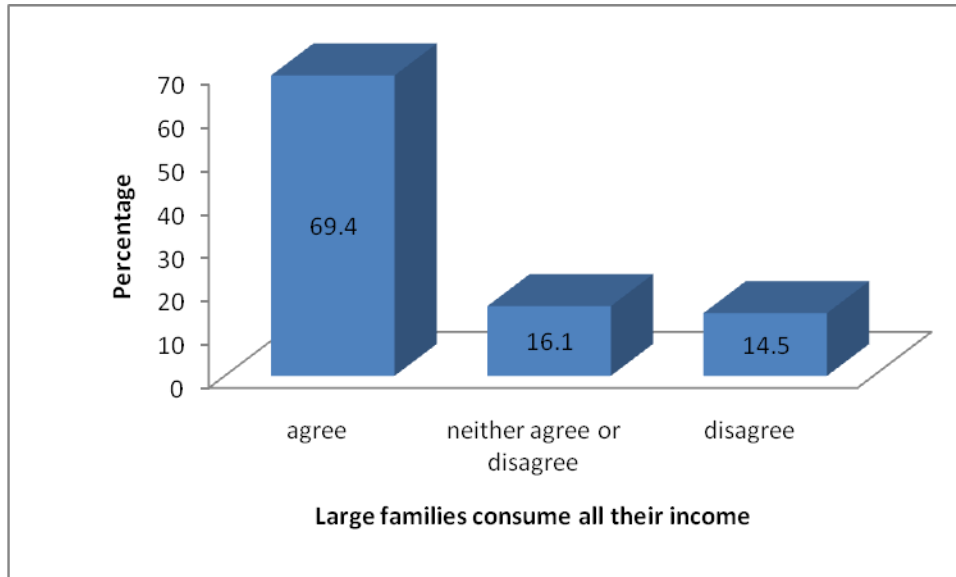
Results show that majority of the women who respodents 69.4% were in agreement that large families consume their income and are unlikely to have any savings and assets. 16.1% neither agreed nor disagreed while 14.5% disagreed that large families consume their income and are unlikely to have any savings and assets.

With access to more disposable income, small families do not have to live from hand to mouth. They have better access to economic and material resources. Children in small families usually have an better access to material well-being. They also have more privacy and space to grow and explore as compared to children from large families who have limited privacy and space.

The focussed group discussion also highlighted the fact that in households where the parents had comparable level of income, smaller families were always better housed, better clothed, better educated and enjoyed higher living standards.

4.5 Future Aspirations that Affect Perspective on Desired Family Size

The respondents were asked to indicate whether there were any significant future aspirations that might affect your perspective on desired family size. A few (8%) respondents indicated that they would want to further their education so that they can get into a good employment. Others (5%) indicted that they would go out of the country to search for better employment so that they can offer their family better living conditions. Some (13%) would go to other places in search for jobs or start business.

A majority (74%) indicated that they did not have any significant future aspirations that would affect their family upbringing responsibility. They have invested in agriculture and other businesses in the area and were contented and therefore no significant future aspiration that might affect your perspective on family size.

4.6 Other Comments

Asked to make other comments the respondents indicated that small families are preferable since they will not be pressed hard economically. Small families live a happier and healthier life and are able to give their children quality education. On the other hand the respondents indicated that large families affect the economy of the country and if not well checked, this can promote poverty and insecurity.

The pastoral communities see a large family as prestigious. Men gain a lot of respect among peers if they have many children. As the children grow up, they provide the needed family labor as the man enjoys whiling away time with his peers. In other communities, social security issues seem to promote large families. If one has a few children, they stand less probability of success. If one has more children, the risk is spread amongst many. Child mortality rates also encourage parents to bear more children – just to make sure they are not left with no off-springs should any of their children die.

4.7 Recommendations from Interviewees

The Focused Group Discussion and Key Informant survey indicated that to reduce the desired family size for young parents the government should enact strict laws like those in China to prevail on the rapid population growth. The first born children can get free education all the way

to university. Second born children should be the responsibility of the parent to bring up. This would be a form of incentive to reduce population growth rate. Parents would be forced to do more cost – benefit analysis depending on the number of children.

Secondly, the government should mainstream Family planning services and integrate the Family Planning (FP) services to the community HIV/AIDS programs. Currently, a lot of focus is being paid to the HIV/AIDS care and support. A lot of community care givers have been trained and receive support from health service providers (government and non-government). The caregivers should be equipped to provide Family planning services and education to the community as they provide HIV/AIDS services.

The government also needs to work through other institutions. The religious organizations are pretty influential. Through churches and mosques, a message should be packaged and shared with the religious leaders. Congregations often appreciate what is coming from their clergy. However, some churches (e.g. Catholic) may not buy in. these people can be reached through other channels. The National Population Council has not been effective in packaging messages to the common parent in rural areas since most of the messages tale elitist approach.

Reproductive Health education in schools – it is time that reproductive health is made part of our school curriculum. This should start right from primary school. There are so many unwanted pregnancies due to ignorance. There is need to mould the minds of our future parents through providing the right information at the right age.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings as discussed in chapter four and interpretations of the data analysis, conclusions, and recommendations based on the findings.

5.2 Summary of findings

The average desired family size of 4.08 (men) and 3.84 (women) in Gilgil and Naivasha districts compares very closely with the national average of 4.1 (average for men and women). Gilgil and Naivasha districts are thus a good representation of the nation.

The most important factors determining the family size of young rural parents include cost of bringing up children, physical status of parents and resources available to the household. For women, societal expectations are an important determinant of desired family size. Men also consider social security during old age as a relatively important factor in determining desired family size. Overall, women seem to have more considerations in determining desired family size than the men.

Generally, young rural parents seem not to consider religious and traditional beliefs as important determinants of desired family size. This could be as a result of the fact that communities are greatly integrated thus losing the traditional and cultural beliefs. Religion has also rapidly modernized and become much more accommodating.

Young parents are increasingly able to associate household welfare with the number of children. Majority of the parents are able to see the direct relationship between family size and household welfare. However, this has not transpired into desire for smaller families. Financial stability is a relative factor and may mean different things to different people. A person who is living below poverty line may consider himself financially stable if his neighbours and family are faring even worse.

5.3 Conclusion

The average desired family size in Gilgil and Naivasha district (4.08 for men and 3.84 for women) is way higher than the average figure quoted by development experts to spur economic prosperity (2.6). This means that if young parents in the two districts achieve their desired fertility goals, the population increase rate in the region will still remain unsustainably high. There is thus need to reach out to the young parents in the two districts with a message that will influence their desired family size.

Since the two districts are a good representation of the national outlook, it can be assumed that young parents in other districts are in a similar scenario.

5.4 Recommendations

The government needs to work through other institutions. The religious organizations are pretty influential. Through churches and mosques, a message should be packaged and shared with the religious leaders. Congregations often appreciate what is coming from their spiritual leaders. However, some churches (e.g. Catholic) may not buy in. These congregations can be reached through other channels.

Reproductive Health education in schools should be made part of the school curriculum. This should start right from primary school. There are so many unwanted pregnancies due to ignorance. There is need to mould the minds of future parents through providing the right information at the right age.

With the free primary education, free maternity services, free secondary education etc, parents are rarely taking responsibility of their children. The 'free things" mentality is making parents from poor background irresponsibly bear children knowing it is the government's responsibility to educate the child. This is retrogressive and needs to be addressed. The government should indicate how many children per household it can support. This will make parents to start taking responsibility. Although such a move will be less popular, it is very strategic for the country to achieve Vision 2030.

The government also needs to re-package the family planning message to address the determinants of desired family size. This message should primarily focus on the cost of bringing up children, availability of resources and how child bearing affects the physical strength of

parents. The message should draw the direct relationship between these aspect and family size. It is apparent that the cost of bringing up children is a key determinant that influences desired family size. The message should also not be elitist in order to appeal to the rural population.

Finally, the government should mainstream Family planning services and integrate the Family Planning (FP) services to the community HIV/AIDS programs. Currently, a lot of focus is being paid to the HIV/AIDS care and support. A lot of community care givers have been trained and receive support from health service providers (government and non-government). The caregivers should be equipped to provide Family planning services and education to the community as they provide HIV/AIDS services. This will efficiently take advantage of the already developed community infrastructure. The country seems to be doing relatively well in containing the spread of HIV. It is a good opportunity to replicate the successful model in containing the rapid population growth.

5.5 Further studies suggestion

It is recommended that further studies to focus on the other counties across the country on the determinants of desired family size. Special attention should be paid to Northern Kenya where the average household size is way beyond the national average.

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ANNEX 1: QUESTIONNAIRE

Thank you for your time to respond to this questionnaire. The data collected will be handled confidentially and will only be used for academic purposes. The filled questionnaire will not be revealed or shared with third parties. You have the right to terminate this interview, or to decline from responding to a question should you feel it necessary.

Name of Respondent:_____ Sub-location:_____

1. Sex (tick as appropriate):□Male □Female

2. Age: _____(years)

3. Level of Education achieved:

   □No School attended

   □Primary not completed

   □Primary completed

   □Secondary

   □Tertiary

4. Occupation:

   □ Un-skilled labor

   □Semi-skilled labor

   □Skilled labor

5. For you personally, what is your desired number of children? (please give a number)

6. What considerations did you make in arriving at the number in question 5 above?

7. What is the number of children you have ever born?

8. What is the number of living children from those in question 7 above?

9. For your spouse, what is the desired number of children? (please give a number)

10. In your opinion, how important are the following factors in determining desired family size. Please rank (1- least important to 5 - Most Important)

	1	2	3	4	5
Financial cost of bringing the children (e.g. school fees, medical care, food, clothing etc)					
Societal expectations (i.e. what the social class, extended family, peers see as an ideal family size)					
Resources available (e.g. land, housing, hospitals)					
Traditional and cultural beliefs (community ancestral beliefs, ethnicity etc)					
Religious beliefs (fulfilling religious teachings on reproduction)					
Social security during old age (children as caregivers to parents during old age)					
Physical status of parents (health status, physical ability)					

Others (please specify)					

11. Among the list in question 10 above, what do you see as the most important factor that determines desired family size for young rural parents? Please elaborate

12. In your opinion, does family size affect the standard of living in a family?

□ Yes

□ No

If Yes, How?

13. Large families are more likely to have insufficient food (please tick as appropriate)

□Agree

□Neither agree or disagree

□Disagree

□ Other (specify)

14. Children in large families are more unlikely to get quality education

□Agree

□Neither agree or disagree

□Disagree

□Other (Specify)

15. Large families consume all their income and are unlikely to have any savings for long term investment and asset ownership

□Agree

□Neither agree or disagree

□Disagree

□Other (Specify)

16. Friends, family and people you interact with affect the number of children to bear

□ Agree

□ Disagree

□ Other (specify)

17. Apart from taking care of your family, do you have any other significant future aspirations that might be affecting your perspective on family size e.g. going back to school/college, leaving the country in search for employment, change of occupation,

18. Do you have any other comment you would want to share regarding your desired family size

Thank you very much for your time.

ANNEX 2: FOCUS GROUP DISCUSSION GUIDE

Introduction

Thank you very much for agreeing to be part of this group discussion. The aim of this discussion is to discuss determinants of desired family size in our district. I would want to get your perspective of the issue from your experience as a community leader or health service provider. Your personal contribution to this discussion will not be quoted back to you, as the outcome will be collective to the entire group discussion. Please do not hesitate to express your opinion. Let us also respect the opinion of other participants. The findings of this study will only be used for academic purpose.

1. On average, what is the desired family size in our community?

2. In our community what are the possible determinants of desired family size?

3. Do the following have any effect on desired family size, and how?
    - Religious beliefs
    - Traditional and Cultural beliefs
    - Economic factors
    - Social interactions
    - Access to health services
    - Education level

Which amongst these factors would be the most important determinant of desired family size? Why?

4. What are the benefits that young parents associate with a large family size

5. What are some of the challenges that people associate with big family size?

6. What can be done to reduce the desired family size for young parents?

ANNEX 3: KEY INFORMANTS' INTERVIEW GUIDE

Introduction

Thank you very much for agreeing to be interviewed. The aim of this discussion is to enumerate determinants of desired family size in our district. I would want to get your perspective of the issue from your experience as a local administrator/health service provider. Your personal contribution to this discussion will not be quoted back to you, as the outcome will be collective to the entire survey process. Please do not hesitate to express your opinion. Finally, the findings of this study will only be used for academic purpose.

1. On average, what is the desired family size in our community?

2. In our community what are the possible determinants of desired family size?

3. In your opinion, do the following have any effect on desired family size, and how?
   - Religious beliefs
   - Traditional and Cultural beliefs
   - Economic factors
   - Social interactions
   - Access to health services
   - Education level

4. In your opinion, do you think young rural parents relate family size to household welfare?

5. What can be done to reduce the desired family size for young parents?

ANNEX 4: FGD PARTICIPANTS LIST

NAME OF PARTICIPANT	DESIGNATION	SUB-LOCATION
1. Martha Muthoni	Community Health Worker	Eburru
2. Consolata Nanok	Community Health Worker	Ol Jorai
3. Jacinta Mugo	Catholic Diocese of Nakuru	
4. Peter Kagio	Catholic Diocese of Nakuru	
5. Hyslop Nalai	Village Elder	Ol Jorai
6. Peterson Musungu	Community Health Worker	Kasarani
7. Thuku wangombe	Community Health Worker	Kasarani
8. Pastor Wairimu Ndimu	Religious leader	Eburru
9. Titus Waruiru	Community Health Worker	Eburru
10. Lilian Wachera Ondimu	Women leader	Eburru
11. Wanene Muriuki	Elder	Oljorai
12. Redemta Osore	Women leader	Kasarani
13. Charles Gitau	Community Health Worker	Kasarani
14. Maitai lelei	Elder	Kasarani