DYNAMICS OF REPRODUCTIVE BEHAVIOUR IN RURAL COASTAL COMMUNITIES OF SOUTHERN GHANA

A thesis submitted by

Akinyinka Akinyoade

(Nigeria)

in fulfilment of the requirements for the degree of
Doctor Of Philosophy In Development Studies
of the Institute of Social Studies
The Hague, The Netherlands

December 2007

Thesis Committee

Promotor:

Professor Christine Sylvester
Institute of Social Studies
and the Institute of Women's Studies, Lancaster University, UK
The Hague, The Netherlands

Co-promotor:

Dr Eric Ross
Institute of Social Studies
The Hague, The Netherlands

Examiners:

Professor Barbara Miller
George Washington University
U.S.A.

Professor Inge Hutter
Universtiy of Groningen
The Netherlands

Professor Bridget O'Laughlin
Institute of Social Studies
The Hague, The Netherlands

This dissertation is part of the research programme of CERES, Research School for Resource Studies for Development

Funded by the Ford Foundation International Fellowships Programme and DGIS/DPO

Dedicated to Akintunde

Printed in The Netherlands

ISBN 978-90-423-0328-7
Shaker Publishing BV
St. Maartenslaan 26
6221 AX Maastricht
Tel.: 043-3500424
Fax: 043-3255090
http://www.shaker.nl

Contents

List of Tables and Figures

Tables

Figures

Acknowledgements

Dear all, I am happy to notify you that I have successfully completed my PhD programme. This is the Lord's doing, and it is marvellous in my eyes. I would like to extend my sincere appreciation to all who contributed both directly and remotely to this success. My first big thanks goes to my supervisors, Professor Christine Sylvester and Professor Eric Ross, who gave me invaluable guidance and support all through my programme. You saw the big picture, you knew the minor details, you gave me technical direction and trust. Also to Loes Keysers, I am thankful for the priceless theoretical insights, right from the design stage.

I grateful to the Ford Foundation International Fellowships Programme (IFP) for awarding me a three-year grant to undertake this study. Likewise, I thank the ISS for supporting me with a DGIS/DPO funding for one year. Still in ISS, ably headed by Professor Box, I thank the following Professors for the various roles they played in contributing to my academic advancement: Professor Marc Wuyts (thinking with data), Professor Ben White (how not to write a PhD thesis), Professor Bridget O'Laughlin, Professor Arjun Bedi, Professor Mansoob Murshed, Professor Salih, Professor TD Truong, Dr Joop de Wit, Dr Jan Kees van Donge and Floris Blankenberg (Minbuza).

The IFP also gave me a worldwide network of fantastic people, many of whom I have come to relate with closely: Dr Joan Dassin (Executive Director IFP), Dr Mike Egboh (Pathfinder), Dr Mary Zurbuchen, Dr Joyce Malombe, Tricia Calendar, Yolande Zhaler, Danielle Marino, our own Araba Botchway, indispensable Dr Aba Nwachukwu, Mary Taidi (RIP), indomitable colleagues Wilson Akpan, Babatunde Omilola, Ebenezer Obadare, Oksana Silentiva, Angele Mendy, Simon Bawa, and all SIT-LSJ staff. In NUFFIC, I will not forget to mention good people like Beers Schroeder, Hanni Bins-Verschuur, Loes and Birgitte.

Special appreciation goes to Ank v.d. Berg; words are not enough to describe your kind heart. Likewsie I cannot quantify all the help I got from Dita Dirks and Maureen Koster of the PhD secretariat; I thank you both. To Cynthia Recto-Carreon and Els van der Weele, your warm disposition

have not gone unnoticed no matter what was required from the students by the IND. Good friends have been found in Barbara McDermot, Inge Veschuur, Irene Lopez, Sharmini Bisessar, Eef van Os, Nalini Harnam, Lenneke Warnars, and Wieke Blaauw. Martin Blok, thanks for the sports, the cultural days, and for your friendliness.

It is crime against humanity not to recognise how the computer department rose to the occasion at all times, whenever we test their endurance to unimaginable levels: John Steinwinkel, Jeff Glasgow, Gordon, Michel Wesseling and Library staff, I thank you all. And in the facilities department: Harold v.d. Linden, Renee de Louw, Sylvia Cattermole, John Sinjorgo, Faroel Ibrahim, Wim Knoester, Willy Hooijmans, the Plugges, Chairmaine Klaring and Khalid Saidi.

Thanks to Professor Agyeman, who invited me to work in the Demographic Unit, Sociaology Department University of Cape Coast (UCC); *Come Aki come*… you said; and I will always remember the Catholic church, the SAPRI days, and *Mobil*. It was also during the Diffusion days that I met inspirational Professor Casterline. In the same vein I say a big thanks to all staff who worked in the Diffusion project – Efo Peter Aglobitse who introduced me to STATA; William Boateng, Eudora Hanson, Margaret Vortia and Steve Green for your substantive contributions. I give kudos to my field staff who worked odd hours to make sure I got the best information – Ahmed Baba (CDS), Kojo King, Esther Ghanney (Brenu Akyinim), Ebenezer Aggrey (Abuesi), and active champion supervisor JD Thompson - your contribution have not been in vain. Professor Ellen Aryettey, Professor Tawiah, Professor Awusabo-Asare and Professor Obeng (VC, UCC), I thankful for your support.

Professor Ben White warned at the beginning: the PhD road is a lonely one. But he forgot to add that I might meet good people who will make the journey interesting and unforgetable. These special ones include: my office mates Mahmoud Hamid, Daniel Oshi, Nguyen van Phuc, Hadaro Filmon, Moushira Elgeziri, Aamer Syed; PhD-year mates Albert Musisi, Yu Kojima and Malika Basu (who sensitized me about gender), Fenta Abate, Paulos Chanie, Wambui Wamuthenya and Ariuna Dashteren. Others are, Immaculate Mogotsi, Mamoon Dawood (fellow rep on the PDC), Lu Caizhen, Manohara Khadkha, Roselle Rivera, Victor Selorme, Jerome Abban, Antonio Machohe, Veronica Bayangos, Rose Namara, Sailaja Nandigama, Pedro Goulart, Georgina Gomez, Camilo Cotthem, June Munala, Deniz Aksin, Pascale Hatcher, Richard Ampadu, Gevas Kolola, Alex Lopez, and all PhD students.

The greats that have graduated from ISS but deserve worthy mention include – Sunbo Odebode, Nicholas Awortwi, Marco Cantillo, Claudius Preville, Omu Kakujaha, Imani Tafari, Pandu Hailonga, Nahda Shehada Sharada Srinivasan and Admasu Shiferaw thanks for sharing quantitative techniques;. Special friends worldwide include Mina Idan, Ope, Toyin, Chinedu (UK); Emmanuel Avevor, Ivy Hadzide, Michael Conteh, Elizabeth Kakukuru, Letisia Alfeus, Nangula Shifotoka, Kaloes Neels, Sibeso Mubiana, Harry Golo, Gifty Amankwah, Musa Dankwah, Debbie, Lucy, Eva, Lilian Kilwake, Josephine Candiru, Patricia Litho, Tapiwa Uchizi, and Namakau Akapelwa (Africa); Riekje von Drigalski and Harrison Odiase (Den Haag); Laura McNeil (Jamaica); Marcela Rodriguez (Costa Rica); Susan Mani (India); Azra Cader (Sri Lanka); Dennis Bulik, Yeva Vladimirovna, Vladimir Veschanaykov, Lena, Ira, Masy, and Svetlana (Russia); Tyas Susanti (Indonesia); Seun Ajayi, Jide, Tunde Shittu, Kate and Kunle Afolabi (Nigeria); Liu Haifang (China), IFP Fellows in ISS and all the Babas of the ISS 06/07 soccer team.

Thanks to Olivia Appiah and Pastor Akinloye for supporting me in prayers – our God is an awesome God. Eugenia Appiah you are forever matchless, and with the following good people you encouraged me: Patricia Akakpo, Christine, Joana *Vondee* Awortwi, Patricia Formadi, Evelyn Cofie, Dzine, Pauline, Hilda, Grace, Gloria, Martha, Prospera, Kofi and Ben.

Professor Sola Olowu (a.k.a. next-of-kin), please join me in thanking your brother, Professor Dele Olowu. He introduced me to ISS, monitored my academic progress, enlisted me in the anti-corruption crusade, and above all settled me in RCCG Holland. Here I am in the Tabernacle of David Parish where Pastor Mathias Akhideno and family not only minister the word, but by the grace of God have laid a solid foundation of TOD as a family church with a congregation of golden people like John and Funmi (Agag), Ben Balah, the Arabomes, Adeniyis, Olasehindes, Abodunrins, Orokes, Onigbogis, Olaleyes, Adebesins, Mugabis, Oukos, Oyibos, Elizabeth William, Peter, and all choir members (Ann, Anita, Anike, Bimbo, Bobby, Charles, Omo, Timi, Yinka), Bose and Yemi Asogbon, Excellent Men's Fellowship and the Praise House choir.

Fellow Nigerians, I Akinyinka hereby salute you: Taiwo Junaid, Ben Ugbe, John Agbonifo, Henry Kifordu, Okey Udubueze, Alhaji Bello, Austin Eweroke, Maimuna Akusu, Ola Doifie, Oladayo Olaide, Bayo Arotiba, Beatrice Onucha, Biola Lawal, Stela Chuku, Aderonke Abokede, Harrison Obayagbona, Emmanuel Oke and Nurudeen Alowonle Ogbara.

My family you are awesome: a big hug to my mum Rachel Akinyoade who has been holding the fort with the warm loving memory of our father

Rufus Akinyoade (I wish you could see this thesis; may your soul continue to rest in peace). We are growing bigger – Bros Sholly and Sister Mubo, Akinyemi Lobinto and Moyo, Akintoye and Mowumi, Taye and Kay Owa, Kehinde and BJ Ajani, Akinbola (ID) of Glasgow and environs. May the memory of our dad who passed away just before I began my PhD programme remain evergreen. Warm hugs to Ayo, Moyo, Busayo, Akinlolu, Oyin mi, and Temilolu – you have all been wonderful to Akintunde while I was away on this programme. Chief Adetunji, Engineer Fakunle, Baba Taofeek (Yusuf), Tunji *Prof* Adeleke, bros Sunday Oyedemi, Segun Oladipupo, Gbemi Fakunle, Yemisi Ogunleye, Baba Bukky (Ogunleye), Mr Ajayi (Computer), you have all been wonderful.

I am grateful to Anne Hodgkinson and Joy Misa for editing and formatting my thesis in order to make the reading more enjoyable.

Akinyinka Akinyoade

Abstract

The main objective of the study is to identify and understand the factors facilitating and/or constraining changes in fertility behaviour in Abuesi and Brenu Akyinim based on the background of fertility decline observed in Ghana (GDHS of the 1990s). Changes in reproductive behaviour among inhabitants of Abuesi and Brenu Akyinim were examined in the context of the theory of culture and political economy of reproduction. The transition in childbearing behaviour was gauged by examining changes in the following areas of peoples' lives: fertility preferences, costs and benefits of childbearing (value of children) and birth timing (age at first birth and birth intervals). In these two rural communities whose inhabitants had previously experienced relatively high level of fertility of about 6 children per woman in the early 1980s, current total fertility rate (TFR) is estimated at 4 children per woman in Brenu Akyinim and 3 children per woman in Abuesi, by using data from the multi-round "Diffusion of Fertility Behaviour" survey (1998-2003).

This decline in childbearing is traceable in part to an increase in the age at marriage, increase in the number of years between births, and improvement in access to family planning methods. Kinship relations and household structures have also evolved in such a way that as family matters became more nucleated, the power of elders and other relatives on decision-making has gradually eroded. Consequently, part of the effects of the increasing freedom of the conjugal unit has been greater consensus between spouses in their assessments of domestic issues, especially about the costs and benefits of childbearing. Added to this is an emerging trend about how some women take physical appearance and aesthetics into consideration as part of the costs of childbearing and possible remarriage. While it is tempting to characterise the transition to lower fertility as a cultural transformation to Western values of childbearing, cultural patterns did not solely explain the timing of fertility decline in Abuesi and Brenu Akyinim, but they are relevant to the process of population change.

Contradictions were also discovered especially in couples' family size desires due to the complex nature of the interaction of background factors. It

was found that fertility behaviour is bound to favour large families rather than small ones in the two rural communities investigated; given the present socio-economic setting in the rural communities people thrive on labour-intensive livelihood strategies, and also rely on local norms of social welfare protection. Even if women and men would prefer to have fewer children, they are not likely to take any serious measures to limit births.

Thus, decisions on birth timing have been found to be largely influenced by prevailing socio-economic conditions such as the need for women to have some form of social stability (guided by aesthetic reasons) and the need to secure financial stability (for childcare) before continuing childbearing with shorter birth intervals. In addition, where couples' decision-making converges – either in re-marriage or for economic reasons, there is a higher chance of an increase in fertility. But, for as long as economic conditions remain unfavourable, especially where only one of the partners in a marriage is gainfully employed, this study shows that it is the lower fertility desires of the working partner that is more likely to be actualised.

In exploring the micro-history of reproductive decision-making, researchers should take into consideration the view that decisions are distributed along the whole reproductive life cycle. The usefulness and validity of studying changes in attitudinal attributes related to childbearing increase if we are able to follow changes in value orientation over life courses of individuals or groups of people (for example the rise in proportion of males wanting to have more children between 2001-2003 in Abuesi and Brenu Akyinim) by employing multi-round inquiries. The relevance of this new anthropology of micro time to childbearing practices is made greater by the fact that demographic actors use their agency to constantly review their reproductive activities, fine-tune and micro-modify them as the need arises.

1 The Fertility Landscape in Ghana

1.1 Introduction

The aim of this study is to identify and understand the historical and current factors facilitating and/or constraining changes in fertility behaviour today among inhabitants of Abuesi and Brenu Akyinim, two rural coastal communities of southern Ghana.

Fertility is defined as birth performance (or actual childbearing) of women. A refined measure of fertility level is the Total Fertility Rate (TFR), which is the average number of children a woman is expected to have during her reproductive years if she experiences a given set of age-specific fertility rates. Traditionally in Ghana, childbearing has been ensured through the institution of marriage, which has been geared towards large family sizes necessary for meeting their economic, social and psychological needs. This explains the high fertility desires (or preference for large family sizes) judging from the findings of the Ghana Fertility Survey (GFS) and Ghana Demographic and Health Surveys (GDHS) till the late 1980s.

Fertility as the main outcome of reproductive behaviour is an important component of population growth (other components being mortality and migration). In response to concern about rapid population growth in Ghana (due to a relatively high annual population growth rate estimated at 3 percent and a national average of more than 6 children per woman), a national policy geared towards slowing population growth was articulated in the 1960s. A program promoting the use of family planning services was adopted as the main tool. But years later, the Government of Ghana (GoG, 1994) opined that 'unless birth rates can be brought down to parallel death rates, Ghana's population will climb at a rate dangerous to continuing prosperity. The resultant effect could be

that children of the next few generations will be born to a world where their very numbers may condemn them to life–long poverty' (ibid.).

It is important to emphasise that the population issue concerns the rate of growth and not the number of people. In terms of absolute numbers, Ghana is not yet crowded. Ghana's estimated 2000 population of 19.5 million is more than double the 1960 population. On the other hand, the U.K, with about the same land area as Ghana has three times Ghana's population. Thus, Ghana's current population density of about 81 people per square kilometre is not large compared with that of England, 243 people per square kilometre (UN, 2001). But by implication, Ghana's current annual population growth rate could swell the population size by around 50 percent of current figures by the year 2020, while that of England remains relatively stable over the same period. This has obvious implications for developmental planning. The potential for rapid population growth and high dependency burden posed by the youthful age structure of Ghana's population could adversely affect savings and capital formation, which are crucial for sustained economic growth. Of course it must be noted that while rapid population growth may not prevent economic growth, economic improvements may occur more rapidly without this obstacle. A slower rate of population growth will also ensure that more people will have access to social amenities.

Ghana's population has been growing rapidly, largely as a result of declining mortality and high level of fertility (NPC, 1994). It is highly probable that mortality will continue to decline steadily, as efforts are being made to contain the recent HIV/AIDS threat - with adult HIV prevalence estimated at 3.1 percent in 2003 - down from previous highs of nearly 5 percent prevalence rate (UNAIDS,[1] September 2005). Thus, the possibility of a further increase in the rate of population growth cannot be discounted if serious efforts are not made to lower the level of fertility.

1.2 Background of the Research Problem

In general, fertility levels have been declining worldwide and various explanations have been given and theories propounded to provide understanding of the decline. Among these theories is the Demographic Transition Theory, which uses the influence of urbanisation and industrialisation as explanatory forces underlying the fertility decline experienced in Europe. Another is the diffusion theory that looks at the importance of

the contribution of contraceptive use to fertility decline. Other explanations are derived from the economic theories of fertility (demand-for-labour, New Household Economics and its derivative, the Easterlin Synthesis).

Fertility (or childbearing) has been influenced by factors that are shaped by different contradictory interests. These include factors related to the marital institution, fertility preferences (individual, couple, and societal preferences for numbers and sex of children, intergenerational fertility ideals), and birth timing (age at first birth and birth intervals). Related to these is the family decision-making environment, changing values (costs and benefits) of childbearing, and contraceptive use. Other factors include class/poverty issues, health needs of women that impinge on pregnancy decisions, changing sexual norms and behaviour, HIV/AIDS and other factors such as occupation and religion. All these serve as ingredients for points of intervention to impact fertility rates.

Recent empirical evidence from Ghana points out that aggregate fertility levels have begun to decline. Earlier, various estimates of the level of fertility obtained from numerous censuses and surveys using a wide range of techniques all indicated that the level of fertility in Ghana remained at a relatively high level over a fairly long period. For example, for the period between 1960 and 1988, the reported Total Fertility Rate (TFR) ranged between 6 and 7 children per woman. However, the GDHS shows that there has been a decline of the TFR to 5.5 in 1993 and lower to 4.6 in 1998. This decline is relatively fast compared to the one-child drop observed in the period from the early 1960s to the late 1980s. In Ghana, differentials in fertility have also been observed among subgroups. For example, women living in urban areas have relatively fewer children (3.0) than women in rural areas (5.4). Also, women in the southern regions of the country have fewer children compared to their counterparts in the north (for example 2.7 and 7.0 children per woman in the Greater Accra and Northern regions respectively). But generally compared to a TFR of fewer than 2 for most developed countries, Ghana's TFR is still high. Nevertheless, the decline in fertility in the past decade represents a break from the past. How genuine the break is depends on its irreversibility. This raises questions about which factors have precipitated and may likely sustain transition from high to low average fertility levels in Ghana, which therefore makes the study necessary at this point in time, especially in the country's rural areas.

Relative to the fertility levels observed in the developed countries, various socio-cultural practices and beliefs have been found to support and sustain the higher levels of fertility in Ghana. Marriage, the social institution in which childbearing is expected to take place, is still contracted early and is near universal. By age 30, almost all females in the population have been married at least once (1998 GDHS). Although the age at first marriage is still low, there are signs of change in the upward direction. Increasing urbanisation and expansion of educational facilities for women are the two main factors accounting for the increase in age at marriage. Thus if women marry late, their relative exposure to the possibility of childbearing is smaller as potential childbearing years are shortened. Having fewer numbers of children in the presence of well-spaced birth intervals and adequate nutrition will give women less exposure to associated health risks and maternal mortality. In addition to this, women may have more time to participate effectively in non-reproductive activities, and free families from the dependency burden of large numbers of children compounded by the worsening of the general economic situation.

Another entry point to the study of fertility behaviour is women's age at the birth of the first child (age at first birth), which is the first visible outcome of the fertility process. The timing of this event measured by the mother's age has strong effects on both individual and aggregate levels of fertility as well as broader implications for gender roles and responsibilities and social changes in general. Social background characteristics such as religion, place of residence, and educational attainment are some of the factors that may postpone the onset of the childbearing process.

The timing of the first birth has important demographic implications, as both the timing of subsequent births and completed family sizes are related to the age at first birth, which marks a woman's transition into motherhood. It has a significant role in the future life of each individual woman and a direct relationship with fertility. It is believed that the age at which childbearing begins influences the number of children a woman bears throughout her reproductive period in the absence of any active fertility control. Several studies have found evidence of births spaced closer together and an increased chance of unwanted births if the first child is born at an early age (Casterline and Trusell, 1980; Rao and Balakrishnan, 1988). On the other hand, delaying the first birth tends to

reduce completed family size. Contradictory evidence was shown in a study in Russia, where it was found that fertility was low despite early age at first birth and a lack of efficient contraceptive methods (Turner, 1992). This was however attributed to abortion.

In line with the studies of Desantis and Thomas (1987) and Dennehy et al. (1995), abortion has become the primary means of limiting fertility in many Eastern European countries and the Commonwealth of Independent States (CIS), formerly the Soviet Union. In Kazakhstan, Agadjanian (2002) discovered that despite an overall decline in abortion and increase in contraceptive use, abortion has remained a prominent part of the country's reproductive culture and practices. Guillaume and Desgrées di Lou (2002) pointed to a complex relationship between abortion and contraception in Cote d'Ivoire. Though contraceptive prevalence is low, abortion is thought to play an important role in the current fertility decline. The odds for relying on abortion alone were significantly higher among women younger than 25 than among those aged 25-34 years. While women who do not have access to contraceptives or who experienced method failure often resort to abortion, abortion can also trigger subsequent reliance on contraception. For a country like Ghana where contraceptive use is relatively low, younger ages at first birth may tend to boost the number of children a woman will have. Low contraceptive prevalence may point to other fertility prevention strategies accounting for the decline that is underway in Ghana. Even in another context when family planning is widespread, the timing of first births can affect completed family size if contraception is used for spacing but not for limiting fertility.

Fertility decline in Ghana could also be probably indicative of a decrease in the number of children desired. The 'wanted' fertility rate was used as an indicator of average number of children desired and it declined from 5.3 in 1988 to 4.3 in 1998. But a contradiction is observed in the GDHS where 'wanted' TFR is lower than observed TFR in different settings. For example, in the rural areas, wanted TFR is 4.3 compared to the observed TFR of 5.4, and in urban areas, wanted and observed TFR is 2.4 and 3.0 children per woman respectively. In addition, current use of any method of contraception increased to 22 percent in 1998 (two points up from 1993 value) as reported in the 1998 GDHS. But can the increase in contraceptive use adequately explain the drop in fertility observed in the same period? Of course, changing costs and benefits of

childbearing, perceived mortality risks and perceived risks of HIV/AIDS (and other sexually transmitted diseases) can powerfully affect motivations for contraceptive use. These have some influence on the implementation of fertility goals as they directly or indirectly impinge on the motivation to achieve certain levels of fertility.

Another probable reason for declining fertility desire is the general economic state. Living conditions of individuals can be more dependent on income than on social values, thus a change in income should lead to a change in the desired family size. During periods of economic depression in developing societies with high fertility, the population can be affected by drop in real income due to rising prices. Ghana experienced a drastic economic recession in the 1980s, with which it is still battling now. Moreover, it was anticipated that the recession might have a lingering effect on people's lifestyles. Such a population may therefore experience a drop in the desired family size. However, it is baffling that people continue to have more children than the expressed numeric desires. This could be an indication of many issues such as level of accidental pregnancies[2] or unwanted births, the effect of economic crisis resulting in lowered desire for children but a lag in practice, and even the result of the discrepancy between men's and women's desires.

Almost all women are at risk for unintended pregnancy throughout their reproductive years. Many of these unplanned or unintended pregnancies end up in abortion. It is estimated that 30% of all pregnancies in Africa are unplanned, compared to 45% in North America. Yet abortion rate is higher in the developing world where abortion is illegal (unsafe and costly), compared to developed countries, particularly the United States, where abortion and teenage pregnancy rates are declining (Alan Guttmacher Institute, 2007). The prevalence of abortion could be a reflection of levels of unintended or unplanned pregnancies. Another indicator of unplanned pregnancy is premature cessation of breastfeeding in infants; invariably, a woman who weans her infant early is more likely to have had the child as a result of unplanned pregnancy.[3] Databases on unplanned pregnancy are unavailable or at best incomplete in developing countries, so it is difficult to say whether rates are rising or falling.

However in Ghana, most studies on the occurrence of abortion pay more attention to adolescents. Sixteen percent of Ghanaian women and 11% of men aged 12-24 who ever had sex reported being involved in terminating a pregnancy. In addition, statistics show that the average

time between first sexual activity and marriage is about two years for young women and more than five years for young men with more than half of the young women in Ghana marrying in their teens (Alan Guttmacher Institute, 2004). This gap between first intercourse and first marriage leaves a window of time when adolescents are potentially at high risk of unplanned pregnancy as well as other STIs. Apart from adolescents, Forrest (1994) showed that formerly married women, and women of low socio-economic status are also at greater risk for contraceptive non-use and for contraceptive failure, which means that they are also at greater risk for unintended conceptions.

Preferences of childbearing can also be shaped by the truths and myths surrounding HIV prevalence and this could ultimately have a bearing on increasing or decreasing fertility levels in both the short and long run. Concern has been expressed about the fertility of individuals infected with HIV, who upon learning of their condition, may attempt to accomplish reproductive goals knowing that they may not continue to live a normal life span. This concern derives from the centrality of reproduction to life courses, adult identities, and access to social support, particularly for women, in many African settings. Setel (1995) adduced that the decision by a healthy HIV-infected person to continue childbearing is likely to be influenced by the importance of fertility for men and women in tenuous socio-economic contexts, and by how reproductive power is configured in culturally supported hierarchies of gender and generation.

In some cases, continued reproduction may not be a matter of choice. For those women who lack the power to negotiate fertility, it seems plausible that those who become infected with HIV may also be reluctant to reveal their serostatus to partners. On the other hand, even though HIV reduces the reproductive capacities (socially and physically) of infected men and women, whether the epidemic will alter fertility rates is unclear. If many of those infected were identified soon after their infection, they might be able to alter their short-term fertility, although probably not by much. At an individual level, any 'extra' children that infected persons might have through a strategy of hurrying up their fertility would be offset by children they will not be able to have later in life. Equally important is the female perception and experience of the process of pregnancy and childbirth. Many biological and psychological factors could colour the anxiety for the first and subsequent births. These fac-

tors could include experiences heard or had about obstetric risks women face during gestation and delivery. Some require immediate intervention in a hospital, regular attendance at a local clinic, or a local traditional birth attendant. The availability of these modern and local facilities, coupled with the fear of life or death situation could make a woman reassess her willingness to have another child. Of course, this is within the context of fulfilling the societal expectation of childbearing (the numbers and sex of her children which has a bearing on her standing both at home and within the larger society), and the changing values (costs and benefits) of childbearing itself.

The onset of fertility decline in sub-Saharan Africa has engendered much interest since it has been suggested that sub-Saharan Africa's fertility transition is different in certain important aspects from that experienced in the past elsewhere in the world (Robinson 1992; Caldwell et al. 1992b). However, there is still relatively little information available to provide a full-scale picture.

1.3 Statement of the Problem

The birth of a child is an important event recognised in all human societies and has great social and individual significance. It signifies the transition of a couple (or an individual) into a new social status of parenthood with related expectations and responsibilities. Childbearing not only marks the consummation of sexual intercourse (or the mechanical in vitro fertilisation), but it also marks the sexual and social maturity of the mother.

Traditionally in Ghana, procreation was ensured through the institution of marriage. Marriage was geared towards the achievement of large family sizes necessary in order to meet the family's economic, social, and psychological needs. Sexual intercourse was permitted after marriage at a relatively young age (of the bride) in a bid to avoid premarital births, thus marriage marked the onset of exposure to the risk of pregnancy. However, many traditional values and social practices have undergone changes over the years in the course of modernisation, and it is likely that the traditional premarital sexual abstinence is on the decrease.

In the 1998 GDHS it was noted that the median age at marriage has risen steadily over the last two decades, from 18.7 years for women aged 40-49 to 19.3 years for women aged 20-24. This trend toward later marriage is supported by the fact that the proportion of women married by

age 15 declined from 11 percent among women age 40-44 to 4 percent among those currently aged 15-19 years. This shift may represent a general tendency towards delaying childbearing as it was further shown that the median age at first birth increased from 19.8 years among women aged 45-49 to 20.9 years among women aged 25-29 years. But the median age at first sexual intercourse for women has not changed much over the last 20 years as it still hovers around an average of 17.5 years among women aged 20-24. This implies that sexual relationships now start before marriage, which realistically exposes women to relatively earlier childbearing potential.

Thus, it is not surprising that about 14 percent of adolescents in Ghana have started childbearing or were pregnant with their first child at the time of the 1998 GDHS. It has also been shown that the percentage of adolescents who have begun childbearing increases with age from 2 percent among women aged 15 years to 32 percent among those aged 19 years. In addition, adolescent childbearing is twice as high in rural areas than in urban areas while women with little or no education are about seven times more likely to have begun childbearing early than women with some secondary education. However, the puzzling feature is that aggregate fertility levels are declining generally, and more so in rural areas where teenagers are experiencing early childbearing. In this situation one would expect an upsurge in fertility levels. It thus remains a mystery why fertility levels are declining given the increase in pre-marital childbearing and the relatively stable age at first intercourse, especially in an environment where contraceptive use is low, in the general context of labour-intensive production strategies to sustain livelihoods.

In the Demographic and Health Surveys Comparative Studies it was found that in sub-Saharan African countries, up to two-thirds of women experienced intercourse one or more years prior to their first union (Arnold and Blanc, 1980). This suggests that age at first union is insufficient to capture all sexual exposure that leads to births prior to marriage. This is opposed to the demands of the quantitative calculation of the index of marriage and its usefulness for estimating fertility levels within the proximate determinants of Bongaarts' fertility framework. Moreover, in recent times marriage has been undergoing a shift from arranged marriages to romantic marriages which frequently are characterised by sexual intercourse before marriage. Sometimes these premarital sexual activities result in premarital pregnancies (Gage-Brandon and Meekers, 1992).

Also with modernisation, it is expected that the age at menarche in Ghana will continue to decline due to better nutrition and household health. Thus women are likely to commence early childbearing depending on the exposure to sexual relationships and the availability and use of contraception. If deliberate measures to change the current situation are not taken, current fertility decline experienced especially in the rural areas may only be a fluke and the prevailing (or even higher) fertility level may persist for some years to come.

Furthermore, farming and fishing activities have been identified as important areas for the employment sector and livelihoods of peoples of Ghana, especially in the rural areas. Major concern has been raised about the over-exploitation of fishery resources. Factors such as the rapid expansion of fishing capacity have been identified alongside the negative environmental effects of industrial over-fishing involving destructive fishing technology, unsuitable national fisheries policies and degradation of coastal habitats through pollution (FAO, 1997). In addition to this, the effect of rapid population growth is one of the major contributing factors to over-exploitation of fishery resources (Bortei-Doku Aryeetey, 2001)

Policy makers thus acknowledge that designing population programmes for fishing communities is critical for achieving sustainable exploitation of fisheries resources, which is also deemed necessary to improve the living conditions of fishermen. The importance of population control to standards of living has been emphasised in international foreign aid circles. In Ghana, there is roughly one dependent person (individuals aged under 15 or over 64 years old) for every economically active adult compared with about two adults per dependent in more developed countries like U.S, Great Britain and Switzerland (Benneh, 1990). The need to provide for economically dependent persons puts pressure on the resources of government and individual households. Thus governments have recognised the need to reduce the rate of growth of their population and adopted policies towards this end. Targets built into these policies are a way to reduce parental desire for large family sizes through direct (more encouragement of the use of contraception for limiting than spacing of childbearing) and indirect means (dissuading women from early marriage) in order to achieve fertility transition. This, however, seems to contradict current labour strategies of the inhabitants of the coastal rural areas. Coupled with this is the national economic

downturn that began in the 1980s. It brought in its wake the 'harsh' conditions of the structural adjustment programme (SAP) that led to the removal of subsidies from various socio-economic sectors as well as to the spiralling costs of inputs in the agriculture and fishing sectors. This made the transition to modern (technological) mode of farming and fishing difficult in another sense, thus increasing the appeal of cheap labour-intensive strategies to facilitate economically productive activities.

Fishing and farming in Ghana are highly labour-intensive. The increasing use of labour-intensive strategies in coping with farming and fishing activities as means of livelihoods in the face of occupational realities in the rural coastal areas suggests that labour is obtained either within the family or from in-migrants, or both. This is more significant in the fishing enterprise right from when the catch is landed, through processing and marketing. Bortei-Doku Aryeetey (2001) contends that the survival of the fishing industry so far has been dependent on the ready supply of loyal and committed labour from a kin-based pool of young men and women. High fertility serves to guarantee this supply, and can almost be seen as an integral part of the fisheries industry. Getting both male and female labour from within the family is a rational cost-saving strategy and may indicate an increase in demand for children; but this is one of the jigsaws in the demographic puzzle in an area experiencing declining fertility levels. In addition, while the education participation rate has been increasing over the years (though more for men than women), there is the growing disenchantment among the populace, especially in the rural areas, who seek higher levels of education for their children on the grounds of the rising costs of education and soaring levels of unemployment among school leavers. Thus if a child can be assured of some occupation after apprenticeship in the farming and fishing sectors, schooling which does not guarantee immediate employment at the end is seen as a waste of time. Education has been negatively related to fertility, which makes it interesting to find out what catalysts account for fertility decline in rural areas where educational attainment is low. UNESCO (2002) observed that Ghana is one of the 78 countries at risk of not halving adult illiteracy by the year 2015.

One distinguishing feature of the erstwhile resistance to fertility decline in West Africa has been high fertility desires. Given the recent fertility declines observed in the GDHS data in the 1990s, Ghana could be said to be in fertility transition. Despite the evidence that fertility transi-

tion has begun in Ghana, a large proportion of the country, especially the population in the rural areas, retains comparatively high levels of fertility such that questions about the prospects for fertility decline remain relevant. This is because the socio-cultural context was and still deemed to support, if not promote high fertility.

There has been a debate on whether a substantial decline in the demand for children is considered a fundamental driving force of fertility transition. One specific and critical issue in this debate that has posed a methodological problem is the meaningfulness of the data on fertility desires that is collected in demographic surveys, especially its predictive value. Hauser (1967) had earlier doubted their validity and, by implication, the validity of the contraceptive knowledge, attitude and practice gap (KAP-gap) and 'unmet need' estimates cited from the 1960s to the present as evidence for fertility decline, in the absence of increases in the desire to avoid pregnancy. But Casterline and Feyisetan (1997) contend that a decline in quantitative demand for children is a necessary condition for fertility transition. The weight of the accumulated empirical research, in fact, is that survey data on fertility desires are valid, as assessed either at the aggregate or at the individual level (De Silva, 1991; Bankole and Westoff, 1998). In addition to this, gender-disaggregated data could help in understanding the discrepancy between fertility desires and fertility outcome. It has been pointed out that women continue to have more children than the desired number they expressed. How men and women (as married couples or in other unions) negotiate and accommodate their numeric desires for children can throw more light on the observed discrepancy.

In addition, reproductive behaviour across the world is played out in very different domestic arrangements and cultural systems so that changes in costs and benefits of children are likely to be distributed among relevant household actors in very different ways. This often leads to outcomes which could not be predicted using the conventional economic demographic theoretical apparatus. Most studies on the determinants of fertility have not only been cross-sectional but have been limited in most cases to enquiries among women. The use of cross-sectional data has the obvious disadvantage of looking at 'snap-shot' reproductive behaviour compared to longitudinal studies to observe trends. Childbearing obviously involves both a female (whether willing or coerced) and a male. The exclusion of the male perspective, despite men's central role in

fertility decision-making is limiting (Ezeh, 1993; Dodoo and van Landewijk, 1996). This has made the incorporation of the male perspective even more imperative and it is now being implemented in many surveys, for example the Demographic and Health Surveys in the 1990s. Many conditions call for the incorporation of male perspectives in fertility and related analyses. Among others, Dodoo (1995) and Ezeh (1993) argued that the patriarchal nature of social arrangements in Africa through lineage, descent, marriage, and bride wealth rules gives men control over sex (and the power to implement their preferences in associated decision making). In marriage, for example, wealth transfers from the groom and his family to the bride and her family compensate the woman's kin for losing her labour and that of her offspring (Caldwell and Caldwell, 1990; Isiugo-Abanihe, 1994). This bride wealth payment also transfers decision-making authority over childbearing to men. Dodoo (2001) showed further that men's higher fertility preferences, which obtain from the lower costs and greater benefits of childbearing that accrue to them relative to women, mean that they traditionally dominate childbearing decision making, at least in a way that is supportive of high fertility.

The recent inclusion of men in fertility and related analyses could be further enhanced using a couple-perspective (as formal partners and other forms of unions). Analyses of information from couples can also clarify the nature and extent of gender inequality associated with high fertility in Africa. The roots of this disadvantage certainly need to be empirically made real. Particularly important is the need to clarify the socio-economic power-play between couples, and the role or impact of spousal discussion or communication on fertility issues.

In summary, evidence from the GDHS in the past decade shows on one hand contradictions between a rising aggregate level of age at marriage and a relatively stable lower age at first birth and on the other the difference between fertility desires and fertility outcomes at the aggregate level. Even the general decline in fertility rates, though less visible in rural areas, has been taking place in the presence of low educational attainment and in the absence of substantial increase in levels of contraceptive use, which points that some other underlying factors are responsible for the decline. This is in the backdrop of a largely patriarchal society with social arrangements that give men relatively more power in decision-making, not forgetting the context of stagnant and dwindling eco-

nomic fortunes that practically encourages the adoption of labour-intensive livelihood strategies. This presents an interesting problematic scenario that could allow us to look at reproductive behaviour from different theoretical perspectives and from different disciplinary angles within the social sciences.

1.4 Research Questions, Objectives and Justification

1.4.1 Research questions

Fertility is the major population component that will determine Ghana's future population growth rate and size, since mortality is declining. This statement might be true if the mortality decline reaches a stage where it cannot decline further than the level of 10 per 1000 per annum. If this lower mortality rate becomes a fact, fertility decline will reduce the population growth rate. However, while fertility levels have been declining, evidence from the 1998 GDHS shows a contradictory picture that Ghanaian women continue to have more children than they consider ideal (more pronounced in rural areas). Across the political divide, the Central Region in southern Ghana, for example, has one of the highest disparities. Also, while age at first birth generally stagnated at an aggregate level of 17.5 years in Ghana in the past two decades, adolescent childbearing is twice as high in rural areas as in urban areas. In addition, married women in urban areas are nearly twice as likely to use a contraceptive method as their rural counterparts. Despite the fact that fertility levels are dropping, childbearing at younger ages exposes women to longer periods of potential childbearing, and the absence of deliberate use of contraception may herald a rise in population growth rate in the near future.

Furthermore, the interface between increase in aggregate age at first marriage, lower age at first sex and rise in adolescent childbearing in teen years, especially in the rural areas, suggest a significant occurrence of premarital conceptions and births. This could be a reflection of the potential waning of the influence of marriage on childbearing.

In the light of the above, four main issues need to be addressed. The first issue focuses on the influence of the social issue of marriage on childbearing activities. The second closely related issue, which is child rearing, concerns the question of how social and economic factors interact to shape the distribution of costs and benefits of different reproductive strategies for key actors within the domestic domain. The third con-

cern is about the interface between gender considerations, livelihoods, and childbearing. Finally are the health considerations that may shape childbearing decisions for both men and women.

Overall, the main question is why has the fertility level dropped? The main question can be further sub-divided into the following four issues.

(i) Social issues: Are patterns of union changing? What factors affect current marriage patterns? Is there a shift in patterns of marriage in relation to reproduction? When do various forms of union lead to changes in fertility? What are the current trends in marital and non-marital sexual behaviour? Is marriage an important consideration for the commencement of childbearing? What factors are decisive for the legitimacy and custody of children? What shapes the timing of the first birth for women and does it have a relationship with age at marriage? How does the relationship between age at marriage and age at first birth affect subsequent childbearing?

(ii) Economics of childbearing and fertility regulation: What kinds of costs and benefits enter into the fertility regulatory calculus? To what extent is the fertility regulatory calculus an issue of marriage? How do social and economic factors interact to shape the distribution of costs and benefits of different reproductive strategies for key actors within the domestic domain?

(iii) Gender and livelihood considerations: What makes couples' interests converge or diverge in the household? How do people's perceptions of what is masculine or feminine and differences in power to take decisions or of the nature of sexual relationships influence their childbearing and birth timing? How do gender differences in interests and agency shape the observed fertility outcomes since couples may have contradictory livelihood needs? In what way do fishing and farming activities in the rural communities set the pace of reproductive behaviour? How does ethnic identity play a role in fertility decisions in the rural communities?

(iv) Health needs: How do the health needs of women impinge on childbearing motivation? To what extent does the current HIV/AIDS threat affect reproductive behaviour in the rural communities?

1.4.2 Propositions

Fertility levels have been undergoing changes influenced by factors that are not only non-mutually exclusive but also shaped by different and even contradictory interests. Marriage, the social institution in which childbearing is expected to take place, is also undergoing changes and the weakened economy also offers a probable reason for altering the childbearing calculus of individuals and couples. Marriage has a major influence on the commencement of childbearing and thus shifts in marriage patterns may cause a corresponding change in childbearing intentions and habits further impacting living arrangements and the reproduction of the new labour force. Thus these propositions will be examined in the light of declining aggregate fertility levels in Ghana and contextual changes in social and economic processes.

(i) Postponement of marriage among never-married women in pursuit of higher education and occupational demands, along with increasing number of cohabiting relationships, may expose women to greater likelihood of premaritally conceived pregnancies and births than in earlier years.

(ii) Convergence of gender-specific interests in the context of changing socio-economic realities is fundamental to bridging the gap between desired and achieved fertility.

In the first instance, changes in the age at first marriage, the likelihood of marital dissolution, and remarriage all have the potential to alter periods in a woman's life when she is likely to experience a first birth, subsequent births, and ultimate level of fertility. Secondly, it is probable that individual social and economic interests concerning childbearing and childcare could have been formed (and may have started to diverge or converge) before the household is formed and this divergence or convergence may be further strengthened in different marital and economic contexts.

1.4.3 The research objectives

This study seeks to understand changes in Ghanaian fertility by examining the situation prevailing in the rural areas of the southern coastal section of the country. The theoretical and methodological objective is to explore and concretely specify the factors contributing to fertility change in two rural coastal communities in the Central and Western Regions of

southern Ghana. Attention will be given to understanding how fertility decisions are being formulated and actual childbearing levels reached in the context of dynamic social and political-economic processes.

The specific objective is to identify and compare the processes linking fertility change to socio-economic and cultural attributes at the individual and community level in Abuesi and Brenu Akyinim communities in the Central and Western Regions respectively.

Rapid population growth has been identified as one of the constraints to socio-economic development in Ghana. One of the main outcomes expected from this study is a technical estimation of prevailing levels of fertility in the Brenu Akyinim and Abuesi communities. The background social, economic and political factors will help in understanding and contextualising people's fertility behaviour. This will also serve as a means to study the socio-demographic characteristics of the inhabitants towards improving the knowledge base of the researcher and providing insights to policy makers on the fertility dynamics of poor coastal communities and their impact on population growth.

Moreover, the vital importance of population policy targets being in harmony with socio-cultural realities while still on course with socio-developmental goals cannot be underscored. One way to do this is to study and understand the fertility behaviour of people. It is important to find out and say more about the working relationship between the inhabitants and policy makers as these two sets of actors influence fertility dynamics, especially fertility goals, family and population size aspirations. Thus, part of the more general objective is to provide policy makers and other stakeholders with useful information for implementing programmes towards modifying reproductive behaviour of individuals, targeted to fertility reduction (especially in the rural coastal areas) within the framework of the National Population Policy.

Furthermore and equally important is to examine how recent economic changes have affected the Ghanaian people's marital and 'extra-marital' family size formation behaviour inasmuch as it has also been highlighted that differences exist between fertility desires and outcomes. In 1992 after a long period of military rule, Ghana began a democratisation process of its political system, simultaneously shifting towards a market economy. A decade before this the country had experienced a deep economic crisis, characterised by a substantial decline in the standard of living and increasing levels of poverty and unemployment. The

change from a centrally controlled economy in the early 90s could have strong political implications for family planning and childbearing. If economic downturn works as an effective deterrent to childbearing, an important implication is that any future improvements in economic activity might foster an increase in fertility levels. The fall in income levels, increased uncertainty of employment, and the disruption of public transfers and support could all have an important effect on women's fertility behaviour. This has implications for the validity of responses regarding fertility desires and its value for fertility predictability.

Given the relative importance of the contribution of changes in fertility desires to stages of fertility transition, it is important to examine the numerical and gender preference for children as it impacts need for contraception in spacing and/or limiting childbearing in the two communities. The study intends to investigate the demand for family planning and unmet need for both men and women in the study areas. Unmet need for family planning may be the result of high demand coupled with unaffordable costs of procurement (due to low income levels and differential demand for particular gender of children), and supply reflecting availability and accessibility of family planning services. The socio-economic subcategories of the population with a low acceptance rate are identified with the aim of finding out the proportion of women in reproductive ages, who want to limit or space their births but are not using any method of contraception, and investigating the characteristics of these women and their partners, with the dynamics involved, not forgetting the supply-side factors.

In this study, an attempt is made to describe the way in which birth timing influences fertility. In doing so, the demographic, social, economic and cultural determinant of birth timing will be examined and the magnitude of its consequences on fertility will be brought to light. Childbearing ability is confined to an approximate period of 35 years for women, and it may be assumed that early entrance into childbearing will lead to higher fertility in rural areas where contraceptive use is low.

The fertility level for the period 1998-2002 is investigated based on the collaborative research at the Demography Unit, University of Cape Coast. The dynamics and contradictions in fertility behaviour will also be studied on an intergenerational basis with older cohorts in the population, in addition to an examination of the contribution of each of the proximate determinants of fertility (age at marriage, post-partum prac-

tices of breastfeeding and abstinence, contraception and abortion) on the estimated fertility levels. This is to provide a comprehensive picture of the social, economic, behavioural, biological and demographic determinants of fertility using a greater sample of two communities. In thinking about differences in fertility behaviour between the two communities, it is possible that there have been differences in marriage, fertility desires, and post-partum practices in the past that have persisted to the present and that might lead to inter-community differences in fertility rates.

1.4.4 The research justification

The government of Ghana considers the population growth rate (caused by high fertility levels) to be very high. In addition, it has been demonstrated that the rapid population growth in Ghana may have negative effects on the economy, health, education, employment, agriculture, environment, and urbanisation (Benneh, 1990). It is against this background that the government of Ghana revised its National Population Policy in 1994, which, among other things encourages a reduction of fertility in order to bring down the annual population growth rate. The success of the earlier (1969) population policy was doubted because of the persistent annual growth rate of the population of 3 percent that implied a doubling of national population size in approximately 20 years. Therefore, more effort needs to be made towards an understanding of the dynamics of fertility behaviour in different sub-sections of the Ghanaian society so that proper strategies can be formulated. To study sub-groups of the population where fertility is relatively high or resistant to decline is a step forward in any programme meant to reduce fertility. Thus the analysis of new data could be used to give a better understanding of reproductive behaviour in the coastal areas of rural southern Ghana. This will help to identify the factors associated with the observed reproductive behaviours and find out if the wave of fertility decline observed generally in Ghana will be permanent, semi-permanent, or reversible.

Though the importance of modern contraceptive use has been stressed as a contributing factor to fertility decline generally in Ghana, the main problem is related to the fact that most Ghanaian women are not using contraception as the 1998 GDHS data suggest. This is an indication that the impact of family planning programmes on fertility has been very minimal so far. This is unlikely to change, especially in the rural areas, within the next decade unless extraordinary measures are taken.

This gives more reason to explore the relative importance of other fertility regulating habits, and even the relative prevalence of primary or secondary infertility and its contribution in aiding fertility decline.

Furthermore there is a need to identify the magnitude and direction of the relationship between age at first birth (a measure of birth timing) and fertility because the level of fertility in Ghana can be associated with both marital and premarital fertility. Premarital and adolescent fertility have not been adequately distinguished because there is a tendency for them to occur concurrently. In many studies done on age at first marriage in Ghana, births outside marriage were always ignored. Therefore the implementation of the National Population Policy targets that would affect the marital status at childbearing is different from those that would affect age at childbearing.

The age at which women initiate sexual intercourse marks more precisely the beginning of their exposure to the risk of pregnancy. Therefore studying factors associated with age at first birth, its consequences and its contribution to the overall fertility in the rural areas of Ghana will help the government and other stakeholders in the policy implementation in this direction. Taking a closer look at the dynamics of reproductive histories and sequencing of events within them will shed more light on the knowledge about the relationship between age at first birth and fertility in the context of the rural communities in coastal parts of southern Ghana. Empirically, the question of the relationship between age at first birth and fertility can be answered using the data from the 'Diffusion of Reproductive Behaviour' project conducted by the Demography Unit of the Sociology Department, University of Cape Coast, Ghana.

In addition, this study hopes to contribute to the growing insight into different aspects of reproductive behaviour as it bears on population dynamics of fishing communities, and its link to the future of Ghana's fisheries. Studies into population dynamics in fishing communities are growing, with the Food and Agriculture Organisation (FAO) of the United Nations playing a major role. In 1993/94 FAO embarked on the Fisherfolk Population Studies Project. The assumption is that understanding the population dynamics of fisheries communities is essential for grasping the economic rationale for livelihood decisions and attitudes towards coastal resource management. Evidence from Asia indicates that apart from being significant food producers, fishers are in many ways central

to the sustainability of coastal and riverine ecosystems (Groenewold, 1997).

Although small-scale fishing communities in Africa have become the focus of an increasing amount of social and biophysical research in recent years (Bortei-Doku Aryeetey, 2001), consideration of dynamics of fertility behaviour at the community and, in particular, household level in small-scale fisheries has received only limited attention. To address this gap, this study partly focuses on artisanal small-scale fishers in Brenu Akyinim (Central Region) and Abuesi (Western Region). Besides trying to understand the link between population features and the carrying capacity of fisheries, it is important to know what other demographic issues directly or indirectly influence the general well-being of fishers and their families. Changes in marital practices, fertility desires, practice of contraception and changes in birth timing could be indicative of communities' participation in the ongoing fertility transition in Ghana. Agyeman and Casterline (2001) contend that the stance of political leaders and the effectiveness of health and family planning programs also have substantial bearing on this transition. Thus the history of health and family planning services provision can be especially influential in determining whether change starts relatively early or late and whether fertility change proceeds rapidly or slowly, or is reversible.

Thus this study stands as an update on the fertility transition process in rural coastal parts of southern Ghana. Evidence that suggest important changes in fertility behaviour are underway will be explored. This will be done by examining the more direct causes of the changes in birth timing and fertility desires and their effect on further changes in fertility levels for individuals both within and outside the institution of marriage. If a contradiction in fertility desires and fertility levels is discovered, reasons for this inconsistency will be sought. In addition, it is likely that people's perception, motivation and experience of childbearing is influenced by social, economic and political changes in the past decades, thus a review of intergenerational changes in fertility behaviour and government's population policy will be conducted. A comprehensive understanding of the dynamics of forces of change is aimed at providing recommendations that will enhance the appropriate implementation of population programmes. This process will help in speculating about the prospects of further declines in fertility in the rural coastal communities.

It has been opined that fertility transition in sub-Sahara Africa is taking on a different form compared to what obtained elsewhere in the world with regard to the rate of decline, context for decline, and whether or not childbearing will dip below replacement levels as is occurring in developed countries. Therefore, the next section explores some of the theories developed to provide understanding of issues related to the demographic process of fertility. The hope is to settle on the appropriate theory that could help in understanding the fertility transition that is currently underway in southern Ghana; this will help in the contextualisation of possible factors that are at play in the fertility transition process.

Notes

1. http://hivinsite.ucsf.edu/global?page=cr09-gh-00

2. Pregnancy is not always a planned or rational behaviour; even when people plan, the ability to control the outcome will vary.

3. Additional reasons for premature cessation of breastfeeding include the condition of the firstborn child, and the first mother-child contact occurring after 90 minutes of life.

2 Culture and Political Economy of Reproduction

2.0 Introduction

In many parts of the world, couples are having fewer children, and family size – and by extension the basic unit of social life – is shrinking. Issues surrounding reproduction, once considered the most private and taboo of subjects have become matters of intense public concern, as neo-Malthusians and environmentalists see third-world overpopulation as a threat to the future of mankind. Cultural understandings of reproduction have also been transformed, as new technological and biomedical breakthroughs have forced a rethink of the notions of personhood and gender, family and kinship. All these heighten curiosity among students of human societies about the causes and effects of these remarkable demographic changes and their implications.

For example, contemporary demographers tend to operate with very descriptive models in which variations in reproductive behaviour are viewed as a function of culturally specific practices affecting married women, the use of contraception, the frequency of induced abortion, and post-partum infecundability. These are better known as the 'proximate determinants of fertility'. Bongaarts (1978) developed a model to quantify the contributions of these factors to observed fertility levels to put them in the form of their effect on reducing biological potential fecundity. Modifications to this framework were later suggested by Stover (1998) based on review of new data and experiences.

However, the understanding of reproductive behaviour goes beyond estimating prevailing levels of fertility. It also entails the understanding of the pathways to achieving or limiting fertility. The Demographic Transition Theory, for example, related the fertility transition in Europe between the 18th and 20th century to forces of modernisation and industri-

alisation. The classic statements of demographic transition theory portray fertility decline as a direct consequence of decreased demand for children, itself a response to improved child survival and structural changes in the society that reduce the benefits and increase the costs of rearing children (Davis, 1963; Hirchsman, 1994).

Understanding the modes of reproduction in pre-industrial and developing societies has not been left out as Harris and Ross (1987) dug deep to provide insights into reproductive behaviour of the peoples of earlier civilisations. The expression 'mode of reproduction' is used to denote the interrelated population-regulating activities and 'decisions' engaged in either consciously or unconsciously depicting reproductive behaviour that have the combined effect of raising or lowering rates of population growth. Four population-regulating practices were identified in these societies.

First is the kind of care foetuses, infants and children receive before live birth and young adulthood respectively. A subtle gradation leads from mobilisation of resources in support of healthy births to indirect and direct abortion; from full support of infants to indirect and direct forms of infanticide. Dickemann (1984) extended the process even further by claiming that children are also subject to direct and indirect forms of homicide.

The second and third population-regulating practices relate to women. One point is the particular society's treatment of women, which in a way helps to decide the fate of foetus and infant, raises or lowers age at menarche, lengthens or reduces the period of adolescent sterility, increases or decreases the frequency of amenorrhea and, hastens or retards peri-menopausal fertility decline. However, measurement of the effect of these on fertility reduction is difficult. Another point is lactational frequency and scheduling. Amenorrhea is a typical accompaniment of breastfeeding, duration of which appears to be controlled by several biocultural factors. While relative importance of factors remain controversial, it is clear that under favourable conditions, lactational practices can result in birth spacing intervals of three years and over with a degree of reliability comparable to modern mechanical and chemical birth control. But it must be quickly added that adjustments of the fertility rate of any social group upwards or downwards is not solely dependent on mere intensification and prolongation of lactation. Moreover, prolonged lactation cannot take place without suitably nourished mothers; human breast

milk as the sole food source beyond six months places infants at risk of anaemia due to its deficiency in iron; and demands on mother's labour time may interfere with frequent nursing demands.

The fourth practice Harris and Ross (1987) highlighted is coital frequency and scheduling. Coital abstinence can be sustained long enough to influence fertility and delays in the onset of coital behaviour can shorten the female's reproductive span. The contraceptive effects of lactational amenorrhea can be reinforced by postpartum coital abstinence, while various forms of non-reproductive sex can influence fertility rates with or without it being associated with postpartum abstinence.

It is interesting to note that reproductive behaviour could be shaped by a whole array of factors, some of which are measurable and others with contributions that cannot be quantified. Subsequently, we will now consider recent theories developed to provide insights to fertility change in modern-day settings by scholars within the field of demography and other related disciplinary backgrounds.

2.1 Demographic Theories of Fertility: A Brief Overview and Critique

Five major theories or groups of theories of fertility dynamics developed in demography help in trying to understand fertility change. First is the demographic transition theory (DTT), also known as the Classic Transition Theory, the leading approach until about the mid-1970s. Four other sets of explanations have been developed since then. These comprise three 'post-classic' transition theories, which dominate fertility research today, and a fourth much smaller class of institutional approaches to reproductive change.

2.1.1 Demographic transition theory (classic transition theory)

In this account, the transition in fertility was ushered in by broad forces of modernisation such as urbanisation and industrialisation, which altered the economics of childrearing, lowering desired family size. Classic transition theory was therefore seen as a version of modernisation theory. Kabeer (1996) recalls the 'classic transition theory' as drawing heavily on the basic assumptions and causal relationships of modernisation theory. There are two features to this. The first focuses on the level of socio-economic development and takes as its model the process of de-

velopment in the West and concomitant increases in income, urbanisation and industrialisation. These are theorised as the key mechanisms through which a shift from high to lower fertility regimes via reductions in mortality rates is achieved. The second feature of both transition and modernisation theory highlights the norms and values of traditional societies as the major impediments to change.

Succinctly put, the Demographic Transition Theory (DTT) shared a set of characteristic assumptions with other classic modernisation theories. Adapting So's (1990) characterisation of all classic modernisation theories, Greenhalgh (1995) substituted 'fertility transition' for 'modernisation' in So's original text, and found that transition theory shares assumptions rooted in evolutionary theory. Fertility transition could thus be observed in the following light. First, that fertility transition is a phased process (societies begin with the primitive or traditional state and end with the advanced or modern state). Also, that fertility transition is a homogenising process that produces tendencies toward convergence to low fertility among societies, and it is an irreversible process. In addition to these are the assumptions that fertility transition is a Europeanisation process, progressive and desirable in the long run, and finally a lengthy process. However, what we are seeing in sub-Sahara Africa and other parts of the developing world is that fertility is declining despite the relative absence of industrialisation and urbanisation in those regions compared to the European experience.

2.1.2 Post-classic fertility transition theories

Faith in classic transition theory was gradually undermined firstly by the results of the testing of the theory with historical data from roughly 700 provincial-level units throughout Europe based on the Princeton University-based European Fertility Project. No consistent relationship was found to have existed between the timing of the onset of fertility decline and measures of social and economic development (Knodel and van de Walle 1979). However, fertility was shown to be significantly related to 'culture' defined operationally as language, ethnicity, or geographical region (Watkins, 1986), sowing the seeds of the cultural or diffusion interpretation of fertility decline (Greenhalgh 1995). It was explained that changes in the economics of childrearing, and thus parental demand for children, do not explain when and why fertility falls. Rather, changes in ideas about the acceptability of birth control (ideational change) explain

when fertility falls (Cleland 1985; Watkins 1987, 1991). Thus, the acceptability and feasibility of birth control is given a central role rather than ideas about the economics of fertility size as the motivating force for fertility decline (McNicoll 1992).

The formulation and adoption of the diffusion or cultural perspective, in reaction to the poor empirical showing of the extremely broad transition theory has a number of advantages. One is its stark simplicity, and another is the diffusion theory's ability to model the social structure of contraceptive diffusion (Greenhalgh, 1995). Ironically, the adoption of modern contraceptives has been used as the main criticism for this approach, which will be discussed in due course.

Another strand of theoretical work in social demography is the wealth-flows theory of John Caldwell. This theory, developed in the late 1970s, tied fertility decline to a reversal in the net intergenerational flow of goods and services (from older to the younger generation). This came as a result of the emergence of Western ideas regarding the benefits of the non-patriarchal child-centred nuclear family (Caldwell 1976, 1982). However, little research has been done to test Caldwell's ideas and key claims of wealth flows theory have not been submitted to clear tests. In addition, difficulties in operationalising the theory are said to explain why the wealth-flow theory is no longer actively pursued, even by its proponent (Handwerker 1986, Greenhalgh 1995).

In the 1980s, women's roles and status moved to the centre stage in a number of part-theories of fertility. Notable is the work of Karen Mason (1986, 1987) using a broad review of the demographic literature on women and fertility to propose a set of hypotheses connecting 'female status' and fertility. It was posited that women's education and their position in the family and household affect women's autonomy from male control, economic dependency, and social status, which in turn influence child supply, child demand, and child costs. Like Caldwell's wealth-flow theory, Mason's approach has also produced little empirical research and even less cumulative theory.

Theoretical frameworks for the economic analysis of fertility trends and patterns were also developed. We could look at Coontz (1957) 'demand for labour' analysis and New Household Economics (NHE) of Becker (1960, 1991). An attempt was made by Coontz (1957) to provide the theoretical apparatus for the economic analysis of population changes and fertility differentials. This focussed on long-run changes in

the economic function of the family for the rich and poor. The evolution in the economic function of the family for the rich indicated that the inverse relationship between wealth and fertility had not always existed. On the contrary, when a man's family constituted a major source of wealth there was no incentive for family limitation. The full development of slavery and concomitant concentration of wealth and increasing class differentiation made it unnecessary for the rich to engage in direct productive activity. Income was thus derived from the mere fact of monopoly ownership of the instruments of production (land and labour). Family fortunes were merged through dowry and at the same time, family limitation was used to preserve the integrity of the patrimony in subsequent generations. This indicates that in the evolution of the economic function of the family for the wealthy, fertility must have varied directly and not inversely with wealth. Its subsequent evolution furnishes the economic explanation for family limitation among the wealthy.

The evolution of the economic function of the family for the poor was also considered. It was first seen as a production and consumption unit and thus was not basically changed by the impact of industrialisation. Of course, industrialisation meant the destruction of domestic industry resulting in the depreciation of the economic contribution of women and children in the home. However, this was more than compensated for by the increased demand for women and children in the industry. Hence, there was no economic stimulus for family limitation among the poor.

The contrast in the economic function of the family for the rich and poor provided the explanation of the first great fertility differential. However the difference in economic function did not explain the fertility decline among the poorer classes dating from the last quarter of the nineteenth century in Europe, nor did it explain inter-occupational differential fertility. This required an historic review of changes in 'demand for labour', leading to its use as a theoretical apparatus for the economic analyses of population changes and fertility differentials.

Since there had been general recognition of the significance of changes in demand for labour for cyclical fertility fluctuations and the geographical distribution of population, the main problem here was to demonstrate how long-run changes in demand for labour effect relatively permanent changes in fertility patterns. The condition least favourable to population growth is one in which demand for labour falls absolutely;

however, even a decreasing rate of growth in demand for labour is unfavourable to population increase. Further, modern industry requires a more highly educated labour force but the time and expense required for the preliminary preparation of an individual for 'productive' labour have greatly increased. Thus the decreasing rate of growth in demand for labour and the rise in the average quality (cost) of labour-power demanded explain the significant fertility decline among the poorer classes. 'Demand-for-labour' analysis also implies that even in the absence of any decline in the total demand for labour, a rise in the average quality (cost) of labour-power demanded would lead to a fertility decline.

Coontz (1957) concluded that the economic interpretation of fertility behaviour does not imply an 'international convergence of birth rates', as contained in the demographic transition theory. The fundamental determinant of fertility patterns is demand for labour and not the democratisation of knowledge of effective means of contraception. Nor does the economic interpretation accept the thesis that 'while changing economic conditions may cause some fluctuations in the birth rate, they do not affect the general trend'. On the contrary, both long- and short-run changes in fertility are a function of changes in demand for labour. It was admitted that although demand for labour still governs supply, this does not mean that this will always continue to be the case. On the contrary, when man is emancipated from the exigencies arising from scarcity, then, undoubtedly, a new law of population will come into existence.

The New Household Economics (NHE) of Becker (1960, 1991) saw the development of a theory of fertility as a branch of the theory of consumer choice. It focused on precisely those behavioural domains that had traditionally been considered to fall outside the economists' purview – fertility and family formation. The NHE seeks to extend the basic choice-theoretic model of neo-classical economics to the analysis of fertility behaviour on the assumption that the decision to have children is analogous to other economic choices in essential ways that: children contribute to utility and they involve the use of scarce resources. Consequently, fertility behaviour is specified by the same set of variables that occur in any economic analysis of choice: prices and incomes. According to Greenhalgh (1995), children were treated like other consumer durable, costing time and money and providing psychic benefits. Households thus decide on the optimal number of offspring given their costs, house-

hold income, and the household's relative preferences for children and other goods.

Leibenstein (1975) and Richard Easterlin (1978) made further theoretical developments such that social and biological constraints were taken into account in the economic process of fertility decision-making. While this approach has been recognised as broader than the consumer-choice models, it has been criticised as still focused on the economic calculus of fertility-decision making, neglecting contextual and historical forces impinging on those cost-benefit deliberations.

The last approach to be considered is the 'institutional determinants of fertility change' advanced primarily by McNicoll (1975, 1994) and later by Potter (1983) and Cain (1986). McNicoll (1994) explained that while fertility transitions are similar at a distance, they are quite distinctive when viewed at a close range. The argument is that the pattern of reproductive change is shaped by the institutional endowments each society has inherited from its past. The institutional endowments are highlighted as community structures, family systems and sex roles among many others. The continuing process of institutionalisation of individual behaviour as it adjusts to realities, hopes, and expectations produces reproductive change. In addition, some combinations of institutional endowments permit a smooth path to low fertility, while other combinations impede or delay that process.

2.1.3 Feminists' perspectives of reproduction

According to Smyth (2000), the notion of reproduction is central to feminist thinking, but in a differentiated manner, and it is characterised by separate strands of feminism. Liberal feminists view control over fertility as a simple legal right women should have to enable them to participate in society as rational and autonomous individuals as fully as men. Only the most blatant abuses for which family planning services are responsible draw the ire of the liberals. Radical feminists see male domination as primary and ubiquitous and, according to Jagger (1983), based on the relations constituted around human reproductive biology. Rowland and Klein (1991) add that radical feminism 'has stressed women's control of their own bodies as crucial to liberation, giving rise to analysis and action within the health movement, in the naming and analysis of violence against women, and in the analysis of sexuality and the imposition of heterosexuality as an institution'. Another strand are the socialist

feminists who in the manner of socialist tradition have located the roots of women's social position in the nexus between relations of production and those of reproduction in different historical settings.

Feminist perspectives have also broadly challenged family planning programmes, even though there are significant variations within feminist positions. The challenge has been on the basis of the belief that, on a worldwide scale, these programmes are not developed and implemented with the intention of promoting women's health and reproductive freedom but with stated or implicit aim of reducing fertility rates and population growth. When traced to their foundations, it is often found that governments upholding Malthusian notions of the relationship between population growth and socio-economic development try to implement family planning programmes with a demographic goal. Where national policies are a response to outside pressure, such programmes are often a reflection of international power imbalances, where in some cases, pressures can be brought to bear on conditionality of loans imposed by international financial agencies (Hartmann, 1992). Two feminist standpoints on reproduction on family planning are discussed below.

2.1.3a Liberal feminist perspectives

Liberal feminists' criticism of family planning programmes focuses on the quality and range of family planning services provided. From the radical feminists' position, on the one hand, the contradictory pressures of global and economic crises make fertility limitation part of poor women's constrained livelihood strategies and, on the other hand, the population policies and family planning programmes of national and international institutions see fertility limitation as the route rather than the result of economic development (Hewitt and Smyth, 1992, in Smyth 2000).

However, Dixon-Mueller (1988) urged that family planning programmes are not necessarily against women's interests and they should be seen as an integral part of the overall strategies to combat women's subordination. But in order for such programmes to be considered to have a woman-centred perspective, there should be a reflective transformation where the programmes discard the demographic rationale and substitute as their objective the augmentation and safeguarding of the health, general welfare and social position of women, especially in developing countries. While women's needs take priority, men should also be

integrated as actors both in their capacity in making fertility decisions and as family-planning users, in a context that does not subordinate women's well-being to demographic imperatives.

2.1.3b Radical feminist perspectives

Radical feminists hold a strong position that sees the linkage between demographic rationale and the international political and economic order as manifestations of the workings of the capitalist patriarchy on a global scale (Mies, 1989). For example at the 1994 ICPD conference held in Cairo, the Feminist International Network of Resistance to Reproductive and Genetic Engineering (FINRAGE) prepared a flyer together with several groups from developing countries, that defined official family planning programmes as forms of population control and these programmes as 'racist, sexist, imperialist' (Smyth, 2000). Radical feminists contend that reproductive technologies not only ignore the multiplicity of women's experiences and needs in terms of reproductive choice, which according to Feldman (1987) may include the desire and ability to limit their fertility, but that these technologies subvert women's 'natural' situations. This, in a sense, creates a dichotomy between the situation and requirements of women in developing and developed countries; this dichotomy can be understood through what Keysers and Smyth (1991) and Peter Waterman (1993) recommended as the deconstruction of the multiple identities and demands of women within both parts of the world.

The radical feminists argument implicitly advocates total dismissal of contraceptive technologies and family planning programmes. But uncompromising critique embodies a decision to throw the baby out with the bath water; it is unhelpful for those engaged in forging strategies that could make reproductive rights accessible for women both in the North and the South. More importantly in the past decade, the relative prevalence of HIV/AIDS and other STIs make it imperative that certain types of contraceptives be used by those who are sexually active.

2.1.3c Feminists' perspectives on the rights-based approach

Reproductive rights are one of the central tenets of the feminist perspectives on reproduction and family planning. The history of rights in this field can be traced back to Western feminists using the slogan 'Women's Right to Choose' with reference to abortion. The concepts of 'right' and

'choice' were conceived as ideas based on a western individualistic understanding which has attendant problems (Smyth, 2000). One of the problems with its use is the failure 'to take into consideration both the importance of social structures which encompass all aspects of women's lives and which pre-determine and mediate reproduction and reproductive choices, and the regional and historical differences between these structures'.

A shift from an individualistic perspective to one that embraces the notion of self-determination in childbearing was made possible through the evaluations of the possible meanings of the central concepts of 'reproductive rights'. Self-determination recognises that the understanding and achievement of a woman's own determination in reproductive matters cannot be done in isolation from self-determination in all other spheres of life, which require looking beyond access to contraceptive and family planning programmes to include access to and command over material and non-material resources.

The language of needs has also been applied to reproduction (Kabeer, 1993) but it has its own problems since it generates a situation where 'reproductive needs' are perceived as part of 'basic needs' to be satisfied with a simple technical solution, that is, family planning programmes. In many instances, contraception through family planning was promoted 'for poor women and poor countries' because the aforementioned groups 'are responsible for unacceptable rates of population growth' (Smyth, 2000). In addition, Wymelenberg (1990) equated the expansion of women's reproductive choice to the expansion in the number and types of modern contraceptives available; even the World Bank (1993) encouraged the broadening of such choice by the removal of unnecessary constraints on the types of contraceptives available.

Keysers and Smyth (1989) found that over time, modern contraceptives and the family planning programmes which manage and distribute them, especially in the developing world and among the poor, brought new threats to the physical and social integrity of women. For example in Bangladesh and Puerto Rico, large numbers of poor women were sterilised in conditions of inadequate information and services, and lack of consideration for the desires, circumstances and health status of the women in question, and other forms of abuse (Mass, 1976; Norsigian, 1987; Kabeer, 1992). Abuses are not limited to women, as men have also been on the receiving end, like the case of Indian men during the Emer-

gency, when the military was mobilised for the implementation of the sterilisation programme. More recently in Ghana, in early 2000, security forces were used to make some villagers participate in a compulsory inoculation programme for children in the Volta Region.

2.1.3d Feminists perspectives on motives of the population establishment

It is incontrovertible that family planning programme interventions are directed almost entirely at women, from contraceptive methods developed and deployed, to information, education and communication (IEC) activities. One could argue that it was therefore natural for liberal and radical feminists to devote a lot of attention to women's reproductive health and family planning. Their efforts have brought into focus factors that seem to motivate family planning programmes and/or development of population policies in the South. Such motives include: achieving demographic objectives (more or less population control); promoting maternal and child health; and to advance human rights.

Dixon-Mueller (1983) observed that the population establishment has gradually shifted emphasis from demographic motives to improvement of quality of care, as well as safe-guarding women's reproductive health due to the sustained efforts of the women's health movement that comprise a considerable number of feminists and other concerned people and their organisations. But the presence of a demographic rationale or its occurrence as an indirect effect cannot be ruled out of the motive for embarking on improvements in quality of care and for supporting it. This is because it can push aside the safeguarding of women's health and rights. For example, improvements in family planning service delivery help to raise acceptance rates of contraception[1] (demographic rationale tagged with population reduction targets of most population policies).

Where demographic motives are concerned, there have been calls for development of new contraceptives for males. This also has implications for the renegotiation of masculine identities at some point in time. The use of contraceptive technologies plays an important role in stabilising or destabilising such conventions, creating new or reinforcing existing gender relations (Butler, 1995). Creation of devices such as the male pill and Viagra generate an impression of the reinforcement of hegemonic masculinity, which in the words of Connell (1995) emphasises men's mastery

and control of sexuality rather than of reproduction as essential aspects of masculinity.

Hartmann (1993) noted that the awareness of the danger of unintended outcomes 'does not mean one does not push for policy reform or engage in dialogue with those within the system, but one has to do it with clear understanding of the limitations and from a crucial perspective, which includes careful use of language'. Such contexts according to Barroso and Bruschini (1991) are the medium through which women's health advocates can, and have influenced policies in directions much more responsive to women's needs, and through which they can gain a foothold in political arenas otherwise inaccessible to them.

Complications highlighted above have not led to the rejection of 'reproductive rights'; rather they have inspired caution in understanding self-determination in the area of reproduction. It allows a consideration of the differences between women in their reproductive behaviour, perception and needs in the light of the social settings in which women are located, and of the various ways population policies affect them. In this sense, individual reproductive behaviour can be seen in the context of 'systems of gender relations that are embedded in social, economic and political norms and structures' (Dixon-Mueller, 1983).

Feminist contributions have helped to identify likely motives and potential spin-off effects of the shift in emphasis of the population establishment especially in relation to family planning programmes, and other project interventions on women's health and rights. The question is whether the tenets of the feminist perspectives as discussed are sufficient to guide our understanding of the seeming contradictions in reproductive behaviour observed in the past decade in Ghana in light of the current study. The pros and cons of recent theorising about reproduction in demography which have been discussed in earlier parts of this chapter will be reviewed in the next section. The aim is to see if such theories offer opportunities to understand reproductive behaviour, and the context in which fertility transition is occurring.

2.2 Drawbacks of the Post-Classic Transition Theories

From an anthropological perspective, Greenhalgh (1995) identified some drawbacks in the recent theorising about reproduction in demography. These are the narrowness of scope and a lingering influence of the Eurocentric theory of modernisation developed in the mid-twentieth century.

These two points form the backbone of the critique of the sociological and microeconomic theories (dominant approaches in demography in recent times). But one point of departure from these criticisms is that the institutional work represents a striking exception to these generalisations. However, these criticisms led to the adoption of the cultural and political economy alternative to the understanding of reproductive behaviour as will be discussed below.

First, the microeconomic theories are resolutely micro level, focusing on the individual couple. While the sociological approaches broaden the conceptual terrain to include families, kin groups, and personal networks, the connections between these and the macro-structures of social life remain an unexplored area. Frankel (1996) contended that Easterlin made gains with his synthesis of economics and sociology, but he only provided a general framework whose hypotheses are difficult to test. Establishing a more specific framework with testable hypotheses has been the goal of 'diffusion theory.' This last point begs a major question. What exactly is diffusing?

The specificity of contraception turned out to be the bane of the diffusion approach. For example, while the turn to cultural theories in place of economic theories would appear to be promising, the diffusion approach to culture has been seen as reductionistic. This is because it places tremendous analytic weight on communication about contraception. It neglects the distinct possibility that when women get together they chat not only about bedtime inconveniences (or conveniences, especially sexual pleasure), but also about their children's schooling, work and other matters bearing on the socio-economics of reproduction. The danger here as Demeny (1993) points out is that success in reducing fertility, or lack of success can be equally construed as reflecting the state of the supply system and, therefore, as proof of the need for more programme efforts. Thus in the words of Greenhalgh (1995), 'the human drama of fertility decline is now reduced to a technological issue, one of the adoption of a modern innovation - contraception - through diffusion'. It brings along with it another problem in its silence regarding the dynamic of change and its omission of the context of contraceptive communication.

The transition theory has relied heavily on two concepts of modernisation theory - the role and status of women. The usage of these concepts have been criticised by feminist scholars and largely abandoned in

other social sciences (Kabeer, 1996). The concept of sex roles was said to have stemmed from a view of the 'modern' family as based on a rationalised gender division of labour. With the increasing entry of women into the labour force with the advent of industrialisation, and the associated role conflict that they experienced, the conditions were laid for the move toward smaller family sizes. However, some development feminists do subscribe to many tenets of modernisation thinking and advocate integrating women into the development process to achieve a whole range of 'positive' outcomes, not only in the line of reproduction. For example, Sylvester (2000) looked at the adjustment-based demands on 'women' to feed, nurture, and maintain services for their household members with less money, amidst the shadow of unemployment. She suggested that survival skills gained by the women in the 1990s in the household and informal sectors might contain useful lessons for industrial relations in the future.

The second concept, women's status, derives from the view that the forces of modernisation would sweep away primordial patriarchal relationships within the family. This is to result in greater equality between women and men at home and in the workplace, again leading to reduced reliance by women on their reproductive roles to achieve status in the social world. Kabeer (1996) contends that there is however very little in the concept of women's status, as defined in the (demographic and economic) literature, to suggest that gender inequalities are underpinned by power relationships between women and men. Moreover, these inequalities might be reconstituted in 'modernised' forms within the household or family, and that may give them different and sometimes conflicting interests in decision-making outcomes, particularly in an arena as critical as reproduction.

It is also worth noting the essentially progressive role accorded to modernisation, and the accompanying Westernisation of values, as far as women's status is concerned, in both classic and post-classic transition theory. Especially in the latter, educated women are seen as demographic innovators. They are considered more able to pursue their own interests which, as far as theories of ideational change are concerned, are primarily equated with the adoption of small family norms and modern contraception (which may not necessarily be the result).

While economic models acknowledged the vital role that women played in the reproduction and care of human resources, they ignored

the implications of unequal decision-making power and conflicting gender interests within the family in explaining fertility outcomes. According to Kabeer (1996) in an assumed gender division of labour within the household, the head (the husband) acted as benevolent dictator in allocating resources according to decision rules which would maximise the joint welfare of all members, since he is the primary breadwinner. Once again, conflicting interests within the household and inequalities in decision-making power were precluded from the analytical domain.

Both the economic and demographic approaches to gender roles within the household appear to share a dichotomous view of 'culture' and 'economics' (Hammel, 1990: Kertzer, 1995). For instance, 'culture' is understood as tradition, custom and constraint, operating in opposition to the forces of the market and modernisation. McNicoll (1992) was even more to-the-point by saying that the 'model seems to envision a jungle clearing in which reasoned behaviour can take place (in this case the parental benefit-cost analysis of childbearing), surrounded by untamed wilderness, where tradition, instinct and such-like "cultural" forces hold sway'. Moreover, the significance of cultural constraints on the exercise of economic rationality is eroded in the course of economic growth and modernisation. The difference however is that economists take cultural constraint as a given, within the purview of 'choice'. Demographers have been more concerned with the forces that alter cultural determination of reproductive behaviour and bring the fertility decision into the calculus of conscious choice. Divergent policy recommendations thus arise in that transition theorists have sought to promote the idea and practice of family planning as enabling conscious choice as an aspect of reproductive behaviour. Economists on the other hand have prioritised the creation of economic incentives that would promote lower fertility preferences and outcomes.

Culture should not be separated from the context of social, economic and political organisation by regarding it as something that facilitates or obstructs contraceptive communication. Likewise, contraception should not be separated from economics. Ultimately, the real challenge therefore is to 'construct whole demographies that illuminate the mutually constitutive relations between culture and political economy, and the implications of these relations for reproductive actors' (Greenhalgh, 1995; Säävälä, 2001; Bélanger, 2002).

The lingering influence of modernisation theory represents the second drawback of much recent work in demographic theory, i.e. the absence of critical perspectives such as those of political economy or feminism, which entered the other social sciences in the late 1960s to the 1980s. For example, the central question of most demographic theories of fertility change, that is, how traditional fertility regimes become modern, is clearly formulated in terms of modernisation theory's evolutionary and Eurocentric view of societal development. Demographic theories thus take on a whole series of unstated assumptions in embracing the modernist preoccupation. Some of the assumptions are that History can be collapsed into traditional and modern phases, but histories, including the unique histories of individual societies, play trivial roles in reproductive change, that women's status, a key determinant of fertility, improves with modernisation; and that fertility transition is caused by and in turn causes further Westernisation and that Westernisation of reproduction is good for everyone.

In the late 1960s and 1970s, global political economic perspectives such as dependency and world-systems theories challenged the central tenets of modernisation theory, arguing that Western involvement in Asia, Africa, and Latin America produced not development but underdevelopment and permanent inequalities between different parts of the globe. Blaut (1993) showed further that both classical (colonial-era) and modern (post-World War II) diffusionism present fundamentally erroneous views of the world. They are rooted in unsubstantiated beliefs about the superiority of European culture, emphasising that the good things are being diffused (neglecting to point out the bad). In addition, non-Europeans are seen as passive recipients of European diffusion, denying their role in the transformation of their own cultures and those of Europe.

In conclusion, the criticisms presented in the foregoing section serve to contribute to the process of disciplinary critique of some of the theoretical orientation in the field of demography. It helps the process of reconstruction by illuminating the constricting effects of the modernisation and other assumptions on reproductive theorising, and by proposing new, anthropological and historical approaches to fertility analysis that might complement the work done by more quantitative researchers.

2.3 The Culture and Political Economy of Reproduction

A culture and political economy perspective stands in sharp contrast to most demographic approaches to fertility. According to Greenhalgh (1995), virtually all the non-institutional theories of the demographic transition (classical and post-classical) make four key assumptions. First that the pattern of change societies undergo is a movement from 'tradition to modernity'. Secondly, that the movement is toward Western-type lifestyles (low fertility). Thirdly, that a change of this sort is irreversible once set in motion and lastly, it is progressive and ultimately good.

However, the culture and political-economy approach is based on a different set of assumptions. One of these is that there are more than two kinds of reproductive arrangements (or three if the transitional one is added). There may be more intriguing variations between high-fertility societies, or between low-fertility societies, than there are between high- and low-fertility societies. Therefore, many kinds of reproductive institutions and outcomes are worthy of investigation in their own right. This study thus intends to look at the variations within and between two relatively high-fertility communities.

Also, a culture and political economy of fertility approach challenges the assumption that demographic change invariably follows Western patterns. It is argued that demographic dynamics follow distinct cultural logic. Thus while some demographers have noted culture's effect on the pattern of demographic change, many anthropologists would broaden the influence of culture to embrace the direction of reproductive change. This puts doubt on the assumption that low fertility is the endpoint of demographic history. Proponents of the cultural political-economy perspective would question the notion that low fertility is necessarily good or 'progressive'. What is good is culturally conditioned, which could mean that low fertility may be good for Western societies, but bad for sub-Saharan African ones. Also, what is good is group-specific. Having few children may benefit the upper classes but hurt the lower ones. Thus, rapid fertility reduction may increase per capita income but destroy the social and cultural fabric of people's lives.

So, the working assumption is that there are many types of fertility patterns, and each interestingly shaped by a combination of forces that is to some degree spatially, temporally, and culturally specific. Therefore, the central aim of current research is to situate fertility; that is, show how it makes sense given the socio-cultural and political economic context in

which it is embedded. The understanding of the dynamics of specific cases might serve as the building blocks of more general understandings of reproductive dynamics. Fertility studies should therefore aim at the creation of 'whole demographies' that put reproductive behaviour into context, not only in the social and economic terms of conventional demographic theory, but in political and cultural terms as well.

The anthropological approach of 'whole demographies' is an attempt to achieve broad, multi-angled understandings of the fertility phenomenon. This approach is similar to McNicoll's (1994) institutional approach to demography that recognises historical contingency and societal specificity. This is in contrast to the universalising and quantifying thrusts of other approaches. It also embraces the narrative modes of explanation that can accommodate such forces as gender and power that are difficult to incorporate into standard empirical models of demographic behaviour. The difference between the 'whole demographies' (anthropological) and institutional approaches as highlighted by Greenhalgh (1995) is that while both attend to societal structure and individual agency, the institutional approach gives greater weight to structures while the anthropological work pays more attention to agency.

Therefore, by using the 'whole demographies', this study will draw on the culture and political economy approach, which is an area of contemporary anthropological theorising. The political economy approach contrasts most demographic approaches, which tend to stress the individual level, to the neglect of history and politics, and to rely heavily on quantitative data and methods. A political economy of fertility is a multilevelled field of inquiry that is explicitly historical and attentive to political and economic as well as social and cultural forces. It combines societal structure and individual agency, both of which generally escape the demographer's attention, and draws on both quantitative and qualitative research methods and materials. It incorporates action on multiple levels and the aim is not to 'break the system into artificial chunks' such as society, culture, and economy (Greenhalgh, 1995). The objective is to understand how a particular set of reproductive institutions and behaviours evolved and how its constitutive elements relate to each other. In broadening the spectrum of analysis, two features of social life with special import to the reproductive process will be incorporated. These are culture and gender.

Culture in this framework according to Säävälä (2001) is not a static and centuries-old set of constraints on choice and behaviour; instead it is constantly negotiated, exploited, and modified by the very people whose behaviour and choices it is supposed to constrain. Such transgression, questioning, and manipulation of norms and culture are what the real world is about. Understanding the cultural processes in reproduction is important because fertility plays an important role in the creation and perpetuation of families and kin groups, communities and nation-states but it has become entangled in a thicket of confusing, conflicting, contested, and vitally consequential moral values. For example, in Northern Nigeria, attitudes about family planning, population and development relate to broader political concerns about the moral basis of the State's authority over matters concerning human reproduction and about what constitutes progress. According to Miles (1990), to treat childbearing openly as a matter of calculation for the economic benefit of individuals and families and as a programme of national development is considered offensive by some Muslim religious clerics. This is because it associates childbearing with material interests rather than spiritual ones (Abd al 'Ati, 1982).

In contrast, people living in Christian-dominated southern Nigeria see population growth as hindering development. While people espousing these views are not unconcerned with broader social and spiritual issues, their perception of development is expressed largely in terms of economic, quantifiable progress; that is higher incomes per capita, higher levels of education, lower rates of mortality and an efficient infrastructure. Smith (2002) however reviewed that religion clearly shapes the cultural context of reproductive behaviour, sometimes in ways that are harmful to women. However, it was noted that women are remarkably adept at interpreting religious values to their benefit and at strategically representing their behaviour in such ways that they simultaneously achieve their personal aims while assuring wider social acceptance.

With regards to gender, Greenhalgh (1995) observes reproduction as a deeply gendered process in that physiologically, only women can give birth, and socially, women are assigned the 'reproductive work' of raising the next generation. Thus reproduction has become enwrapped in gender relations, relations of difference and inequality in beliefs, resources, and power. Thus it will be pertinent to stress women's agency in constructing their reproductive outcomes, the complex and contradictory

character of change in gender relations, and the pervasiveness of gender in all of social life. According to Kabeer (1994a), a human-centred[2] development must recognise women as key actors in the development process not only because their survival and well-being as human beings are ends in themselves, but also because they are most closely connected with the reproduction, maintenance and care of human resources.

Thus there is the special need to be concerned about the well-being and agency of women in the reproductive process. While the well-being is associated with the extent to which families and specifically children, benefit from different reproductive strategies, Sen (1992) believes that the agency is the capacity of different categories of family members to exercise judgment in the field of reproductive decision-making and to promote change on the basis of their own priorities and interests. Debates around the inter-relationship between population and development have generally been conducted with little regard to the gender issues at the core, and this can lead to the violation of the basic human right to self-determination in reproduction.

Feminist approaches allow us to broaden the intellectual agenda beyond that offered by the conventional women's-status approach to gender and fertility. The perspectives of feminist researchers and human rights activists are crucial not only for making sense of aspects of population and development that a conventional economic or demographic analysis is poorly equipped to deal with (Greenhalgh, 1995), but also for ensuring that population policies contribute to the goals of promoting human well-being and agency (Kabeer, 1996).

Arising from the foregoing discussion of this approach are concepts, the understanding of which would help in streamlining this study in the culture and political economy school of thinking. These concepts include culture, agency, history, time, gender, and power and politics.

2.4 Conceptual Framework

This section highlights the appropriateness of the concepts identified in the preceding section in paving the way for our understanding of the dynamics of reproductive behaviour in the context of a culture and political economy approach. The concepts will be discussed and their usefulness emphasised in trying to unravel the contradictions discussed earlier in the problem statement.

Fertility: This is defined as the childbearing performance of women. Inquiries are made into actual children born alive by respondents, and a total is obtained from the number of currently living children (at home and/or away with other guardians), and children born alive but now dead. Sieved out were step-children and foster children of any origin who might be staying with the respondents, and still-born babies[3] who might bias the reporting on number of live children woman has ever given birth to. If the measure of fertility is the number of children surviving to adulthood rather than number of live births, we might run the risk of exaggerating both the central causes of possible decline in the demand for children and the magnitude of such declines. Thus in this study, the concept of the number of children ever born alive to women in the communities was used rather than the number of children surviving to adulthood which generally is used by women to rationalise their numerical fertility preferences.

Fertility preferences: This is sometimes referred to as fertility or family size desires; it is obtained from women who already have children but were asked about the ideal number of children they would like to have if each individual could go back to the time she did not have any children and could choose exactly what number of children she would like to have in her whole life. However, fertility preferences obtained this way are taken to be biased by the childbearing experience the women already had. On a comparative basis, women who did not have any childbearing experiences were also asked about the ideal number of children they would have liked to have.

Marriage: This is the union of two persons of opposite[4] sex ranging from the traditional engagement, to those made official through religious and civil ceremonies.

Culture and Agency: Carter (1995) stated that culture and human agency have dominated thinking in demographic research on fertility as 'passive' and 'active' concepts. In the passive perspective, people are taken as mindless adherents to cultural rules. But ethnographic fact disproves the passive notion of culture, which denies people the ability to shape their lives (agency). From an active perspective, people are portrayed as conscious decision-makers that deliberately choose their fertility levels through abstract rationality. Greenhalgh (1995) deems the notion of people as rational utility maximisers unsatisfactory because 'real

maximisation is too time-consuming and complex to be a workable cognitive modus operandi'.

Two solutions have been proposed to this problem of giving demographic actors agency without endowing them with a utility maximising rationality. The first solution by Carter (1995) is that human agency should not be seen as a sequence of discrete acts of choice and planning. Agency should be seen as a reflexive monitoring and rationalisation of a continuous flow of conduct, in which practice is constituted in a dialectical relation between persons acting and the settings of their activities. Therefore, the values assigned to different behaviours (emanating from culture) and the forces creating them (political economy) become ingredients to action, rather than external to it, and the human agent is placed in the centre of the stage.

Peter and Jane Schneider (1995) were concerned with why people caught in the demographic trap of high fertility and low mortality sometimes are unable to escape. From their study of early twentieth-century Sicilian labourers, it was shown that reproductive 'irrationality' is produced not by ignorance or backwardness, but by power differentials that constrain people to have many children at the expense of their own well-being. It was argued that interclass relations of dominance/subordination that robbed them of the abilities to imagine and to achieve smaller families prevented the landless labourers from lowering their fertility. Thus, the culturalist (passive) models that see people as fatalistic, and 'demand for labour' model which holds that they have a conscious preference for many offspring were rejected. This is because in such circumstances, the exercise of 'rationality' is likely to be constrained by relations of power.[5]

Another dimension of culture is the context in which it is used in the diffusion approach to fertility change. Culture is used here first as a facilitator or inhibitor of the spread (diffusion) of knowledge and usage of modern contraception, which can be measured by common language, ethnicity, and/or region. It is seen also as an evaluative mechanism by which people (especially women) assess their contraceptive options (Watkins 1990). For instance among the Sotho and Ndebele women in South Africa, it is noticed that these ethnic identities share cultural ideas and practices of motherhood, such as temporary separation/departure from husband's household by a wife immediately after childbirth (Smith, 2002). This is a peculiar form of sexual abstinence that not only helps to

avoid unplanned pregnancies, but it also helps to sustain or lengthen birth intervals and it is therefore useful for understanding patterns of reproductive behaviour. Conversely in the Balkans, ethnicity disappears as a reproductive force when larger political forces are considered among factors influencing dynamics of reproduction (Hammel, 1995).

History: In most demographic theories of the fertility transition, reproductive behaviour is not usually reviewed within its real historical context; it is fitted into abstract, metaphorical histories that all societies are assumed to undergo. In the traditional phase of history, vital rates are portrayed as stable and high, while in the modern phase of history, vital rates are stable and low. The argument is that descriptions and analyses of fertility at the micro level invariably exist in historical vacuums; and cross-national empirical research is built on the assumption that the specific histories of the countries included have little relevance to their fertility levels.

From the lens of anthropology, history is seen as something people make, especially in the context of aspects of people's local life within the powerful constraints imposed by the political and economic structures of their societies (Thompson (1978) and Roseberry (1989) in Greenhalgh, 1995). There have been various contributions of how real history can be made an ingredient of demographic practice. For example, Fuchs and Moch (1995) showed that Parisian women during the third republic (1871-1914) made their own history by constructing networks of kin and friends through which they could pursue their reproductive agendas.

Time: Time is also important at the micro level of the individual life course. Rosaldo (1989) accused demographic students of reproducing the assumption that fertility decisions are made once-and-for-all, generally at the beginning of the reproductive life span, with little or no adjustments made afterwards. This could have been an earlier fallout with reliance on cross-sectional data analysis of demographic processes (aside from the logistical issue of embarking and co-ordinating longitudinal studies). The implication is that we will neglect the ambiguity, spontaneity, and improvisation, and even full-scale about-faces that characterise most peoples' lives in reproductive endeavours or other careers. Therefore in the temporal organisation of individual action, instead of accounting for practices in terms of fixed cultural rules, researchers should see the practices as having a developmental structure that works itself

out over time. In this way, time is not merely lived but 'constructed' in the living.

The relevance of this new anthropology of micro time to childbearing practices is underscored by the fact that real-time demographic actors constantly check their reproductive activities, fine-tuning and micro-modifying them as the need arises. For example, Matsuo (2001) pointed out that value orientation changes over life course, and furthermore, its characteristics and occurrence and timing of first birth have close associations. The preliminary results of his findings led Matsuo to conclude that those women in Japan and The Netherlands experience changes in value orientation over various birth cohorts and these changes can influence the occurrence and timing of first birth. Bledsoe's (1995) paper on the Mende of Sierra Leone queried the common notion in demographic research that children have comparatively stable values which couples or individuals are able to translate to a single aggregated desired family size value that is relatively fixed. In reality, the value placed on specific children could change from one time to another as their mothers' relations with the children's fathers and other males undergo change (for example among the Mendes). Thus, children have a high value because they are offspring of current unions; however, such value can easily be lost and the children deprived of resources when the parental union is broken. Time, in this analysis, portrays children not as ends in themselves, but as symbols of the ups and downs of adult relationships.

Another tool for exploring the micro-history of reproductive decision-making is that which takes into consideration the view that decisions are distributed along the whole reproductive life span. In North India, it was gathered that cultural constructions of the body and of pregnancy help to define decision points at which women may intercede in the flow of reproductive events. For instance, missed menstrual periods may provide an opportunity to 'regulate' menstruation through the use of abortifacients. Thus, a time-based account of reproductive practice should probe the temporal structure of reproductive activities, especially the way actors strategically manipulate their biological clocks, and the fertility outcomes of these manipulations.

Gender: The gender construct provides a powerful tool for exploring the influence of male-female differences and disparities in fertility for several reasons. Presenting a gendered perspective of reproduction requires the study of men as well as women, it is a cultural construction

(not culture-free); it symbolises power differentials and sex-related ideologies and material inequalities; and it is a structuring principle of social life rather than simply an attribute of individuals.

In order to have a comprehensive understanding of how gender shapes reproduction in different times and places, the following must be noted. The first point is in recognising that gender force is omnipresent because it structures all aspects of life (including reproduction). For example, Fuchs and Moch used the gender-specific character of networks to describe reproductive strategies of poor Parisian women in the early 20th century. The networks gave migrant women a setting to seek marriage partners, abortions, and aid with child-care. The women used the networks of kin and friendship more frequently than men and their networks took on a distinctly female quality in the sense that they were activated in female spaces, bonded together by women in female occupations.

The second point is about gender connoting agency. Women need not be seen as just victims of oppressive systems, but also as social actors who use the resources at their disposal to devise strategies that challenge (and could even alter) the systems that oppress them. They can be seen as actors of their own reproductive destinies (Fuchs and Moch, 1990). Women living in the Third World have for long been portrayed as lesser beings of patriarchal societies who have no say in their childbearing options. Thus women in such societies are seen as victims of patriarchal institutions who have little choice but to surround themselves with many children (Kabeer (1996); Caldwell (1978) in Greenhalgh (1995)). Carter (1995) has noted examples in north India of 'successful resistance' where women who were subject to their husbands' authority in all reproductive matters, secretly defied their husbands and in-laws, going behind their backs to arrange for contraception and abortions.

In addition, while demographic theories of fertility predict that women's status will improve with social and economic modernisation, prompting fertility decline, theories of gender are more hesitant about the direction of change in gender relations and thus in women's reproductive lives. Bradley, as reported in Greenhalgh (1995), challenged the view that women's lives are steadily improving and that increases in socio-economic status lead to fertility decline. Gains have been mixed and contradictory. In the study based on western Kenya, it was shown that socio-economic development might empower women through im-

provements in education, employment, and political voice; but in other areas women lose ground. The redistribution of resources toward women is strongly resisted by men in a context of shrinking job opportunities. In addition, there have been rising levels of domestic violence in which women are victims. Bradley thus suggested that the pattern of change is complex and multidirectional, and that Kenya's fertility decline is a by-product of scarcity in the wider economy, and not due to the empowerment of women.

A gender analysis of these cultural beliefs and practices helps to further identify certain features of householding systems in the African context which are likely to uphold high fertility rates and to slow down the pace of reproductive response to changing economic circumstances. It will also be interesting to gauge the main problems women face in the historical transition between traditional and modern life, when making reproductive choices that fulfil their own needs. This is despite the likelihood of conflicting gender interests with regard to reproductive decision-making and actualisation. One way to do this is to study the interruption by modernity of the traditional inter-generational transfer of knowledge on sexuality and reproductive health practices in the context of gender relations in a society which is still strongly patriarchal. Greenstreet and Banibensu (1997) found that modernity has disrupted traditional knowledge-transfer of reproductive health and sexual behaviour, so that grandparents, once so important in educating young people at puberty, are no longer consulted. Furthermore, 'no adequate way of gaining knowledge is replacing old traditions, with family planning services rarely reaching the poor, rural Ghanaian women'.

Power and Politics: The role of power and politics, conflict and inequality in the reproductive process has largely been neglected by demographic theories of fertility (which tend to be consensual in nature). The consensus accounts have been challenged by political sociologists and social historians, suggesting that power and politics are central to the reproductive process. Works on the politics of fertility try to illuminate the activities of states in regulating family life, both directly and indirectly (Ghana Population Policy, 1969, 1994; Vision 2020/Poverty Alleviation Programme). There have also been contentions over such issues as the definition of the population problem in the international population community, and the direction of national population policies and pro-

grammes (Finkle and McIntosh, 1994). These works have focussed on the politics of formal organisations.

Reproductive politics should also be probed at the micro level of individuals, networks and community. For example, at the micro-political level, Launay illustrated the role of power in the labelling of some children as illegitimate, among the Dyula of Côte d'Ivoire. Increase in public illegitimacy was tied to changes in the wider political economy that undermined the political and the economic rationality behind the formation of large kinship groups. It was found that the control of group members was no longer a strategic resource (in the politics of local factionalism and the economics of weaving and cloth trade). Clan heads thus lost interest in claiming excess numbers, and children with dubious origins were cast aside as illegitimate.

Further probing of reproductive outcomes at the 'meso' level of class and gender groupings is also encouraged. Fertility levels have been found at the meso level to be shaped by conflicts and inequalities between groups within societies. Among the Tamang of Nepal, members of hierarchically ranked clan groupings manipulate culturally given possibilities of marriage in an inter-group competition for advantages in the flow and obligations of labour (Fricke, 1995). Resources and marriage strategies could also affect fertility outcomes as shown in Kenya where a struggle between men and women for pieces of the shrinking pie and a deteriorating economy rather than women's empowerment have been associated with fertility decline.

Also on the issue of conflicts, the pace of diffusion of contraceptive knowledge at the community level is assumed to be affected by societal integration which thrives on good communication, shared values, cultural homogeneity, and common political authority. This idyllic conflict-free view of the world is another bane of the diffusion approach (Retherford and Palmore, 1983). Societies and communities are increasingly becoming heterogeneous, and this signifies that underlying sources of contrasting interests in many areas of decision-making surrounding fertility dynamics and outcomes need to be probed.

The anthropological contribution to demography lies in its ethnographic descriptions and the field methods that elicit them. In addition, anthropology can make its greatest contribution in the area of theory. This is so not only because demography finds itself relatively weak on theory today, but also because anthropology has developed an analytical

framework that provides insight into precisely the forces omitted from conventional demographic theories of fertility.

In conclusion, arising from this conceptual review are some key questions for the study that will be undertaken in the Brenu Akyinim and Abuesi rural coastal communities. In the context of culture, agency and gender, it will be pertinent to know how Ghanaian women in these two rural communities negotiate, accommodate or occasionally reject male control over their fertility and sexuality, and how these patterns change over the course of their life cycle. An interesting aspect to this is the issue of secret use of contraceptive methods. A full-fledged historical analysis will not be carried out but reproductive behaviour based on intergenerational accounts will be collated and vital rates would be explored to give a historical trend. We shall also explore if ethnic groupings inhabiting the two study areas have different reproductive strategies.

The following factors would be explored on the basis of time: fertility preferences, costs and benefits of childbearing (value of children) and birth timing (age at first birth and birth intervals). Also, power and politics provide an interesting setting to examine if the State, operating with the country's resources in the wider regional and world economy and financial state, might be inadvertently responsible for people's decisions to exhibit particular reproductive behaviour as a response to the wider political and economic policies. At the micro level, states are important reproductive actors with their own interests in surveillance and control of national population growth. The study aims not only to tease out the informal politics of reproduction at the micro level of individuals, networks and community; it also seeks insights into the implementation of the 1994 National Population Policy, the successes, challenges and the way forward, both for the implementers and the public at the rural level.

Given the theoretical and conceptual background of fertility change, discussions in the next chapter focus on practical issues such as Ghana state policies on population and development; the local socio-economic setting of Abuesi and Brenu Akyinim and the possible impact it might have on childbearing strategies and the potential influences of abortion and contraception as factors guiding fertility outcomes.

Notes

1. According to Green 1992, there is the underlying urge by the World Bank that through more advanced management styles, tactical means can be employed to

increase contraceptive prevalence and continuation rates by improving the 'interface' between providers of services and users

2. This human-centred angle is based on the fact that the desired goals of development endeavours are for human survival and well-being, and human beings uniquely and intrinsically offer both the 'means' and 'ends' because human agency and creativity help to activate all forms of production. The second aspect of the indifference exhibited in the population and development discourse is the gender dimension of the inter-relationship.

3. Still-born babies are not taken as part of the childbearing performance of women because babies born dead have no chance of contributing to the overall number of potentially living children a woman will have.

4. Marriage in some parts of the world now takes place between persons of the same sex, but this is rare across Africa.

5. While Carter proposed that solving the problem of agency requires a micro-micro research programme, Peter and Jane Schneider (1995) are at home with a more macro level solution.

3 The Setting

3.1 Introduction

This study is founded on the observation that fertility rate is declining in Ghana. Changes in childbearing aspirations have been associated with fertility decline in many settings and many factors serve as major disincentives to maintaining high levels of fertility. This transition is occurring in the context of socio-economic development and national policy choices in the political arena. This chapter presents some of these developments and how they are likely to have some bearing on the formulation of childbearing aspirations and the modification of reproductive behaviour for individuals and the society at large.

The culture and political economy approach of Greenhalgh (1995) encourages such review because childbearing does not take place in a vacuum but within societal structures and interactions, and with the exercise of individual agency. The following subsections contain discussions on the Ghana state policies on population and development; socio-economic pre-cursors to fertility decline; the potential contribution of abortion and contraception as factors guiding fertility outcomes. At the end, the general background is narrowed down to a description of the socio-economic setting of Abuesi and Brenu Akyinim, which are the two coastal communities on which this study is based.

3.2 The State and Family Planning

One might ask why the State should become involved in family planning at all. Why not leave people to make their own decisions around reproduction? According to Kabeer (1996), population policies are central to the totality of development efforts because of their focus on the reproduction of people and of the societies they belong to. States get involved

for many other reasons. For example, China has been deeply involved in population control since the take-over of government by Communists in 1949; firstly introduced as health and welfare programmes, by 1970 it had developed into the more specific birth control programme tagged 'later, longer and fewer'. Around this time, most couples were made to pledge themselves to have only one child. Eligible couples could potentially receive subsidies paid continually by the State for fourteen years. A cash reward was also paid for sterilisation, priority access to urban housing space given to those working in the cities, and longer paid vacations given to those who got married at the government-approved 'optimal age' of 22 and 30 years for women and men respectively.

In the Indian sub-continent, the family planning programme went through different phases, from delaying childbearing by delivering IUD insertions to women in rural clinics in the 1960s, providing condoms at subsidised prices to men, and by early 1970s, the State turned to sterilisation as the preferred method of birth control. One hundred rupees, equivalent to almost four weeks' wages at that time, were offered as compensation. In practice in some areas, population policy has also been implemented on the basis of how to reduce the number of people within specific categories; for example, the sterilisation of women from poorer backgrounds in Puerto Rico (Mass, 1976); or on a few occasions to increase the number of people according to objectives set by policy makers, for example in the promotion of birth rates of the Jewish population in Israel (Yuval-Davis, 1987) and educated women in Singapore (Leng and Khoon, 1984).

While these examples are drawn from different local, political, and economic contexts, there is a general impression on a more global scale depicting population growth rates in less developed countries as posing a threat to the global order. No matter how controversial and inconclusive available evidence is, this has directed the alarm that a high population growth rate and size is harmful to economic growth rates in the South, threatening Northern[1] standards of living in the case of mass emigration from the Southern countries (Connelly and Kennedy, 1994).

3.2.1 Population control: Hindrance to or critical for development in Ghana

In Ghana, there are two opposing views about the relationship between population growth and development. On one end of the spectrum, the

opinion in the early 1960s was that large population is essential for development. By the 1990s others saw population growth as harmful to development, and the government's ability to control this growth was seen as crucial to developmental planning. These two positions often reflect personal opinions. Attitudes about family planning, population, and development relate to broader political concerns about the moral basis of the government's authority over matters concerning human reproduction and about what constitutes development at the family level and at the state level.

According to Callaway (1987), private affairs such as reproduction should not be treated as a general public concern; rather the timing of childbirth and family size are subjects for personal discussion between couples. Abd al 'Ati (1982) and Miles (1990) argued that among Muslims, to treat childbearing openly as a matter of calculation for the economic benefit of individuals and families and as a programme of national development is considered offensive because it makes having children related to acquisition of material interests rather than spiritual ones. But a Muslim scholar, Faruk (1988) contended that though the Koran is distinctly pro-natalist, it allows for exceptions when the health of the mother is at stake. He opined that the Koran contains passages that support the spacing of pregnancies by advocating a two-year nursing period after a new child has been born, with a concomitant censure of nursing while pregnant, ensuring the promotion of the health of the mother and the newborn.

On the other side of the coin is the argument that a fast rate of population growth and a large size is a stumbling block to development. Those who espouse this view perceive development largely in terms of economic and quantifiable progress which according to Renne (1996) is represented in, for example a higher income per capita, higher rates of education, lower rates of mortality, and efficient infrastructure.

So why is the linking of population control with development morally questionable? There is the perception that the mismanagement of the economy by those in charge of national affairs is the bane to development rather than large population size or population growth. Ghana, for example, has the same land area as Britain, but the latter is currently able to sustain a population thrice the population size of Ghana despite abundant agricultural potential in the latter (Benneh, 1990). Thus if there is proper management of economic resources, Ghana will be able to sus-

tain its population size. Successful development depends on a combination of governmental programmes such as a national population policy and state-sponsored family programmes, sound and workable economic policies – and individual initiatives based on rationalism rather than mere lip-service to general social and political change.

3.2.2 Ghana's 1994 National Population Policy

In the early 1960s, the Nkrumah government did not see population size as inimical to development and actually saw a large population as one of the defining symbols of a nation's clout in the international arena. However, towards the end of that decade, a change in government was accompanied by a change in position on the population question, which led to the publication of a document that officially defined Ghana government's first policy on population, entitled "Population Planning for National Progress and Prosperity: Ghana Population Policy" in March 1969 (GoG, 1994).

In 1994, Dr. Botchwey (the Minister of Finance of the NDC government) asserted that twenty-five years after this policy was first promulgated, "the country's annual rate of population growth still remains at an unacceptably high level, and the population factor continues to act as a serious impediment to the country's march towards economic modernization, sustainable development and eradication of poverty" (GoG, 1994). The revision of the 1969 document was found necessary due to the emergence of new concerns. The rise of the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) and the problem of sexually transmitted infections (STIs) necessitated the call for "intensive population programmes to educate the public on the risks of casual lifestyles as well as on how such diseases can be prevented from spreading further to the wider population" (ibid).

It was imperative to draw up policies that would make the citizens modify their aspirations with regard to childbearing and family size as it was felt that numbers of people are central to all socio-economic planning of the Government. According to GoG (1994), "women, children and the youth are the major groups who are most likely to suffer from the adverse effects of rapid population growth"[2]. A high rate of population growth estimated to be in a range of 2.9 percent to 3.1 percent was seen as a stumbling block to the country's developmental efforts, especially in relation to why the gains of the 1983 Economic Recovery Pro-

gramme (ERP) and SAP may not be felt even though these programmes have the ultimate aim of improving the quality of life of Ghanaians. It was based on this kind of background that the Government of Ghana in 1994 justified the introduction of a new national population policy. Whether this programme has played an important role in the modification of childbearing aspirations and reproductive behaviour at the local level will be explored.

3.3 Socio-economic Precursors to Fertility Decline in Ghana

In the 1950s Ghana was considered one of the more developed countries in sub-Saharan Africa because it had a relatively high per capita income; its infrastructure and government institutions were relatively well developed, and it could be safely inferred that Ghanaian people enjoyed a relatively high standard of living compared to other African countries. With such a good economic foundation and outlook, the post-independence Nkrumah-led government felt the strength of the nation could be further boosted by the numbers of its people and as such did not embark on any state policy to deter a natural increase of population. Fertility rate was as high as 7 children per woman; mortality rates started to decline due to relative successes in combating infectious diseases, and the rate of annual growth hovered over 3 percent. Changes in the political landscape occurred towards the end of the 1960s, and after Nkrumah was overthrown, the new government expressed concerns about the need to curb the country's rate of population growth and formulated the country's first population policy.

However, in the 1970s, the coincidence of poor economic policies implemented by a run of successive military governments, drought, and the increase in oil prices seemed to conspire to bring about a decline in GDP and by the early 1980s the Ghanaian economy deteriorated steadily compared to the booms enjoyed in the 1950s and 1960s. Agyeman et al. (2001) added that decline in the per capita income in the late 70s and mid-80s increased the incidence of absolute poverty, which was made worse by huge inequalities in income, a rising rate of unemployment and the emigration of skilled professionals. The era was also characterised by persistent high inflation and declining production and exports which reduced the government tax base and real revenue; the cumulative effect of this downward spiral was the deterioration in infrastructure and in-

creased political instability. The Rawlings military putsch that saw off the civilian government of Limann in the beginning of the 1980s tried its hand in a series of activities to bring the Ghanaian economy back on track.

Since the early 1980s, Ghanaian state economic policies, with the best of intentions, were directed at bringing a halt to the further deterioration of the national economy. The Rawlings-led PNDC military government launched a series of reform initiatives starting with the Economic Recovery Programme (ERP) in 1983 and the Structural Adjustment Programme (SAP) in 1986. These programmes were embarked upon to jump-start, accelerate and sustain growth, as it brought substantial increase in governmental and donor funding in all sectors of the economy. But some conditions for accessing the funds caused other hardships. For example, World Bank assistance to the tertiary education sector was laden with conditions including a reduction of staff to a total of 30 percent of the student population and limitation of the tertiary education share of the Government budget and actual expenditure on education. Retrenchment of staff and freezing of appointments in the public sector further worsened the unemployment situation, and increasing user-fees in schools and hospitals, dampened couples' desires for large families, due to the bleak prospects for providing adequate upbringing for offspring. By the time the GDHS was conducted in 1988, a decline in TFR (to around 6 children per woman) was recorded compared to the nearly 7 children per woman recorded in the 1979/80 Ghana Fertility Survey. Whatever the noble intentions of the SAP were, it gained notoriety for the hardships it inflicted on the common man.

The World Bank and IMF's rescue package came with conditions which led to: deregulating the economy; removing tariffs that made imports cheaper, which handicapped the export sector; devaluing the national currency; retrenching the public sector (worsening the already low employment figures); and removing subsidies on a regular basis such that securing social services became an illusion to the majority who were poor and living in rural areas.

On the other hand, gains were achieved in some areas. For example in education, compared to the 1985/86 academic session when nearly one-third of six-year-olds were not in school, enrolment increased by about 50 percent at the primary and junior secondary levels in the period from the 1987/88 to 1997/98 academic session (Agyeman et. al., 2001).

However, many other things plunged the Ghanaian economy further into doldrums, which the NPP used as part of a campaign to gain votes that eventually sent the Rawlings government packing in January 2000. Business and property seizures and a relative lack of operating capital in the early days of the Rawlings government forced many urban smallholders into bankruptcy; increased costs of premix fuel for operating outboard motors (through a fallout from rising crude oil prices) also forced many fishermen to cut fishing expeditions. Removal of fuel subsidies also jacked up the costs of transporting farm produce.

Other unsavoury developments include the unfavourable climate that made imports cheaper, reducing many farmers to the level of subsistence (for example it was cheaper to import frozen chicken than to run a local commercial poultry farm; and fishermen opted for pineapple farming during the low fishing season, albeit on a subsistence basis); lower cocoa prices (Ghana's main export crop) on the international market coupled with inadequate storage practices; and rising costs of fuel imports. These all increased the economic burden on society. The Rawlings-led government threw official weight behind economic reforms, raised the costs of education, and access to health care. All these and many more constituted the wider political and economic environment that did not make large family sizes desirable, as it used to be.

3.4 Abortion and Contraceptive Use in Ghana

In many parts of Eastern Europe and Russia, the practice of abortion has been identified as a strong factor responsible for low fertility rates observed in the two areas. Likewise in Japan, the use of abortion is touted to have made the country undergo a faster transition period from high to low fertility. More recently in China, various foetus sex-identification techniques have been developed and abortion (especially of female foetuses) has been widely carried out to assist many couples in their bid to implement the one-child policy.

Pregnancy, abortions and childbearing have become issues of broad public concern in Ghana. This becomes more important among the young when one considers that medical and social risks of pregnancy are greater for adolescents than for adults aged 20 years and over based on higher incidence of pre-eclampsia and maternal and infant mortality that occur among the first group (Ampofo, 1986). It was further noted by Agyei and Hill (1997) that one out of three sexually active adolescents

who were not married had been pregnant at least once, and the proportion rises to almost half of the adolescents in the rural areas. A regional breakdown of the level of childbearing among adolescents aged 15-19 years indicates that the Central and Western Regions (where Brenu Akyinim and Abuesi are respectively found) have the highest proportions at 33.3 and 26.5% respectively (GSS, 1994).

This calls for reflection on how adolescents cope with pregnancies. It is sometimes assumed that most unmarried adolescent girls who get pregnant generally have multiple sexual partners, are casual about sex, or exchange sex for money out of necessity. Henry and Fayorsey (2002) found that force and deception by boyfriends and other males play a major role in girls initiating sex before they want to. In addition, some girls reportedly have relatively few partners (one or two) and long-term relationships of between 4 to 10 years, which infrequently result in long-term child-rearing unions. The habitual monitoring of the menstrual cycle by girls leads them to know or suspect, generally within one or two months, that they are pregnant. This advance knowledge gives girls enough time to negotiate within their social network a plan for coping with the pregnancy and still have time for a first-trimester abortion. The decision whether to terminate or to continue the pregnancy depends on the social circumstances and the people involved.

3.4.1 Abortion in Ghana: The decision-making process

The outcome of a focus group discussion conducted by Henry and Fayorsey (2002) show that generally, whatever the decision made, it is a joint decision by the girls and their boyfriends. If they decide to keep the child, a public acknowledgement of paternity is made. If they decide to terminate the pregnancy, which does not necessarily cause the relationship to end, the boyfriend often supplies the girl with money to have an abortion. There are times when parents/guardians make the decision when there is no consensus on the plan of action between the 'couple'; such parents/guardians generally supply some financial support for the birth of the child and/or the abortion procedure. There is also a substantial minority of girls whose boyfriends denied responsibility for the pregnancy when it occurred thereby putting the responsibility for decision making on terminating the pregnancy on the girl or her family.

In general, it is understood that too many abortions could be dangerous and could affect girl's future fertility. Although most girls, whether

or not they had had an abortion, said that abortion was morally wrong, they all cited practical reasons why it is acceptable for a girl to have an abortion. A clinic abortion was sometimes preceded by a failed attempt to terminate the pregnancy using home remedies, pharmaceuticals, or herbs bought in the market. The participants in this study experienced few complications from their clinic or herbal abortions.

3.4.2 Measuring the rate of abortion in Ghana

Generally, one cannot help but underscore the need for precise estimates of induced abortion in order to understand the overall reproductive health patterns given the backdrop that the Ghanaian population experienced an especially fast decline in fertility during the 1990s. But data to quantify the incidence of abortion in Ghana is scarce because existing laws restrict electively-induced abortion (Ahiadeke, 2001). According to Rossier (2003), "the task of measuring the incidence of induced abortion varies substantially depending on the legal status of the practice" and WHO (1998) contends that legal abortions represent only a portion of all induced abortions undertaken in the world. Prior to the amendment of the Ghana criminal code in 1985, the existing law prohibited induced abortion except when a woman's life was endangered by her pregnancy. Changes brought to this law thereafter saw abortion not as an offence when the pregnancy is the outcome of a rape, incest, 'defilement of a female idiot', and in situations where the continuation of a pregnancy would involve risk to the life of the pregnant woman or injury to her physical and mental health; or where there is an indication that if the pregnancy were carried to term the child would suffer from or later develop serious physical abnormality or disease. In any or a combination of such scenarios, abortion is permitted if it is or to be "caused by a medical practitioner specialising in gynaecology or other registered practitioner in a government hospital or registered private hospital or clinic" (Ghana Criminal Code, 1985)[3].

However, the relaxation of abortion restrictions in Ghana has not changed the availability of abortion services much. In order to obtain abortions, Ghanaian women use a mix of traditional practitioners, quack doctors, physicians and other sources (for example, a qualified nurse), despite the fact that the unhygienic methods used in some cases (at times involving the insertion of foreign bodies into the uterus) can lead to life-threatening complications (Anarfi, 1996). Even in cases where data can

be obtained from hospital records, they are somehow unreliable due to poor record keeping and inaccurate classification of induced abortion.

To circumvent this, Ahiadeke (2001) monitored almost two thousand pregnant women living in the same community as some fieldworkers in four (out of the ten) regions in Ghana from March 1997 to March 1998, seeking information about the women's health and pregnancy outcomes (including self-induced abortions). Since nearly half of the women in the study conducted by Ahiadeke (2001) obtained a clandestine abortion (through self-medication or in collaboration with pharmacists or non-physician providers), it is safe to say that a large proportion of abortions were performed outside of the medical system. This sets a difficult scenario for obtaining quantitative data on the extent of the practice. In order to quantify the contribution of induced abortion to observed fertility levels and decline, it would be necessary to calculate or estimate indirectly an abortion rate. Almost all the studies of abortion conducted in Ghana are small scale and not at national level.

According to Lamptey et al. (1985), findings from these small-scale studies suggest that abortions are most common among young women, especially to prevent first and premarital pregnancy. Ahiadeke (2001) calculated the ratios of 15 abortions per 100 live births in 1997 and 14 abortions per 100 live births in 1998 among the women, the majority (60%) of whom were younger than 30 years old. This translated to 32 abortions per 1000 women in both years, compared to the WHO estimate of 31 abortions per 1000 Ghanaian women aged 15-49 years for 1997 and 1998. While 90% had obtained abortions before the 10th week, nearly half of the women had done so before the seventh week of gestation. Women who had decreased odds of obtaining abortion include Muslims, those who live in rural areas, have lower educational attainment, and women that have fewer than four children (if a woman has more than four children, she is likely to use contraceptives or more likely to obtain abortion). A paramount reason why the women opted to abort pregnancy is not being sure of wanting a child (57%) indicating a seriousness of the underutilisation of family planning services in Ghana. Other reasons include financial constraints (26%), and the pregnancy being unplanned (16%). However, there is no evidence to show that the women choose to have an abortion based on the sex of their last child.

Blanc and Grey (2000) alluded to the difficulty in estimating an induced abortion rate and thus resorted to using the following sources to

look at the impact of abortion on fertility decline in Ghana. For example, evidence was presented from hospital records in the Eastern region analysed by Taylor and Abbey (1994) showing that 20% of hospital admissions between 1990 and 1992 were due to abortion-related complications. Complementary information was further cited from Government of Ghana (1999) that in 1998 there were 33 abortions per 1000 women, and that nearly 70% of women had had an induced abortion in their reproductive lives, in addition to the information that women aged 20-24 years had aborted one in four pregnancies. Some commonalities in the various indirect sources of data suggest that urban women are more likely to resort to abortion than rural women (Dinan, 1983; Ahiadeke, 2001; Guillaume and Desgrees du Lou, 2002).

3.4.3 Abortion and unintended pregnancies

More often than not, one might equate abortions with unintended pregnancies. But it must be realised that unintended pregnancies arise from a varying mix of more specific underlying factors (Bankole et. al., 1998). While some pregnant women would dearly love to carry their pregnancies safely to term, the timing of such pregnancies may make them undesirable due to the prevailing employment, educational, or economic situation. The occurrence of such unintended pregnancies among young people is not due to the difficulty of successfully using family planning methods; Ahiadeke (2001) noted that women might experience unplanned pregnancies arising from contraceptive failure even where effective contraceptive use is high. The situation can be compounded based on unanticipated changes in their personal circumstances or sometimes their own hesitance.

By and large, a Ghanaian woman may be unsure of carrying pregnancy to term if the partner denies paternity, if she is not willing or ready to marry, or if the family frowns on childbearing outside marriage. Furthermore, an older woman may opt for abortion because the Ghanaian society disapproves of a mother's sexual behaviour if she is nursing an infant at the same time as her daughter.

3.4.4 Abortion and contraceptive use

The need to evaluate the impact of family planning efforts and contraceptive failure rates in a given setting has given rise to the consideration of obtaining reliable measures of induced abortion. In situations where

contraceptive failure is associated with an increase in unintended births, researchers need to take cognizance of the use of abortion as a means to end unintended pregnancies, but if this is overlooked, there could be the underestimation of the number of pregnancies associated with contraceptive failure. Abortion, however, appears to be a fairly common strategy for controlling births in Ghana, though what makes a pregnancy mistimed is unclear (Henry and Fayorsey, 2002).

In neighbouring Cote d'Ivoire, a setting where abortion is illegal and data on its use is scarce, abortion is thought to play an important role in fertility decline due to low contraceptive prevalence (about 10%). The illegality of abortion in Cote d'Ivoire has not dissuaded women from relying on it to limit their family size. Even where the life of a pregnant woman is seriously threatened, the Ivorian Penal Code requires the consent of two doctors in addition to that of an attending physician. Conducting a retrospective survey on abortion and contraceptive practices among 2400 women who attended four general health centres in Abidjan, Guillaume and Desgrees du Lou (2002) discovered that 40% reported controlling their fertility through contraceptive use, 30% relied on both contraception and abortion, while 3% used abortion solely. Muslims had consistently lower odds than Christians of adopting any of these three behaviours, women younger than 25 years had significantly higher odds when compared to those aged 25-34 years, while better educated and single women were associated with significantly higher odds of adopting each of the three behaviours.

It was concluded that there is a highly complex relationship between abortion and contraception. In this sense, women who do not have access to contraceptives or who experience method failure often resort to abortion, which can also trigger subsequent reliance on contraception. Abortion may not even completely disappear despite increased access to contraception. In Mauritius for example, Oodit and Bhowon (1999) found that successful family planning programmes co-exist with a high prevalence of illegal abortion because some women's personal and social situations make them resort to abortion if the method fails or the service delivery system is inadequate. In another study in France, it was found that women were more likely to abort unwanted pregnancy if it resulted from a modern method failure (Leridon, 1987). Post-abortion counselling is therefore essential given the scenario above; this is to be geared

towards avoiding repeated abortions and also to educate women on how to prevent unwanted pregnancy in the first place.

The use of abortion as a strategy for limiting fertility falls outside the range of outlook of Ghana's family planning programme or targets of the 1994 national population policy; and the likelihood of obtaining reliable estimates of induced abortion in rural areas is low. But qualitative investigations can be conducted into whether induced abortion is a common method of birth control among adolescents, and its importance (or otherwise) as a contributory factor to fertility transition especially in rural communities.

3.5 The Study Sites: Abuesi and Brenu Akyinim

Ghana is still a nation of rural communities. The 1999 Population Reference Bureau estimated the proportion of Ghanaian population residing in rural areas at approximately 65 percent, a slight decrease from about 15 years before. The national economy is based on two distinct sectors: a large traditional sector (principally agricultural and informal activities) and a relatively small, labour-intensive industrial and service sector. Agriculture (which accounts for nearly half of GDP) and fishing (very important to the domestic market) are highly important to the employment rate covering 60 percent of those employed.

The two communities used for this study are Brenu Akyinim and Abuesi, two rural coastal settlements located in the Central and Western Regions respectively in southern Ghana. These two communities are already the study sites of a larger research being conducted by the Demographic Unit of the University of Cape Coast in collaboration between Population Council (New York) and the Department of Sociology, University of Cape Coast (Ghana). Brief descriptions of the socio-economic activities peculiar to each community are given below.

3.5.1 Abuesi

Fishing is the main economic activity in Abuesi. The men catch the fish and the women are fish smokers and/or fishmongers. This brings the women into contact with people from other communities, especially women who come to the community to buy fish or whom they meet in the market in the nearby communities or occasionally in more distant cities (Sekondi-Takoradi and Cape Coast). High fertility is seen as a ne-

cessity and a blessing in fishing (processing and trade) among the Fantes in the coastal parts of the Western and Central Regions. Moreover, the reliance on direct off-spring continues to play an important part in the recruitment of labour (Bortei-Doku Aryeetey, 2001). Mothers, sisters and daughters co-operate in trade of fish, and during fishing periods, houses may actually resemble fish processing factories or workshops where all women and children – often with hired labour in addition – clean, smoke and pack fish day and night. The smoked fish is carried to the truck station and most of it is sent to the market in other towns by one of the women in the house.

Marriage is also an inherent part of the fisheries and is reflected in the gender division of labour: men fish and women trade. The right of a wife to buy fish through a husband is an important institution in the fishing economy. However, it is not unusual that some married couples live apart, each in their own or matrilineal relative's house. It is the duty of the wife to cook for the husband and bring the food to him in the evening. She stays with him overnight and goes back to her own house in the morning. In polygynous marriages, the wives alternate – often at monthly intervals – in this arrangement. Husband and wife have separate purses, but do in various ways and to various degrees pool resources for the up-keep of their children.

Husbands are important sources of credit for women who borrow money to buy fish, or, in the event their husbands are canoe owners, they get fish on credit from their canoes. Some women also own canoes and for them, loans from husbands have often been important in enabling them to acquire a canoe. However, lineage members are also important sources of credit, and for women who enter the male-dominated field of fishing, the co-operation of male lineage members is crucial in their management strategies. Hence, for example in Morees (one of the coastal communities), practically all women canoe owners have sons who work as captains. In some settings, husbands also borrow money from their wives, not only for family provisions, but also to buy canoes, outboard motors and petrol. As the canoe fisheries became more capital-intensive with the introduction of larger nets and outboard motors in the 1960s, credit has become institutionalised in the *enam nyi* ('woman selling fish'). These women, according to Overá (2000) 'have accumulated substantial amounts of capital in fish trade, and can thus advance canoe owners with money to buy petrol for a particular fishing trip, and some

of them lend out large amounts for the purchase of canoes, nets and outboard motors. The loans are usually interest-free, but the *enam nyi* benefits through a commitment by her customers to repay the loan in fish. Thereby her fish supply is secured, whereby she can make a profit.'

3.5.2 Brenu Akyinim

The second study site is Brenu Akyinim, a coastal settlement, where farming and salt winning are the leading economic activities. The farmers are mostly men who grow food for home consumption and cash crops (maize, cassava, plantain, and coconut) for marketing. The women engage in food preparation and the sale of salt and pineapple. This explicit gender division of labour could have its effects on the demand for numbers and preference for children of one particular sex especially due to labour-intensive production strategies. Economic activities of the inhabitants thus provide them with some limited social interaction with people from outside the community. Fishing is another distinguishing primary economic activity but is mostly engaged in by a minority of migrants. The in-migrants' reproductive behaviour could also taint or be tainted by that of the host community or vice versa.

However, many of the seasonal in-migrant fishermen are notorious for 'blowing' away this income in a very short period by spending money on luxury items (latest music equipment such as CD players), drinking and showing off in expensive outfits during social events (funerals and weddings). Generally, fishermen do not save money and during the off-peak season, they turn to subsistence pineapple production. Despite abundant pineapple production, the low storage capacity for this highly perishable farm produce drives down the prices of pineapples, at least in the rural areas as farmers-turned-marketers quickly want to sell off their harvests. Motorists on the Winneba-Cape-Coast-Takoradi highway get great bargains because many pineapple farmers resort to selling by the roadside (assisted by their wives). Others who benefit are middlemen who buy pineapples from the farmers in the rural areas to resell in big city markets (for example in Accra) charging exorbitant prices blamed on high transport costs, to a willing population.

The coastal zone has witnessed the reorganisation of local fishing practices and notably emigration, even to other West African countries on the Atlantic, during the economically and politically unstable periods. Despite increased rate of out-migration, the number of planted hectares

did not decrease immediately among farmers, but the food production situation worsened as bad weather contributed to harvest failures in the early 80s. Out-migration contributed to the transition to low fertility as men were not around to impregnate their (prospective) partners. Thus two households are formed: one by the fisherman where he is making a living, and the other back home. These two types of household can readily coexist, at least for some time, with contrasting patterns of fertility.

Examples of such households that are formed by fishermen emigrants can be found far afield as Senegal where they make a living from fishing activities. In coastal Senegal, many of the small-scale fishermen (not distinguished by nationality) have been blamed for depleting fish stocks by over-fishing in the territorial waters. Fishermen that are non-native to Senegal, for example from Ghana, remit money back home. For them, having large families in Senegal is of no use, and the fact that they are away from their spouses in Ghana for long periods of time further sets limits to the number of children they could have. Remittances sent back to kinfolk enabled many who stayed behind to purchase fishing equipment to sustain a livelihood, with attendant multiplier effects on local crafts and commerce.

Today, families that receive remittances from émigrés are urged to save such monies in rural banks (Shama and Kakum in the Western and Central regions respectively). Many others are also encouraged to have shareholdings in the rural banks. The relative successes of the banks' operations are yielding dividends for the shareholders, and it will not be surprising that a new social class of investors with improved financial wealth is springing up in the rural areas. Fishermen have always been queried about their spending habits because most of their earnings disappear a few weeks after the harvest season. Many of the fishermen in Brenu Akyinim turn to subsistence pineapple farming for sustenance as they wait for the beginning of a new fishing season. Cultivation of savings habits and shareholding can improve economic fortunes, give a new outlook on life, change tastes, and assist in realising socio-economic aspirations which can influence family formation behaviour. The proportion of girls to boys in school, formerly low, is improving. Intersecting this development is a transformation of production (and consumption) patterns. Agriculture and fishing inputs are slowly expanding, and the time may come when savings in form of shares and cash will be re-invested in the family business; the outcome will be a reduction in the demand for

child labour because of the mechanisation of farming and fishing activities.

Now that both the national and local socio-economic and political settings, that could help improve our understanding of the on-going changes in the landscape of reproductive behaviour, have been presented, the stage is now set for an exposition of the research strategy and a description of the characteristics of the sampled respondents. Thus the next chapter sheds light on the types of data and sources of information used in analysing changes in reproductive behaviour, how the information was gathered, the suitable methods of data analyses based on conceptual background for understanding fertility change, and the limitations of the data available to the needs of the study. Profiles of the respondents interviewed are also presented.

Notes

1. Today, some countries like the UK and the US officially have no domestic population policies outside of admittedly restrictive immigration and refugee legislation. In other countries without official birth-stimulating policies, the socio-cultural, media and medical climates tend to be pro-natal (Stein, 1995). France, Germany and Israel have policies aimed at promoting childbearing (Economist, 2004).

2. The population growth rate and youthful age structure of Ghana implied a doubling of population size within 23 years compared to Sweden which has a growth rate and age structure that can only double after more than 700 years, using a UN medium variant estimation method. This implied that countries with a relatively stable population stand better chances of successful socio-economic planning for their people

3. Ghana Criminal Code (29), 1960, SS58-59, amendment, February 22, 1985; and Cook R.J. and Dickens B.M. 1981. Abortion laws in African commonwealth countries, Journal of African Law, 1981, 25(2): 60-79.

4 The Research Strategy

4.1 The Research Methodology

4.1.1 Data sources

Two sets of data are used for this study. In the first instance information is collected using a structured interview schedule in a multi-round data collection programme, and the second set of information is obtained from in-depth interviews and Focus Group Discussions (FGDs) purposely designed for this survey. This is because both quantitative and qualitative data was needed in providing explanations of reproductive behaviour in the two rural coastal communities of Brenu Akyinim and Abuesi.

General topics inquired about in the panel survey of 667 respondents using the structured interview schedule are: reproductive behaviour, socio-economic characteristics of the respondent and his/her household, knowledge and attitudes about HIV/AIDS, mass media exposure, and geographical mobility. It includes extensive social network data that also has information about discussion of childbearing, and even an inquiry into costs and benefits of children. All these are aimed at understanding how social interaction influences the reproductive behaviour of respondents. The distinguishing factor of the multi-round survey is that it gives special leverage in investigating the stability and reliability of fertility behavioural data that has been measured for both women and their male partners seven times over four years. As a subset, it also expands the knowledge on husband-wife reproductive behavioural dynamics (hitherto, women have tended to receive more attention in demographic studies of fertility). Here gender balance is given a place in a setting where many scholars feel that men's preferences and decision making are more important in the social setting.

The second set of data, mainly qualitative, was obtained in two phases. The first phase was based on in-depth interviews conducted on older generations of women who have completed their fertility aspirations as historical accounts of general reproductive behaviour. Information was sought on variables such as attitudes towards teenage pregnancy, choices of marriage and childbirth patterns, birth timing (age at first birth and birth intervals), fertility desires (individual preferences and community ideals), breastfeeding practices (lactation scheduling and associated amenorrhoea), contraceptive use, the family decision-making environment, sexuality, and costs and benefits of childbearing. An examination of the female respondents' understanding of reproductive choice across generations in settings of strong customary community allegiance, and relatively poor access to education and family planning will be carried out. In order to do this, three generations of women of one line (that is, grandmother, mother, and daughter) were interviewed. Responses gathered reflect both modern and traditional views concerning various aspects of reproductive behaviour, and identify shifts or abrupt breaks in the traditional system and areas where local indigenous knowledge is being reinforced.

The second phases of qualitative data are FGDs conducted on four groups randomly selected from current cohorts of panel survey respondents homogenous by age and sex. The ethnic mix of the FGDs was based on proportional representation at the community level. Discussion groups comprised adult men, adult women, mixed male/female adult, and adolescents, and were based on the variables highlighted in the preceding paragraph. These FGDs included respondents already interviewed using the questionnaire and some not among the sample used during questionnaire administration. This will provide additional information on community-level attributes of reproductive behaviour and would help in understanding disparities, if any, between the respondents' fertility aspiration and behaviour. The FGDs focused on gender relations at the household level as fertility decision-making and fertility decision implementing individuals and partners, and other aspects of reproductive behaviour. Even though information has been collected on these issues using the questionnaire survey, the FGDs enabled participants to freely express themselves about reproductive aspirations and practices in order to shed light on the responses obtained via the questionnaire, which was deemed 'restrictive' in the sense that responses to close-ended questions

cannot appropriately explain dynamics and contradictions of reproductive aspirations, attitudes and behaviour.

In addition, officials from governmental agencies and non-governmental organisations (NGOs) associated with providing services and information pertaining to family planning programmes borne out of the national population policy were interviewed in the two regions where the communities are located. This is to obtain their experiences in the implementation of programmes, and reveal constraints and prospects they face in their goal of promoting family planning and addressing reproductive health generally. Such organisations where information can be sought include regional and local offices of the National Population Council, Ghana Statistical Service, and NGOs like the Planned Parenthood Association of Ghana (PPAG) in Cape Coast and Takoradi.

The origins of the first set of data can be traced to the wider project titled 'Social Networks and Diffusion of Fertility Behaviour' which focused on six rural communities in the four coastal regions of southern Ghana. This was a joint project between the Population Council (New York) and Department of Sociology (University of Cape Coast, Ghana), directed by the Demography Unit of the university. Two rural coastal communities of Brenu Akyinim (Central region) and Abuesi (Western region) were selected for this study from the bigger project. These two communities were purposively selected for diversity in ecological setting, primary economic activity, relatively homogenous ethnic composition and corresponding kinship, and religion. Seven rounds of data collection were accomplished in more than 4 years at approximately seven-month intervals.

The interview schedule was drawn up in English but translated into the local languages used in each of the two communities. This was usually done during the training session preceding each round of data collection. Pre-tests were conducted on respondents in communities not falling within the sample, for necessary amendments and understanding of the translation. The household was the primary sampling unit and data was obtained from individuals including married men and women, and unmarried women. Women in the age range 15-49 years in the selected households were interviewed because of the theoretical and practical notion that age 15 marks age at menarche, which is the onset of the exposure to the chances of pregnancy. Age 49 in turn marks the end of a woman's childbearing years, signifying the natural end to both involun-

tary and deliberate practices (for example contraceptive use) to regulate reproduction.

The consistency of quantitative data obtained from this longitudinal survey is somewhat assured due to the relatively short interval between data collection rounds, avoiding information recall problems for men and women in the sampled households concerning their reproductive practice. Cross-sectional and single-round surveys have the disadvantage of recall problems, with respondents having to think back into the past (5-10 years in some cases) in order to report experiences; valuable information can be missed using this approach. The multi-round survey is quite useful in this regard. Of course for issues like fertility levels (measured as number of children ever born alive) and birth timing (measured as age at first birth), we still have to rely on memory recall. With the exception of currently happening events, the multi-round survey is particularly useful for other related information like pregnancy history, breastfeeding practices, miscarriage and abortion experiences, fertility desires, and contraceptive use. The data collected this way is also used for the appropriate quantitative estimation of their (excluding fertility desires) roles as proximate determinants of fertility using the Bongaarts' framework. Information on these variables were collected in the survey questionnaire in form of monthly calendars where female respondents indicated in the months within the rounds of data collection whether they had any experience of pregnancy, miscarriage, abortion, still born, live birth, breastfeeding, and contraceptive use. This gives a continuous picture of some reproductive experiences of the women. Except for calendars on contraceptive use (and marital status), calendars on the other variables highlighted in previous sentence excluded information from men because of the peculiar nature of such reproductive behaviour pertaining biologically to women.

In the same vein, the fertility preferences of both men and women were collected in the multi-round period using the question 'desire for a/another child'. The inter-round consistency of information collected will point to a higher level of data reliability. The theoretical debate has been on disadvantages of the use of single-round surveys that constrained respondents to give one-time numerical values. The validity of this has been questioned in the demographic literature for predictability of fertility levels in the short and long run because peoples' intention and/or behaviour may change after the data collection period. Thus it

was not surprising that some respondents in previous surveys declined to give numerical answers to questions on fertility desires, especially by saying it is God that determines or has the foreknowledge of numbers of children an individual may have. Another tactic proposed is not constraining respondents to giving exact numeric desires for children but to state a preferred range of numerical values. Thus, in order to do away with the problem of non-numerical responses in this survey, respondents were asked if they desired a/another child. The proportion of affirmative responses would help in noting potential increases in fertility levels, pace of increase or likely demand for contraceptive use either for stopping or spacing childbearing.

It would have been ideal to rely on longitudinal data spanning a longer period of time such as 10 to 30 years, which would have enabled us to contextualise changes in intergenerational reproductive behaviour. However for logistics reasons, this was not possible, therefore the current data available on a monthly basis for approximately four years will be relied on to give a picture of the dynamics of reproductive behaviour in the two rural coastal communities in recent times. This is not to say that changes in reproductive behaviour will be limited to this reproductive period alone; to reiterate, more data will be collected from older cohorts of men and women with whom in-depth interviews and FGDs will be conducted. It will help to garner information about changes in their reproductive behaviour as moulded by cultural and socio-economic experiences.

In summary a total of 667 respondents (411 females, 256 males) are expected from the questionnaire survey in the two communities. For the FGDs, there will be four groups per community, with a maximum of 10 participants per group, yielding 80 FGD participants in all. Older cohorts of men and women, above age 60, will be invited for in-depth interviews on reproductive behaviour in order to obtain intergenerational information.

4.1.2 Methods of analyses

A quantitative measurement was done for the main indicator of reproductive behaviour, which is fertility level (the main dependent variable, to be measured as mean number of children ever born and total fertility rates). The same was done for the estimation of birth timing (age at first birth and birth interval) and fertility desires (proportion desiring

a/another child). These two dimensions will serve as intermediate variables to explaining the main dependent variable of fertility level. The determinants of age at first birth will be examined while factors influencing fertility desires will be established. The understanding of their dynamics and contradictions will help in shedding light on current achieved fertility and point to prospects for further decline or increase in levels of fertility and ultimately population growth in the rural coastal areas. The second aspect of birth timing that could be one of the determinants of the level of fertility achieved by fertile women is the spacing between one birth and the next. These birth intervals determine the number of children that can be 'packed' into a reproductive career. The length of these intervals has important consequences for the health and activities of both mothers and their children, as well as a major determinant of the overall level of reproduction for the whole population as a whole.

Conceptually, each birth interval can be divided into three segments (Howell, 1979). The first is the 'idle' period following a live birth. During this period there is no probability of conception, because the mother is not ovulating, and because she is not having sexual relations. The second segment begins when both ovulation and sexual relations are present and lasts until the next conception. The woman has a higher likelihood of pregnancy during each of the months of this segment; it is the base from which probabilities of conception per month (fecundability) should be calculated. The third segment of the birth interval consists of pregnancy, the period from conception to the next live birth. It is the most invariant segment in duration for the pregnancies that end in live birth. Sometimes in order to divide the months in the birth intervals into the three components, it is necessary to collect information monthly from the women in the fertile years on whether they had a menstrual period and sexual relations within the previous month. Statistical analysis could be performed on the length of the components of birth intervals. This information was collected from the panel survey as calendar events; measuring the total length of birth intervals during the 1998-2002 period could help to explore the determinants of the timing of births.

On the issue of completed reproductive careers, there are several sources of information on the coastal women's reproductive careers to help in understanding typical and special patterns in their fertility. One important source is that of the women aged 50 and over. These women provide the only information on questions that require looking at com-

pleted reproductive performance, such as age at menopause, and they provide valuable sources of information on the context of changes in reproductive behaviour during the recent decades of accelerated social change. In the case of data on fertility among women who were in the childbearing age groups during the fieldwork, there are two sources of information, retrospective cumulative accounts provided by the women about their own experience, and direct documentation of current and on-going events. The age pattern of fatherhood can also be examined and questions asked to determine the extent to which the men have a distinctive pattern of age-specific fertility different from that of the women who were the mothers of their children.

In addition, from a Social Psychology perspective, attitudinal variables can be incorporated in demographic research (especially fertility research). Even though fertility preferences (an attitudinal variable) are routinely measured in demographic surveys, there has been a tendency to give them short shrift in much of the theorising and analysis. This is due to the fact that they are considered less real than other socio-economic and demographic variables such as income, age, schooling and ethnicity, among many others. On attitudinal variables, the Likert scale was employed in analysing respondents' perceptions of the costs and benefits of raising children that is obtained from the questionnaire survey. Though while there is no single, universally accepted definition of attitude, several authors seem to agree that attitude may be thought of in terms of 'a tendency to evaluate a stimulus with some degree of favour or disfavour, usually expressed in cognitive, affective, or behavioural responses'. In 1932, Likert developed the method of summated ratings (or Likert's scale) that is still widely used. The Likert scale requires that individuals tick a box to report whether they 'strongly agree', 'agree', are 'undecided', 'disagree', or 'strongly disagree', in response to a large number of items concerning an attitude, object or stimulus. This will be particularly useful for analyzing parts of the questionnaire designed to obtain responses on costs and benefits of childbearing where respondents were required to give assessments of different socio-economic considerations.

Fertility is generally easier to measure than mortality, and it differs from mortality and many other processes in that it can occur repeatedly while the person to whom it occurs remains within the physiological likelihood of its re-occurrence. Age-specific fertility rates can be computed for single years of age or for 5-year age groups (by extension these are

birth probabilities). To summarise the birth probabilities over the whole reproductive career, therefore, we can sum the probabilities over each age segment to obtain the average number of children who would be born to a cohort experiencing those rates; this is called the total fertility rate.

The research propositions are evaluated using simple cross-tabulations of responses obtained on the variables of interest. Stronger statistical tests requiring multiple regression analysis of dependent and independent variables will also be conducted. This will be done using simple linear regression for numeric dependent variable of fertility levels and logistic regression of variables concerning the likelihood or probability of occurrence of certain events (for example direction of trend of family size desires and fertility levels).

Fertility level is first measured as Mean number of Children Ever-Born (MNCEB) for the women interviewed; this was cross-tabulated with background characteristics of the women. Useful information can be obtained by cross-tabulating MNCEB with some socio-economic and demographic background characteristics, but results are not conclusive. This is due to the fact that the knowledge of the effect of an independent variable without controlling for the effect of others may not reveal the net effect of the dependent variable under consideration. It becomes imperative to isolate the net effect of each variable while controlling for the effect of other variables.

Thus, multivariate regression analysis of the relationship between number of children ever born (as dependent variable) and background characteristics (as independent variables) was conducted. According to Norusis (1992), regression can be used to summarise data and to study relations among variables. Multiple linear regression broadens bivariate regression by incorporating multiple independent variables. The regression model can be expressed as:

$$Yi = \beta_0 + \beta_1 X_{1i} + \beta_1 X_{2i} + \ldots + \beta_n X_{ni} + e_i \quad - \quad (3.0)$$

where:

- Y_i is the dependent variable
- β_0 is the universal mean
- β_n is the coefficient of multiple regression
- X_{ni} signifies the value of the nth independent variable for case i, and
- e_i is the independent error term

The assumptions of this model include:

(i) that there is a normal distribution of the dependent variable for every combination of the values of the independent variables in the model (Norusis, 1992)

(ii) that the error terms are normally distributed with mean 0 (zero), constant variance (δ2) and covariance for all i2 (Mood et al., 1974), and

(iii) all variables are measured in interval scale; but in cases where the independent variables are categorised (that is not measured in interval scale), the use of dummy variables is suggested (Majumdhar, 1983).

The dependent variable in this study is the number of children ever born and the independent variables are the socio-economic and demographic characteristics of the respondents. These include age of mother, level of education, number of children desired, age at first marriage, occupation, and religion. In creating the dummy variables for the categorical variables, women in sub-categories of independent variables who reported the highest mean number of children in the cross-tabulations are used as reference categories.

In most academic fields as well as in the real world, predicting whether an event will or will not occur, in addition to identifying variables useful in making the prediction, is of great importance in rapidly changing socio-economic circumstances. Some multivariate statistical techniques can be used to predict a binary dependent variable from a set of independent variables. But techniques such as multiple linear regression and discriminant analysis pose difficulties when the dependent variable is dichotomous – for example, an event occurring or not occurring. In this situation, assumptions necessary for hypothesis testing in regression analysis are violated. Such assumptions include the notion that the distribution of error is normal, and that predicted values cannot be interpreted as probabilities such that values cannot be constrained to fall within the interval 0 and 1.

In the study of the determinants of contraceptive use, the dependent variable is the use or non-use of contraception at the time of the survey. In this situation, the standard multiple regression analysis becomes inappropriate as the dependent and independent variables cannot be related by a linear model. One important method applicable in this situation is

logistic regression, also referred to as logit regression, and this method of analysis is useful when the dependent (response) variable may be qualitative, categorical, or a mixture of the two.

Logistic regression directly estimates the probability of an event occurring. For more than one independent variable, Norusis (1992) showed that the model can be written as:

Probability (event) = $1 / (1 + \varepsilon^{-z})$
where z is the linear combination, and
$z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n X_n$

The maximum likelihood method helps in estimating the parameters of the model. This implies that the coefficients that make the observed results most likely are selected. The non-linear nature of the logistic regression necessitates an iterative algorithm for parameter estimation. Thus the odds of an event occurring are defined as the ratio of the probability that it will occur to the probability that it will not. Using the odds logic, the logistic equation can be written as:

$$\frac{\Pr obability(event)}{\Pr obability(noevent)} = e^{\beta 0 + \beta iXi + \ldots + \beta nXn}$$

Here, $e\beta i$ is the factor by which the odds change when the i^{th} independent variable increases by 1 unit. Thus:

- if β_i is positive, this factor will be greater than 1, implying increased odds
- if β_i is negative, the factor will be less than 1, which means decreased odds
- when β_i is 0, the factor equals 1, meaning unchanged odds (Norusis 1992).

Logistic regression allows for the building of a model for the relationship between a dichotomous dependent variable (one with two categories) and a set of independent variables. The categorical independent variables are converted automatically into contrasts. For the purpose of this study, contraceptive use will be measured by the current use of any method of contraception at the seventh round of the Diffusion survey in 2003.

Statistical measurement of the fertility levels using Bongaarts (1978) proximate determinants of fertility framework was also done. This enabled the estimation of the relative contribution of indexes of breastfeeding, abortion, contraceptive use, and marriage on current fertility levels. The modifications suggested by Stover (1998) for better estimation of these indexes in explaining current fertility levels will also be considered. For example, it was suggested that index of marriage be replaced with age at first sex as relative exposure to the risk of childbearing. Of course the explanatory (or independent) variables in the general background are cultural and socio-economic variables such as educational attainment, religion, marital status, contraception, place of residence, and ethnicity. Other background factors include value of children, the household fertility decision-making environment, sexual norms and values, and intergenerational knowledge transfer on reproduction. In addition to these are economic status and geographical mobility. The influences of social networking and the influence of the State on issues of reproduction take place in a wider context. These and other factors contribute to shaping people's reproductive behaviour.

The study also tried to make incursions into the field of Anthropological Demography. As Caldwell (1996) pointed out, this field of demography concerns 'the use of anthropological approaches and concepts to study the nature and causes of demographic behaviour.' In order to make the study as comprehensive as possible, both the quantitative and qualitative methods were combined in order to generate prevailing rates and to know what those numbers mean in reality. It also goes beyond treating anthropological demography merely as a means of saying in words and with small samples what quantitative data sets propose to show; it exploits the theoretical framework of modern anthropology to clarify reproductive behaviour.

In summary, the 'Whole demographies' approach advocated by Greenhalgh (1995) encourages the use of both qualitative and quantitative data sources and techniques. Secondary data sources of the qualitative type are consulted to highlight and verify the socio-economic policies implemented by different governments in the past decade. These are needed in order to contextualise the influence of the wider socio-economic and political environment on reproductive behaviour, especially as such policies have a bearing on the private domain of couples and individuals. Thus we would be able to know if changes in reproduc-

tive aspirations and attitudes were directly or indirectly instigated by changes in the socio-political setting. Intergenerational interviews are also conducted because they provide not only the basis for personal accounts of lifetime reproductive experiences but also the documentation of changes in reproductive behaviour and strategies women have used to achieve their aspirations from one generation to another. In addition, information obtained through the use of FGDs will also help to identify how the forces of power and politics and gender relations at household levels are at play in the decision-making system for married couples. FGDs allow for more comprehensively argued points from respondents which cannot be obtained from analysis of pre-coded questionnaire interviews.

On the quantitative front, the illustration of fertility transition requires the presentation of figures that indicate childbearing levels and the change (or trend) in these levels at different points in time since attitudes to childbearing are dynamic. Statistical tools like means and medians will help in aggregating reported numbers of children born by respondents, and obtaining age at first marriage, women's age at birth of first child and birth intervals within women's reproductive life spans. Responses will be aggregated and presented in proportions and percentage distributions according to various socio-economic backgrounds of interviewees especially for the women for whom numerical fertility preference levels and numbers of children born alive have been established.

The use of regression techniques will also help to statistically identify important categories of socio-economic factors that influence current levels of childbearing and contraceptive use. The Bongaarts analytical framework is more particularly useful in identifying the relative contribution and importance of social and biological factors to observed fertility levels.

4.1.3 Limitations

Studies like this require the use of extensive longitudinal data. This was however not possible due to constraints such as the time limit for data collection for this study, and the currently available primary data spanning approximately four years. In order to solve this, additional data obtained from interviews of cohorts from the older generation (with associated recall problems) was resorted to, as well as comparison with other national data like the 1988, 1993, 1998, and 2003 GDHS and 1979/80

GFS. The data from these sources are not from the current cohort of respondents; in order to observe related dynamics of reproductive behaviour, regional statistics from such data will be used for comparison purposes, but with caution.

In the following section, I would like to provide the profile of respondents from the two communities. It is on these groups of people that subsequent analysis of data will be based in order to draw community-wide generalisations.

4.2 Background Description of Study Area and Respondents

In order to achieve the objectives of this study, information on reproductive behaviour and associated characteristics was obtained from a select sample of women and men from Abuesi and Brenu Akyinim communities of the country's Western and Central regions respectively. Two sets of primary data are relied upon for this purpose. The first set is based on female and male respondents used for the (New York) Population Council-sponsored Diffusion of Fertility Behaviour project, in which Abuesi and Brenu Akyinim constituted two of the six communities used for data collection in the rural coastal parts of Ghana. Here, a regular questionnaire interview format was employed. The second set of data is partly a subset of the respondents from the first survey and partly a fresh mini-sample which included respondents who have never been consulted in the earlier survey. Here, Focus Group Discussions (FGDs) and in-depth interviews were used to secure further information on fertility behaviour of inhabitants in the two communities. It should be noted that this does not serve as a comparative study between communities. But given some degree of homogeneity, which will be discussed soon, the two communities were useful in presenting a micro-facet of fertility behaviour within the general fertility transition framework being experienced in Ghana.

In the following sub-sections, the background overview of the various respondents is discussed, focusing on some socio-economic characteristics which could throw more light at different points in subsequent analyses in the next few chapters on why certain behaviour are exhibited. These socio-economic characteristics include the age distribution, ethnic composition, current marital status, religious affiliation, educational background, media exposure, occupational status, the household deci-

sion-making environment, geographical mobility, and of course, the number of children borne by respondents.

4.2.1 The Diffusion Survey

Timing the data collection

Appropriate timing of interviews was crucial for obtaining consistent and reliable data. Timing is divided into two parts: season of the year and time of day of interview. From background knowledge, a large proportion of the male respondents were expected to be fishermen. Therefore it was expedient to interview these men during the rainy season. At such times, they usually do not go out on relatively large-scale fishing expeditions because that part of the Atlantic ocean is rough when it rains; so they spend more time mending nets, living on earnings accrued from the harvests of the previous fishing season. Small-scale fishermen, however, do go out during the rainy season but not too far from the shores. But whether it is rainy season or dry season, it is strictly forbidden for the fishermen to go out on Tuesdays for fishing. It is a day 'reserved for the gods', mostly spent mending nets and other fishing gear. Farmers are exempted from work on Thursdays.

The best time of day to interview a fisherman ranges from three to six o'clock in the afternoon. They go out fishing late in the night or early before the first rays of the sun. By 9a.m. they are all back on shore mending nets and fixing other gear till midday. Also they can be interviewed on Tuesdays while mending nets, performing other duties, or simply being at rest. For the farmers (both males and females,) although they normally get back home from the farms around 4p.m., they usually make themselves available for interview after 6p.m. In some instances, some interviews took place before 5:30a.m as they prepare to go to their respective farms.

Women who are not engaged in fishing or farming were interviewed more at home. However it was easier to contact women generally and there are some occasions where interviews took place during business hours (most who are fishmongers have their ovens around their places of residence). Some opted to be interviewed at their trading points in the market at times when many customers are not anticipated to come around. It is to be noted that women were interviewed first before their male partners were interviewed, and never together, so that no external influence was involved. Prior to commencing the survey, this was ade-

quately explained to the community heads and heads of households, for those that were sampled for interview, so that the authority of the head of household (men in most cases) did not seem to be undermined. As will be explained later, the males interviewed are expected to be married, or be in some kind of formal union with the sampled women. While marriage or some type of formal union was pre-requisites for selection of males for participation in this survey, this was not so for women in that they were interviewed irrespective of marital status as long as they fell in the sampling frame. It got more interesting if some of the women were married which made it necessary to interview their partners. During the later stages of this longitudinal survey, men who got divorced or separated from their partners were dropped form the sample. In some few instances, some re-appeared later as husbands of women who were single earlier but were in the sampled list. Their reproductive histories were adjusted with the new status. On the average, most interviews lasted an hour.

Socio-economic characteristics of female respondents

The 'Diffusion of fertility behaviour' survey was a longitudinal effort aimed at collecting information from respondents (in six communities) over an average six- or seven-month cycle depending on the weather seasons. In between late 1998 and the first quarter of 2003, seven rounds of data collection had been conducted. From the Abuesi and Brenu Akyinim communities, a combined total of four hundred and thirty-two (432) women, in the age bracket 15 to 49 years, were interviewed at the beginning of the multi-round survey. These same women were re-visited every six or seven months. Based on the fact that consistent data is necessary for proper analysis, this study focuses on four hundred and eleven (411) women who were able to state their ages correctly at the beginning of the survey period. It should be noted that at every round, women who got older than the 49-year limit were dropped while some new entrants were included in the survey. The new entrants include those who moved into the community within the survey period. Such new respondents were served 'hybrid' questionnaires which sought information from them regarding their fertility behavioural characteristics as of the beginning of the survey and as of the time they were co-opted. This was done bearing in mind that they fell within the 15-49 year age limit.

Using a five-year age range in table 4.1, the respondents were divided into seven age groups. It could be observed that a fifth of the surveyed women were in the age group 20-24 years, followed by those 30-34 years old, while there is an almost even representation for women aged 25-29, 35-39, and 40-44. The upper and lower limits of the age distribution each constitute less than ten percent (10%) of the sampled respondents. The average age of the women was 31.1 years; in Abuesi the average was 29.7 years, while in Brenu it came to 32.9 years. The seven age groups are in line with standard demographic practice useful for obtaining refined statistical measures of fertility.

Furthermore, a major proportion (95%) of these respondents are of Fanti ethnic origin. This is not surprising as the survey was conducted in the Central and Western administrative regions of Ghana which constitute the largest concentration of ethnic Fantis in Ghana. Within these communities, there is a scattering of other constituents which include the Denkyira, Ahanta, and Ewe ethnic groups. This is expected, especially as they are also found in the southern parts of Ghana, as the former two are located in these administrative regions but not in the coastal parts. The Ewes are from the Volta region, with a good proportion dwelling in the eastern coastal parts of Ghana bordering the Republic of Togo. The Ewe fishermen have also been noted for their migratory characteristics (Aryeetey, 2001). Other ethnic constituents found to a much lesser extent in the two communities of interest have their origins from further inland; these include the Ashanti, Akwapim, Akyim, and Nzema, and an Ibo from Nigeria. Recognising that the two communities are largely homogenous based on ethnic consideration makes a comparative study unnecessary, but the homogeneity serves as a convergence point for studying fertility behavioural characteristics in a micro scale which may not have been possible in national surveys like the Ghana Demographic and Health Survey (GDHS).

In addition, six categories of marital status were identified in the two communities as can be seen in table 4.1. Here, the difference between women in current union and married women is that while the latter is officially recognised in a civil registry and/or through religious ceremony, those in current union could be having a serious relationship or be cohabiting.

Table 4.1
Percentage distribution of female respondents by socio-economic characteristics

Background	Percentage	
	Abuesi	Brenu
Age distribution		
14-19	9.9	6.7
20-24	23.3	15.6
25-29	17.2	10.6
30-34	17.7	19.6
35-39	11.2	19.6
40-44	14.2	16.2
45-49	6.5	11.7
Ethnicity		
Fanti	94.8	94.4
Others	5.2	5.6
Marital status		
Never married	7.8	6.2
In union	3.9	6.7
Married	78.5	72.1
Separated	4.3	1.1
Divorced	4.7	12.3
Widowed	0.9	1.9
Number of children		
0	12.9	11.7
1 - 2	28.5	23.5
3 - 4	23.7	24
5+	35.9	40.8
Religious affiliation		
None	9.9	4.5
Catholic	2.2	39.1
Orthodox protestant	28	31.8
Moslem	23.3	2.2
Syncretic	21.9	6.2
Charismatic/Pentecostal	14.7	12.3
Others	-	3.9
Ever attended school		
No	43.5	31.3
Read newspaper/magazine any language		
None	67.1	67.7
1ce a month	16.4	24.2
Once/more a week	15.1	8.1
Daily	1.4	-
Listen to radio		
None	14.7	17.3
1ce a month	7.3	7.8
Once/more a week	22.3	26.9
Daily	45.7	48
Watch TV		
None	17.2	21.8
1ce a month	9.1	8.4
Once/more a week	41.8	39.1
Daily	31.9	30.7
Occupation		
Not working	11.2	10.1
Farming	-	29.6
Fishing	0.9	1.7
Trading	75.9	46.4
Teaching	-	3.9
Other: dressmaking, hairdressing, apprentice	12	8.4

Source:First round of 'Diffusion' survey In Abuesi – 232 females; In Brenu Akyinim (BrenuA) – 197 females

This type of relationship is informally known and recognised by the families of the two parties involved and could, like in many cases, resort to a loose family formation where children born to such couples are accepted as legitimate. Most couples in this type of union may still go ahead to formalise it in a civil or religious or traditional ceremony at some point later in life if they so wish.

While three-quarters of the female respondents in the two communities were currently married at the beginning of the survey, an additional 5 percent were in current union. About 12 percent at that time had experienced marital break-up; more were due to divorce, and to lesser extents, separation and widowhood. However, there were about thrice the proportion of women currently divorced in Abuesi as there were in Brenu Akyinim. Later on, the stability of marriages, with its implication on childbearing, will be explored.

Approximately 7 percent of all the women had never been married at the beginning of the survey. The essence of breaking the respondents into marital status categories is to observe interesting fertility features that might come up based on these categories. In most parts of Africa, if not all, marriage is still near-universal and childbearing is mostly expected under the auspices of marriage. However, whether there is a changing pattern along marital status lines due to changing socio-economic circumstances nowadays is a point to ponder.

Ghana has three main religions; these are Traditional, Christianity, and Islam. It is largely held that more Christians can be found in the southern parts of Ghana while in the northern regions, there are more Muslims. These two patterns were evident from the women in the two communities, and while about 8 percent claimed to be of no religious persuasion, none claimed to follow any of the African Traditional religion. Approximately 14 percent of the women were Muslims while the remaining 75 percent were Christians. However, within the large Christian body in these two communities are orders which include Orthodox Protestants (Presbyterian, Anglican, Methodist) and they constitute about a third of all respondents. Following in descending order of proportion are Catholics, Syncretic (a mix of Christianity with traditional worshipping styles, for example the Musama Disco Christo Church), and the Charismatic or Pentecostal Christians (a departure from Orthodox Protestants that allows independent spirit-filled worshipping, and owes no allegiance to orthodox churches, following styles from Pentecostal

faiths in America). A much smaller group in the 'others' category are Jehovah's Witnesses. It is believed and documented (GDHS 1988, 1993 and 1998; NDHS 1990) that the degree of religious affiliation or commitment to particular religious order and obligations may influence an individual's fertility behaviour. Mormons for example use one of their religious tenets as an important reason for a high fertility rate (Linn, 2001).

There are twice as many women in Brenu Akyinim than in Abuesi who professed to not belong to any religion. Among those who were religious, adherents of the Catholic faith were a significant chunk of the women in Brenu Akyinim compared to Abuesi. However, what the Abuesi women lacked in proportion as Catholic was made up with a significantly larger group of Muslims (23.3%) compared to those in Brenu Akyinim (2.2%). How the affiliation to religious groups and doctrines influences childbearing attitudes and behaviour will also be explored bearing in mind the relationship between religion and fertility exhibited. for example, whether there is any systematic influence by any type of religion on the introduction and usage of family planning (Adongo et al., 1998); the difference in fertility norms dictated by diverse religious groups (Lehrer, 1996), and in the wider DHS results.

With regard to educational background, more than 60 percent of the women have undergone some type of formal schooling. At this micro level in 1998, it presents a slightly better picture than what was observed in the GDHS level of education data where it was stated that between 1993 and 1998, the national percentage of women reporting to be literate increased from 43 percent to 51 percent (Ghana DHS EdData Education Profile 1993 and 1998).

But contrasting evidence is presented when one compares reading and understanding a newspaper in English, and or in any Ghanaian language to educational background of respondents. While 61.8 percent of the women have ever attended school, only 38.4 percent can read and understand a newspaper in English easily or with difficulty. The statistics are slightly worse for reading and understanding any newspaper in any Ghanaian language with only 18.7 percent who could do it easily and 16.1 percent who could read and understand with difficulty. This could have implications for dissemination of family planning information in written form to the inhabitants of these communities. Providers of information or services may be better off relying on oral transfer of infor-

mation, with associated pros and cons depending on the motive of the information or service provider (and interpreter). Out of the total 172 women (representing 41.8 of all women respondents) who could read and understand a newspaper in any language, less than 1 percent read newspapers daily while just above a tenth of the women consulted newspapers about once a week.

While more women were noted to have had some form of schooling in Brenu Akyinim than in Abuesi, it is worthy to note that women in Abuesi are relatively regular readers of newspapers compared to those living in Brenu Akyinim. Although the two communities are geographically situated away from the route of daily newspaper supplies from Accra, it can still be argued that Abuesi is closer to Takoradi than Brenu Akyinim's is to Cape Coast. Takoradi and Cape Coast are regional administrative capitals that enjoy a daily supply of newspapers and it is expected that trickledown supplies will favour closer communities than those farther away.

The most popular source of general public information for the totality of female respondents is the radio. Almost half the women listen to the radio daily (some have it permanently on with them in their market stalls) while another third listen to radio more than once a week. With regards to television viewing, about a third of the women find time to watch TV programmes daily while approximately 41 percent do so more than once a week. How these media affect attitudinal changes on issues related to childbearing will be explored in subsequent chapters.

An indicator of the level of employment observed in table 4.1 is where 10.7 percent of the women indicated they were not doing any work for income as of the beginning of survey. At a more local level, the remaining 89.3 percent paints a better picture of relatively high employment in these communities (compared to a national average of 81 percent employment reported for women in the 1998 UNDP Human Development Report). Most of the women working in the two communities were trading (fish mongering and small-scale trading), about 13 percent were farmers, and 1.2 percent were in fishing which still remains largely a male occupation. In the service sectors are hairdressers, dressmakers (tailors) and to a much lesser extent, teachers. Apprentices form 3.2 percent of all female respondents; they do some part-time work by practicing newly acquired skills on willing customers who pay cheaper rates than they would pay professionals.

Although none of the women living in Abuesi were farmers, there were twice the numbers of women in fishing jobs in Abuesi as there were in Brenu Akyinim. However, more than three-quarters of the women in Abuesi were into trading, compared to less than half of Brenu Akyinim women. How the women's occupation corresponds to a trade-off in quantity and quality of children will be investigated in the fertility preferences section.

Finally in table 4.1, while about 12 percent of the women had never had any children, approximately 30 percent reported having more than five children each and half of the entire 411 women had between one and four children.

Socio-economic characteristics of male respondents

One of the striking characteristics of this longitudinal survey is that all the males interviewed were in some form of union to the women interviewed compared to the women who were interviewed irrespective of their marital status. Couples were interviewed separately, with the women interviewed first whenever the field research assistant got to any of the sampled households in the two communities. The essence was to get a feel of how couples operate within household decision making environment in matters relating to childbearing, family planning, children's education and general welfare, HIV/AIDS awareness, and social network information, while maintaining or taking into cognisance individual preferences in family formation and maintenance.

In all, a total of 246 males automatically fell into the sampled list and the percentage distribution by selected socio-economic characteristics is shown below in table 4.2. The average age of these males in the two communities was 37.9 years with the largest share, 40 percent, within the 30-39 age group and less than 5 percent aged 60 years and over. The males in Brenu Akyinim were about four years older than their counterparts in Abuesi whose average age at the commencement of the rounds of interviews was 36.5 years. This is quite similar to the pattern observed for the females, where those in Brenu Akyinim were approximately three years older than the females of Abuesi. While the age difference between spouses will be discussed in detail later, the average age level irrespective of gender seems to suggest that there is some relative aging of the population in Brenu Akyinim. Relatively fewer men in their 50s were sampled in Abuesi than in Brenu Akyinim.

Table 4.2
Percentage distribution of male respondents by socio-economic characteristics

Background	Percentage	
	Abuesi	**Brenu**
Age distribution		
20 - 29	24.2	15.1
30 - 39	42.5	36.6
40 - 49	21.5	24.7
50 - 59	7.2	20.4
60+	4.6	3.2
Ethnicity		
Fanti	97.3	94.7
Marital status		
In union	1.3	3.2
Married	98.7	96.8
Number of wives/partners		
1	77.1	86
2 wives	20.9	12.9
3 wives	1.3	1.1
4 wives	0.7	-
Number of children		
0	2.6	3.2
1 - 4	47.1	46.2
5 - 8	26.2	32.3
9 - 12	19.5	10.8
13+	4.6	7.5
Religious affiliation		
None	7.8	19.3
Catholic	3.3	30.9
Orthodox protestant	30.1	26.9
Moslem	27.4	2.2
Syncretic	17	4.3
Charismatic/Pentecostal	14.4	10.7
Traditional	-	1.1
Others	-	5.4
Ever attended school		
No	37.9	16.1
Read newspaper/magazine any language		
None	41.4	50
1ce a month	20	27.3
Once/more a week	37.1	12.1
Daily	1.4	10.6
Listen to radio		
None	5.2	6.5
1ce a month	1.3	4.3
Once/more a week	24.9	23.6
Daily	68.6	65.6
Watch TV		
None	13.7	20.4
1ce a month	6.5	11.8
Once/more a week	40.6	31.2
Daily	39.2	36.6
Occupation		
Not working	3.3	1.1
Farming	2	48.4
Fishing	69.9	15.1
Trading	4.6	1.1
Teaching	-	4.3
Other: dressmaking, hairdressing, apprentice	20.2	30

Source: First round 'Diffusion survey'. **Abuesi** – 153 males; **Brenu Akyinim** – 93 males

Looking at their ethnic composition, most of the males are Fantis and it is surprising once again that the Ahanta (another sub-group within the Akan ethnic group which the Fanti belong) were underrepresented in the sample, with in this case only one male claiming to be an Ahanta. Abuesi was expected to harbour a large number of Ahanta due to historical antecedents. However, the seeming absence of the Ahanta may be due to out-migration, or that most would simply regard being called Fanti due to the dominance of the Fanti in cultural and social matters in the Central and Western regions. In Brenu Akyinim, there was no representation of the Denkyira and Ahanta (likewise in female data).

While 98 percent are officially married, either by religious, civil and/or traditional ceremonies, exactly 80.5 percent have only one spouse; those with two wives constitute approximately 18 percent of the total number of males, while the remaining 1.6 percent have three wives/partners or more. Also, males tend to be more monogamous in Brenu Akyinim with nearly 90 percent of the men having only one wife compared to their counterparts in Abuesi with approximately one-quarter having more than one wife. Their proportional distribution by religious affiliation could reflect the fact that Islam allows a man to have more than one wife. Muslims accounted for 17.9 percent of the aggregate males and as expected, the majority of males are Christians of different denominations with Orthodox Protestants holding sway in similar proportions to their female counterparts. However, those males with no religious affiliation are a surprisingly high 12 percent while there is a lone traditional worshipper in the ranks. The proportion of men professing to no faith in Brenu Akyinim was more than twice those in Abuesi. It may imply that this group of men in Brenu Akyinim may be less disposed to tele-guidance through religious doctrines and values concerning means of birth spacing and limitation. On the other hand, Brenu Akyinim has a significantly larger proportion of men that are Catholic (as in the case of female respondents), while a larger number of more 'liberal' Christians are found in Abuesi. Also there were more Muslims among the men in the sample in Abuesi compared to Brenu Akyinim, buttressing the fact that there were more men in polygynous unions in Abuesi than in Brenu Akyinim. Polygyny is strongly supported in Islam (as well as in African custom and tradition) and its effect on attitudes and behaviours around reproduction will be examined.

With regard to educational status, 70 percent have had some type of formal schooling. This proportion of males reporting to be literate is however lower than the year 1998 national average of 76 percent (up from 65 percent in 1993) recorded in the GDHS. Thus it can be assumed at this stage that females were comparatively better off than males at the micro level when national data is compared to information obtained on literacy from the two communities. While there were more men in Brenu Akyinim who have ever attended school, exactly half of them had never a read newspaper or magazine in any language during the year preceding the survey (comparative trend with the female respondents). Interestingly about three-fifths of men in Abuesi have ever gone to school and an almost equal proportion claimed to have consulted newspapers at varying degrees at the time of the survey.

Exposure to media which could have an influence on attitudes, lifestyles, and introduction of new forms of behaviour of the men was measured using three indicators: newspaper or magazines, radio, and television. Relative exposure to all forms of media considered in this section shows that more men use newspapers, radio and TV as a regular source of public information in Abuesi than their counterparts in Brenu Akyinim.

Within the year preceding the survey, almost half of the males interviewed had never read a newspaper or magazine in any language. This could be due to some being illiterate, and/or the fact that newspapers do not really get delivered to the communities directly on the day of production due to their location; by the time it gets there, it is already 'dead news' which could have been received either on radio or TV. Thus there is no point in spending money on newspapers especially for daily acquisition of knowledge on current events. This could partly be the reason why more than two-thirds listen to the radio daily and close to 40 percent depend on the TV daily. Less than 20 percent had never watched the TV in the year preceding the survey. However, it must be noted that while there are many radio stations the listeners could depend on for a variety of national, regional or local news and events, TV viewing is mainly restricted to the government-controlled national Ghana Television (GTV). There are other TV channels in Ghana, but their coverage is limited to the national capital Accra and immediate environs and the other major cities of Kumasi and Takoradi.

Once again, similar to the women, the labour force participation rate was very high at the time the survey commenced with only 2.4 percent reporting they had not done any work for reward in cash or kind in the year preceding the survey. As expected in the coastal communities, about half of the men were engaged in fishing and about another 20 percent were farmers. The rest of the men were in occupations such as construction, driving, trading, dressmaking and a host of others in descending order. But the aggregate data hide some proportional differences in the professional categories. Overall, while 49 percent of men were in fishing, the breakdown by community shows that there were more than four times the proportion of fishermen in Abuesi to those in Brenu Akyinim. In Abuesi, fishing is the main occupation while in Brenu Akyinim, farming was the occupation of almost half the men.

Lastly, it can be seen from table 4.2 that males with no children account for less than 3 percent of the total. Approximately 47 percent have between 1 and 4 children, and in descending order of proportion, some reported having between 5 and 8, 9 and 12, and 13 children and more as of the beginning of the survey. The occurrence of men having multiple partners accounts for why men seem to report having more children than the women. At this stage a cursory look at the relative childbearing performance of the men in the two communities did not show large differences.

4.2.2 The FGDs and in-depth interviews

The timing of the FGDs and in-depth interviews followed pattern from the multi-round survey. Most of the FGDs took place when the fishing season was winding up during the early stages of the rainy season, especially on Tuesdays and Sundays which are resting days.

A total of four FGDs were organised in each community among groups comprising adult females, adult males, a mixed-sex group of adults, and adolescents. The first three groups were randomly selected from the list of those who had been interviewed in the multi-round survey. The selected adolescents (aged 14-24 years), were drawn from within the community irrespective of whether or not they have been in the sample list of the multi-round survey.

For the in-depth interviews, an inter-generational approach was considered in order to have a flow of information enabling us to paint a picture of historical dynamics of fertility behaviour in a line of women.

Thus, women who were in the multi-round survey but have their mothers still alive and also have daughters living in the community were identified. In this manner, in-depth interviews were conducted in households with a recognisable line of descent comprising 'grandmother', 'mother', and 'daughter'. A total of 10 of such lines in each community were contacted.

Information on the background of the FGD participants shows that slightly more than half were females. It is recalled that most of the groups have nine participants on average and where they are mixed as in the case of adolescents and adults, the female-male ratio was 5 to 4. The average age of respondents was 31.1 years. This is lower than the average obtained in the multi-round survey but similarly, the males were older than the females at 32.9 years and 29.5 years respectively. One observation which did not depart from what was observed in the survey is that the participants were mostly Fanti (97.2 percent). Sixty percent of them were involved in the fishing business either as fishmongers or fishers. Another 12 percent were involved in trading and other sales ventures, while most of the adolescents that formed 20 percent of the totality of respondents were students.

Exactly three-quarters of the FGD participants had had some form of formal schooling ranging from primary to teacher training level, although the majority has had some Junior Secondary level of education. Similar to information from the multi-round survey, more than 80 percent of the participants are Christians, while about 70 percent are currently married. Most of those that have never experienced marriage are adolescents, representing 25 percent of the total number of participants.

4.3 Reproductive Health Care Provisioning in Abuesi and Brenu Akyinim

Inasmuch as Abuesi and Brenu Akyinim are rural communities, efforts have been made by government health agencies and non-governmental organisations to provide a semblance of modern health care. In the area of maternal and child health (MCH), the main thrust is to use the most cost-effective strategies within the context of Primary Health Care (PHC) programmes to reduce the high infant, childhood and maternal morbidity and mortality rates. Sensing the wide gap between the high knowledge of family planning and low contraceptive prevalence rates (GFS, 1979-80, GDHS 1988, 1993, 1998 and recently 2003), MCH ac-

tivities are to be expanded to provide much wider availability of family-planning services. The government will in addition actively seek improvement and expansion of the capability of private participating agencies and community-based family planning activities.

One pertinent aspect of this study is that of reproductive health care services provided by related institutions to the inhabitants of the two villages. The first task is to know which type of health organisation and personnel operates in the two communities; secondly to have insights into the operations of these health institutions in the context of reproductive health care, if it has bearings of the 1994 National Population Policy; and thirdly to understand the challenges health personnel face in carrying out their duties and how it influences their successes or otherwise in these rural outposts.

Institutions identified include the Planned Parenthood Association of Ghana (PPAG; a non-governmental organisation), and a government-run Child Welfare Clinic (CWC). Initially, the aim was to purpose- sample and interview high-ranking personnel of the PPAG and medical personnel of any government clinic based in any of the two communities. However, it was found in Abuesi there is a small centre being run by the PPAG, while in Brenu Akyinim, there is no PPAG centre and health care service is provided by the CWC on a monthly basis. Even though these were two relatively different organisations, similar in-depth interviews were conducted for one representative from each of the organisations with respect to their reproductive health care objectives. The two officials interviewed are full-time staff of their respective organisations; the understanding is that while 'volunteer' or 'attachment' staff could implement the health institution's goals in these communities as well, the non-permanency of their status could bring settling-in problems between rotations and lag time in understanding societal or individual needs, since clients might have been used to securing services from a particular staff member. In an area as sensitive as reproductive health, clients would prefer to discuss personal worries with and place their confidence in a familiar face or someone familiar with their personal problems. A programme's success rate has a higher likelihood of achievement if it uses staff who are permanently attached to the centre and become familiar with their clients.

In Abuesi, the PPAG staff member who was interviewed paraphrased the agency's primary objective as to promote the right of men, women

and youth to make free and informed choices about sexual and reproductive health. Additional objectives are to improve access to basic reproductive health care services, family planning information, and to improve local awareness of the most common sexually transmitted infections, especially HIV/AIDS and how it can be prevented since there is no cure at present. In Brenu Akyinim, though the worker interviewed is a permanent staff of the Ghana Health Service (GHS), she is on a monthly outreach exercise to immunise children aged below 5 years against the childhood killer diseases. She is attached to the Child Welfare Clinic (CWC) in the nearby bigger village of Brony Ibima which is about 15 minutes' drive from Brenu Akyinim (after an average wait of 45 minutes at the main taxi station). The hospital in Brony Ibima serves as a central headquarters for some trained nurses whose main way of extending medical care to villagers is to conduct outreach programmes. Thus the nurse whose circuit includes Brenu Akyinim comes on the first Wednesday of every month. To interview the nurse, an appointment was booked for one of her monthly visits. She could not be interviewed at the 'headquarters' due to the fact that she spends only a short time there to compile reports and re-stock vaccines.

One of the disadvantages of living in Brenu Akyinim is that if regular medical care is needed, the patient has to travel to Brony Ibima or to Cape Coast, the regional capital, to procure treatment. The people of Abuesi fare relatively better as they can still access emergency medical services in nearby Aboadze (a community about 5 minutes' drive from Abuesi) home to one of Ghana's thermal plants that provide electricity to the national grid, which has reputable medical services for its staff. In a way, then, inhabitants of Brenu Akyinim are at a comparative disadvantage because their access to medical services is very poor and the nurse attached to this CWC outreach centre, which is just a table and couple of benches under a tree (come rain or shine) in the taxi park, only provides informal family planning services to those who are interested or those that she feels need it more (as she pointed out, pregnant teenagers) during her monthly runs.

Despite the seemingly hostile physical environment and the demands of the job that keeps her on the move constantly, this nurse was quite optimistic. She believed that as of mid-2003, she had already covered up to 70 percent of the annual target population for child immunisation in Brenu Akyinim. However, problems faced include cost-recovery as there

are many defaulters who are financially indebted to the provider of services received. We must remind ourselves here that subsidies have been removed, and the pay-as-you-go system (popularly called cash and carry) is now in place; but the institution sometimes allows clients to defer payment of charges which has follow-up problems in getting clients to redeem their indebtedness.

Still on the issue of expenditure priorities, inhabitants of the communities live in a traditional society full of contradictions. While people are more willing to spend on social ceremonies (*out-dooring*[1], marriages, and funerals) there is a huge problem of parting with personal money when it comes to usage of public services; and medical personnel are sometimes caught in ethical dilemmas around their service to humanity and the necessity to stay afloat in order to provide better health care continuously. Thus it was not surprising that a medical doctor had to resort to unorthodox[2] means of getting remunerated for health care services rendered.

However, the technical competence of these two officials operating in different regions cannot be called into question. They were correct and clear about the effectiveness of certain contraceptives, the menstrual cycle and pregnancy, and routes of transmission of HIV/AIDS. This mini-test was carried out to ascertain the type of message transferred to their clients during counselling; this was done in order to find out if any type of bias is mixed with their messages and advice to clients. In addition, if they are not knowledgeable in these areas, there will be problems in adequately dealing with new and emerging trends as required by the 1994 Ghana Population Policy. With regard to questions designed generally around the female menstrual cycle, the two officials were able to describe why women have different ovulation periods due to varying cycle lengths. There was an apprehension that many females reach teenage years with little or no information, or even wrong information about sexuality and pregnancy. These two officials have been able to combat many prevailing myths, for example informing many young women that a woman can get pregnant the first time she has sex; that the withdrawal method is not an effective method though it is one of the preferred methods of contraception in the communities; that women who are menstruating can actively engage in sports. The two interviewees were resolute in the belief that condoms are effective in protection against HIV/AIDS if used correctly and consistently, and that people should

not take the HIV/AIDS status for granted by mere physical appearance because a healthy looking person could be a carrier of the virus[3].

The PPAG centre in Abuesi and the CWC unit in Brenu Akyinim offer counselling services to people who patronise them. The two officials interviewed are often found in positions where they are approached in strict confidence on matters pertaining to sexuality, pregnancy and childbearing that clients do not find easy to discuss with family members, friends or teachers in the community. This prompted the painting of a few scenarios the officials might be confronted with for counselling and how they will be dealt with. They were uniform in the opinion that if a sixteen-year-old girl reports to them that classmates touch her breasts, she will be educated that it is sexual harassment; to be strong and to say no; to keep records of the harassers; and that they would help victims to report the matter to school authorities. Furthermore, the two officials are always ready to advise teenagers and supply them with contraceptives if they are approached for such services. Both officials were also ready to recommend abortion to a pregnant woman who comes seeking information as to where to get one; but they believe abortion should be done after proper counselling of the patient and with an understanding of the circumstances surrounding her.

The foregoing socio-economic and related institutional background has given us a relative understanding of the context in which the subjects of this study live. Having laid out the setting, the following chapter is dedicated to unravelling the issue of marriage as one of the factors that impinge on the dynamics of reproductive behaviour. The exposition is about how partnerships, households and families are formed, sustained or broken up; what goes into the family/household decision-making system; who the heads of households are, what roles they play and what influences they have in the reproductive decision-making arena, resulting in the fertility levels being currently observed and the implication of these rates for the future.

Notes

1. Child-naming ceremony.

2. Sensing he might not get paid for treating a local patient, he promptly announced to the relatives that the patient had died on admission. The funeral committee constituted by the family gathered money needed for expenses related to the impending burial; this includes all hospital costs before the body is

released for interment. Upon getting the money, which the doctor had craftily calculated to equal his treatment bill, he released the live patient. While the doctor's action raises serious ethical questions of giving false impression of enormous psychological proportions, he felt there was no other way of getting his bill settled unless he conned the family of the patient this way.

3. However during the interview at the two communities, one could sense momentary hesitation when the question was posed with regard to the fate of a woman who is on the Pill (contraceptive) but forgot to take it one day. The visible momentary lapse in answering the question was however compensated for by the confident answer that this causes a level of imbalance in the protection level that can be corrected by taking an extra Pill during the next dose.

5 The Man in his House

5.1 Introduction

The principal aim of this chapter is to explain how marriage and its contextual changes impact on childbearing generally in the coastal parts of Ghana and particularly in the two rural coastal communities of Abuesi and Brenu Akyinim. Okonkwo (2004) argues that marriage is the greatest choice we make in a lifetime, and that failed partnerships are more often than not a result of only a minimal understanding of what pertinent questions we need to ask and the courage to accept honest answers before the official recognition of this partnership. Therefore in preparing the minds of individuals towards marriage or in appealing to the sensibilities of friends, families, and the wider society, opinions vary as to who is a 'good catch'. Additional questions posed by Okonkwo (2004) in trying to find the perfect match include: Who will suit individual tastes and perceived position in society? Is one in search of a soul mate? Is there anything like a soul mate? What are individual expectations? How does this converge with partner's expectations? Are partners chosen for the right reasons? What are the right reasons and are they subjective? Irrespective of the specific choices and conditions, these questions are all relevant.

Marriage, in Ghana, is the union between two people of the opposite sex. The union can be formally recognised by law (when contracted in a civil registry), and/or when it is sanctified as a holy matrimony after having undergone a religious ceremony in a church, or the Islamic *amalia* or *nikai* ceremony. Another type widely regarded as traditional marriage is termed the *etie awar*; fondly translated as knocking, where representatives of the suitor go to the bride's family house, armed with one or more bottles of imported hard liquor (as presents) to introduce themselves and

announce the intentions of the husband-to-be. Depending on the tribe, representatives of the groom's family on the knocking rites trip are normally three people selected from among parents, uncles and aunties. On such an occasion, a bottle of schnapps is presented as a symbolic gift to formally announce that their son is now dating a particular lady in the house (or family in case the lady is not resident at the parent's house). Statements are made to the effect that if there is any reason for the lady's family to look for her, she can be found in the boyfriend's house and he can be held responsible in case of any eventuality. Such eventualities include the occurrence of pregnancy; however this is regarded as pregnancy by 'mistake' because in the current context, parents expect the lovebirds ideally to wait till a proper marriage ceremony is performed before they engage in any sexual activity. Receiving a warm welcome and acceptance of the hard liquor immediately confers an official recognition of the announced courtship between the couples who have by now been in an informal relationship (which in many cases has led to sexual activity though a blind eye is often turned to this fact). The knocking ceremony can also be extended to asking for the hand of the lady in marriage rather than just a visit to announce the formal beginning of a courtship. However, depending on the lady's subsequent behaviour, a man may cancel marriage plans if the lady is regarded as wayward, even after knocking rites have been performed. While the knocking ceremony is performed to achieve formal recognition of courtship between couples, it can also be done on the same day as a formal engagement ceremony.

In the local sense, engagement signifies the beginning of married life. The engagement ceremony is a larger forum that brings together the extended families and friends, where the real marriage ceremony is performed. Some couples may also decide to formalise marriage at some point after the knocking ceremony by registering in a civil registry, or having it blessed in a religious ceremony. At this point, the couple receives a marriage certificate, which is useful for various purposes including gaining points for official staff housing allocation by some government institutions which give priority to married people over single people; or as part of the documentation needed to secure visas in foreign embassies. Some consuls are of the opinion that it is safer to give a visa to a married individual as he or she would not want to overstay the period of validity due to the pull factor of the spouse left at home. The system is not foolproof, as many embassies have woken up to the fact that a

few individuals have tendered fake marriage certificates to support their visa applications.

Although Ghanaian society may have changed massively in the last few decades with the roles of traditionally dominant men and submissive women being transformed, tradition and customs have never been forgotten for some Ghanaians living abroad. There is another variation to the mix of marriage ceremonies. A couple that met and married abroad still travel back home to Ghana in order to perform the knocking ceremony, having put the cart before the horse. In many instances, where a couple living abroad cannot be physically present at the knocking ceremony for one reason or another (such as finances), the groom's family resident in Ghana would in absentia travel to the bride's family house to perform the traditional knocking ceremony. This buttresses the notion that marriage in Africa involves not only the couples but the immediate and extended family.

5.2 Universality of Marriage

5.2.1 Timing of marriage for women

Within the age range (15-49 years) of the women interviewed for the survey, it is recorded in table 5.1 that more than 90 percent of the women in Abuesi and Brenu Akyinim had experienced some form of married life. The majority of the women are currently married or in a stable socially sanctioned union with a man, and others had experienced marriage earlier but now terminated (through separation, divorce, or death). The mean age at first marriage for the women stands at 19.4 years and 19.7 years respectively for women in Abuesi and Brenu Akyinim. These figures show a convergence with the target contained in the 1994 Ghana Population Policy whereby minimum age at first marriage for women is recommended at 18 years.

For the category of women who said they are 'in union', one could make an analogy with the consensual unions Magazine (2004) discovered in his study of young rural migrants in Mexico City. Such a union does not involve a religious or civil ceremony; rather it 'involves cohabitation and an aspiration to cooperation or complementarity and to autonomy'. In this context, the word *matrimonio* (marriage) is rarely used, 'but those with a partner describe themselves as casado or casada (married) and refer to their partner as their *esposa* or *mujer* (wife) or *esposo* (husband)'. The

translation of the local terms *casado, esposa*, and *esposo* as married, wife and husband, 'respectively requires a note of caution since these unions may not coincide with what English-speaking readers usually think of as marriage' in the official context.

Table 5.1
Percentage distribution of women in Abuesi and Brenu Akyinim according to marital status

Marital Status	Abuesi		Brenu Akyinim	
	Frequency	%	Frequency	%
Never married	18	7.8	11	6.2
In union	9	3.9	12	6.7
Married	182	78.4	129	72.1
Separated	10	4.3	2	1.1
Divorced	11	4.7	22	12.3
Widowed	2	0.9	3	1.7
Total	232	100	179	100

Source: Diffusion of Fertility Survey, Round 1

In Abuesi and Brenu Akyinim, age at first marriage among the women range from a minimum of 12 years to a maximum of 30 years as shown in table 5.2. Generally, the chances of getting married at a relatively older age increase if a woman has ever attended school and is currently working. However, in Abuesi, the average age at first marriage is highest among women who stated they are Catholics (22 years) and those in the fishing industry (21.5 years). In Brenu Akyinim, the highest age at first marriage is also found among women in the fishing industry, followed by those with no religious affiliation. Women who are likely to get married at the earliest opportunity in Abuesi are those who have never worked (18.8 years) and those who have no religious affiliation (18.3 years), while in Brenu Akyinim, the earliest to marry are also women who have never worked and those who said they are Pentecostal Christians. It is expected that these women who got married early would start childbearing early too.

Also in the two communities, average age at first marriage among women who are currently working is higher for those in the fishing industry, by about two years, than women in other professions as illustrated in table 5.2.

Table 5.2
Mean age at first marriage according to selected background characteristics of women in Abuesi and Brenu Akyinim

Variable	Abuesi			Brenu Akyinim		
	Mean	Range	Freq.	Mean	Range	Freq.
Age at 1st marriage	19.4	12 - 30	181	19.7	12 - 30	153
Ever attended school						
No	19.1	12 - 28	73	19.1	14 - 30	42
Yes	19.6	12 - 30	108	19.9	12 - 29	111
Ever worked						
No	18.8	16 - 23	15	17.5	12 - 20	11
Yes	19.4	12 - 30	166	19.9	14 - 30	142
Type of work						
Farming	-	-	-	19.6	15 - 26	47
Fishing	21.5	18 - 25	2	21.7	19 - 26	3
Trading	19.2	12 - 30	142	19.7	14 - 30	73
Religion						
None	18.3	15 - 24	15	21.3	15 - 30	6
Catholic	22.0	18 - 29	4	19.5	15 - 27	62
Orthodox Protestant	19.8	14 - 26	49	20.1	12 - 29	49
Moslem	18.9	12 - 26	45	20.8	19 - 25	4
Syncretism	19.8	12 - 30	40	19.9	15 - 25	7
Pentecostal	19.3	14 - 28	28	18.0	15 - 24	19

Source: Diffusion of Fertility Survey, Round 1.

The fishing activity for the women starts as early as age 6 where they help their mothers in the fish smoking and drying processes. The drying process is done for fish harvests not sold as fresh when the fishing crew lands on the beach early in the mornings; such fish have their guts slit and emptied as a preparatory step towards salting and smoking, which takes several days. This is a continuous activity during the fishing season, and in the lean season, trips are made inland as far as Kumasi (approximately 400km away) to market the processed fish. The processing and commercial activities go on through the early stages of the woman's life. Their frequent trips and interactions with other people inland hinder their developing and maintaining (long-term) relationships that could encourage them to marry early. A woman and her family will start to think about marriage when it is felt that she is old enough to be an independent fishmonger.

Living in Brenu Akyinim presents a different set of opportunities for the women with regard to religion and marriage. Women who profess to be Pentecostal marry earliest at the average age of exactly 18 years and

women with no religious affiliation get married at the highest average age, 21.3 years. Catholic women in addition get married about one year younger than Muslims and Orthodox Christians. Since there were only four Catholic women interviewed in Abuesi compared to sixty-two in Brenu Akyinim the seemingly higher age at first marriage for Catholics in Abuesi can be attributed to distortions caused by sample size bias. This helps to avoid the hasty conclusion of categorising Catholic women as being more likely to enter into marriage at relatively higher ages. Pentecostal doctrine recommends and encourages formalisation of romantic relationships in order for adherents to avoid committing fornication. Women who strictly abide by this are likely to marry younger than their counterparts of other faiths.

5.2.2 Men and marriage

It is good to reiterate at this point that one of the criteria used for men who participated in the longitudinal survey was that they should currently be in stable and recognised unions (civil, traditional, religious) with women already in the sample as respondents. This automatically excluded single, separated, divorced, and widowed men from being interviewed. If at any point during the multi-round survey any of the sampled women got divorced or separated and got a new husband or partner, this usually called for the incorporation of this new man into the sampling frame and a hybrid questionnaire was served to probe the man's background from 1998 when the survey started up until the time he was co-opted into the survey. While it is essential to note that the hybrid questionnaire takes more time to complete than the normal questionnaire for the round when the man joined the sample, the structure and content of hybrid questionnaire remains the same. Supervisors and field assistants take time in explaining the essence of the hybrid questionnaire to the new entrant, who might not have been familiar with regular survey procedures in the community. The interviewers are careful in noting that there might be respondent fatigue at some point in the extra-long interview (compared to the wife's), and quell doubts so that the new respondent does not distance himself from responding to personal or sensitive questions. Therefore there were only two categories of men's marital status in the sample; these are the married and those in-union. Table 5.3 below shows the percentage distribution of sampled men living in Abuesi and Brenu Akyinim according to current union status.

Table 5.3
Percentage distribution of men living in Abuesi and Brenu Akyinim according to current union status

Marital status	Abuesi		Brenu Akyinim	
	Frequency	%	Frequency	%
In union	2	1.3	3	3.2
Married	151	98.7	90	96.8
Total	153	100.0	93	100.0

Source: Diffusion of Fertility Survey, Round 1

More than 95 percent of the men are officially married, signifying a preference for not wanting to just be in-union. On the average, men get married at a younger age (23 years) in Abuesi than in Brenu Akyinim (25 years) and it is generally observed that age at first marriage is higher for men than for women in the two communities. In addition, even though more than three-quarters of the men are in monogamous unions, there is a higher incidence of polygynous marriages in Abuesi than in Brenu Akyinim. This is attributed to a higher proportion of Muslims in the former community than in the latter. In Islam, having multiple wives is allowed; some Christians practice this, but by Biblical injunction they are not allowed to occupy certain positions in the church administration. Bigamy is also not prohibited by law in Ghana.

Table 5.4
Percentage distribution of men in Abuesi and Brenu Akyinim according to multiple partnership status

Number of wives	Abuesi		Brenu Akyinim	
	Frequency	%	Frequency	%
1	118	77.1	80	86.0
2	32	20.9	12	12.9
3	2	1.3	1	1.1
4	1	0.7	-	-
Total	153	100.0	93	100.0

Source: Diffusion of Fertility Survey, Round 1.

The fundamental importance of marriage to males is also considered along the lines of how socio-economic activities (education, work, and

religion) have influence on the age at first marriage. In Abuesi, it is observed that the likelihood of marrying at a later age is higher among men who have had some formal schooling (23.4 years), traders (26 years), and Catholics (25 years). This situation is comparable to their wives' except the fact that women who engage in trading get married at a lower age than those in other types of work. As expected, Muslim men marry at a relatively younger age than men in other religious categories.

Table 5.5
Mean age at first marriage according to socio-economic background of males living in Abuesi and Brenu Akyinim

Variable	Abuesi			Brenu Akyinim		
	Mean	Range	Freq.	Mean	Range	Freq.
Age 1st Marriage	22.8	13 - 40	138	24.9	14 - 60	89
Ever attended school						
No	21.8	13 - 40	49	27.5	18 - 60	13
Yes	23.4	13 - 40	89	24.5	14 - 38	76
Ever worked						
No	23.4	20 - 28	5	38	38	1
Yes	22.8	13 - 40	133	24.8	14 - 60	88
Type of work						
Farming	22.5	20 - 25	2	25.1	18 - 39	44
Fishing	21.6	13 - 40	95	20.5	15 - 28	13
Trading	25.9	18 - 33	7	20	20	1
Religion						
None	21.9	13 - 30	8	24.2	15 - 60	17
Catholic	24.4	20 - 27	5	24.3	14 - 35	26
Orthodox	23.1	15 - 35	44	26.3	18 - 38	24
Moslem	21.2	13 - 40	36	24.5	24 - 25	2
Syncretism	23	15 - 40	25	24.8	20 - 30	4
Pentecostal	25	17 - 38	20	25.3	20 - 39	10

Source: Diffusion of Fertility Survey, Round 1.

However, survey data in Brenu Akyinim presented in table 5.5 suggest that males who have never been to school or had not worked for one year preceding the start of survey had their first marriage at higher ages than their counterparts living in Abuesi. The higher age at first marriage in Brenu Akyinim is traced to outliers: a man who had never attended school said he got married for the first time at age 60; another man who was unemployed at the time of survey reported being 38 years old when he got married for the first time. These figures distort the mean age at

first marriage for men, yet there are reasons for their relative occurrence in the locality. It was found that the man who got married for the first time at age 60 years was a sickler[1] and for a long time was not healthy enough to engage in a vocation on a long-term basis. The associated negative financial environment around him made many parents discourage their daughters from getting married to him. He finally got married at age 60 when he achieved some semblance of good health and economic stability; he was described as somebody who 'did not chose to marry late in life but his situation compelled him to do so'.

With reference to religious categories, males who are Orthodox Protestants and Pentecostal Christians got married at higher ages than those in other religious categories. Considering the age at which men in different occupations get married, a further highlight of the effect of occupation is revealed in the two communities as males in the fishing industry get married at on average a younger age than those in farming. Traders in Abuesi exhibit the highest average age at first marriage due to their constant movement and the itinerant nature of their job, which makes it less conducive not only to start a family but in maintaining regular physical presence.

5.3 Premarital Sexual Activity

The essential question remains as to at what point the marriage is believed to have started. Is it the day the *etie awar* is performed or when the marriage certificate is obtained, either in a religious or civil ceremony? During any of these stages, the courtship/relationship/union has been recognised and childbearing approved (and in most cases accepted). Some Christian denominations have been strict if, for example, a woman delivers a baby at a point less than nine months (thirty-six weeks is the normal gestation period) after a marriage was contracted in a church ceremony. If there is no acceptable medical reason, like pre-mature delivery, then it is surmised that the couple involved engaged in pre-marital sexual intercourse, which is forbidden in the church doctrine; the couple can be told to relinquish or step aside from any official position or leadership role they occupy or perform in the church.

However, this type or pattern of reaction to identified premarital sexual activity is neither limited to the church nor recent. It was remarked by a 46-year-old female trader in Abuesi that '*about forty years ago….sex was forbidden until marriage*'. Some adolescents added that previously, people

who engaged in non-marital or pre-marital sexual activities were made outcasts in the community; when such offenders are discovered, they are made to offer sacrifices in form of slaughtering goats to pacify the gods. The belief system then did not permit couples to have sex before marriage and punishments were meted out to people who indulged in it.

But can it be it that people are just waking up to the idea of pre-marital sexual activity? During the FGD sessions in Abuesi and Brenu Akyinim, the general agreement was that '*even if sex was practised by people in informal unions about 50 years ago, it was not as rampant as it is today'* (in 2003). A 37-year-old fisherman stated that '*many people did not consider sex as a priority at that time compared to now*'. These days, people say '*we are in modern Ghana*' implying that pre-marital sexual intimacy is not to be frowned upon. Teenagers are of the opinion that '*nowadays people are free to initiate sex before marriage*'. Ownership and relatively easy access to the media, especially the television and home video, presents another angle from which one can view changes in sexual orientation among Ghana's youth. Citing a report compiled by Rebecca Collins (a psychologist), Conlon (2004) found that about two-thirds of entertainment programmes contain sexual content ranging from jokes and innuendo to overt and explicit references to intercourse. In his assertion, teenagers who watch a lot of television with sexual content are twice as likely to engage in intercourse as those who watch few such programmes.

A woman's fidelity is highly valued, and having multiple sex partners compromises her respectability. But many residents of Abuesi and Brenu Akyinim found a common ground to the underlying cause of sexual explosion in contemporary times; that is, young women dressing provocatively. In a bid to keep up with fashion '*some young women and girls put on provocative dresses and this increases sexual urge among men*'. A 28-year-old fisherman suggested that '*a type of dressing called apuskeleke entice a lot of men to go in for sex*'. When probed further, *apuskeleke* refers to mini-skirts or tight trousers worn by young women in public, which have a tendency to reveal body curves.

In sharp contrast to women, men have much greater social latitude in terms of acceptable sexual behaviour and are expected or even encouraged to engage in practices considered inappropriate for women. Moreover, compared with what is expected of women, far more emphasis is placed on sexual conduct as a means for young men and adult males to attain respectability. The importance of sexuality in defining masculinity

is embodied in the concept of being referred to as a '*champion*' or being '*brutal*'.[2] According to Varga (2003), such terms denote 'a man who is socially successful and popular with women, although its colloquial usage has strong sexual connotations'.

Thus in Brenu Akyinim it was contended that having extra-marital affairs is like singing 'the national anthem' (i.e. common practice) to some men in that '*if you have a wife you must have a girlfriend in addition*'. Some said that teachers in schools are '*keeping relationship with the school girls*' and while some men leave their wives and travel for a long time, it makes the women '*engage in extra-marital sexual activity behind the husband*', more so '*if the woman is not the God-fearing type*'.

For teenage girls, adolescent motherhood also means social stigma, but paternity acts as an intervening factor in the extent to which adolescent childbearing affects female respectability. Bledsoe and Cohen (1993) contend that paternity may or may not be linked with marriage in African society; however, it confers social legitimacy upon a birth. In Ghanaian society, acknowledgement of paternity implies social and financial commitment to a child on the part of a man and his kin and endows the child with rights and status within a society (Preston-Whyte 1974).

Further on the issue of sexuality, older participants in the FGDs were melancholy in their remarks, saying that 'in modern times, the moral fabric is gradually breaking down; there is less fear about sexual activities compared to times when we were younger'. A 46-year-old man further stressed that 'borrowed culture has influenced our young people's way of doing things; they copy and initiate what is done abroad (to their personal detriment)'.

Judging from the above, the essence of the relative ban on pre-marital (and extra-marital) sex was to discourage sexual activities that could lead to childbearing among unprepared couples, and in times past might have helped in stemming the rate of childbearing. From a morally-correct perspective, the taboos placed on pre-marital sex would encase childbearing in the protective cocoon of couples in a marital setting who were adequately prepared psychologically, financially, and spiritually with an extended family background ready to lend supporting hands in times of needs for child rearing. But Abayie (2005) opined that the extended family system that 'was once the backbone of the country's society is now losing ground to the nuclear family system which seeks to promote the interest of only a limited number of people'.

Anne Atkins, a social commentator in the United Kingdom (UK) blamed the soaring rate of sexually transmitted infections (STIs) on high-risk behaviour among young people in the UK 'as more young people are having unprotected sex, encouraged by the sexualised culture all around us. And yet do we see the real answer to the problem, abstinence'. In her conclusion to a contribution posted in the Daily Express (July 29, 2004), on 'why can't the young just say No in sex-mad Britain?' Atkins recommended that 'now perhaps part of the antidote to our moral decay might be the influx of other religions into this country. Hindus, Muslims, Christians from Asia and more family-friendly cultures raise their children with a sense of propriety and a context, usually marriage, to sexual expression. If the faith communities unite to give a lead, all might not be lost for our children's children.'

Coming back to Brenu Akyinim, one participant in a male-only FGD emphasised his personal support for a ban on extra-marital sex but in addition proposed polygyny as a way out for men with a high libido by saying that '*today many people are afraid of contracting the HIV; even I have two wives and this will prevent me from going to other women for sex*'. But he believes that sexual promiscuity in the community is not that high, possibly due to the knowledge of the existence of HIV and other STIs in that 'the absence of HIV or denial of existence of other STIs may increase sexual promiscuity among the youth'. This in a local sense sheds more light on the wider debate about link between HIV prevalence and sexuality. Since HIV is blood-borne, transmission ranges from heterosexual and homosexual sex, blood contacts arising from use of unsterilised sharp objects used earlier on or by an HIV-infected person (e.g. in hospitals, among intravenous drug-abusers), vertical transmission in breast milk from infected mothers to babies, and transfusions of HIV-contaminated blood among other things. Many people argue that the limiting the cause of increase in rates of HIV prevalence to sexual intercourse amounts to scare-mongering that has direct effects and long-term repercussions on the face of sexuality in Africa. The majority holds the belief that heterosexual intercourse is predominant and that only a few engage in homosexual activities that could pre-dispose them to HIV infection. Supposedly, the prevalence rate is not really as high as is often quoted and the gloomy picture being painted is to promote the use of condoms which will help boost sales for their Western manufacturers, limit childbearing, and in the extreme case, impoverish already poor sub-Saharan African

countries who have no other choice but to buy high cost anti-retroviral drugs for their citizens who are infected with HIV (or have developed full-blown AIDS). Evidence against the touting of heterosexual intercourse as a major route of HIV transmission was cited in a South African Presidential AIDS Advisory Panel Report.[3]

5.4 The Need to Marry

The primary goals of individuals are different as they seek union with members of the opposite sex. These include procreation, occasional sex, companionship and love, shared housing costs and childrearing convenience. In addition, many issues of potential downsides are anticipated, such as preparedness to give up individual freedom, submissiveness to the will of spouses and the necessity to have the compromising nature that it takes to deal with marital conflicts.

However, marriage does more than give a context to sexual expression with all its ramifications for childbearing and sexually transmitted infections. Many participants in the FGDs in Abuesi and Brenu Akyinim also talked of the economic benefits associated with marriage. These include the financial support couples derive from each other, and as a 28-year-old fishmonger concurred, 'couples can work together or operate joint savings account' in order to improve their financial position. A female teenager with JSS level of education and an apprentice at the time of the FGD added that a wife's duty is to support the husband '*if the husband should find himself in financial difficulties*'. Conversely, from a 65-year-old fisherman's perspective, '*when women incur losses in their businesses, their husbands are to pay off the debts; this support should be reciprocated when the men are in financial difficulties*'.

It was observed that these statements were made in passive ways, suggestive of the ideal situation; in practice, these financial obligations are often not met or upheld by the couples. The concluding statement made by the 65 year old fisherman was, however, more definite when he said, '*this is why they contracted the marriage*'. In the event that financial help or support is not given, conflicts can arise in such unions.

From a social perspective, marriage is deemed '*important in human life because our forefathers have said that two hands are better than one*'. More important is the status of responsibility or attainment of a new and higher level of maturity that is conferred by society on a couple when they officially get married. Marriage, however, serves another purpose for the enforce-

ment of local notions of masculinity. As put by a teenager in a FGD session, '*if you are a man in a community and you refuse to marry, people think you are an irresponsible man; but when you get married, people give you respect and see you as a responsible man*'. Being a man implies taking on financial responsibilities of other people (wife, children, and the extended family). In other ways, the newly married person takes on the air of maturity. Another angle posited by Magazine (2004) is that 'marital dynamics as well as husbands' attempts at domination can be better understood by employing a unit analysis that extends beyond the household itself to include husbands' relationships to other men'. In situations 'when wives make demands on the same limited resources and husbands refuse, making claims to a dominant and independent masculinity, they are responding to, while also obscuring, their obligations to other men'. For example, these 'other men' in groups called *bandas* (gangs) in Mexico City, 'try to obligate each other to spend time and resources that could otherwise be directed toward conjugal relationships'.

Getting married comes with costs. On the economic side, the financial support or obligation from a partner, especially those borne by the men is relatively heavy. A lot of money is needed to organise the marriage ceremony, beginning with the planning of the wedding. It was agreed in the FGD that a man's expenses double with marriage as he has to bear most of the brunt of the cost of living when the couple starts bearing children. A 19-year-old male student in Abuesi observed further that '*once a person marries, the marriage includes the entire family member of the spouse, and if any of these family members come to visit the couple, money would have to change hands*'. That is, in-laws more often than not, pay visits whenever they are in need of financial assistance (among many other reasons) and all these add up to the economic costs of being a husband. In essence, husbands bear financial burdens of extended family members, from both his side and from his wife's family.

This in a way further strengthens the hegemony and decision-making power of the man over his wife. Another adolescent in Abuesi painted a worst-case scenario where a man can really land himself in trouble, when he decides to go ahead and get married, knowing full well the financial burdens associated with marriage, and unfortunately finds himself unemployed at some point after the wedding ceremony. This creates an entry point for marital discord and the opportunity for the employed wife to be the front-running decision-maker in the household; in some

cases it makes the affected men feel insecure, as they believe that their masculinity is being challenged. This will be discussed in due course; however it is important to note that if adolescents at this point have certain notions of masculinity, there is the higher likelihood of the continuance of male hegemony as the natural household decision-maker irrespective of the socio-economic status of the wife. Among young rural migrants in Mexico City, Magazine (2004) found that 'when a husband does not contribute a large enough portions of his earnings to household expenses and thus fails to fulfill his marital obligations, complementarity breaks down. This breakdown of complementarity not only provokes the wife to make demands on her husband but also frees her to do so since the husband's authority over her depend on the complementarity. The husband may interpret his wife's demands as an infringement upon his manhood.'

On the social side, people in Abuesi and Brenu Akyinim highlighted other social costs partners must be ready to bear once they get married. From a religious viewpoint, cases were cited of Muslim women who are immediately confined to purdah after the marriage ceremony. Much of their freedom to mingle with other people is seriously curtailed and in nearly all cases, the women are totally physically covered even if they have to visit the market.

From a non-religious perspective, a 30-year-old fisherman in Abuesi noted that '*married people* (especially women) *cannot socialize with their friends the way they used to do* (hugging, embracing, and so on)'. While the freedom of most women is curtailed when they marry (in order to conform to proper social decorum), it was found that this applies to men also and it is not as strict as that of the women. But in some instances, women '*can prevent their husbands from going out when they think the time is odd*'. This leads us to the question of who then is the main decision-maker in the household.

Generally, the mantle of decision-making rests on the male partner. A striking event occurred in Abuesi during the male-only FGD. A 34-year-old fisherman made a statement that was concurred with by the panel of discussants, that '*because a man went to marry the woman, he should have the maximum decision-making power on all issues pertaining to the marriage*'. Related to this authority is the financial edge a man has over his wife in that '*he is the breadwinner, he provides the chop money and the wife depends on the husband*' meaning she cannot have the same decision-making power as the man in

a household. Adolescents also echoed the relatively higher authority of the '*man in his house*' which arises from facts that '*he went to marry the woman', 'men are breadwinners for the family*', and '*women do not give good suggestions or contributions*'; all these account for why their '*voices are not heard most of the time*', making men automatically have more decision-making power.

However, a note of caution was sounded by a 36-year-old trader in Brenu Akyinim during the mixed-adult FGD that while 'women understand that the men have power because they married you…so they have every right over you, men must bear in mind that without we women, they cannot survive'. Such areas include being advisers to their husbands in that 'a woman can encourage her partner to look for job so that he can earn more to support the household if the man is jobless'. Further exercise of power can be exhibited by women who can encourage their husbands to use contraceptives, if they already have many children, otherwise the women can look for unorthodox means of preventing their husbands from having sexual intercourse with them. A 37-year-old fisherman retorted in Abuesi that 'some women put on about three shorts before they go to sleep in order to make it difficult for their husbands to have easy access to sex; they do this to avoid pregnancies especially if their men are not performing the roles expected of the head of household'. The women are as varied and often as conniving and as authoritative in their sexual escapades as the men who are supposed to be nominal heads of households. Whatever the truth of the matter, the fact remains that gender relations are much more complicated than is assumed or allowed to be, especially in quantitative analyses or in trying to understand social engineering. Furthermore, the association between gender relations and demographic behaviour is subtler than that depicted by analyses of survey data.

Of course, being a poor rural woman comes with many handicaps. These, according to Saavala (2001), include the drudgery of housework, the greater dependence on children in the present and for the future, the perceived relatively greater inability to walk out of an unsatisfactory relationship and the more limited access to efficient birth control. The women might have internalised and accepted the role of the man as the main breadwinner cum decision-maker in the household, but the recognition of this responsibility or respect given can be withdrawn from the man if the occasion warrants it. In the mixed-adult FGD in Abuesi, one area identified by the participants in which women can enjoy household

decision-making power is '*domestic issues such as cooking and buying stuffs at the market*'. Issues concerning children's welfare (feeding and school clothes) are decided by women, especially housewives who stay at home most of the day. Men were also urged to 'co-operate and understand their wives on sexual issues' because 'women know their menstrual cycle better'. When conflict ensues, some men may resort to violence or other forms of abuse in their effort to regain authority (Magazine, 2004; Bhabha, 1995). The abuse in turn provides the wife with a legitimate reason to leave her husband, although she may return if the husband agrees to fulfil his obligations. But the intention here is neither to paint a not-so-rosy picture of women as wives nor is it to justify the treatment meted out by their abusive partners. The objective is rather to advance understanding of some contexts of male dominance.

5.5 Marital Stability

To attempt to understand the issues related to why marriages last or fail, it is necessary to start from the very beginning. Each couple should ask themselves questions like what marriage means to them, why couples get married, personalities involved in the marriage contract, and how they get married and answer them individually and honestly. Avoiding these pertinent questions as they relate to the peculiarity of each individual is a recipe for future trouble.

Among the women who had ever experienced or were currently in a marriage, 60 percent of married women in Abuesi and about 41 percent of married women in Brenu Akyinim stated that their married status at the time of interview was not the first one. This reveals a new trend that goes against the high expectations of stable long-term first marriages. But it is important to note here that during the five-year survey period, there were a few instances where some women got separated from their partners and after a while got back into union with previous partners.

Generally, a chain of events leads to a separation. While Gutmann (1996) and Melhuus (1998) attribute marital strife to conflicts regarding husbands' control over wives' bodies and sexuality, others like Beneria and Roldan (1992) and Mindek (2003) link it primarily to conflicts surrounding control of household resources and the fulfilment of obligations. Issues concerning finances and coital frequency ranked highest among causes of marital discord in Abuesi and Brenu Akyinim. Adolescents in Abuesi pointed out that '*sometimes the chop money provided for main-*

tenance of the home is small and when the wife asks for upward adjustments, this degenerates into quarrels'. It was further observed by some adults in Abuesi that '*some women are never transparent in their dealings with their husbands; they will never declare their financial position to their husbands but would rather continue to ask for more (money) from them*' and that this can lead to disagreements. Another assessment from the men of Brenu Akyinim was that '*a man who has extra-marital affairs is what every woman hates in life*'. Conversely, a woman who does not cook regularly or does not attend to her husband's laundry, prepares fertile ground for quarrels. Disputes also arise due to drunkenness on the part of men, and women refusing to prepare meals for their husbands.

Table 5.6
Percentage distribution of currently married women according to previous marital experience

Ever married before	Abuesi		Brenu Akyinim	
	Frequency	%	Frequency	%
Yes	128	60.1	68	40.5
No	85	39.9	100	59.5
Total	213	100.0	168	100.0

Source: Diffusion of Fertility Survey, Round 1

Sexual incompatibility or incompetence formed a basis for wider discussion. In Brenu Akyinim, there is a general perception among the FGD participants that anybody who thinks marriage is not important means the person cannot make love with a woman. Impotent men are called crocodiles; that is they have brute strength but are sexually dysfunctional. Sexual virility is the epitome of manhood, more so when it produces a child as evidence. It was summed up that '*marriage is important because that is the way to show your friends that your manhood is not dead*'. Bullough (1994) sees this kind of statement in the light of European medieval men who were defined in terms of sexual performance; in the Middle Ages, the basic assumptions was that a man was superior to a woman. In a different context in pre-eighteenth-century America, Rotundo (1993) (in Garlick, 2003) claims that the essence of manhood was to be found then in a man's patriarchal role as head of a household. The notion of duty is inherent in the postulation that 'a man must perform his sexual

duty according to nature, and he must take his place at the head of family as the embodiment of God's authority' (Garlick, 2003). This situation is not prevalent in Ghana, and in fact, Connell (1993) argued that masculinity as it is known today in the industrialised countries was produced by the gender order existing in both Europe and North America in the eighteenth century.

Men in Abuesi and Brenu Akyinim can also be aggrieved if their wives have extra-marital affairs. This type of situation comes up when men are financially handicapped. Some women look for boyfriends who can support them financially, up to the point that these women move into the new partners' abode. Conversely, '*a promiscuous man who decides to take good care of his girlfriend at the expense of his wife and children*' invites trouble to his matrimonial home when such a serious breach is discovered. Conflict also occurs in bed: if '*a woman is not properly aroused by her husband and she refuses to have sex with her husband, the man usually gets angry*' but would not want to reason along the lines of his own impatience.

All this goes to show that marital life is neither smooth sailing nor a bed of roses. In the absence of marital bliss, some individuals seek succour or comfort in informal unions. This type of relationship between a man and a woman is based on a gentleman's agreement where terms of reference include financial and sexual obligations, and which is not strictly binding, relatively easy to terminate, and in almost all instances does not entertain ideas of childbearing. However this relationship could naturally lead up to marriage, or be a catalyst for marriage when the woman '*accidentally*' gets pregnant, does not want to terminate the pregnancy, and is therefore forced in a way to marry the man (or if he is not ready to marry, she may terminate both the pregnancy and the relationship), or make the man assume responsibilities (or ownership and prenatal care) in order to legitimise the pregnancy. Since in many cases the financial burden is borne by the man, it is believed that some women use getting pregnant as a strategy in order to get financial benefits. Odd instances are cited where a woman gets pregnant by another man but ties the pregnancy to another, richer, man.

In Abuesi and Brenu Akyinim, people agreed that informal union is common but an undercurrent of assessments shows an ironic negative perception. The belief is that a man's benefit is the sexual satisfaction derived, but he will always lose on financial basis. An FGD participant remarked that '*your partner is not obliged to help you in your business* (as a wife

would) *but rather demand money from you*'. Therefore, informal union is costly to maintain, especially if the man involved is married (which means he now has a wife and a girlfriend). Others believed that it is not only costly to maintain, but lowers the moral standards in the community.

More problems arise if the 'girlfriend' dies due to pregnancy complications (including from abortion, eclampsia, labour or delivery), and the consequences are heavy for the boyfriend or man-friend who caused the pregnancy. A 45-year-old fisherman in Abuesi noted that the boyfriend of the dead lady '*will be expected to perform the marriage rites before her burial is permitted; it is a big cost to pay*'. Another man in Brenu Akyinim exclaimed: '*if the girl dies in your room, it will be better to kill yourself before the family sees you*'!

For those who were not fatalistic, it was admitted that informal union is more costly than marriage because the girl knows she will not be with the man forever, thus she will make sure the man spends a lot of money on her (in return for her sexual 'favours', but it is not termed prostitution as it has elements of an amorous relationship). The women of Brenu Akyinim also believe that men find it costlier to maintain informal unions than proper marriage because the girlfriend '*will always demand new gifts and money everyday*' but women suffer more as men '*overuse the women sexually and dump them*'.

Generally, the potential contribution of couples in informal union to overall childbearing is low. More often than not, the occurrence of pregnancy leads to a formalisation of the union. Except when conscientious information is obtained in order to determine if pregnancy necessitated the marriage, what type of relationship was in existence at the time of conception and gestation and the effect of pregnancy on the decision to get married, it will be difficult to quantify the contribution of pre-marital pregnancy and childbearing to the total fertility rate (TFR). In many cases, it was difficult to get true information with regard to whether the occurrence of pregnancy led to the decision to enter into marriage or whether the marriage resulted in pregnancy.

5.6 Childbearing in Marriage

In the ideal situation, as a 39-year-old married woman in Brenu Akyinim observed, '*marriage is important for companionship, raising children, and building life-long relationship*' between a man and a woman. The importance of marriage to childbearing was summed up from a religious viewpoint in

Abuesi and Brenu Akyinim, with apparent reference to the book of Genesis in the Bible,[4] and many residents used this to refer to children as gifts from God; this gift should be obtained after marriage between a man and a woman because God ordered marriage to take place as a legitimate basis for procreation. Many participants in the FGDs were more specific by saying that '*God made marriage purposely for childbearing*' and '*marriage must take place before childbearing as ordered by God*'.

There used to be a practice where a sheep was presented to a wife after she successfully delivered a tenth baby (usually called *badu guan* in the Fante language) in a bid to encourage married women to have many children. While the conferment of this social status used to spur women to have as many as 10 children, the attendant socio-economic and health effects have dissuaded many women from embracing this practice. Evidence has also been shown that marriage is less stable than it used to be, thus from an economic perspective, raising children as a single parent is not the best situation due to the enormity of attention required by the child and expenses involved in taking care of the child. Thus it is advocated that couples marry so that they can join together to raise children. In recent times, it has been recorded in Ghana Demographic and Health Surveys (GDHS) that since the 1980s, childbearing performance of women has dropped significantly from an average of seven children per woman to about half this number.

Table 5.7
Mean number of children ever born (MNCEB) per woman and ideal number of children (IDNC) according to current union status of women in Abuesi and Brenu Akyinim

Variable	Abuesi			Brenu Akyinim		
	Mean	Range	Freq.	Mean	Range	Freq.
MNCEB						
In union	1.7	0 - 6	9	1.9	0 - 5	12
Married	4.1	0 - 12	182	4.4	0 - 11	129
IDNC						
In union	3.6	2 - 6	5	4.5	3 - 6	8
Married	4.3	1 - 10	146	4.2	2 - 12	111

Note: IDNC – Ideal number of children; MNCEB – Mean number of children ever-born.

5.6.1 Marriage and union: The views of married women

Being properly married (that is, having undergone an acknowledged process of introduction, engagement, and 'official' wedding) gives a sense of stable partnership with a higher sense of security than being in-union (socially recognised for childbearing but less secure, like a loose federation). It was not surprising therefore to find that married women in Abuesi have two-and-a-half times more children than women in-union; in Brenu Akyinim, married women have twice as many children as those in-union.

While the actual childbearing of women in-union is low compared to the numerical ideal they stated (indicating the desire to have more children) in both communities, there is the feeling that childbearing could be on the increase if the women in-union have the opportunity to formalise their relationships, thereby making their desires attainable if one of the main goals of getting married is to create an enabling environment for procreation. Oddly enough, women in Brenu Akyinim who are in formal marriages seem to have marginally exceeded on the average the childbearing desires they identify with, while those in Abuesi are still a few points away from achieving theirs.

5.6.2 Childbearing and marital status: What married men think

Childbearing achievement and desires of the men were also viewed against the backdrop of the marital status. In a situation comparable to their wives, the formally married men in the two communities bear more children than those in relatively less formal unions. The difference is more pronounced in Abuesi, where married males on the average have more than five times as many children as those in less formal unions. The difference is less dramatic in Brenu Akyinim where married men only have approximately twice as many children as those in-union. However comparing across the board for males in-union, it appears that in Brenu Akyinim men are becoming less encumbered by the need to be in formal union before having children, as they reported having more children in this setting than the same category in Abuesi. While the sample size of males in-union is relatively small, this data signifies another part of the emerging complex changes in reproductive behaviour taking place in contemporary societies.

Table 5.8
Mean number of children ever born (MNCEB) per man and Ideal number of children (IDNC) according to current union status of men in Abuesi and Brenu Akyinim

Variable	Abuesi			Brenu Akyinim		
	Mean	Range	Freq.	Mean	Range	Freq.
MNCEB						
In union	0.5	0 - 1	2	3.3	1 - 6	3
Married	5.8	0 - 20	151	5.6	0 - 19	90
IDNC						
In union	2.0	2	1	4.0	4	1
Married	5.3	1 - 20	116	4.1	1 - 10	67

Source: Diffusion of Fertility Survey, Round 1.

5.6.3 Childlessness

Married couples that do not have any children to show for their efforts in the union are usually scorned in society, especially if they exhibit 'improper' attitudes and behaviour towards other people's children. A 37-year-old fisherman of the traditional religious faith in Abuesi contended that 'once people get married, they should try and have children; you can be scorned if you try to send somebody else's child on an errand and he/she refuses, it is a signal that you should have your own child'. Depending on the social context, especially where families live as co-tenants in a house, comments on the scenario described above could be harsher if there had been points of clash or discord between such families. For example, sources of disagreement could arise from appropriate sharing of water and electricity bills, or someone shirking on cleaning responsibility of the compound. Whether or not the parent of the child being sent on errand is the guilty party, snide comments referring to the pains of childbirth could be used against the woman/man sending the child on errand. While this is totally disconnected from initial point of discord as co-tenants, women who have children use it as a quick reminder and weapon in emotional blackmail in trying to win arguments. In this case, she will point out that if the person sending her child on the errand had had the experience of going through childbirthy, the pains would remind her to be more careful with other people's children (as if the child would come to harm when on the errand).

This is also in line with what Castle (2003) found in Mali, that 'other women can be wary of letting their own children be sent on errands by the supposedly infertile woman lest there be dangerous supernatural consequences'. Some young boys and girls also give flimsy excuses to avoid running errands and refuse to give ear to someone who is perceived as barren. Relatives and in-laws also use other means to put pressure on couples to bear children, if within about two years of marriage there is an apparent or misconstrued sign of infertility.

5.7 Birth Timing

5.7.1 The first child

One of the determinants of total number of children borne by fertile women is the spacing between one birth and next. This is important because the length of these intervals has important consequences for the health and activities of both mothers and their children, and is as well a major determinant of the overall level of reproduction for the population as a whole. One has to be ready for children before entering into marriage, as a farmer in Brenu Akyinim reasoned: '*immediately you enter into marriage, you know you can have children at any time, so you must be prepared*'. This state of readiness includes being in gainful employment, establishing some profitable business, and having good accommodation.

On a personal strategy note, a 30-year-old trader in Brenu Akyinim expressed that 'what I considered before having my first child was to have a man who wanted to be a father, and have enough material property for the children'. Others countered that being financially sound should not be the precondition to having a first child; one must consider physiological maturity. A 19-year-old male adolescent in Abuesi expects that 'on part of the women, they should consider whether their breasts are big and well developed so that breastfeeding their babies will be smooth'. This may sound naïve, as having big breasts may not necessarily translate to proper and adequate breastfeeding practice on the part of the woman; the incidence of inverted nipples, insufficient milk production and a host of incongruent breastfeeding practices may interfere with 'smooth' breastfeeding. However, it does bring to light the concern associated with incidence of Vesico Vaginal Fistula (VVF) among very young females married off to older husbands. These females are not yet physiologically developed enough to successfully handle the processes of preg-

nancy, gestation and parturition. VVF, a major factor in maternal morbidity and mortality is prevalent among young Muslim women who go through pregnancy and childbirth, basically because they are expected to have children as soon as they become nominally married, at tender ages. For example, Shadpour (1999) gave evidence that early marriage is actively promoted in Iran because Traditional Islamic law (Sharia) favours early (female) marriage as a social and religious value. But early marriage is closely linked to early, repeated and unplanned childbearing and it is not unusual for both mother and child to die during the birth (Monekosso, 2001).

One cannot put the sole blame on one religion or the other. It is believed that a breakdown in societal values and norms has led to a recent increase in teenage pregnancies, most of which are out of wedlock.

> 'In the olden days, children were fearful of their parents and thus wanted to be married before having sex or children. But now, young ones go their own way and can decide to have children anytime they want it.'

In support of this statement, a 46-year-old fisherman in Brenu Akyinim argued that:

> 'I know our mothers started childbearing early in life but they waited until they got married before they started childbearing. These days, girls can get pregnant and have babies while in school.'

These statements are however seen as laments from respondents who felt that modern ways of life or borrowed western culture is gradually breaking down the moral fabric of their society. From a personal viewpoint, it is a contest between parental consent and a young person's perception about his/her level of maturity. While in the olden days parents served as gauges of maturity and subsequently determined the state of preparedness of their children for marriage, it seems now that the exposure to western lifestyles and other information is gradually replacing the parental role as a gauge of maturity. Some participants in the FGDs noted '*young people now think they are enlightened so they have to practice sexual intercourse to prove their enlightenment*'. Fallouts from this enlightened sexual intercourse include unwanted pregnancy and mistimed childbearing, which further disrupts real or intended socio-economic plans. In fact, in South Africa, Varga (2003) found that for adolescent boys, the relationship between respectable status and reproductive status is shaped largely by concerns over the potential costs of fatherhood. Similar to the experi-

ences of adolescent girls, boys' fears involve school disruption, reduced employment prospects, and financial hardship, among many other reasons. The social pressure to demonstrate masculinity through accepting paternity is largely a rural phenomenon.

Quantitative estimates[5] of women's age at birth of first child was compiled from a combination of two sets of data obtained from the first and second rounds of the longitudinal survey exercise. It is important to note here that in the questionnaire there was no question directly asked to a female respondent who had ever given birth as to her exact age at the delivery of her first child. But the presence of three variables – female respondent's identification code, age during the first round of survey, and the date of birth (day, month, year) of the children enabled the calculation of the age at which women who had ever had a live birth did so for the first time.

Survey estimates show that in Abuesi, women who had ever given birth to a child or children had their first child at an average age of 19.3 years. In Brenu Akyinim, the average age of women at birth of their first child was 20.5 years. Comparing the estimates of women's ages at first marriage and age at birth of first child average (table 5.2), it appears that childbearing comes after marriage, but the marginal difference between them indicates that pregnancy does occur before marriage.

In the context of marriage, the first child is normally timed to arrive within a year of getting married. In Brenu Akyinim, some of the family members can question the couple if there is no child born or on the way after one year. In fact, during FGD sessions with adolescents and mixed adult groups, one common observation was that within six months of getting married, some women deliver their first child, whic implies three months of pregnancy prior to the marriage ceremony. This was also supported by adults in Abuesi that '*childbearing after marriage is usually fast and quick; many start having children after six months of marriage which makes you wonder that the pregnancy was there before the marriage*'.

In such situations, the timing of pregnancy (before the wedding) serves as an early assurance there will be no fear or problem of infertility or impotency (related to women and men respectively). Some men also go as far as 'trying out' their prospective wives by getting them pregnant, and having the baby aborted, as a pre-marriage test of the couple's fertility potential. If the couple is infertile it is easier at this stage to cancel the marriage with a good excuse. A man can legitimately call off wedding

plans if his wife-to-be is infertile (in most cases, these men have not been tested whether or not they have fertility problems). More often than not, prior to medical testing, accusing fingers are usually pointed at women/wives when couples show signs of infertility. This is similar to Inhorn's (2003) findings in Egypt. Many men resort (or are encouraged) to marrying additional women in order to have children they could not have by the first wife. But does men's '*proving their manhood*' elsewhere really signify that only women are infertile? No. In other cases, men who refuse to have additional wives or girlfriends in the quest of having children are from this point perceived either to have a dysfunctional erectile system or have weak sperm (locally referred to as '*blank bullets*') when they cannot impregnate their wives or any other female outside the matrimonial sphere.

Having children helps to raise the social status of married couples, and such parents are referred to as being responsible when they take good care of their children. An eighteen-year-old female Muslim, currently a senior secondary school student in Abuesi added that:

> 'it is beneficial for couples to have children so that during the couples old age, these children can take care of them'

Adult women more often than not find themselves combining child care with their vocations - fish processing, trading, or farming. This has further implications on breastfeeding; the busier a mother is, the more likely she is to wean her babies early, resulting in the loss of protection against new pregnancies by the disruption of lactational amenorrhea. Though these women are more likely to get pregnant because of the loss of this naturally induced protection, their participation in vocation limits coital frequency with their partners, and is a major reason why they experience longer birth intervals.

Large gaps in birth spacing make the woman's family appear less compact; according to Schneider and Schneider (1992) this could result in more generational stratification than the 'early-stopping' families. In addition, where a large gap existed between the last and the next-to-last child, the last child is culturally marked. Parents easily refer to such children as 'accidents'; this is common in cases of absentee heads of household who live outside Abuesi and Brenu Akyinim. Others claim accidents happen because, at a certain point, a man wants to see if he is still sexually potent. Though men discuss such 'accidents' with a show of remorse laced with disguised celebration, some women see such accidents

as a source of shame (and ironically did not abort the pregnancy, or as they say, use natural feminine capabilities to inhibit the growth of the foetus).

5.7.2 Birth intervals: Married women

Birth intervals indicate the period in between two pregnancies that resulted in live births. In the first round of the longitudinal survey, female respondents were asked 'how soon would you like to become pregnant', and male respondents were asked 'how soon would you like your wife to become pregnant' for first and second wives. This questioning was limited to respondents who had earlier shown an intention to have additional children. Married women who expressed the desire to have additional children were asked how soon they intended to get pregnant, as an indicator of average waiting time, thus birth interval. Some women said they wanted to get pregnant as soon as possible. This can have many interpretations, for example, it could mean at the earliest possible time for those whose husbands are frequent travellers and are not home for many days/weeks on end, thereby limiting coital frequency and chances of getting pregnant. 'As soon as possible' could also mean when economic conditions look favourable to support another child. Other women were more forthright with regards to exactly when they would like to get pregnant, expressing such preferences in specific time units of months and/or years. For the purpose of standardisation, 'years' is used as the reference time unit and references given as months in the raw data were converted to 'years' by dividing the figures by '12'. They were used in aggregating figures in addition to the respondents who stated their preferences in 'years'. A final batch of women who were not sure of when they wanted to get pregnant again gave their answers as 'don't know'.

Table 5.9 shows that among those who could give an approximate time they would like to get pregnant again, women in Abuesi would on the average wait approximately three years compared to the four years stated by women living in Brenu Akyinim. It appears that many more women in Brenu Akyinim would actually wait for more than two years before they get pregnant for additional children the table shows that 81.3% and 63.8% of married women in Brenu Akyinim and Abuesi respectively would wait three years or more. However, slightly more than one-third of married women in Abuesi and less than one-fifth of women in Brenu Akyinim would not like to exceed two years before they get pregnant

with their next child based on the socio-economic conditions prevailing at the beginning of the survey in 1998. The 1994 Ghana Population Policy sets a two-year minimum target for women as an average birth interval. Judging by the current trend, is this an indication that the National Population Policy of 1994 is being implemented (or working) properly and that it needs to be upwardly revised, to the joy of family planning advocates? Many women do not have children in quick succession; some wait two to three years before having a second child. One female participant in the mixed FGD in Brenu Akyinim was very proud when she said:

> 'I have three children with five-year interval between them. My first born is fourteen years old, the second one is eight years and the last one is three years.'

Table 5.9
Percentage distribution of women living in Abuesi and Brenu Akyinim according to birth interval preferences

Childbearing interval	Abuesi (%)	Brenu Akyinim (%)
< 2 years	36.2	18.8
3 – 4 years	50.0	53.1
5 years	13.8	28.1
Total nos. of women	(58)	(32)
Average birth interval	2.7 years	3.7 years

Source: Diffusion of Fertility Survey, Round 1

Table 5.10
Percentage distribution of married women living in Abuesi and Brenu Akyinim according to perception of their husband's birth interval preferences

Childbearing interval	Abuesi (%)	Brenu Akyinim (%)
< 2 years	22.9	25.0
3 – 4 years	54.2	41.7
5 years	22.9	33.3
Total nos. of women	(35)	(24)
Average birth interval	3.2 years	3.6 years

Source: Diffusion of Fertility Survey, Round 1

The women were also probed as to how soon their husbands/ partners would like them to become pregnant again. Married women (table 5.10) in Abuesi think their husbands would like to wait comparatively longer by about half of a year (that is, 3.2 years) than the average birth interval recorded for the women.

In Brenu Akyinim, the married women stated a numerical average for the men almost equal to their own. Women are believed to want to have their children in quick succession in order to achieve the childbearing aspirations in record time; this would help to free up their time in the longer term to do other things in life. This is in contrast to men's position that such quick childbearing is not always economically viable. Women's perception that the men would like to wait longer is based on the economic reasoning tendered or expressed (both directly and indirectly) for wanting to have a longer childbearing interval.

5.7.3 Married men's opinions on birth intervals

In Abuesi, the males were prepared to wait approximately three years before having the next child with their first wives, compared to a two-year waiting period for additional children with the second wives.

Table 5.11
Percentage distribution of men living in Abuesi and Brenu Akyinim according to birth interval preferences

Child birth interval	Abuesi		Brenu Akyinim	
	Wife1	Wife2	Wife1	Wife2
<2 years	42.1	66.7	33.3	75
3-4 years	39.5	33.3	38.1	25
5 years	18.4	-	28.6	-
Total nos.	38	6	21	4
Birth interval	**2.9 years**	**2.1 years**	**3.2 years**	**3 years**

Source: Diffusion of Fertility Survey, Round 1

For a relationship or partnership already taken for granted by the first wife (by virtue of her rank), there is a mutual consensus between the man and the second wife to have more children, and/or a burning desire by the man to use childbearing to further cement the union with the second wife; or the second wife would use childbearing in a relatively faster

succession in order to consolidate her position and status (for inheritance purposes) in the family, which at the same time secures the children's future if the man is well-off by local standards. In some instances, birth intervals are even shorter if some second wives have given birth to male offspring when the first wives have not been able to achieve this feat.

Proportionally, about 60 percent of the men in the sample would want to wait for three years before having another child with their first wives, compared to almost 70 percent who would wish to have additional children with their second wives in a shorter span, less than two years in both communities. Average birth intervals stated by the men in Brenu Akyinim followed a similar pattern to that observed among men in Abuesi; however there is a marginal difference where multiple wives are concerned, as most men would prefer to wait 3.2 years before having the next child with their first wives compared to a slightly shorter 3.0 years for those with second wives.

The men were also asked about what they felt their wives wanted with regard to the interval between the birth of a child and their next pregnancy . The results are presented in table 5.12 below.

Table 5.12
Percentage distribution of married men living in Abuesi and Brenu Akyinim according to perception of their wives' birth interval preferences

Child birth interval	Abuesi		Brenu Akyinim	
	With wife1	With wife 2	With wife1	With wife 2
< 2 years	38.2	60.0	22.7	50.0
3-4 years	41.2	40.0	45.5	50.0
5 years	20.6	-	31.8	-
Total	34	5	22	2
Birth interval (years)	3.0	3.5	2.2	2

Source: Diffusion of Fertility Survey, Round 1.

From the men's point of view, most of their first wives would want to wait for three years, compared to two years for second wives, before getting pregnant again with another child. This pattern is similar to the one indicated as birth interval preferences by the men themselves in the previous table. In some way, it makes one think that the men are either con-

sciously or unconsciously imposing their own preferences about childbearing intervals on their wives.

One difference was observed, however in Brenu Akyinim: while the men expressed that they would rather wait for three years before impregnating their first wives, these men felt that their second wives would prefer a relatively shorter waiting period of two years. With their first wives, the men indicated (on average) a longer interval of three and half years. Reasons for the second wives' preference for a relatively shorter interval are not hard to understand. Second wives are more often than not younger than first wives, and in many cases they are taken on as second wives by relatively rich men, and/or men who want more from romantic relationships than what they were experiencing with their first wives. These women's willingness to have children at shorter intervals helps in further cementing unions with their husbands. Some even do so for inheritance purposes from a rich husband, which in a way causes conflicts between the matrilineal and patrilineal rules as the woman (or man) can use it for personal benefits. Generally in this area, the matrilineal rule is widely accepted and used; however a man separated from his wife might subconsciously invoke the rule to avoid spending so much on child welfare since children automatically belong to the wife's family (children are expected to inherit from maternal uncles too); a woman can also use a biological connection (in lieu of patrilineal rule) to make children inherit their father's property in event of his death (which in a way makes the widow a potential beneficiary).

The next section comprises a summary of the intergenerational in-depth interviews of women (grandmothers, mothers, and daughters), with the aim of distinctly articulating issues surrounding marriage and reproductive behaviour as related to patterns of marriage, marital instability and permanence, sexuality, birth timing and the household decision-making environment. Even though each of these generations is in some way unique, none of the interviewees considered themselves to be out of the ordinary.

5.8 Intergenerational Perspectives

Grandmothers: Most of the grandmothers interviewed identified customary marriage, church weddings and amalia as the main types of marriage in the locality. They also stated that marriage unites two different families, giving them a common vision. They also pointed out that be-

fore someone gets married, a lot of investigations are done to find out whether there have been incidences of communicable diseases, for example, tuberculosis and in most cases, mental illness which could be transferred to offspring.

Considering childbearing, they stated that its benefits outweigh the costs involved. Benefits include: (a) potential source of care for parents at old age, and (b) by the right persons inheriting wealth in case of death. However, traditionally, people looked down on childless couples.

The grandmothers noted that the nature of their work was very tedious when they were first married. The women trekked great distances to adjoining communities to trade while their husbands engaged in fishing in boats without outboard motors. Couples at that time needed many children to assist them in their occupation. For men, one of the many reasons for having more than one wife was to have as many children as possible who would serve as source of help in whatever business the father or mother engage in.

They also pointed out that few women these days used herbs to avoid getting pregnant. But it was estimated that women grew as old as 25 years before having their first child. They felt their generation was blessed with children since they could have as many as eleven, a feat they claimed cannot be achieved by women now. Also, one could detect a sense of pride in their belief that they were healthier and stronger than modern- day women. No official records exist of family sizes, but historical accounts indicate birth intervals of approximately 3 years and a younger age at marriage. The interviewees stated that there was a big difference between their fertility levels and those of modern-day women since families were larger in the olden days. However, they conceded that having too many children could have an overall negative impact on women's health. Regardless of the ethnic mix or composition of the people in the locality, there was no difference in the reproductive behaviour between people from different ethnic groups living within the community in the olden days. Not all the possible questions about sexual behaviour were asked, but the extended interviews did help convince us that withdrawal is a sacrifice of sexual pleasure.

One of the interviewees stated that giving birth under the watchful eye of a birth attendant was preferable since at the hospital women are restricted to lying down when delivering. But it was generally felt that the bad side of having children in hospitals now is the increase in numbers

of people having caesarean sections. It is believed that some pregnant women are given caesarean sections due to the impatience and time pressure on the part of the nurses.

Finally, the general consensus among this older cohort of women was that marital life lasted longer for them because of the mutual respect and understanding they enjoyed with their husbands. Most of the conflict within marriage was attributed to lack of trust, openness, and willingness to take responsibilities.

Mothers: Most of the women interviewed stated that unions between couples could be formalised in churches, civil registry, and customary/traditional procedures. It was admitted that most people today engage in sexual activities prior to marriage and being married is an important thing to do because marriage brings clans and families together. Aside from this, they felt that people are social beings and couples should entertain each other, help each other financially and pool resources so as to take care of the family.

Society frowns on childless couples; children are considered gifts from God who create a lot of happiness in marriage. It is believed that the potential benefits of childbearing are many while the costs are limited. Couples used to larger families and nowadays, with the introduction of family-planning methods, couples are having fewer children and are having longer periods between children. But it was agreed that having too many children can make a woman less healthy, depicted outwardly by dejected looks.

Looking at occupational realities, they admit that children play an important role in their parents' work by being a direct source of 'unpaid' labour since most people in the community still engage in traditional occupations.

Within a marriage, the man is traditionally expected to play a leadership role in decision making. The respondents outlined false accusation, lack of good communication, and selfish attitudes as the factors creating problems and domestic violence in the community.

Daughters: The relatively younger generation alluded to the fact that people are much freer nowadays to engage in pre-marital sexual activities. It was also noted that presently you do not need to carry out a full investigation into the family background of prospective partners before getting married. Thus a casual relationship could easily end up in a mar-

riage, but marriage can be destroyed due to lack of trust, openness, understanding, and mutual respect. With respect to informal unions, the girls admitted that they get into relationships because of financial difficulties and some men are willing to help them financially. But this type of relationship is plagued by a lack of trust and engaging in multiple relationships, and is seen as generally irreseponsible from the point of view of outsiders. Most of the girls said the ideal thing is to be in a formal union, but not to have too many children as it affects the health of women.

Childbearing is seen as an important factor in stabilising a marriage and most people deride childless couples. Mothers-in-law are seen as potential sources of friction and central points of trouble especially when visiting or living with a younger couple. While the older woman is expected to be sympathetic to the cause of motherhood, daughters-in-law often see such women more as sources of provocation. Perceived benefits of childbearing continued to include catering for parents in old age, and being a source of help to parents in their respective occupations. But the decline in childbearing today is attributed to unfavourable economic conditions in the country and the introduction of modern family planning methods. This group of respondents admitted to the use of contraceptives and increasingly, abortion to prevent pregnancy and childbearing respectively. In order to support these claims, some of the younger women openly admitted to have undergone abortions and volunteered to name other teenage girls who had done so.

Childbearing in pre-transition populations seems to have been structured indirectly at the household level through covert customs such as parental monitoring of the potential age their children could get married, taboos on extramarital sex, and rules for the appropriate time for resumption of intercourse after childbirth or age to cease childbearing. Today, younger women believe that couples have smaller families because of the introduction of family-planning methods and family life education on radio and TV stations. Most of the respondents admitted that HIV/AIDS has been reported in the community. Some also believed that AIDS is helping couples to stick to their partners (or at worst have children with fewer partners) since having children with more than one partner (implying having multiple sexual partners) can increase the chances of being infected with HIV.

5.9 Conclusion

One cannot but help assess the findings in this chapter in the context of two categorisations of household decision-making as highlighted by Haddad et al. (1997). One theory holds that households are single or 'unitary' decision-making bodies on the assumption that all household members have the same preferences or that the head of household acts completely dictatorially. The other theoretical categorisation looks at the household as a 'collective' entity where the sometimes conflicting preferences of individuals within the household are combined in various ways to reach a collective choice. How benefits for the household are used and how decisions are reached often reflect the bargaining power of different household members. In Abuesi and Brenu Akyinim, men continue to have the edge over women, though women sometimes use different tactics in order to have their say or way.

Power in relationships, that is, women's lesser power compared to men, has emerged as a major conceptual focus of much of the findings on the household decision-making environment. According to Connell (1987 and 1995), hegemonic masculinity is the most dominant, most valued expression of manhood. It legitimates patriarchy and values competition, hierarchy, individualism, sexual prowess, physical toughness, rationality, emotional distance, dominance, aggression, and risk taking. What even makes it more difficult is that all these can occur as multiple expressions of masculinity. While Van Dijk (1997) sees hegemony as power that 'makes people act as if it were natural, normal, or simply a consensus', hegemonic masculinity is reproduced through discourses that make it seem natural, inevitable, and morally right that men behave in particular ways. This was supported by comments coming from the adult male FGDs such as that 'marriage is important because that is the way to show your friends that your manhood is not dead'; a statement that emphasises men's mastery and control of sexuality as essential aspects and/or natural feature of masculinity. As espoused by Craig (1992) 'traditional characteristics of masculinity are made to seem correct and natural that men find…domination…not just expected but actually demanded'.

The chapter was approached by triangulating information from focus-group discussions, questionnaires and in-depth interviews to present an analysis of adolescent and adult notions of male and female gender ideals in the area of reproductive behaviour. Results indicate that gender ideals

are grounded in traits that reinforce double standards and that put a heavier burden on women on matters concerning childbearing and child-rearing in the marital sphere with lesser decision-making power. Overall, adolescent parenthood is viewed negatively for both sexes because it compromises personal, professional, and financial aspirations despite direct linkages to gender-based inequities.

In sub-Sahara Africa, research indicates that young people's first sexual experiences are taking place in a different social context from those of previous generations (Mensch et al. 1998). As if to support the lamentation of the older generation in this study, Meekers and Ahmed (1997) affirmed that increasing modernisation and education together with exposure to Western media appear to have led to a decline in traditional values and, in particular, have reduced the importance of maintaining virginity until marriage, with obvious implications for pre-marital or illegitimate childbearing. In addition, increases in the cost of marrying may delay formal weddings (Joseph and Garenne, 2001) but this cost does not preclude sexual intercourse between young people who intend to marry each other later, as well as those who have no intention of doing so (Araoye and Fakeye, 1998). All the same, individuals and couples seek to avoid premarital pregnancy because illegitimate children are considered socially unacceptable. Additionally, premarital pregnancy can reduce a girl's chances at marriage as well as her educational and employment opportunities in the near future. This has resulted in longer birth intervals between the first and second child of women who have experienced pre-marital pregnancy, using the long lag time in-between childbearing to improve themselves socio-economically.

The vocation of the inhabitants also influenced childbearing intervals. Fishing has been an artisan activity for a long time (though some now do it on subsistence and part-time basis); fishermen owned their own equipment and harvests were sold at market rates dictated by powerful market women, who in many cases were wives of the fishermen. In the farming community of Brenu Akyinim, a fishing group of temporary seasonal-settlers from nearby Moree appeared. These seasonal migrants from Moree established social relations that impact on the marital and childbearing aspirations and behaviour of some women in Brenu Akyinim. If an un-married woman was discovered to be pregnant in the off-peak fishing season, and the date was traced back to the peak-time of the fishing season, more often than not the seasonal in-migrant fishermen

were found responsible. The result was usually for the woman to move back to Moree and live with the fisherman, a good proportion of which end up in official marriage. Other women, in some cases, chose to remain in Brenu Akyinim as a household unit because the man was (or was suspected to be) married already to another woman in Moree. But this brings along with it long birth intervals between the first and second child. Abortion is not common due to the belief that childcare is not expensive and the extended family kinship system is still strong enough for mothers to get help in childcare.

Therefore, there are many considerations that go into the actualisation of people's childbearing aspirations. People may have childbearing preferences before they marry and these preferences sometimes withstand differences of views that may emerge within marriage. In the next chapter, we explore the childbearing aspirations of the respondents, especially to see the nature of convergence or divergence in fertility goals. In effect, we will have a clear picture of what categories of men and women desire to have relatively small or large family sizes.

Notes

1. Suspected to have had sickle cell disease.

2. Casterline's definition of culture as 'the local meanings applied to social (and other) phenomena', is appropriate here in the area of sexuality, when one considers appellations like 'champion', 'brutal' and 'crocodile' as innuendoes for male sexual prowess and infertility status in the two communities. If we neglect culture in this context, our understanding of demographic processes (causes and consequences) will often be incomplete and sometimes quite misleading.

3. In the second chapter of the Presidential AIDS Advisory Panel Report, titled Aetiology and Transmission of AIDS (cited from http://www.virusmyth.net/aids/data/panel/chapter2.htm), reference was made to Padian's paper of 1997 in the American Journal of Epidemiology which showed that in a 10--year follow-up prospective study of heterosexual couples of whom only one partner of either sex was positive 'no seroconversions occurred among exposed partners', suggesting no transmission via the vaginal route. They also noted Goudsmit's view that for heterosexual HIV transmission anywhere in the world, including Haiti, Africa, and Thailand, 'a homosexual or anal factor seems to be required'. The question was posed that if HIV is transmitted from active to passive partner in the sex act like other STDs, then how does the active partner become positive?

4. In the 1999 edition of the African Bible, the first part of Genesis chapter 1 verse 28 reads: 'God blessed them, saying to them: "Be fertile and multiply; fill the earth and subdue it." '

5. When a woman's first-born child has been identified and tagged with the mother's identity code, the child's date of birth was converted to single year (age at last birthday); this was thereafter deducted from the mother's current age. By subtracting a first-born child's age from its mother's age, I was able to arrive at the age at which the woman gave birth to her first child, which is now used for some quantitative analysis. It is also important to add that in the second round women who have more than one child gave the dates of birth of their children in no particular order, which led to manual assessment of the stored data (in EPI Info) in order to identify which child could be categorised as the first born. Data from some women were discarded so as not to bias final calculations; these include women who could not recall the date of birth of their children. Out of the 394 women who had ever had children in the two communities, 12 women (3%) could not recall the dates of births of their children; as such their information was not used. Another group of women whose information was discarded are those who gave ages that yielded spurious results. For example, age misstatement made this group of women appear to have had their first child at ages 5 and 7 years.

6 Fertility Goals: Do or Die

6.1 Introduction

This chapter provides a quantitative measurement and qualitative assessment of childbearing aspirations in Abuesi and Brenu Akyinim. There are several reasons for wanting to measure childbearing aspirations in the context of ongoing fertility decline in Ghana. The first one is to confirm if the preference for smaller family sizes (observed in GDHS) is gaining ground in rural areas of Ghana where family size is comparatively larger than in urban areas. Another reason is indeed to signal the extent of the need and type of family-planning programme intervention as the heralded fertility transition gathers pace. In addition, the comparison of stated goals with fertility outcomes can help to gauge how well (or how badly) women and men are doing at achieving their reproductive goals. The non-achievement of these goals may indicate an individual or couple's failure to attain the control they want over this basic area of their lives. Behaviour and intention are often at variance, and contradictory goals can co-exist in the same mind; in some cases goals are often changed post hoc to justify behaviour. In this situation, if people in a particular place are having problems limiting their family size, the resultant effect could be an increase in unwanted births. Such births can place a strain on a family's financial resources and they may limit a woman's ability to attend school or earn a living. While unwanted births can become a burden both to families and to society, they are amenable to reduction through improved delivery of family-planning services.

6.2 Complexity of Measuring Attitudinal Issues

Many individuals enter their childbearing years already thinking about their reproductive goals; not just how many children they would like to

have overall, but when babies should come in relation to their parents' work, education and interpersonal relationship. Childbearing is increasingly becoming a consciously planned part of peoples' lives because values are changing and their lives and activities are becoming more complex due to modernisation and development. People may wish to have or not to have a certain number of children, or wish for a particular mix of boys and girls. For most individuals and couples, the question of whether to have children or not, how long to wait before having another child or how many children one can afford to have come up at some point in life. At first, the aspiration may not be consciously verbalised; for some the question of limiting childbearing gains prominence by the time they already have one or two children. In other instances, discussions on childbearing aspirations may come up even before a woman and a man marry because in many cultures young people are expected to have a child immediately after marriage.

The measurement of family size goals is complex due to the attitudinal nature of the associated concepts (such as ideal, intended, desired fertility preferences) and because of the fact that the larger social and economic factors that influence them are sometimes difficult to analyse. In addition, change does not happen at a uniform pace for individuals or couples which may make men and women have differing views of both their short-term and their long-term reproductive goals. Therefore, measuring the shifting individuals' goals and the ability to achieve them is difficult[1] but not impossible.

Even if the reproductive goals that individuals report vary from one point in their lives to another, the aggregate data for sub-sections of a population can provide useful insights into the values, goals and behaviour of women and men. In this chapter, I set out to find what guides the childbearing aspirations of the inhabitants of Abuesi and Brenu Akyinim. Using the concept of fertility preferences, an investigation was conducted into whether respondents desired to have children or not; and for those who chose to have children, information on the ideal number of children they would like to have was collected. The numerical responses were aggregated and related to their background characteristics. The characteristics and motivations of respondents were compared in the two communities in order to highlight what factors are important in shaping childbearing aspirations.

6.2.1 Fishing in Abuesi and the need for children

The main source of livelihood in Abuesi is fishing and. For most of the inhabitants, their main income is derived from the fishing industry and they are very much involved as fishermen (males) and fishmongers (females). Activities in the fishing industry include fish harvesting (male-dominated), selling freshly caught fish (by males and females), salting, drying, packaging and marketing of processed fish (female-dominated). Generally the fishing activity is on a commercial basis and it is commonly said that the entire life of most of the inhabitants depends on the fishing industry.

The main market for fresh fish is on the beach as soon as the fishing boat lands. The selling is done by the fishermen, who sel the fish mainly to women (ironically 'middlemen') who in turn sell it to consumers at the main market in the community. Processing of the catch – salting, smoking, and drying – is done by women throughout the entire fishing season. Target markets for processed fish are Kumasi (Ashanti region), Techiman (Greater Accra region) and Agona Nkwanta (Central region); these areas are respectively about 300, 200 and 100 kilometres away from Abuesi by road.

The fishing business is family-based; assistance that may necessitate payment of wages to other (extended) family members, or joint ventures with friends, are rarely explored. Children are allowed to get involved in the fishing activities from the tender age of six irrespective of sex; however, boys help with fishing while girls engage in the fish processing and marketing. Being family-based, this might account for why large family sizes could be desired by couples. The boat owners usually called 'bosen' finance fishing expeditions. Canoes and boats are used for fishing expeditions and the type of vessel used determines the length of each trip. For example, canoes take between three to four days while boats go on trips that last from three to six months. In Abuesi, canoes are mostly used. Those who would like to go on longer trips are employed at another fishing base nearby at Sekondi (a larger urban area and twin city of Takoradi, the Western Region administrative capital).

Processing of fish by fishmongers takes two to three days. The sale, however, depends on the rate of consumption by the public. There are times when the sale of fresh fish goes very fast so that very few are left to be processed. However, there are a few people in Abuesi who do subsistence farming in addition. Some women also go to Nyankrom, As-

sorku Essaman, and other villages nearby to acquire foodstuffs which are re-sold at Abuesi. Thus other types of food are made available for consumption.

Some children are not allowed to go to school, and there have been instances where others may be withdrawn from schooling due to the perceived economic advantages of fishing. Some children may also not go to school on particular days when there is news of a bumper catch or during the peak of the fishing season, which often coincides with the opening of the school year (September) and extends for an appreciable period. In this way, many children in these fishing communities are on part-time schooling and as a result their chances of progressing to higher levels are negatively affected.

In the mid-80s, three-quarters of primary school leavers did not proceed to the secondary level and there was no substitute apprenticeship training programme for the dropouts (Agyeman et al. 2001). The fishing season gathers steam at the end of the Bakatue festival at Elmina (a fishing town on the Atlantic near Brenu Akyinim), 'to thank God in anticipation of good harvest season'. At Elmina a fishing net is symbolically thrown three times and the amount of fish that is drawn in at the third throw gives an indication of what the fishing season would look like. Superstitious as it sounds, this symbolic gesture is held in high respect and plays an important part in deciding the eventual participation of boys in their fathers' fishing trips that season. While some male children may have the opportunity to combine part-time schooling and fishing, many are withdrawn altogether to engage in full-time fishing until the peak is reached. As many of the parents do not have a formal education, little value is placed on their children's schooling, and if by chance a child decides on his or her own to discontinue schooling in favour of participation in the fishing business, no pressure is put on the child to go back to school.

6.2.2 Farmers in Brenu Akyinim also need children

Despite being a coastal settlement, farming is a major occupation that has been engaged in by the people of Brenu Akyinim for a relatively long period, and to a large extent on a commercial rather than a subsistence basis. The name Brenu Akyinim was derived as follows: Akyinim literally means the area of salt, while Brenu is the name of the lagoon in the area. The original settlers lived from salt production and farming. Historically,

the beach and the Atlantic Ocean were very far from their present location and the area was originally a coconut and pineapple plantation. However, encroachment by the Atlantic forced the inhabitants to move further inland to where they are now.

Seasonal visitors also come from Moree, Elmina, Ampenyi, and especially Dogo (all these are within a 40-kilometre radius) to engage in fishing in the area; thus fishermen consist more of in-migrants (but mostly of the same Fanti ethnic stock). They usually come during the peak of the fishing season, which runs between August and December. Some of the migrants, especially the few that are not Fanti, come with partners while others come to inter-marry with the Brenu locals. Even now, the indigenous people of Brenu often mock those who are into fishing activity as 'foreigners'.

For the farmers, the planting season is from March to June while harvesting is done between July and August. Pineapples and tiger nuts are the main crops cultivated. Women dominate in the production of tiger nuts and men are found more in pineapple production. Some women, however, help their husbands in the pineapple farms. The desire to have many children to assist with the farming activity is high among both sexes. The women usually prefer to have girls while the men prefer to have boys to assist them. In terms of numbers, almost all women are involved in tiger nuts from planting to weeding, harvesting, storing, and marketing. Tiger nuts are believed to be natural aphrodisiacs and their consumption (chewing and sucking the sap from the root berries) is commonplace in Ghana.

6.3 Childbearing Intentions

In the fertility preference section of the multi-round survey, two categories of respondents were identified as individuals who already have children, and those that have no living children. However, no differentiation was made between seasonal migrants and long-term settlers for the reason of similar socio-cultural and economic characteristics based on the proximity of the areas of origin of the temporary in-migrants. In order to have knowledge of the ideal number of children women with living children would have liked to have, they were asked 'if you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?'. Responses to the question, illustrated in table 6.1, varied from those

who could give a numerical answer to those who said it is 'up to God' (God is the giver of all things, so they are ready to accept as many children as God gives). Other responses to this question includes 'all eggs in body' (that is, as long as the woman is fertile, she will continue having children), and 'don't know' for those who are not sure what their preference is, as the situation is fluid and '*one should not be tied to giving a number which may not necessarily be the reflected behavior at the end of the day* (childbearing period)'.

Table 6.1
Percentage distribution of female respondents (not currently pregnant) by number of children wanted

Number of children wanted	Females with childbearing experience		Females without childbearing experience	
	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu
0	-	-	-	-
1-2	8.2	7.6	13.9	31.8
3-4	49.0	58.0	44.5	63.6
5+	27.0	24.9	27.8	-
Up to God	10.2	3.8	11.1	4.6
All eggs in body	0.5	3.8	-	-
Don't know	5.1	1.9	2.8	-
No of females	**165**	**142**	**36**	**31**

Source: Diffusion of Fertility Behaviour Survey, 1998.

It is observed that not one woman of the women in the two communities who already had children stated 'no children wanted' as the ideal childbearing situation. It suggests that the situation espoused by FOS (1992) that voluntary childlessness is rare in West Africa. About 90.5% of the women from Brenu Akyinim could give numeric responses with regard to the ideal number of children, compared to 84.5% from Abuesi. Generally, while less than 10% of the women stated 2 children as their maximum ideal, approximately a quarter of the women gave 5 children and more as ideal in the two communities. Almost 60% of women in Brenu Akyinim had an ideal of 4 children, compared to slightly less than half of the women in Abuesi. Looking at the overall data, three times more women in Abuesi stated 'up to God' and 'don't know' than women

in same category in Brenu Akyinim. Overall, there is a larger family size preference in Abuesi than in Brenu Akyinim.

Women with no living children (representing 17.3% of all women interviewed) were asked: 'if you could choose exactly the number of children to have in your whole life, how many would that be?' This question was to take care of rationalisation effects; 'rationality' is where respondents' numeric fertility preference is most often equal to or greater than the actual number of children they already had. The respondents want to avoid creating the impression that one or more of their existing children is unwanted if they state an ideal less than the number of children they already have. It is also quite interesting to see here that all of the childless women expressed the desire to have at least two children. Voluntary childlessness is rare in West Africa (more so in communities seen as rural that may still hold tightly to traditional childbearing values). The largely unexplored side of voluntary or involuntary childlessness is male infertility, which Inhorn (2003) termed a major global reproductive health problem, contributing to more than half of all cases of infertility worldwide.

Furthermore, table 6.1 shows that the modal ideal number of children is a maximum of four as stated by more than 60% of women in Brenu Akyinim and 43.2% of women in Abuesi. While Brenu women with no living children do not want more than four children, more than a quarter of their counterparts in Abuesi want five children and more. Why this is so will be explored in subsequent sections, and more rigorous analysis will reinforce the conclusion that women in Abuesi want more children than those in Brenu as the data seems to suggest in the initial stages.

Inquiries were also made into the childbearing intentions of males in the two communities. Those that already had children were asked: 'if you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, with all your wives, how many would that be?' This question was asked only in the first round of interviews, and we must remember at this stage that all men interviewed were in some formal union with women in the sample frame. In table 6.2, generally 86.6% and 92% of these males in Abuesi and Brenu Akyinim respectively were able to give numerical answers to the question on their ideal number of children.

However, while about half of the males in Brenu Akyinim wanted no more than four children, the majority (42.1%) in Abuesi stated an ideal

of 5 children and more. This corroborates what was found among their female partners that there seem to be a preference for larger family size in Abuesi. As expected, probably due to rationalisation, none of the men gave 'no children' as the ideal situation (and they may just not like the idea of not having any children). There were also more men in Abuesi than in Brenu Akyinim stating that having children is 'up to God', while some simply 'don't know' the number they prefer. However, when childbearing is left to 'all eggs in body', both males and females in Brenu Akyinim preferred this option compared to their counterparts in Abuesi. This type of non-numerical response was seen as an inability of respondents to distinguish a personal ideal from a collective ideal (Lightbourne and MacDonald, 1982), or a way 'to avoid confrontation with an issue that is beyond their control' (Farooq and Adeokun, 1972). In addition, Ezeh (1991) saw non-numerical responses as an inward desire not to have many children but an outward reluctance not to do anything about it.

Table 6.2
Percentage distribution of male respondents by number of children wanted

Number of children wanted	Males with experience of having children		Males without experience of having children	
	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu
0	-	-	-	-
1-2	11.9	10.9	-	26.3
3-4	32.6	48.7	50.0	52.6
5+	42.1	32.4	33.3	15.8
Up to God	8.9	1.3	11.1	5.3
All eggs in body	0.7	4.1	-	-
Other	-	1.3	-	-
Don't know	3.7	1.3	5.6	-
No of males	(116)	(68)	(15)	(18)

Source: Diffusion of Fertility Behaviour Survey, 1998.

Male respondents with no living children were asked: 'if you could choose exactly the number of children to have in your whole life, how many would that be?' It is interesting to note here that similarly to their female partners who do not have children, none of the males in the two communities saw voluntary childlessness as an ideal situation. Some gave

age-old reasons of 'continuation of family name' and 'proving my manhood' for wanting to have at least a child during informal chat sessions. Coupled with this in Abuesi is that numerical statements on ideal number of children starts at a minimum of three (exactly half of the males stated so) and one-third wanting to have more than five children. In Brenu Akyinim, about a quarter of the men want a minimum of one child while a larger proportion want more than three children each. Non-numerical reporting was relatively low and it may suggest that such males may want to actualise the number of children they saw as ideal, in the absence of external forces.

Table 6.3
Distribution of female respondents according to number of children desired by age and childbearing status

Variable	Mean number of children desired by women	
	Abuesi	Brenu Akyinim
Women with living children (age groups)		
14-19	3.6	3.5
20-24	3.7	3.4
25-29	3.8	3.8
30-34	4.0	4.5
35-39	4.8	4.1
40-44	4.9	4.3
45-49	5.3	4.5
Mean	4.2	4.1
Total number of women	165	142
Women with no living children		
14-19	4.0	2.7
20-24	3.6	2.6
25-29	(3.7)	(3.0)
30-34	(3.0)	(4.0)
35-39	-	-
40-44	(0)	(3.3)
45-49	(5.0)	-
Mean	3.7	2.8
Total number of women	32	21
Number of children born		
1	3.4	3.1
2	3.7	3.5
3	4.1	3.6
4	4.3	4.6
5+	4.8	4.6

Source: Diffusion of fertility behaviour data, 1998.

In the following section, I would like to concentrate specifically on numeric ideals stated by the respondents with respect to their age, and in relation to the number of children already had. The fertility preference is expressed in terms of mean (average) ideal number of children preferred by the respondents. The distribution of female and male respondents by age group and childbearing status according to statements on ideal number of children are given in tables 6.3 and 6.4.

Table 6.3 shows that among females with living children, the mean ideal number of children stated is 4.2 in the two communities (with women in Abuesi giving a slightly higher ideal of 4.2 and in Brenu Akyinim, 4.1). In Abuesi, there is a clear positive relationship between age distribution and mean ideal number of children. Therefore as women increased in age from the age 15-19 group to age 45-49, the ideal number of children rose from 3.6 to 5.3 children respectively (with a range of 1 child minimum to 10 children maximum). Among women in Brenu Akyinim, this positive linear relationship was observed with some degree of fluctuation across the age groups; but ideal number of children figures rose from 3.5 among women aged 14-19 years to 4.1 children among women aged 45-49 years, all in the range of a minimum of two to a maximum of twelve children.

It has been observed that stated fertility preferences if implemented, tend to be close to actual family size. The adolescent women in the FGD, asked to give the ideal number of children they would like to have by the year 2010, on average stated 3. If these ideals were to be actualised, then the expectation that women in Ghana should on the average have a Total Fertility Rate (TFR) of 3 by the year 2020 as outlined in the 1994 National Population Policy may be realised. One could not help but observe the difference in the statements of participants of the FGD, who were sub-samples of people drawn from the larger body that took part in the panel survey. In a one-to-one conversation, individual preferences seem larger than when people state preferences in a discussion forum. One should therefore expect a situation where couples who discuss family size issues would hold smaller family size ideals and have more ways of achieving desired objectives than couples who are averse to such discussions. The possibility of linking current childbearing aspirations to implementation of the population policy is another interesting scenario that will be considered in a later chapter of this study.

However, among females with no living children, the average number considered ideal was lower, with a more visible difference in Brenu Akyinim. While there was no clear pattern when the averages were considered according to age of the women, it was observed that females with no living children in Brenu Akyinim want one child less than women in Abuesi (this was also observed among women with living children). But if we are to rely on younger females (aged 14-19 years) to actualise the number of children they consider ideal, then the number of children per woman might well be 4 in Abuesi and just about 3 in Brenu Akyinim by the time these women complete their reproductive life.

The issue of rationalisation was brought to the fore again when statements on ideal number of children were compared with the actual number of children the women already had. This was especially evident among women who had one child, who preferred to have three times more. However, the difference between ideals and reality decreases when we see women who have two or more living children not wanting a dramatically higher number of children. This is attributed to childbearing, childcare and other life experiences of these women, who downsize the numbers of additional children wanted as they have more children. This will be further explored in the section on attitudes towards having additional children.

Among males, the number of children considered ideal range from a minimum of 1 child to a maximum of 10 children in Brenu Akyinim, and 15 children in Abuesi (see table 6.4). In Abuesi, the men gave an ideal of approximately 5.2 children, which is about 1 child more than those in Brenu Akyinim. In addition, while there is a positive relationship between the men's age and the number of children considered ideal, men in the 60 years and over group stated an ideal twice the number given by younger men aged 20-29. In Brenu Akyinim, the men in the oldest age group stated ideals that were one and half times more than those in the youngest age group.

The pattern observed for females is also visible among males who currently have no living children. It is fascinating to note that the average ideal stands at 5 children for males in Abuesi while those in Brenu Akyinim have a somewhat smaller desire of approximately 4 children. While there is a positive relationship between age and ideal number of children, males from Abuesi would like to have from a minimum of 3 to a maxi-

mum of 10 children, and in Brenu Akyinim, the ideal range is from 2 to 7 children.

Using males without living children in the youngest age group as an indicator of what might occur in the future, we might well expect males in Abuesi to have approximately four children each while those in Brenu Akyinim would settle for 3 children each. An element of convergence of ideals is observed when compared with evidence from the female data. How this will be played out in terms of actualisation in the household decision-making environment with regards to spacing and limiting births and occupation-related concerns, and their implications for family-formation and family-planning policies will be explored in latter sections.

Table 6.4
Distribution of male respondents according to number of children desired

Variable	Mean children number of children desired by men	
	Abuesi	Brenu
Men with living children (age groups)		
20-29	3.9	3.2
30-39	5.1	3.8
40-49	5.4	4.7
50-59	8.4	4.9
60+	(17.5)	(1.0)
Overall mean	5.2	4.1
Range	1-15	1-10
Total number of men	116	68
Men with no living children (years)		
20-29	3.6	(3.3)
30-39	4.0	3.4
40-49	(5.7)	3.8
50-59	(10.0)	(4.0)
60+	(10.0)	-
Mean for men (no living children)	5.0	3.6
Range	3-10	2-7
Total number of men	15	18
Number of children fathered		
1	3.3	2.8
2	3.7	3.0
3	3.5	(3.7)
4	5.0	4.3
5	4.6	4.3
6+	6.5	4.5

Source: Diffusion of fertility behaviour data, 1998.
Note: Values in {*} obtained from less than 5 respondents

6.4 Ideal Number of Children According to Selected Background Characteristics of Women

We have highlighted the general fertility preferences of the sampled females and males in Abuesi and Brenu Akyinim. However, it will be more expedient to show differences in these ideals with regards to the socio-economic sub-categories to which the respondents belong. Doing so will unmask variations in ideals otherwise not seen in the overall summaries of the previous section. We will now discuss the influence of social and economic characteristics on childbearing preferences, using factors such as ethnic background, current marital status, religious affiliation, school attendance, media exposure, and geographical mobility. Other factors include types of occupation, and decision-making habits.

Table 6.5 shows the distribution of women according to their socio-economic background and fertility preference measured as mean ideal number of children. The discussion will be limited to respondents who had living children based on the reason that cross-tabulating socio-economic background with ideal number of children stated by the women who currently had no living children resulted in many empty cells and in cases where there were responses, averages were made on less than five respondents. This sample size problem made further interpretation of data less meaningful.

Ethnic composition: Ethnicity generally implies a group of people sharing particular cultural tradition(s) or a classification of human groups having racial, religious, linguistic and other traits in common. The Fanti are the main ethnic inhabitants of the two communities; it is expected that they could have common childbearing traits (aspiration and behaviour). While this holds true for the women as they aspire to have about four children on the average during their lifetime (table 6.5) the situation was not the same for the men. It was observed later (table 6.6) that Fanti men living in Abuesi would prefer to have an average of five children each compared to four children desired by each Fanti man in Brenu Akyinim. What this means is that it would be erroneous to stereotype people of the same ethnic origin as having common childbearing values. Since other factors do come into play in family size decision-making and implementation, childbearing norms and values are not very useful in distinguishing people of common ethnic origin.

Marital status: Categorisation by marital status revealed that single women with living children expressed the least desire to have many children. The reason cannot be hard to find. Society still frowns on women having children out of wedlock or a recognised union. Most of the women in this category got pregnant while in school, and had to discontinue their schooling in order to take care of the baby once it was born. Thus, having more children was not what they wanted to think about, not to mention 'forcing' an opinion out of them as to how many children they considered ideal for them to have. There were more important things to think of; for example, how to take adequate care of the baby, and securing an independent economic base for the mothers. It was opined among adult males in a FGD in Brenu Akyinim that:

> Taking care of children as single parent is not the best because it brings about inadequate attention and you incur more expenses. People must marry so that they join hands to raise children.

Marrying can go a long way in the general re-admission of the single mother into the general societal flow, after which she can start thinking and implementing having more children without society frowning on her continuing to have children outside social (marriage) and economic (job) limits of acceptance and tolerance. An age-old practice brought up by a 19-year-old adolescent in Abuesi underscores the importance of having children within the confines of marriage where

> The presentation of a sheep to a wife after the delivery of the tenth baby, usually called badu guan in Fante, encourages others to have many more children.

Thus it was not surprising to see women in stable unions (socially approved) wanting to have more children than single women. A 45-year-old married woman of five children explained that

> people without children are mocked

and as a follow-up stressed that

> marriage is very important and childbearing must follow after you marry.

The importance of marriage as the socially acceptable arena for procreation cannot be over-emphasised, not only in that it secures a joint economic base between two partners for child care and upbringing, but also for not giving room to having 'illegitimate' children. The downside of

this, according to a 30-year-old fishmonger with no education and a 19-year old senior secondary school male in Abuesi, is that:

> people derogatorily refer to couples who are barren as saadwe – sterile or infertile.

Inhorn (2003) cited worldwide data from the Reproductive Health Outlook (1999) that between 8 and 12 percent of couples suffer from infertility or the inability to conceive a child at some point during their reproductive lives. 'Yet women typically bear the social burden of childlessness when their husbands are infertile.' For example, while male infertility presents a crisis of masculinity for Egyptian men, 'this crisis often redounds in multiple ways on the lives of women, who ultimately pay the price for male infertility under conditions of Middle Eastern patriarchy' (Inhorn, 2003).

On another note, the emerging phenomenon of marital instability could have resounding effects on how childbearing intents and wishes are actualised. Women whose unions have been terminated (whether due to death or other physical means) marginally prefer having fewer children than women in some form of union. The fluidity of these child preferences can change in the event of a later change in marital status.

Religious background: Lehrer (1996) asserts that religions differ in their fertility norms and corresponding tradeoffs between the quality and quantity of children. Using religious affiliation as a basis for checking categorical differences in statements on ideal number of children preferred, Muslim women in Abuesi showed the highest inclination to have more children, compared to Catholics and Pentecostal Christians who exhibited relatively lower but comparable ideals. However, in Brenu Akyinim, Muslim women showed the smallest preference for numbers of children (this could be due to small sample size bias with reference to number of Muslims); it goes against the norm found by Isiugo-Abanihe (1994) that adherents of indigenous religions and Muslims have higher family size preferences than Christians. But, as expected, Pentecostals and Orthodox Protestant Christians want fewer children than Catholics, while women with no religion indicated they wanted more children. The set of respondents who have no religious beliefs are theoretically assumed not to be tele-guided by any kind of religious ideal that could influence their aspirations for having children.

Table 6.5
Average number of children wanted by women by selected background

Background	Mean number children wanted	
	Abuesi	Brenu Akyinim
Ethnic composition		
Fanti	4.2	4.2
Others	4.1	4.0
Current marital status		
Have never married	(3.0)	(2.0)
In current union	3.6	4.5
Married	4.3	4.2
Separated	(4.0)	(4.0)
Divorced	4.0	3.9
Widowed	(5.0)	(3.0)
Religious affiliation		
None	4.4	5.3
Catholic	3.7	4.4
Orthodox Protestant	4.0	3.9
Moslem	4.6	(3.5)
Syncretic	4.4	4.4
Charismatic/Pentecostal	3.8	3.9
Other	-	2.8
Ever attended school		
No	4.3	4.8
Yes	4.1	3.8
Reading a newspaper or magazine in any language		
Never	3.9	3.8
Once a month	3.6	3.8
Once/more a week	4.4	3.5
Daily	(6.0)	-
Frequency of listening to radio		
Never	4.5	4.6
Once a month	3.8	4.4
Once/more a week	4.3	4.4
Daily	4.2	3.8
Frequency of watching TV		
Never	3.9	4.6
Once a month	4.4	4.5
Once/more a week	4.1	4.2
Daily	4.5	3.7
Occupation		
Not working	4.3	3.3
Farming	-	4.0
Fishing	(5.0)	(4.0)
Trading	4.3	4.5
Teaching	-	3.8
Trade-person	3.1	3.5
Other	4.1	(3.0)
Overall average for all working women	*4.2	*4.2

(Continued)

***Table 6.5** (Continuation)*

Background	Mean number children wanted	
	Abuesi	Brenu Akyinim
Geographic mobility (Travel to Accra)		
Not at all	4.3	4.3
About twice a year	4.2	3.6
Once & more a month	(3.0)	(4.3)
Once or more a week	(4.0)	(3.5)
Travel to Takoradi, Cape Coast or other big city		
Not at all	4.2	4.3
About twice a year	4.0	4.2
Once & more a month	4.4	4.0
Once or more a week	4.3	3.9

Source: Diffusion of Fertility Behaviour survey, Round 1

Education: Magadi and Curtis (2003) reported that women in Kenya who desire larger families are less likely to use contraceptives, while those who have attained higher levels of education are more likely than others to practice contraception in order not to have large families. The effect of education on the motivation for having children was further highlighted in the two communities, as women who had never gone to school stated higher ideal numbers of children they want to have. While the difference was not much in Abuesi, a much more noticeable difference was observed among the women in Brenu Akyinim: those who have some schooling experience want one child less than women who have never gone to school. Advocates of education continue to point out that apart from equipping the recipient with education and skills needed for securing a brighter economic future, education also invariably fosters the use of modern contraceptives, while the number of years spent in school theoretically protects the women from early pregnancy. As a junior secondary school teacher living in Abuesi put it, only the unlucky ones get pregnant;they did not use contraceptives, or did not abort the pregnancy early enough (or were afraid to abort). Abortion is a commonly but clandestinely used method of birth control at Abuesi; it is resorted to if the pregnancy is an unplanned or unwanted one especially if the man responsible is opposed to having a child or the woman already feels over-burdened with many children.

Media exposure: According to Derne (2002), increasingly, mass media are heightening people's awareness of different lifestyles. The frequency of reading and understanding a newspaper or magazine in any language, listening to radio programmes, and watching television are used as indicators of media exposure. Here, common sub-categories of indicators are whether the respondents have never, once a month, or once or more a week, or daily used any of the three forms of media exposure. Interesting and contrasting patterns were observed in both Abuesi and Brenu Akyinim in the mean ideal number of children stated by the women in light of their exposure to these forms of media.

In Abuesi, a positive relationship was observed such that average desires for children tend to increase with the magnitude of exposure to newspapers and television programmes. This goes against the conventional wisdom that exposure to media leads to an inculcation of preferences for smaller family sizes among regular newspaper readers and TV watchers who are expected to be regularly bombarded with western values, norms and family-planning information that discourages large family sizes. However, it could be that women who have regular access to and use newspapers and television programmes as sources of public information were better off to begin with, and with the prevailing socio-economic situation (and outlook) they could accommodate the idea of having more children. The possibility is greater in an area where family-planning methods are used more for spacing than for limiting childbearing.

For the women who are ardent radio listeners, a negative relationship is found to exist between average numerical preferences for children and increase in frequency of listening to radio. Looking at the background discussed earlier in the previous chapter, the radio appealed more to the respondents as a source of public information, which could indicate that it is more reliable and trusted (virtually everybody has television sets in their homes so it is not the case that they use the radio more because of relative affordability). If that is the case, propagation of smaller family size values and ways of implementing or achieving it could lead to a change of attitude among the listeners resulting in dampening desires for having many children. This is more pronounced in Brenu Akyinim where women who had never listened to the radio at the time of the survey preferred having about five children, compared to approximately four children for those who listened to the radio daily. In Brenu Akyinim, there

was also a consistent negative relationship between the number of children desired and frequency of reading a newspaper or magazine, and watching television.

Effect of geographical mobility on childbearing preferences: Appadurai (1996) opined that migration (and mass mediation) 'allow people to imagine a wider range of possible lives than they ever did before, disrupting people's sense of the givenness of their own culture'. For this study, geographical mobility was measured as frequency of travelling to Accra, and any of the regional administrative capitals one year prior to the survey. In the two communities, travelling out more frequently indicated lower ideal number of children preferred by the women. In Abuesi, there is a marginal difference in computed average numerical childbearing ideals between women who never travelled out of the community, compared to those who have visited other cities, in increasing level of frequency one year preceding the survey. In fact women in Abuesi who had visited Takoradi (the neighbouring city) stated marginally higher preferences for children than those who never travelled out of the community.

However, a much more noticeable difference was observed in Brenu Akyinim where women who had travelled to Accra (the national capital) and to Cape Coast (the nearest regional administrative capital) wanted to have fewer children than women who never ventured out of the community one year preceding the survey. Without fail, the women who have travelled out for one reason or another may want to have fewer children, possibly the effect of urban lifestyles rubbing off on them (we see in GDHS 1993 and 1998 that women living in urban areas want to have fewer children compared to those in rural areas). In addition, most of the people who travel for longer periods for schooling and occupational reasons would not want to be hampered or burdened by childbearing activities.

But one of the female participants in the FGD in Brenu Akyinim noted:

> Wanting fewer children is not solely determined by financial aspects of childcare, or the burden of raising a child. It is more of looking fine; you see, if I have too many children and my partner decides to leave me, it will not be easy to marry again because prospective suitors would think I have misused my body. If you have many children, your breasts turn flabby and

> you will not look attractive again. If you have fewer children, then you boost the chances of getting another partner if the need arises.

It was further added that:

> The women want to look fine so they can get boyfriends (extra-marital affairs in some cases). They have been to cities (Accra, Takoradi, Cape Coast) and they see how young and fresh-looking girls are in those cities. This freshness puts them at an advantage in getting attention from men who are ready to spend their money on gifts for them. The girls wear 'apuskeleke' (sexually revealing) clothes.

By extension, females who have lots of children would not want to set seemingly bad examples for their children by wearing such revealing clothes (even though they may secretly like wearing them to portray they are fashion-conscious, or to get the necessary attention from would-be suitors).

How occupation impacts fertility preferences: one of the main thrusts of this study is to expose the influence of occupational activities on childbearing aspirations, attitude and behaviour among the inhabitants of the two communities with an apparently similar ethnic background. Digging below the surface reveals that among the women in Abuesi, there is a negligible difference in the stated ideal number of children between unemployed women and those that were working. Among the latter, women engaged in fishing had the highest desire, for five children, while dressmakers wanted the fewest (an average of 3.5 children). Getting no response from female farmers was not surprising because women in Abuesi are rarely engaged in it. However in Brenu Akyinim, it was found that traders wanted more children, followed by farmers and teachers, indicating the labour-value of children[2]. Teachers wanting fewer numbers of children buttress the importance of education as a catalyst to lower childbearing desires. If the views of the adolescents who participated in the FGD in Brenu Akyinim are anything to go by, children are supposed to help their parents in farm work or other businesses. This was in a way corroborated by a 22-year-old apprentice in junior secondary school education in Abuesi who argued that:

> Women would prefer to have girls who will later on take over the fish mongering activity while the men prefer to have boys because of the fishing activity on the sea.

It was further adduced by a female trader, aged 46 years with middle school level of education at the time of FGD in Abuesi, who has six children, that:

> If children render support in the form of trading and other economic activities to their parents, all members of the household will be comfortable.

6.5 Childbearing Preferences among Men

Discussion on numerical childbearing preferences on the basis of ethnic background among the men will be limited to the Fanti as they constitute the overwhelming majority of respondents in the longitudinal survey. In table 6.6, in contrast to their female partners, males of Fanti ethnic background in Abuesi want more children (5.1) on the average than their counterparts (4.1) in Brenu Akyinim. This buttresses the fact that even though ethnic background plays a role in a wider analytical setting (for example national data), there are other factors at play among people within the same ethnic configuration that influence childbearing aspiration and reproductive behaviour of individual constituents.

The marital status categories among the men were mainly limited to those that are formally married, and those in unions that are socially recognised and accepted (where children born are not considered illegitimate) but loose enough as they lack official recognition of a civil or religious ceremonial procedure. Married men in Abuesi want to have one child more on average than their counterparts in Brenu Akyinim. A pattern starts to emerge where, like the women, the male inhabitants of Abuesi would like to have more children than those in Brenu Akyinim.

Furthermore in the likely event that the men are married with more than one wife, they express the hope to have more children than those who have only one wife. In table 6.6, it can be seen that as the number of children the men consider as ideal increases as the number of wives increases. This positive relationship exists in both communities even though the men of Brenu Akyinim want fewer children no matter how many wives they have, compared to the men of Abuesi. Generally in the two communities, irrespective of whether the men have had a child before or not, the number of children they would like to have increases as their current numbers of wives increases. However while this increase is observed, the number of children considered ideal thins out for each wife and is noticeably smaller than when the women are in monogamous

unions. This raises the question of whether advocates of population control should recommend the practice of polygyny in order to naturally cut down the potential number of children women can have so as to reduce population size and slow the rate of population growth.

Having no affiliation to religious groups increases the chances of high childbearing aspirations among the men. While in Abuesi you can find a difference of almost two children between men who have no religion and those of the Pentecostal faith, the difference was less in Brenu Akyinim. In addition, men practicing the Syncretic religion would like to have slightly fewer children than those not associated with any religion.

Considering the impact of school attendance, men who have never been to school want one child more than those who have some form of schooling. This difference is more noticeable in Abuesi while in Brenu Akyinim the average was about the same. Generally in the two communities uneducated men who currently have no living children want twice as many children as those that are educated. A 51-year-old male farmer in Brenu Akyinim with primary-level education urged having fewer children and stressed the importance of children's education, saying that nowadays parents should look beyond seeing children as potential contributors to family business and other household work at the expense of children's schooling:

> In the olden days children help us (parents) to work but currently children have to go to school. The children can only help you after school hours. So you have to give birth to fewer children to be able to pay their school fees.

The level of exposure of the men to information media was measured by the relative frequency of reading newspapers and magazines in any language, listening to radio, and watching television. Generally it is observed that daily usage of any of the three forms above resulted in lower childbearing desires compared with men who have not used any of the three forms of information media in the year preceding the survey. While there were no large-scale proportional differences, the pattern was still observed among men who currently have no children.

Table 6.6
Average number of children wanted by men in selected backgrounds

Background	Mean number children wanted	
	Abuesi	Brenu Akyinim
Ethnic composition		
Fanti	5.1	4.1
Others	(8.0)	3.5
Current marital status		
In current union	(2.0)	(4.0)
Married	4.9	4.0
Number of wives/partners		
One wife/partner	4.9	3.9
Two wives/partners	6.1	5.3
Three wives/partners	(4.2)	-
Four wives/partners	(12)	-
Religious affiliation		
None	6.3	4.5
Catholic	(3.8)	4.1
Orthodox Protestant	4.4	3.9
Moslem	4.9	(4.0)
Syncretic	6.0	(4.0)
Charismatic/Pentecostal	4.0	3.8
Traditional	-	-
Other	-	2.4
Ever attended school		
No	5.7	3.8
Yes	4.4	4.0
Reading a newspaper or magazine in any language		
Never	4.0	4.3
Once a month	3.8	3.7
Once/more a week	4.0	(4.0)
Daily	(4.0)	3.6
Frequency of listening to radio		
Never	(6.3)	(4.7)
Once a month	(6.0)	(5.0)
Once/more a week	5.1	3.5
Daily	4.7	4.1
Frequency of watching TV		
Never	4.6	4.1
Once a month	4.2	3.7
Once/more a week	5.1	4.2
Daily	4.7	3.8
Occupation		
Not working	3.6	(4.0)
Farming	(4.0)	4.3
Fishing	5.7	3.5
Trading	5.9	(3.0)
Teaching	-	(5.0)
Other artisan	3.9	4.8
Other	3.6	3.8
Overall average for all working men	*4.9	*4.0

(Continued)

Table 6.6 (continuation)

Background	Mean number children wanted	
	Abuesi	Brenu Akyinim
Geographic mobility (Travel to Accra)		
Not at all	4.9	4.8
About twice a year	4.9	3.7
About once & more a month	4.4	3.5
Once or more a week	3.7	3.3
Travel to another big city		
Not at all	(5.3)	(4.0)
About twice a year	4.2	4.4
About once & more a month	5.1	4.0
Once or more a week	4.9	3.1

Source: Diffusion of Fertility Behaviour survey, Round 1

Childcare and upbringing require a tremendous amount of physical, financial, and emotional investment. Money is needed to provide for basic needs – adequate shelter, food, education, and clothing among many other things. A good or stable job with guaranteed income is needed to secure the financial base essential for childcare. It was not surprising therefore to record that males who are in an occupation preferred to have more children than those who were not currently employed. Consider this background; individuals in the middle of their childbearing years now have grown up in a system that moved from an economy providing subsidised health, educational and other welfare services, to an economy operating on a 'cash and carry' basis (full payment before you enjoy social services), and later graduated to a political economy that promised some kind of palliatives after people had to pay for the service in full (PNDC and NDC government in first two scenarios between 1983 and 1999; NPP government from 2000 to present). Added to this is the eroding influence of support mechanisms obtained from extended family and increasingly nucleated family structures. It is therefore not out of place to find unemployed individuals not having or actualising desires for many children, whom they have limited means to take care of.

The increasing phenomenon of market-value oriented welfare policies and practices of reigning governments (influenced by both national and international economic realities) have made people's living conditions worse especially in a society where extended family members are reluctant to give continued support under the reign of modernisation as less

wealthy members retort 'we are all experiencing shocks from same economy'. However it is easier for members of the extended family to visit their relatively well-off relatives asking them to donate extensively when it comes to funeral ceremonies. Reciprocal gains are made, for example, when this relatively well-off family member is organising a social event and other members of the family come around to lend a helping hand (in cooking, arranging chairs, etc.) but it comes at a cost (feeding and in some instances, accommodating them, paying for their transport etc.).

The survey data showed that male farmers Brenu Akyinim want to have more children than those engaged in fishing, irrespective of whether they have childbearing experience or not. However in Abuesi, traders and fishermen consider 6 children the ideal number of children, followed by farmers, and other categories of workers in Abuesi. One of the adolescents in the mixed-sex discussion group stated that:

> If a man has five canoes, he will need a minimum of five male children so that each will be respectively assigned specific role in the canoes.

This statement buttresses issues about sex preferences. It also adds spice to the fact that young adolescents are re-enforcing some traditional values which could impact on their own children's future livelihood but may also make them exceed numerical preferences (if they have any) for children, thereby resulting in more contradiction where fertility behaviour exceeds fertility aspirations. This can happen when the wife keeps on having female children who are seen as less likely to help as fishermen, and the husband wants to expand his fishing business, keeping it solely in family hands, and is not ready to hire labour from elsewhere.

Beside exposures to various forms of information media, geographical mobility also plays a visible role in dampening enthusiasm among the men for having many children. This serves as another avenue for exposure to modernisation effects (urban lifestyle and culture). Those who travelled to Accra more frequently in Abuesi and Brenu Akyinim stated much smaller family size preferences than those who had not visited Accra for any reason in the year preceding the survey. Like the female respondents, men in Abuesi who travelled to the regional capital Takoradi more frequently desire to have more children than sedentary males. Conversely in Brenu Akyinim, men who go to Cape Coast want to have fewer children than men who do not embark on such journeys frequently.

Recently, it has been the interest of successive governments to encourage couples to have fewer children , thereby slowing the annual rate of population growth as part of a wider design to move the Ghanaian citizenry into the middle income-earning zone by the year 2020 (Vision 2020, Poverty Alleviation Programmes, 1994 Population Policy, proposed modification of 1994 Population Policy in 2005). Exposure to urban lifestyles could very well modify rural dwellers' childbearing aspirations; it may not be of immediate significance. Problems associated with bourgeoning population in the fastest-growing cities (Accra/Tema, Kumasi, Takoradi/Sekondi, Cape Coast, and Tamale) are partly due to inmigration. Although programmes are being implemented to encourage people to go back to rural areas, it has not been easy providing equitable development that could give an urban tint to rural areas (popular projects include rural electrification). Thus other avenues have to be explored in trying to influence peoples' minds as to childbearing aspirations. But whose interest is it in to have the number of children that can be adequately taken care of? In the next section, we will therefore look at cost/benefit analyses of childbearing aspirations among the inhabitants of the two communities.

6.6 Desire for Additional Children

One of the problems related with relying on results from attitudinal studies is the fluidity of change, which impacts the reliability of responses. This refers to a situation where stated numerical preferences for childbearing may not necessarily translate to action or behaviour on part of the respondent. This is due to a fact that over time, certain childbearing preferences, beliefs and attitudes can change or be modified due to prevailing circumstances. As pointed out earlier, this can impact the reliability of responses related to questions about individuals' childbearing aspirations. In the survey used for this study, while some respondents could give numerical responses to the question of the actual number of children they consider ideal, others preferred to leave the situation 'up to God' and 'all eggs in body' as determinants of their childbearing outcomes, and some simply 'don't know' their preferences. Even for those who could give actual numbers, does it mean the responses are binding? Is the number of children stated as ideal what they will have at the end of their childbearing period? The advantage however is the light such answers can shed for policy makers and implementers on the potential

childbearing behaviour of individuals. It could also help fashion programmes in fertility control (if need be), and preparation for provision of social welfare services (education, health, food, transport, clothing) and related industries for anticipated population growth from birth outcomes.

6.6.1 Women's desire for additional children

Limiting childbearing preferences to non-numerical statements for cultural or personal reasons necessitated a re-phrasing of questions related to this phenomenon; it also brought about the use of better methods and tactics that helped in generating reliable data which can serve as useful indicators of future childbearing behaviour. It is in this sense that I consider the use of 'desire for a child' and 'desire for another child' for those who have no children and those who have children respectively in the survey. The females were asked 'would you like to have (a/another) child (with your husband/partner) or would you prefer not to have any (more) children (with him)'. In addition, this question was posed to females irrespective of pregnancy status, and their male partners in the two rural communities in successive rounds during survey period. In the latter sense, we were able to get an insight into the workings of change with respect to childbearing preferences over a 5-year period (between 1998 and 2003 from Round 1 to Round 7). Table 6.7a illustrates the percentage distribution of female respondents (not currently pregnant) according to desire for a/another child.

In Abuesi, at the beginning of the survey in 1998, a little more than half of the women wanted a child or additional children, depending on their circumstances. However, three years down the line (in the third and fifth rounds of data collection), there was a decline to as low as 40% in the proportion of women wanting additional children, but this proportion went up to approximately 50% of all women in the 7th round of data collection in the year 2003. In the same period in Brenu Akyinim, fewer than half of the women interviewed wanted a child or additional children at the beginning of the survey, and there is a visible gradual decline in the proportion of women wanting children over the survey period (in the third and fifth rounds, this proportion was stable at 46.3%).

The proportion of women who stated they wanted no more children was as low as 37% at the beginning of the survey in Abuesi, followed by a marked increase to 39 % in the third and fifth rounds, then down to

38% in the seventh round. Also in Brenu Akyinim, there was an increase in the proportion of women who reported not wanting any more children, starting from approximately 42% to slightly more than half of the women at the end of the data collection period.

The interesting thing about this pattern in both communities is that during the third round of data collection (year 2000) there was a decline registered in proportions of women wanting more children and a marked rise for those who wanted no more children. It occurred in a period of political change in Ghana when the former ruling party (of eight years, but actually of eighteen years if counted as an offshoot of the past military government), the National Democratic Congress, lost the national and local elections to the current ruling party National Patriotic Party (NPP). The change of government widely sought and got by the citizens brought about the touting, introduction, and adoption of the Heavily Indebted Poor Country (HIPC) status for Ghana from IMF/WB by the NPP functionaries who capitalised heavily on the goodwill of the electorate. Concomitant with the HIPC status were ramifications of a declining price of gold (Ghana's main export and source of government revenue) on the international market, and a rise in price of crude oil resulting in increase in the local pump price of petrol, diesel and other fuels. The clamour for change and resulting change in government in the prevailing economic circumstances was capitalised on by the new government which forewarned economic belt-tightening measures for individuals and the nation as a whole. The trickle-down effect was such that people's desires for having children were dampened in a situation where there were huge increases in household expenditures, a rise in transport costs resulting in rise in prices of goods and consumables, a rise in the cost of pre-mixed fuel for outboard motor users and other inputs in the fishing sector which increased the cost of fish catch etc. and reduction in earnings and income earning capability. Thus it was not unreasonable to see respondents reporting desires for fewer children.

Comparable patterns were observed among the women who had partners, who were also asked to give impressions of their husbands'/ partners' desires for additional children over the period in question. While this could be a fair reflection of the workings of the minds of their partners with regard to the desire for more children, it could also easily be that responses were based on the women's imagination of what their partners thought and not necessarily what was really going on in their

Table 6.7a

Percentage distribution of female respondents (not currently pregnant) by number of children wanted according to desire for a/additional children

Variable	Women's desire for a/additional children (Round 1)		Women's desire for a/additional children (Round 3)		Women's desire for a/additional children (Round 5)		Women's desire for a/additional children (Round 7)	
	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu
Desire for a/another child								
Wants a (another) child	55.6	48.7	40.9	46.3	40.1	46.3	48.8	43.7
Wants no more (None)	36.9	41.9	39.4	48.6	39.1	50.0	38.2	51.4
Cannot get pregnant	2.5	1.4	5.7	1.1	3.9	2.5	4.8	2.8
Undecided/Don't know	5.0	8.0	14.0	4.0	16.9	1.2	8.2	2.1
Total Number of females	**198**	**148**	**193**	**175**	**202**	**162**	**207**	**144**
Partner's desire for a/another child (for women in current union)								
Wants a (another) child	50.3	51.8	45.0	52.7	40.4	45.8	50.3	42.3
Wants no more (None)	31.9	34.6	37.9	33.6	39.8	37.3	35.8	39.4
Undecided/Don't know	17.8	13.6	17.2	13.7	19.8	16.9	13.9	18.3
Total Number of females	**157**	**110**	**140**	**131**	**161**	**118**	**173**	**104**

Table 6.7b

Percentage distribution of female respondents (currently pregnant) by number of children wanted according to desire for a/additional children

Variable	Women's desire for a/additional children (Round 1)		Women's desire for a/additional children (Round 3)		Women's desire for a/additional children (Round 5)		Women's desire for a/additional children (Round 7)	
	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu
Desire for a/another child								
Wants a (another) child	50.0	40.0	31.3	33.3	56.0	60.0	28.6	44.4
Wants no more (None)	32.1	45.0	56.3	60.0	36.0	40.0	35.7	44.4
Undecided/Don't know	18.9	15.0	12.5	6.7	8.0	-	35.7	11.2
Total Number of females	**28**	**20**	**32**	**15**	**25**	**10**	**14**	**9**
Partner's desire for a/another child (for women in current union)								
Wants a (another) child	48.2	40.0	28.1	53.9	44.0	60.0	35.7	66.7
Wants no more (None)	18.5	25.0	43.8	30.8	28.0	40.0	35.7	22.2
Undecided Don't know	33.3	35.0	28.2	15.4	28.0	-	28.6	11.1
Total Number of females	**27**	**20**	**32**	**13**	**25**	**10**	**14**	**9**

Source: Diffusion of Fertility Survey, 1998-2003.

partners' minds. This rationality of sorts will not make the interviewer think there is a wide scale contrast in women's opinions of their partners' family size desires. In order to get a clearer picture, their partners were also asked to state their desires, which will be discussed in due course.

Furthermore, similar queries were conducted on pregnant women in the same period. In table 6.7b, huge fluctuations were found in the proportion of pregnant women wanting additional children after delivering the current pregnancy. In Abuesi, exactly half of currently pregnant women wanted additional children in round one but the proportion declined to less than 30% of pregnant women in round seven. In between, especially in rounds three and five, there were respective a decrease and increase in this category of women. The same situation was observed in Brenu Akyinim.

For pregnant women who wanted no more children, it was found in Abuesi that at the beginning and end of the survey period, their proportion was around one-third of all pregnant women. By the year 2000 during the third round, there was a significant rise (to 56%) of those who said they did not want any more. In Brenu Akyinim, the trend was the same but in higher proportions when compared to Abuesi. In addition to political and economic experiences of the year 2000, psychological reasons tied to the 'pregnant state' were given by the women during the FGDs that could impinge on desires to have or not to have additional children.

After a miscarriage the decision to become pregnant again depends on individual experience. The intention to have more or few children depends on the individual, especially if the miscarriage was a first pregnancy, but there is an initial period of disappointment which is largely overcome by words of encouragement from family and friends who urge further attempts at pregnancy (experiences are often cited about those who had experienced miscarriage one time or the other and were able to have children successfully afterwards). Younger women (aged under 20 years) were of the opinion that:

> pregnancy can affect your womb so much that it becomes weak and this can cause a miscarriage.

Another took the aesthetic view that:

> some women breastfeed so much and this makes their breast very flat and small.

which means these young women did not want to have many children for various reasons aside from the economic implications of having many children. In contrast to the younger women, older women with childbearing experience held views that suggested the pregnancy experience should not deter women from having more children. They agreed that:

> most women experience so much pain and difficulty during pregnancy and delivery but after a short period, the feeling of pain vanishes and they are ready for further childbearing.

More so,

> God makes it possible for women to forget about the pain that they may likely encounter when they become pregnant

and

> once created a woman, there should be no fear of becoming pregnant since you will certainly have a child one day.

And from an ethnic point of view, a 46-year-old Fante woman who currently had six children noted that Ashanti women get angry with their husbands when they go into labour.

> They insult their husband because of the pain they are going through till the delivery is over.

However, irrespective of pregnancy and marital status, more women in Brenu show the desire to cease having children when compared to those from Abuesi. But it could also be seen that pregnant women in Brenu Akyinim perceive their husbands want additional children after the delivery of the pregnancy currently carried. Valid conclusions can be made when the views of the men are directly considered.

6.6.2 The desire for additional children among men

The dynamism of male respondents' desire for additional children was also explored taking into consideration their wishes independently with respect to the number of wives they have at home. Each male respondent was allowed to state his desire for additional children in conjunction with each of his wives (if he had more than one) who were not pregnant at the time of survey. As illustrated in table 6.8 and in a similar pattern comparable to their female partners' desires, it was observed that nearly half of the males living in Abuesi expressed a desire for additional

Table 6.8

Percentage distribution of male respondents (who's partners are not currently pregnant) by number of children wanted according to desire for a/additional children

Variable	Men's desire for a/additional children (Round 1)		Men's desire for a/additional children (Round 3)		Men's desire for a/additional children (Round 5)		Men's desire for a/additional children (Round 7)	
	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu
Desire for a/another child (Wife 1)								
Wants a (another) child	42.5	54.4	32.7	53.2	34.2	46.6	40.3	39.1
Wants no more (None)	48.8	38.2	60.4	41.8	47.1	47.9	46.8	52.2
Wife cannot get pregnant	1.6	-	3.0	2.5	5.7	1.4	4.8	5.8
Undecided/Don't know	7.1	7.4	3.9	2.5	13.0	4.1	8.1	2.9
Total Number of males	**127**	**68**	**101**	**79**	**123**	**73**	**124**	**69**
Partner's desire for a/another child								
Wants a (another) child	42.4	57.3	35.7	50.6	35.3	45.8	42.3	40.0
Wants no more (None)	41.6	30.9	56.1	44.2	47.4	48.6	50.0	46.2
Undecided/Don't know	16.0	11.8	8.1	5.2	17.2	5.6	7.7	13.8
Total Number of males	**125**	**68**	**98**	**77**	**116**	**72**	**118**	**65**
Desire for a/another child (Wife 2)								
Wants a (another) child	48.2	42.9	36.0	46.7	33.3	35.7	37.0	50.0
Wants no more (None)	37.9	42.9	44.0	53.3	50.0	57.1	48.2	44.4
2nd wife cannot get pregnant	3.5	-	12.0	-	4.2	7.2	11.1	5.6
Undecided/on't know	10.4	14.2	8.0	-	12.5	-	3.7	-
Total number of males	**29**	**7**	**25**	**15**	**24**	**14**	**27**	**18**
Partner's desire for a/another child								
Wants a (another) child	35.7	42.9	45.5	40.0	39.1	38.5	37.5	41.2
Wants no more (None)	46.4	42.9	45.5	60.0	47.8	61.5	45.8	58.8
Undecided/Don't know	17.8	14.2	9.0	-	13.1	-	16.6	-
Total Number of males	**28**	**7**	**22**	**15**	**23**	**13**	**24**	**17**
Desire for a/another child (Wife 3)								
Wants no more (None)	-	-	100.0	-	100.0	-	100.0	-
Total number of males	-	-	**2**	-	**2**	-	**2**	-
Partner's desire for a/another child								
Wants a (another) child	-	-	-	-	-	-	-	-
Wants no more (None)	-	-	100.0	-	50.0	-	100.0	-
Don't know	-	-	-	-	50.0	-	-	-
Total Number of males	-	-	**2**	-	**2**	-	**1**	-

children at the beginning of the survey with their first wife, which declined to just one-third by the third round of data collection a couple of years later. However, we could see a steady rise from 34.2 percent to 40.3 percent in the proportions of males in 2001 and 2003 respectively declaring their intention to have additional children. When asked to give opinions about their first wives' desire for additional children, the pattern was quite similar.

Brenu Akyinim males provided a contrast; there was a steady decline in the proportion of men who expressed a desire for additional children with their non-pregnant first wives, from more than half of the males at the beginning of survey to less than 40 percent after seven rounds (five years) of data collection. Their views about their first wives' desire for additional children with them were altogether similar. Generally it is interesting to note that the men living in Abuesi were able to overcome factors that led to the slump in desire for additional children with their first wives at the third round of data collection, such that by the fifth round, optimism started to rise for more children; meanwhile in Brenu Akyinim the downward trend in the desire for additional children with their first wives continued throughout the survey period.

The situation is a bit different when their non-pregnant second wives are considered. In Abuesi there was a noticeable downward trend in the desire for additional children with second wives until the fifth round of the survey, after which there was an increase in the proportion of males expressing a desire for more children, but still short of the level five years earlier. Their second wives' patterns of opinion were not too different from the men's point of view over the years. In Brenu Akyinim, there was a significant rise in the proportion of males wanting more children with their second wives from round one to round seven of data collection but with high fluctuations within the survey period. Contrastingly, these men in Brenu Akyinim expressed that their second wives did not want additional children with them.

It is generally assumed in Ghana that most women who become second wives do not see their position as stable. It is noted that what made the man take a second wife could always make him take more wives whenever he sees fit. As a particular secular Muslim man (aged 56) in Cape Coast observed in an informal interview:

> When the barrier of having more than one wife is broken, it is like opening the flood gates for more women to come in; you can always find some ex-

> cuse to have more female partners, especially younger ones if you have the money to spend.

Thus if the second wife does not see herself as the last wife the man would venture to have, and if things could go awry for any reason (socio-economic, political, personal or otherwise), then she would be better off not to commit too much to having many children with such a man so that if it came to pulling out of such a partnership, they would not be saddled with the responsibility of taking care of too many children and they would still be

> marketable enough to attract another man with the view of entering into another union.

Over the survey period, the men of Brenu Akyinim showed a decline in the desire for more children with their first wives but increase in the desire for more children with their second wives. The 56-year-old Muslim man who has been partially residing in Brenu Akyinim for about three years noted:

> As with all things relatively new, a man would want to consolidate his partnership with the second wife by withdrawing comforts he shares with the first wife to the favour of the second wife; therefore in trying to assure the second wife that her position is safe, he would do everything financially and in matters of childbearing to show that the second wife is the favoured one. Mind you, this can change as soon as there is a potential for a third wife.

In table 6.9, we can see that the pattern of the situation was not too different except in numbers of men who wanted additional children with their pregnant first and second wives. Men whose first wives were pregnant showed that over the years, the desire for additional children with pregnant wives waned from 56.2 percent to 37.5 percent of men in Abuesi and from 47.1 percent to 25 percent of men in Brenu Akyinim, from round one to round seven of data collection respectively. There was a corresponding rise in numbers of men who expressed that they did not want children again with their first wives. Also in the men's view, their pregnant wives' desire not to have children any more with them had also risen.

Table 6.9

Percentage distribution of male respondents (who's partners are currently pregnant) by number of children wanted according to desire for a/additional children

Variable	Men's desire for a/additional children (Round 1)		Men's desire for a/additional children (Round 3)		Men's desire for a/additional children (Round 5)		Men's desire for a/additional children (Round 7)	
	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu	% in Abuesi	% in Brenu
Desire for a/another child (Wife 1)								
Wants a (another) child	56.2	47.1	27.3	66.7	46.7	25.0	37.5	25.0
Wants no more (None)	31.2	52.9	63.7	33.3	40.0	75.0	37.5	50.0
Undecided/Don't know	12.5	-	9.0	-	13.3	-	25.0	25.0
Partner's desire for a/another child								
Wants a (another) child	37.5	53.9	27.3	66.7	46.6	25.0	37.5	-
Wants no more (None)	37.5	47.1	54.5	33.3	40.0	25.0	37.5	50.0
Undecided/Don't know	25.0	-	18.2	-	13.4	-	25.0	50.0
Total number of males	**16**	**17**	**22**	**3**	**15**	**4**	**8**	**4**
Desire for a/another child (Wife 2)								
Wants a (another) child	66.7	33.3	80.0	-	42.9	100.0	50.0	-
Wants no more (None)	33.3	66.7	-	100.0	57.1	-	-	-
Undecided/Don't know	-	-	20.0	-	-	-	50.0	-
Partner's desire for a/another child								
Wants a (another) child	66.7	33.3	60.0	-	28.6	100.0	50.0	-
Wants no more (None)	33.3	66.7	-	100.0	57.1	-	-	-
Undecided/Don't know	-	-	40.0	-	14.3	-	50.0	-
Total Number of males	**3**	**3**	**5**	**1**	**7**	**1**	**2**	-
Desire for a/another child (Wife 3)	-	-	-	-	-	-	-	-

Source: Diffusion of Fertility Survey, 1998-2003.

6.7 Costs and Benefits of Childbearing

Finding out whether individuals or couples desire to have a particular number of children, or additional children, is good but not satisfactory to understand underlying reasons for these fertility preferences. In the survey, three indices were used to note the cost of childbearing for each woman: feeding, educational, and health costs of having a first or additional child. This questioning was limited to the first round of survey exercise in 1998 and five years later, when they were asked similar questions. In table 6.10, we will see how women weighed the impact of feeding and education against their decision to have a child or additional child. The women also gave their views on the health costs of childbearing. The question asked was: 'suppose you (and your husband/partner) were anticipating the demands of a/another child on your health; how demanding would this be on a scale of 0 to 10, with 0 meaning a/another pregnancy and birth would make no demands on your health, and 10 meaning a/another pregnancy and birth would be extremely demanding on your health?' On this scale, the codes were re-grouped and labelled for this study as follows: '0' for 'no cost'; '1-3' for 'low cost'; '4-6' for 'moderate cost'; and '7-10' for 'high cost'.

6.7.1 Costs and benefits among women

Fewer women (21.1 percent) in Abuesi gave the impression that having a child or additional children would be of high financial cost to them compared to 31.8 percent of the women in Brenu Akyinim. However, fewer women in Brenu Akyinim than in Abuesi thought the cost of educating a child or additional child was small, in general about one-third of the women in the two communities. In addition, approximately one-quarter of the women in the two communities believed that having a child or additional children had high health costs which could negatively impact their desires to have many children. In all three indices highlighted above, it could be inferred that the inability to provide formal education for children could dampen women's desires to have many children, relative to perceived feeding and health costs.

In the same vein, an inquiry was also made into the potential benefits women thought they could derive from having children and how this could motivate them to have a child or additional children. Questions asked in this sense relate to the anticipated labour contribution from

children, and their support for parents in old age. Support level anticipated from male and female children separately was categorised as 'no', 'low', 'moderate', and 'high' as well as 'don't know'. The women were asked: 'suppose you (and your husband/partner) were anticipating the labour contribution of a/another child to this household; how helpful would a/another child be on a scale of 0 to 10, with 0 meaning a/another child would make no labour contribution, and 10 meaning a/another child would be extremely helpful in the household?'

More than 90 percent of women in the two communities anticipated labour contribution in one form or the other as a benefit of having a child or additional children. There was no distinct difference between male and female children. A slightly higher proportion of women in Brenu Akyinim expect high labour contribution from their wards.

With regards to old age support, again more than 90 percent of the women in the two communities expected that their children would give them the needed support when they (the parents) reach old age. However, while close to 50 percent of women in Brenu Akyinim expected high support from their male children during their old age, just above one-third of women living in Abuesi expressed a similar expectation. In a reverse situation fewer women in Brenu Akyinim expected support from their female children at old age compared to those living in Abuesi. But the notion of having children as form of insurance for parents at old age is re-enforced in this day and age.

6.7.2 Calculation of costs and benefits by men

The men were also interviewed with respect to the anticipated impact of feeding and educating a child or additional children on their childbearing aspirations, as well as the impact of having a child or additional children on the health of their wives, as illustrated in table 6.10 below. With reference to their first wives, the impact of having a child or additional children generally weighed less where their health was concerned, compared to costs of feeding and educating the child. However for the latter two categories, the dynamics were different in the two communities. While just over one-third of the men in Abuesi saw educating a child/additional child as more costly, an equivalent proportion of men in Brenu Akyinim would consider the high cost of feeding before having a child or additional children with their first wives. By the fourth round of survey data collection in 2001, when the 'belt-tightening HIPC measures' were

already in place, there was a significant increase in the proportion of men in the two communities who felt that the cost of both educating and feeding a child weighed heavily with regard to having more children. Cost of feeding moved to second place but with a significant rise in the number of men claiming this reason (though fewer in Brenu Akyinim than in Abuesi). This is not surprising, as it had been reported earlier that it was at this stage that a high proportion of respondents stated a desire to stop having children. In addition to this was the visible rise over time (from 19.6 to 26.2 percent) in the proportion of men in Brenu Akyinim who would consider the impact of further childbearing on their wives' health; but this proportion in Abuesi was relatively stable at about 29 percent between 1998 and 2001.

Table 6.10
Percentage distribution of male respondents according to impact of feeding/clothing and educating a child/additional child and health impact of a pregnancy on decisions to have more children

High Costs (%) (1998)	**Males with Wife 1**		**Males with Wife 2**	
	Abuesi	Brenu A.	Abuesi	Brenu A
Feeding/clothing	28.8	31.5	31.4	43.1
Educating	36.6	29.3	28.6	38.5
Wife's health	28.7	19.6	37.1	23.1
High Costs (%) (2001)	**Males with Wife 1**		**Males with Wife 2**	
	Abuesi	Brenu A.	Abuesi	Brenu A
Feeding/clothing	48.0	39.0	29.0	37.5
Educating	55.3	46.3	29.0	31.2
Wife's health	28.5	26.2	22.6	25.0

Source: Diffusion of Fertility Behaviour Survey

With second wives, the situation was almost in reverse order. In 1998, Abuesi men would rather consider the impact of another pregnancy on their second wives' health before deciding on having another child or additional children, followed by the cost of feeding and education. In Brenu Akyinim, the cost of feeding was paramount on the men's minds, followed by the cost of education, and health impact of a pregnancy on their second wives' health. Within three years, there were obvious reductions in the proportion of men regarding these three indices as weighing

heavily on the decision to have a child with their second wives. This is in line with the significant rise observed at this point in time in the proportion of males wanting more children with their second wives in Brenu Akyinim.

Table 6.11
Percentage distribution of male respondents according to labour contribution and social security support expected from their children

Child value		Males with Wife 1		Males with Wife Wife 2	
		Abuesi	Brenu A	Abuesi	Brenu A
Anticipated labour contribution (%)					
High	Male	37.2	55.4	48.6	38.5
High	Female	41.2	46.7	51.4	53.8
Anticipated social security support					
High	Male	45.8	52.1	57.1	38.5
High	Female	39.9	44.5	54.3	38.5

Source: Diffusion of Fertility Behaviour Survey

Furthermore, the men were asked about labour contributions expected from their children. In table 6.11, looking at children of first wives in Abuesi, fewer men expected high labour contributions from male children than they did from female children. The reverse was the case in Brenu Akyinim where more than half of the men looked forward to high labour contribution from male children compared to 46.7 percent who anticipated high labour contribution from female children. However, more men in Abuesi were looking for social support in old age from their male children than from female children. This kind of thinking must have arisen from the fact that male children were to inherit canoes from their fathers upon retirement, which in addition to their own canoes should boost fish catches and ultimately income accruing to these sons. Therefore it is not entirely out of place to expect financial support from these quarters. In Brenu Akyinim a slightly smaller proportion of men anticipated high social support from children than those who would demand high labour contributions from children during their younger years. It is anticipated that these children would have already paid their dues to their parents in form of labour contributions and as such, not

much is demanded from them again as social security support for their parents in old age.

However, the situation was different with the second wives. While more men expect high labour contributions from female than male children in the two communities, the proportion expecting high labour contributions from male children is higher in Abuesi (48.6 percent) than in Brenu Akyinim (38.5 percent). Follow-up to this, a larger proportion of Abuesi men expect high social security contributions from the children of second wives by the time they grow old. It indicates that some parents who formerly had not considered high labour contributions from these children would rather have support from them in their old age. However, men who wanted high social security contributions (38.5 percent) were significantly fewer than those who demanded high labour contributions (53.8 percent) from female children.

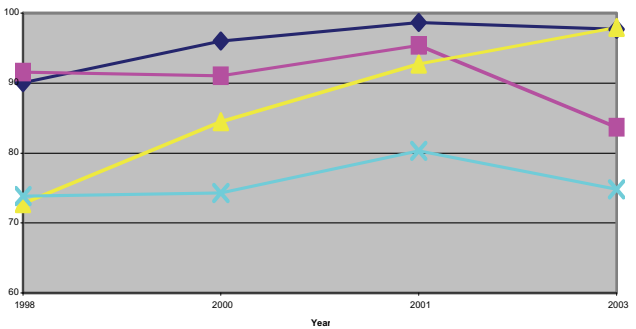
6.8 Contraception in Abuesi and Brenu Akyinim

There was a sizeable proportion of people observed who reported not wanting more children than they already have in Abuesi and Brenu Akyinim. These respondents therefore represent a likely proportion of people who would want to use some means to limit births. In addition, if we take a careful look at those who would like to stop having children and compare it with those who are using some means to stop having children, the difference could give us the picture of the unmet need for contraception in the two communities. However, it would be useful to know first what the attitudes of the inhabitants of Abuesi and Brenu Akyinim are to birth control. Figure 6.1 shows the changing attitude of women towards birth control from 1998 to 2003. It should not be forgotten that in the year 2003, about 38 percent of women in Abuesi and more than half the women in Brenu Akyinim claimed they wanted no more children.

Respondents were asked 'do you approve or disapprove of couples using any means to space births or avoid pregnancy?' This line of questioning is relevant in trying to understand people's perception of the use of modern contraceptives, especially with regard to the gap between knowledge and use, and unmet need for contraceptive use. Approval rating for contraceptive use was quite high among the women and it increased with time over the five-year survey period but towards the end

of this period, a dip in was observed in the approval rating, which was much more pronounced in Brenu Akyinim.

Figure 6.1
Approval of birth control



Even though contraceptive use had a high approval rating among the women and it increased over the years, the importance of their partner's feeling towards contraceptive use could not be ruled out. As one 45-year-old fisherman with primary education in Abuesi observed in the FGD (men-only group):

> The decision to use contraceptives should be the responsibility of the man. Men have more education than women and for that matter have more knowledge about family planning and contraception.

In the longitudinal survey the women were asked: 'Do you think your husband/partner approves or disapproves of couples using any means to space births or avoid pregnancy?' It was observed that based on the women's perception, relatively fewer men approved of contraceptive use. However, by the end of the survey period, there was an indication that nearly all the women in Abuesi perceived that their husband approved of contraceptive use. At the same time in Brenu Akyinim, there was a decline in the proportion of women who thought their husbands approved of contraception (this is similar in pattern to the women's personal approval of contraception).

Despite this perception of their husbands' approval, it was pertinent to know if they had ever discussed ways to space births or avoid preg-

nancy with their husbands/partners as one could not rely solely on what they perceived as their partner's approval. Another fisherman aged 34 years and educated up to 'Middle' level living in Abuesi, in the FGD for men only contended that:

> The decision to use contraceptives should be discussed by the couple. The couple can even go to the drug store to purchase whatever method they intend to use together.

This statement is in contrast to the opinion of the older fisherman who expected the decision on contraceptive use be to be left to men alone. Discussion of birth control with partners helps in gauging the other's knowledge, approval and usage of methods and could be a first step in deciding to adopt specific methods of contraception. In some other instances, disapproval could likely result in clandestine use of contraception by either partner in a couple. In the words of a 37-year-old fisherman:

> Some women use contraceptives secretly because their husbands do not live up to responsibility expected of a head of household.

Inasmuch as some people would not like to use contraceptives, some are using it secretly without their partners' knowledge. Approximately one-fifth of men in Abuesi and one-tenth of men in Brenu Akyinim claim they know women who are using contraceptives without their husbands' knowledge. Over half of these men in Abuesi claimed that they learnt of this 'secret' from other people, while close to 40 percent stated the secret users themselves took them into their confidence. However, 10 percent of all claimants said their knowledge of the women's secret use was based on pure suspicion. In Brenu Akyinim, men who knew secret users were evenly split along those who were informed about it directly by the women themselves, those who were told by others, and those who suspected some women were secretly using contraceptives.

Their husband's opposition to family planning was cited as the major reason some women secretly use contraceptives in Abuesi, followed by the women who said they were over-burdened by childbearing, and to a lesser extent some women use contraceptives secretly in order to space their childbirths adequately. But in Brenu Akyinim, the chief reason perceived by the men driving women to use contraceptives secretly is being over-burdened with childbearing, followed by when the man wants a child but the woman is obviously not ready. One man mentioned in ad-

dition that 'it is only when women want to be wicked' that they resort to using contraceptives secretly to frustrate their partner's sexual efforts to conceive. In all, about 56 percent of the men living in Brenu Akyinim approve of this secret use of contraceptives compared to 40 percent of men in Abuesi. However, clandestine contraceptive use was virtually limited to women; only one man in the entire lot admitted to having used herbs without his partner's knowledge.

Between 1998 and 2003, it was observed in Abuesi that the proportion of women who discussed contraceptive use with their husbands increased over time from about 64 percent to 70 percent (table 6.12). In Brenu Akyinim, however, the relationship was U-shaped as during the mid-survey period there was a decline of almost 50 percent in the proportion of women who reported having discussed contraception with their husbands, and by the year 2003 the number of women had risen back by slightly more than half.

Table 6.12
Percentage distribution of women according to approval of birth regulation

Indices of birth regulation (%)	Abuesi	Brenu Akyinim
Discussed birth control with partner		
Round 1	63.9	63.8
Round 3	65.8	41.7
Round 5	66	34.9
Round 7	70.3	52.2
Encouraged to use birth control		
Round 1	27.2	48
Round 3	36.4	41.3
Round 5	51.5	30.8
Round 7	58.8	55.6
Discouraged to use birth control		
Round 1	19	23.5
Round 3	13.8	4.8
Round 5	6.6	7.9
Round 7	8.1	24.2

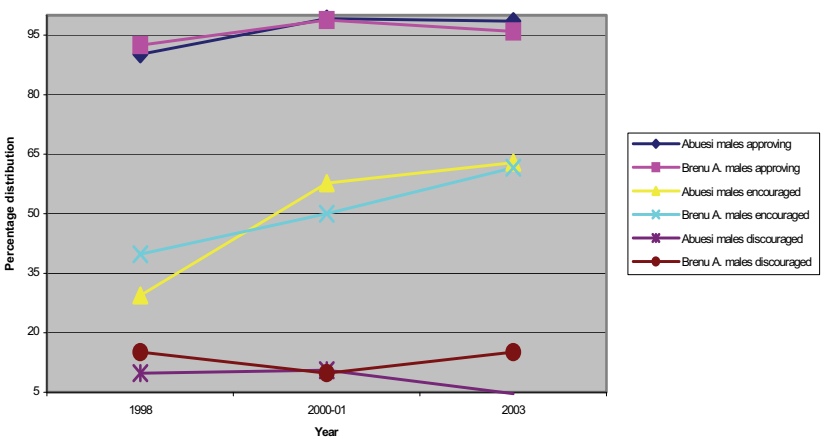
Source: Diffusion of Fertility Behaviour Survey

The effects of discussion or counselling about using any method to space births or avoid pregnancy the women received from people other than their partners, resulting in encouragement or discouragement, were also taken into consideration. In both communities, there was a recog-

nisable rise in the proportion of women who were encouraged to use contraceptives between 1998 and 2003; while this was linear in Abuesi, the mid-survey lows were again recorded in Brenu Akyinim.

Complementing the general pattern was a continuous decline in the proportion of women who were discouraged by others in matters of contraceptive use. In Brenu Akyinim, there was a significant rise in the proportion of women reporting they were discouraged from using contraceptives from a mid-survey low of under 5 percent to almost one-quarter of the women by the end of the survey period. The drop in contraceptive approval rating (see figure 6.2) reported among the women, especially in Brenu Akyinim, could be attributed to this discouragement received from other people.

Figure 6.2
Approval rating of birth control regulation among males



According to GSS and MI (1999), generally in Ghana there has been a more than three-fold increase in the percentage of people opposed to the use of family planning since 1993; it was not strange to observe an increase in the proportion of respondents in Abuesi and Brenu Akyinim claiming they received some discouragement about contraceptive use from other people. The most common reason cited for non-use of contraceptives among women under age 30 years is the fear of side effects. Another reason given for non-use includes the fact that they or their

partners, or someone else, was opposed to the use of contraceptive methods. In addition to this, those who naturally desire to have additional children would not want to use contraceptives. By and large, an understanding of the reasons why people do not like using family planning methods is vital when designing the type and quality of service.

Approval of birth control was at its highest for the men at the mid-survey period which we could link to the harsh effects of political and economic change which affected their childbearing aspirations. Again, this could be attributed to the culmination of the effects of various on-going contraceptive awareness programmes being exhibited at a time when people were rather concerned with not worsening their economic plight by increasing family sizes.

However, it is observed in figure 6.2 that there was a general increase in the proportion of men who received some kind of encouragement to use birth control in the two villages within the 5-year survey period. In addition to this, more men (15.1 %) in Brenu Akyinim received some discouragement of contraceptive use, about thrice the proportion reporting it in Abuesi.

Table 6.13
Percentage distribution of men on attitude to birth regulation

Attitude to birth control	Wife 1		Wife 2	
	Abuesi	Brenu A.	Abuesi	Brenu A.
Approval of birth control				
Round 1	82.4	88.2	74.3	92.3
Round 4	97.6	96.3	84.9	100
Round 7	97.7	83.6	89.7	77.8
Discussion with partner				
Round 1	72.6	77.4	48.6	76.9
Round 4	80.5	63.4	61.3	68.8
Round 7	72.7	61.6	51.7	66.7

Where multiple wives/partners are concerned, the men's approval of contraceptive use was lower than with second wives than with first wives. This could be in a bid to have children with the second wife in order to consolidate her position in the family. Second wives can feel their position is shaky; it is thought that their husbands do not take them seriously if they use contraceptives in the early stages of partnership. Es-

pecially where inheritance and property accumulation issues are concerned, you cannot properly lay claim to the deceased's property if you do not have offspring to show from your union. First wives, due to their position, are relatively easily recognised and admitted while on some occasions, second wives/partners are regarded as opportunists looking for a piece of the man's inheritance in event of his death. In a pattern opposite to that reported by the women, there was a reduction in the proportion of men who claimed they had discussions with their wives about contraception, as shown in table 6.13.

In Abuesi, there was an increase in this proportion around mid-survey which declined at the end of 5 years to almost same level as the beginning of the survey period. This decline in proportion of men who had discussions of contraceptives with their wives was more direct in Brenu Akyinim. One's partner's approval of family planning is crucial to the use of any form of contraception, and more importantly in method choice. Magadi and Curtis (2003) suggested that women whose partners disapprove of family planning are highly likely to use traditional methods of family planning, suggesting that in this group of women, the disapproval is directed toward modern contraceptive method. The implication for secret use of injectables is even higher as barrier methods are considered least often when a partner's cooperation is lacking. How true this is will be seen in coming chapters of this study especially in the context of the determinants of contraceptive use (or non-use), shifts in contraceptive choice, and the perspective of service delivery, and how these interact to effect changes in fertility levels.

6.9 Conclusions

Between 1998 and 2003, fluctuations observed in desirse for more children casts doubt on the assumption that low fertility is the end-point of demographic history, as it was observed that when the inhabitants thought they had overcome (or there were prospects of overcoming) particular socio-economic shocks, their desire to have children started to rise again. Noting the changes in childbearing aspirations would have been problematic in a situation where cross-sectional information is relied on; thus the usefulness of longitudinal data is strengthened despite the seemingly relatively complex operational logistics it entails with regard to follow-up of subjects. Thus the concept of time as important at the micro-level of the individual life course cannot be over-emphasised

in getting a true picture of attitudinal changes. Reproductive decision-making is essentially distributed along the whole reproductive life cycle; if we are able to follow changes in value orientation over life courses of individuals (for example the rise in proportion of males wanting to have more children between 2001-2003) or groups of people by employing longitudinal studies, the validity and usefulness of studying attitudinal attributes increase. But this is made difficult due to spontaneity and improvisation and full-scale about faces with regard to translating childbearing aspirations to childbearing behaviour, which can make the predictive value more valid.

Despite similar geographical and ethnic configurations in the coastal communities of Abuesi and Brenu Akyinim, different livelihoods and childbearing aspirations exist when the inhabitants are compared. It has been noted that men and women who had no living children at the time of the panel survey and were inhabitants of Abuesi would like to have more children than those living in Brenu Akyinim. In addition to this, the influence of increasing educational level in dampening desire for large family size was reinforced. It was also shown that fishing and farming activities in Abuesi and Brenu Akyinim respectively play important roles in moulding peoples' perception of how large family sizes are supposed to be and what gender of child is preferred to another. Over time, between 1998 and 2003, we could see changing trends in desires for additional children and associated reasons based on shifts in the political and economic system; coupled with this was a change in intention to use contraceptives and concomitant secret use of contraceptives by those who thought they were over-burdened with childbearing or those who had husbands openly opposed to use of modern contraception. For example, it is recalled in Malaysia that the decrease in Chinese parents' desired family size came as a fall-out of the New Economic Policy (NEP) implemented by the Malaysian government in 1970 which limited economic and educational opportunities for the Chinese, indirectly raising the cost of having children. According to Suet-Ling Pong (1994) the subsequent increase in the rate of contraceptive use was much faster among Chinese (and Indians) than among Malays.

The resulting discontent associated with implementation of the structural adjustment programme, which is largely seen as the outcome of national economic mismanagement by those in power, is used by those against the implementation of a national population policy aimed at lim-

iting family size. This can account for the reason why there is divergent opinion even among officials of the NPC about the permanency of the current fertility decline being experienced in Ghana. On one side of the argument is the belief that the current decline is permanent and that people's fertility attitudes and behaviour will not go back to previously high levels, which is made more possible by currently increasing widespread use of contraceptives. However, there is another impression that the current fertility decline is a temporary attitudinal response due to the prevailing poor economy, which means changing fortunes can make parents reconsider increasing their family sizes. If individuals and parents later revise their fertility desires upwards, actual fertility rates may increase,t not up to previously high levels but definitely more than replacement fertility. This would be significantly different from the situation described by the Classic Transition Theory where low fertility is the end point of fertility transition. In fact in some European countries, fertility levels have declined so low that they are now below replacement levels (The Economist, 2004; Wattenberg and Zinsmeister, 1986).

Towards the end of the 1980s, the new economic policies, changes in housing conditions (from compound style to one-room tenancy) plus the simultaneously rising costs of childcare (the change from subsidised education and health care to a 'cash and carry' system; high costs of new clothes leading to a switch to second-hand clothing), migration of fathers leaving the burden of child care on women who rely on irregular remittances) compelled family limitation among farmers, fishermen, and traders. All were events that uprooted and overturned the earlier controls surrounding childbearing aspirations, conjugal relations, and daily life, encouraging the rapid spread of new ideas about family size.

In addition to the structurally related decline in the perceived necessity of large families, new modes of thinking were discovered especially in relation to a few women in Abuesi who during the FGDs expressed the desire not to have any child throughout their lives. Voluntary childlessness is rare in West Africa and people grow up with notions of having at least one child for many reasons. It is instructive here that about half of the women who have not started their childbearing careers do not want more than three children. This group of women may be emerging with new thinking about how to manage their sexuality and reproduction, which is totally different from the traditional way of life and its previously higher numbers of children for individuals and couples. The

practice of voluntary childlessness has not caught on in non-western societies, especially as it is discordant with local expectations that a woman (or a couple) must bear offspring. Where infertile individuals are found, their suffering is exacerbated by strong pronatalist social norms mandating motherhood. Inhorn (1994a) points out that in many non-western societies, policy makers are often obsessed with curbing population growth rates, ignoring the suffering of sub-populations that are infertile because it is 'barrenness amidst plenty'.

Furthermore, the differences observed in the childbearing aspirations of people sharing homogenous ethnic background over time supports the argument by Greenhalgh (1995) that there may be more intriguing variations within such societies, with many kinds of reproductive outcomes worthy of investigation in their own right. To further substantiate this point, not only were economic factors considered as necessary elements in shaping reproductive intentions, newer reasons were aesthetic factors cited by the inhabitants of Brenu Akyinim as important in shaping their thoughts about further childbearing.

In the area of occupation, despite women's participation in the labour force, certain conventional arrangements of gender have not necessarily been dismantled and may have become more entrenched given the socio-economic realities on the ground. There exists a tacit acceptance of the types of jobs men and women could find themselves engaged in, which they further encourage their children to adopt. In Abuesi and Brenu Akyinim, the fisherman's wife has the burden of processing and selling fish in addition to her activities as homemaker. The additional activity serves the economic purpose where more household income is derived from the sale of fish which if not processed might otherwise have gone bad, providing much-needed revenue during lean times of the fishing season. It is easy to agree with McNay (1999) that men and women may have entrenched 'often unconscious investments in conventional images of masculinity and femininity which cannot be easily reshaped'. Whereas Derne (2002) observed in India that in order 'to handle threats to their own Indianness, nationalist men insisted that women remain at the home cooking and maintaining family ties'.

This chapter has served as the exploratory entry point for understanding the numerical values of family size that individuals and couples hold dear in Abuesi and Brenu Akyinim according to different sets of norms. These norms and values about family size preferences and attitudes to-

wards contraception underlie reproductive behaviour. In order to see if there is any congruence in fertility aspirations and outcomes, the next chapter is thus dedicated to measuring reproductive outcomes – both measuring fertility levels and to establish the remote and immediate determinants of these levels in Abuesi and Brenu Akyinim. The implications of these fertility rates for future levels of childbearing, contraceptive use and the population policy implementation arena are also dealt with.

Notes

1. Defining intentionality may be complicated, by the way in which conflicting personal, familial, and societal pressures are psychologically reconciled (Harris and Ross, 1987).

2. See Inter-relationship between family size growth and labor-value of children in the mills of Lancashire in pre-industrial England (Harris and Ross, 1987).

7 Childbearing Performance

7.1 Introduction

The main objective of this chapter is to estimate levels and proximate determinants of fertility of women in the two communities studied, having set the background for childbearing preferences and the socio-cultural context of family size formation. Currently, Ghana's total population stands at approximately twenty-one million people based on projections of the year 2000 census, almost triple in size relative to the census taken 30 years ago. As if that is not enough, experts in the early 1990s believed that based on the annual rate of population growth experienced around that period, Ghana's population would increase by one and half times[1] to 35 million by the year 2025. The trend is such that the doubling time for population growth in Ghana is getting shorter. One of the key elements behind this change in population is the level and pattern of fertility. Fertility, in this study, is defined as the childbearing performance of women. Even though mortality and migration are important areas of study because they affect population size, structure and growth, population dynamics are however strongly moulded by fertility. Fertility is also important because it is inextricably connected with many aspects of the economic and social milieu. Therefore a better understanding of fertility behaviour may yield insights relevant to a wide range of social and economic behaviour, patterns and changes such as labour force participation, educational aspirations and attainment for children, and income distribution.

The ability to estimate the magnitude of changes in fertility and the knowledge of the underlying causes of these changes are required background information for the development of policy in many areas. For example, projections of fertility and child survival data are essential for

an analyst interested in estimating the number of children who may be enrolled in schools in the future, especially as this has a potential impact on projecting expenditures on primary education. Another obvious example is that knowledge of fertility levels, trends and differentials is important for designing policies that are likely to have a direct or indirect effect on fertility and, to a greater extent, population growth. In the ideal sense, policy makers and planners would therefore examine probable impacts of proposed policies and programmes directed towards other social or economic development objectives as they relate to fertility.

Vital registration is an important source of data needed for obtaining reliable estimates of fertility. In most developing countries, vital registration systems are either incomplete or non-existent. In Ghana, vital registration exists in all the regions but the passive approach in gathering of vital rates coupled with the uneven distribution of centres results in incomplete coverage, especially in rural areas. In this situation, reliable sources of vital rates are from censuses, which are however irregular, and surveys which are designed for specific research needs. These are a few of the handicaps that have made scholars try to fill the gap in knowledge by developing different indirect techniques for estimating levels of fertility and mortality. In this chapter, an attempt is made to examine fertility levels and differentials in Abuesi and Brenu Akyinim using information obtained from the panel survey data collected by the Demography Unit of UCC. The second task in this chapter is to analyse the socio-demographic factors influencing cumulative fertility by using multiple regression. Finally, an examination of the determinants of fertility in the two communities is conducted using the Bongaarts model of the proximate determinants of fertility.

7.2 Estimating Fertility Levels

In the panel survey data collected by the Demography Unit, two types of data were obtained on which fertility estimations are based. First, women were asked questions regarding the number of children they had ever given birth to, which helps to obtain information on lifetime fertility. Second, women were also asked in subsequent rounds of the survey how many children they had had in the inter-survey period (approximately seven months); careful analysis of this data at the end of the seventh round of data collection (carried out in 2003) yielded information on

children born twelve months prior to the end of the seventh round which helps in determining current fertility.

There are limitations regarding the use of current fertility data, age-specific parity data, and maternity history data. Errors that affect current fertility data include age misreporting, omission of births, reference period error, and the use of short time periods, which has implications of uncertainty in the reported fertility levels due to sampling variability of the observed number of births (Ngalinda, 2000). However, the use of the panel survey data of the Demography Unit helps in overcoming most of these errors that might have occurred if one-time cross-sectional information is used for this study. The comprehensive way in which the Demography Unit data was collected, which involved interviewing the women at regular intervals as to number of children ever born, and information on pregnancy, breastfeeding, menstruation and sexual activities was also obtained on a monthly basis which allows the collection of progress report on any pregnancy experience and its outcome. The issue of memory lapses on the women's part, which can lead to omission of births and reference period error, were overcome by the relatively short inter-survey period which did not require them to think too far back into the past when recollecting childbearing experiences and associated activities. While a drawback to this procedure is the huge cost involved in monitoring women's reproductive histories (as they were being made), it is compensated for by the collection of highly reliable data.

Age-specific parity data on the other hand can be affected by misclassification errors arising from misreporting of age and/or duration of marriage, errors in the reported number of births and women of a specific age group which form the numerator and denominator respectively in the calculation. The most serious error is committed by older women who omit births when reporting the total number of live births they have ever had. According to the UN (1983), some of the older women tend to omit reporting births that ended in the early death of the child. In some cases, they even forget grown-up children, those born to another husband or partner, and children not at home for various reasons at the time of survey or census. On the other side of the coin are also factors that may tend to inflate the number of births; for instance, the inclusion of step-children, adopted children or grandchildren, the inclusion of births, and non-inclusion of parity by a sizable proportion of women who either did not state their parities, or left a space blank. While no system is fool-

proof, the data collection efforts of the Demography Unit tried various ways to minimise the occurrence of these errors. Right from questionnaire design in the Population Council (New York) to the practicalities of enumerator training (staged in Cape Coast), questions were formulated, moulded, and reformulated such that at the end respondents were comfortably guided through giving information on currently living children (at home and away), children born alive but now dead, still-born babies, step-children and foster children of any origin. Also, data editing had three different phases; the first being the supervisor on the field who checked on any omissions and inconsistencies, followed by the office editors who cross-checked questionnaires one by one, and lastly the data entry personnel whose software programme does not permit continued entry of data from a questionnaire when it comes across an omission where one is not supposed to be. In any of these three stages, the questionnaire was sent back to the enumerator in the field for the correction of any detected omission or inconsistency.

For maternity history data, possible sources of variation other than cohort or period changes are misstatement of the age of women especially in their earlier lifetime fertility data, under-reporting of births by women older than 35 years and unmarried adolescents who would not like to be reported as mothers. This latter factor is being overcome presently as the adolescent childbearing is such a common social problem that adolescents no longer avoid stating that they have children. Extraneous consideration can also be given to women who died before the interviews were conducted, as they might have had different fertility patterns from those interviewed. However, the collection of inter-generational data helps in understanding fertility behaviour of older women and experiences that are representative of women in the past when they were reproductively active. In all, the possibilities of distortions were highlighted for appropriate caution to be taken in interpreting the reported data. This makes the use of indirect techniques of fertility estimation necessary in some cases.

7.3 The Completed Family Size

The completed family size is defined as the number of children ever born by the end of the reproductive period of a woman's life. It proves to be much more stable than age-specific fertility rates from year to year. According to Kpedekpo (1982), it represents the cumulative fertility of

specific women for each successive age. In demographic analysis, the exercise involves following a group of women born in a particular year over their entire reproductive life by recording the number of children they bear. However, due to financial and other logistical constraints in developing countries, the exercise is not widely used. Instead, the average parity of women aged 45-49 years is taken to represent the completed family size with the assumption that fertility of older cohorts are equal to the current fertility experience of women in the childbearing ages. If the fertility value obtained for women in age group 40-44 is greater than the fertility value of women in age group 45-49 years, the fertility value of the younger age group is taken as Completed family size.

The completed family size for women of childbearing age (15-49 years) in Abuesi and Brenu Akyinim is given below in table 7.1.

Table 7.1
Mean number of children ever born to women in Abuesi and Brenu Akyinim

Age group	Abuesi		Brenu Akyinim	
	1998	2003	1998	2003
15 - 19	0.345	*	0.5	*
20 - 24	1.852	1.29	1.286	1.115
25 - 29	2.975	2.289	2.842	2.381
30 - 34	4.195	3	4.229	3.733
35 - 39	5.077	3.63	5.027	4.308
40 - 44	6.303	5.559	5.621	5.065
45 - 49	7.2	5.769	5.905	4.421
Total	3.651	3.443	3.95	3.556

Source: Diffusion of Fertility Behaviour Survey, 1998 and 2003

The women were divided into seven age groups and their childbearing performance, expressed as mean number of children ever born, is obtained by dividing the total number of children enumerated as born to the women in a particular age group by the total number of women enumerated in the age group. Factors such as mortality and/or out-migration of women affect this measure since not all women survive up to the age group 45-49 years. The inflation of fertility rates may occur, especially if the women who dropped out of the sample due to death or permanent change of residence at relatively younger ages might have had fewer children; the women who dropped out may have different fertility

behaviour from those who stayed and were enumerated. However the incidences of women dropping out of the sampled frame were so negligible as to not distort fertility estimations in the two communities to an appreciable extent.

Generally, the data show a positive relationship between cumulative fertility and age of women in the sample; that is, the mean number of children per woman increases as women's age rises. Although the total mean number of children is approximately four children per woman, the mean is closer to four for women in Brenu Akyinim than in Abuesi in 1998 at the beginning of the survey. Another apparent difference is that the childbearing rate is higher in teenage years in Brenu Akyinim than in Abuesi, but at the oldest age group of 45-49 years, women in Abuesi have one child more (7.2 children) on the average than those in Brenu Akyinim (5.9 children).

In the early 60s, the Nkrumah government linked the strength of a nation to the numbers of its people, and the government was largely perceived to be pro-natalist since it neither formulated anti-natalist policies nor took steps to curb population growth. But recognising the threat of uncontrolled population growth to national development, the post-Nkrumah government embarked on the formulation and implementation of Ghana's first population policy in 1969. One of the targets of this policy was fertility reduction, but since it takes time for results to be seen, the earlier values and norms of relatively high numbers of children must have been passed on to those who entered reproductive age in the late 60s and early 70s, which was approximately the time the women now aged 45-49 years started childbearing. If we rely on information obtained from the women currently aged 40-44 or 45-49, those living in Abuesi had more children than the ones who lived in Brenu Akyinim. Their current age shows that they may not be able to have children again due to menopause; as such the current number of children they have can be safely assumed to be their completed fertility levels.

In addition, an appreciable difference in the total number of children ever born is observed among women based on length of stay in the two communities. For instance in Abuesi, women who have lived there for less than three years have fewer children (3.2) than those who have lived there for more than ten years (4.5 children). In Brenu Akyinim, using the same reference period and same lower benchmark, the difference is even more pronounced by about two children. Thus in-migrants might be

bringing smaller family size attitudes along with them which are diffused with the already existing childbearing behaviour in the two communities.

7.4 Fertility Patterns

In the ensuing analysis, variation in the mean number of children ever born (MNCEB) is computed in the context of various socio-economic and demographic background factors.

7.4.1 Childbearing differentials among women

It is imperative to examine differentials in cumulative fertility in different age groups of women since the number of children ever born is strongly associated with age. The age groups were further condensed; the cumulative childbearing pattern of women in the two communities with respect to their social background characteristics is presented below in table 7.2. The age of a woman at the birth of her first child is an important factor that influences the length of her reproductive life in a society where contraceptive prevalence is relatively low. Ngalinda (2000) asserts that the age at first birth is highly and negatively correlated with fertility. In this light, higher age at first birth shortens the reproductive period of a woman, which will consequently reduce the total number of children she would ever have (and vice versa). In many cases, this pattern is expected to hold when the factor of age at first marriage of a woman is considered.

In both Abuesi and Brenu Akyinim, it was found that little or no difference exists in the childbearing pattern of the women when their fertility is viewed along the lines of three gradations of age at first marriage. A few reasons could account for this. One of these is that women who for different reasons (schooling, short-term migrant trading) got married at relatively older ages tend to want to 'speed up' childbearing in order to 'catch up' with their counterparts who got married at earlier ages. In addition, women who experienced teenage childbearing often put a temporary hold on childbearing until they are in a good position to have more children; such good positions include the attainment (or semblance) of socio-economic stability which was disrupted by the early childbearing. Also, we have to take account of children born by women before officially entering into marital unions. This is an area of data limitation in the sense that information collected did not include the delineation of num-

ber of children born before entry into marital union, which would have thrown more light on issues of premarital childbearing. Compared to the clear onset of a formal marriage, the blurry line between co-habiting and traditional engagement/wedding, which often pre-dates the officially registered unions, presents a scenario where tracking of childbearing should be divided into different phases. Since parents would not want to identify any of their children as illegitimate, technically arising from the fact that such a child was born before marriage, often all children are reported by women in surveys as born within marriage.

Examining childbearing patterns among women according to the age at which they started childbearing presents a different picture. While the exposure to chances of childbearing at very early age can be associated with high fertility, the situation is different for women who started childbearing late for all the three broad age groups. However, one thing that cannot be discounted is the danger posed by the early exposure to the risk of childbearing and its subsequent effect on fertility levels. This is because physiological maturity of the reproductive organs is necessary for management of the foetus once conception takes place. Obstetrical complications occur when this physical immaturity compromises the ability of a woman to carry the pregnancy to full term. These complications sometimes result in secondary infertility. Of all the women sampled, only one woman did show signs of primary infertility as it was discovered, a woman in Abuesi aged 45 in 1998, who had no children. Despite her situation, she still expressed the desire to have up to five children if possible.

Using marital status of the interviewed women as another basis of checking fertility patterns, married women in Abuesi and Brenu Akyinim have much higher cumulative fertility in all three broad age groups than their counterparts who are single. Though it is evident from table 7.2 that some single women do have children, they have the lowest number of children in this regard. Married women are reported as having more children, averaging four each, especially when we consider that they are ensconced in the socio-economic and culturally acceptable cocoon that gives them the confidence to have the number of children they desire. Among those who have had their marriage disrupted, divorced women are shown to have more children than those who are separated. Though widows seem to have a higher mean number of children ever born, the small sample size of less than five women in the two communities does

not allow conclusions to be made other than accept for now that they are outliers. It is laughable at this stage to suggest that chances of a husband dying earlier than his wife (or a wife outliving the husband) become stronger when a couple has more than six children, but it could be an angle worth exploring as one of the factors influencing mortality differential by gender among married couples. Thus not only does having fewer children enhance the health of women and children, it may also increase the life expectancy of men if they become less prone to aggressive sourcing for daily living (for example fishermen who travel far from home on high seas to eke out a living in order to make ends meet). Grouping the women who have had their marriage disrupted (by death, divorce, separation) into one category showed that their MNCEB is almost at par with women that had their marriage intact.

With regard to religion, Lehrer's (1996) assertion that religions differ in their fertility norms, coupled with the finding in the fourth chapter that Muslim women showed the highest preference for large family sizes were further supported by the results in the actual number of children ever born. In Abuesi, fertility is highest among Muslims at almost five children per woman and lowest among Catholics and Pentecostal/ Charismatic Christians at a mean of three children per woman. At younger ages, that is, adolescents 15-24 years old, Pentecostal/ Charismatic Christian women have the highest fertility level of a minimum of two children, while Muslims have one child on the average. Among Christians, there is the widespread teaching which encourages 'early' entry into marriage in order to create the context for appropriate sexual relations (rather than fornication); coupled with a high traditional expectation of having children within the first year of marriage (Ampofo and Gyepi-Garbrah, 1986), it is not surprising therefore to find women of the Pentecostal faith having the highest number of children in this age category. The situation is the same in Brenu Akyinim where Pentecostal/Charismatic women are shown to have two children more than women in other religious categories. However, the rate of childbearing slows down as women grow older, when evidence shows that cumulatively, Muslims and those of the Syncretic practice have outpaced women of other religious leanings. But on the whole in Brenu Akyinim, women of the Syncretic persuasion have the highest mean number of children ever born, followed by those who expressed not being guided by any religious value. Comparing evidence with their fertility prefer-

ences (Chapter 6), it is shown that the women's fertility behaviour are being played out along with their numerical childbearing aspirations.

Table 7.2
Mean number of children ever-born according to socio-cultural background characteristics of women by age group

Women's background	Abuesi - MNCEB (n=232)				B.A. - MNCEB (n=179)			
	15-24	25-34	35-49	Total	15-24	25-34	35-49	Total
Age at 1st marriage								
12-19 yrs	1.7	4	7	**3.8**	1.5	4.4	5.5	**3.9**
20-24 yrs	1.5	3	5.6	**3.9**	0.8	3.5	5.7	**4.4**
25+ yrs	-	3.6	4.6	**4.1**	-	2.2	4.7	**4**
Marital status								
Single	0.1	{1.0}	-	**0.1**	0.1	-	-	**0.1**
In union	0.6	{2.0}	{6.0}	**1.7**	0.4	{4.3}	{3.5}	**1.9**
Married	2	3.8	6.1	**4.1**	1.8	3.9	5.4	**4.4**
Disrupted marriage	0.9	2.4	6	**3.7**	-1	2.8	5.8	**4.4**
Separated	*0.7*	*{1.0}*	*{5.0}*	***2***	*{1.0}*	-	*{5.0}*	***{3.0}***
Divorced	*{2.0}*	*2.8*	*6.5*	***4.7***	*{1.0}*	*2.8*	*5.6*	***4.1***
Widowed	-	-	*{6.0}*	***{6.0}***	-	-	*{7.0}*	***{7.0}***
Religion								
None	2.3	3	5.6	**3.7**	-	4.3	5.6	**5.1**
Catholic	{0.0}*	{3.3}	{5.0}	**3**	1.2	3.6	5.6	**3.7**
Orthodox Protestant	0.6	2.9	6.7	**3.1**	0.8	3.9	5.1	**3.7**
Moslem	1.3	4.5	7	**4.6**	{1.0}	{4.0}	{6.0}	**{3.0}**
Syncretic	1.6	4.3	5.3	**3.7**	{1.0}	{3.0}	6.9	**5.3**
Pentecos-tal/Charismatic	2.2	2.4	4.9	**3.1**	2.5	4.3	5.2	**4.6**
Other	-	-	-	**-**	{0.0}*	{1.0}	5	**3.7**
Watch TV								
Never	1.4	3.7	6.8	**4.1**	1.1	4.3	6.2	**4.8**
1 monthly	1.2	5.5	6	**4.5**	{2.0}	3.5	4.8	**3.7**
1 weekly	1.6	3.9	6.5	**4**	1.2	4.2	5.6	**4.1**
Several times weekly	1.3	2.9	5	**2.8**	0.8	3.3	5	**3.5**
Read English newspapers								
Easily	0.3	2.2	4.8	**2.4**	0.5	3	4.6	**2.8**
Difficulty	1	3.2	6.4	**3.1**	1.3	4.2	5.7	**4.3**
Cannot	1.8	3.9	6.3	**4**	1.5	3.9	5.7	**4.4**
Read Ghanaian newspapers								
Easily	0.8	2	5.3	**2.6**	0.5	4.8	4.6	**3.3**
Difficulty	1	3	4.5	**2.5**	1.4	3.1	5.6	**3.8**
Cannot	1.6	3.9	6.3	**4**	1.4	3.7	5.8	**4.3**

Source: Diffusion of fertility behaviour survey, 1998

The relationship between exposure (and access) to various media sources and mean fertility levels in the two communities was also considered. Two media sources considered are newspapers and TV. An inverse relationship is observed between frequency of watching TV and

the mean number of children among the women in the two communities. For example, while women living in Abuesi who declared they do not watch TV have 4.1 children, the other group that watch TV almost daily or several time weekly have 2.8 children on the average. The same pattern holds for women in Brenu Akyinim where there is a more than one-child difference in the different grades of frequency of TV watching among the women. This negative relationship is very distinct when it comes to reading newspapers. Respondents who could read newspapers easily in English had fewer children than those who could not, the difference amounting to almost two children in Abuesi and one child in Brenu Akyinim. In the same vein, women who could read newspapers and magazines very well in the local language had fewer children than those who could not. The relative power of different sources of media for transmitting images and information about socio-economic changes in the world and the peculiar surroundings of the respondents is showing up as an important influence on childbearing aspirations and behaviour in the two communities. Presently, the chance of lowering childbearing desires and fertility levels is higher if respondents have regular access to media information that directly or indirectly discourages the practice of having large family sizes.

In table 7.3 below, an analysis of childbearing differentials was conducted using additional socio-economic background characteristics of the women. The sampled women from the two communities were also asked about their desires for further childbearing. Expectedly, women who said they do not want to have children anymore currently have the largest family size with a mean of about six children Abuesi and 5.6 children in Brenu Akyinim. This category of women are therefore more likely to adopt measures to forestall further childbearing, especially if they are not yet near menopause which naturally puts a stop to childbearing potential[2]. Meanwhile, women who would like to have additional children presently have a lower family size with an approximate average of two children in Abuesi and nearly three children in Brenu Akyinim. In between these two categories of women are those who are undecided, and women who admitted that they cannot get pregnant again ('impossible') especially those near the end of the general physiological age of childbearing (that is, the late 40s) in the two communities. Among women who desire to have more children, there is a positive association

between their numerical desires and the number of children they had in 1998.

In Abuesi, women who prefer two as the maximum number of children exceeded their preferences by two additional children. For other categories of fertility preference, births appear to be within the preferred limits. In Brenu Akyinim, women exceeded their preferences by about one child in the different sub-categories of fertility preference. This may imply unsatisfied demand for contraceptive use as a means of achieving family size within the limits of aspiration (see chapter 4).

Table 7.3
Mean number of children ever born according to socio-economic background characteristics of women by age group

Women's background	Abuesi - MNCEB by age group				B.A. - MNCEB by age group			
	15-24	25-34	35-49	Total	15-24	25-34	35-49	Total
Desire for children								
Want another	1.3	2.8	3.9	**2.1**	1.1	2.6	4.8	**2.7**
Want no more	{3.0}	5.1	7	**5.9**	{2.0}	5.3	6	**5.6**
Impossible	-	-	5.8	**5.8**	{0.0}*	-	{7.0}	**3.5**
Undecided/Don't know	{1.0}	3.4	{2.0}	**2.4**	{0.0}*	-	{7.5}	**3.8**
Fertility preference								
1-2 children	2	4	6.5	**4**	{1.0}	{1.8}	4.6	**2.8**
3 children	1.7	2.5	{6.3}	**2.7**	1.5	2.9	5.7	**3.7**
4 children	2	3.7	5.8	**3.9**	2	3.9	6.1	**4.9**
5+ children	2.9	4.4	6.7	**5.5**	{2.7}	5.1	5.9	**5.3**
Non-numeric pref.	2.3	4.8	5.7	**4.7**	{2.1}	{3.5}	4.3	**3.5**
Ever-used contraceptives								
No	1	3	5.9	**3.1**	0.5	3.6	4.9	**3.4**
Yes	1.7	3.8	6.1	**3.9**	1.3	3.8	5.7	**4.2**
Now using contraceptives								
No	1.1	3.5	5.7	**3.3**	0.9	3.5	5.4	**3.9**
Yes	2.1	3.9	6.8	**4.3**	1.3	4.1	5.7	**4.1**
Level of education								
None	1.8	4	6.5	**4.4**	2.2	4.1	5.4	**4.6**
Primary	1.8	3.7	5.8	**3.2**	1	3	6	**4**
JSS/Middle school	0.4	3	5.5	**3**	1	3.8	5.5	**3.8**
SS/VT/PT	{0.5}	{1.0}	{4.0}	**2**	0.2	1.5	{3.5}	**1.6**
Occupation								
None	0.6	{3.5}	3.6	**1.4**	0.4	{4.0}	{3.0}	**1.1**
Farming	-	-	-	**-**	1.3	3.9	6.2	**4.8**
Trading	1.9	3.8	6.4	**4.3**	1.6	3.9	5.3	**4.3**
Teaching	-	-	-	**-**	{0.0}	{2.5}	{3.5}	**2.7**
Other	0.8	1.6	4.5	**1.8**	1.3	2.8	{4.3}	**2.5**

Source: Diffusion of fertility behaviour survey, 1998; In { } less than 5 respondents in the sub-category.

What was further computed is the current childbearing levels for women who could not state numerical values for their fertility preferences; some of these women say their preference is 'up to God' to determine, and others simply 'don't know' or would rather leave it to how the body responds to the effects of childbirth. It was found that on the average, these categories of women when combined have almost five children each in Abuesi and around four children each in Brenu Akyinim. This further strengthens the notion that women who opt not to state numeric childbearing preferences are often found at the upper end of the childbearing scale (see section 6.3, table 6.2).

Irrespective of whether a woman has ever used or is currently using any type of contraceptive method, the mean number of children ever born to the women is lower in all age categories for respondents who have never used contraceptives or those who are not currently using. Data in table 7.3 suggest that contraception is favoured more when women have more than four children. In Abuesi for example, women who are currently using contraceptives have slightly above four children each while those who are not currently using any type of contraceptive have approximately three children each. This pattern also exists among the women in Brenu Akyinim though with marginal difference among the women in the contraceptive use categories. This further supports the findings above that those who expressed the intention to stop childbearing currently have the highest number of children.

Also, an inverse association is found to exist between women's level of educational attainment and fertility (table 7.3). In this sense, the mean number of children ever born decreases as the level of education increases among the women in the two communities. Using four categories of level of educational attainment, there is a highly noticeable difference among women at extreme ends of the educational scale; for example in Abuesi, women with no education have two children more than those who have attended Senior Secondary School (SSS) or have gone as far as Polytechnic institutes. In Brenu Akyinim, a difference of almost three children is observed among the women in these poles of educational attainment.

The last relationship explored in this section is between occupational categories and fertility, and it is shown that the dominant economic activities seem to be associated with high fertility levels. For example, in Abuesi, where women are generally engaged in trading (mostly of fish

produce), these women have the highest value at a mean of 4.3 children per woman, while in Brenu Akyinim, the highest mean number of children of almost five children per woman is found among those engaged in farming which is the predominant economic activity. Common to the two communities is that those who are unemployed have just about one child each. This will help shed some light on the economic rationale for childbearing purposes. Logically, with no means of regular or adequate income, it is essential not to increase family size which can compound an already difficult situation. However, some still have children as this is socially expected if one is married (even though unemployed). Even some respondents who are presently apprentices of various kinds have children. This is expected to increase as they find themselves in more stable jobs and their economic situation improves. Teachers, supposedly with a higher level of education in the community, have fewer children than women in the farming category in Brenu Akyinim.

7.4.2 Childbearing differentials among men

It is also important to examine childbearing differentials among men in the same way childbearing differentials were analysed for women. As pointed out earlier (Chapter 4) these men are partners of the interviewed women, in varying degrees of socially acceptable union (civil, religious, and traditional). What makes their situation different is that some of the men have up to four wives, so it is useful to know how having children differs among men in this regard.

Table 7.4
Distribution of male respondents by age groups and number of wives according to the mean number of children they have ever born

Background	MNCEB	
	Abuesi	Brenu Akyinim
Number of wives		
1	4.7	4.8
2	9.3	10.1
3	10.3	{12.1}
Age group		
21-30	2.7	2.0
31-40	5.4	3.7
41+	8.4	8.2
Total	**5.8**	**5.6**

Source: Diffusion of fertility behaviour survey, 1998

Table 7.5

Distribution of males according to the mean number of children ever born

Background	Abuesi - MNCEB by age group				B.A. - MNCEB by age group			
	21 - 30	31 - 40	41+	Total	21 - 30	31 - 40	41+	Total
Religion								
None	{4.5}	3.3	{9.0}	**5.4**	{4.0}	3.8	8.1	**5.9**
Catholic	{2.0}	{2.0}	{5.3}	**4.0**	2.2	4.4	8.5	**6.1**
Orthodox Protestant	2.8	3.6	7.9	**4.6**	{0.7}	2.0	7.0	**4.6**
Muslim	2.5	8.5	9.7	**7.0**	{0.0}*	{5.0}	-	**{2.5}**
Syncretic	{3.0}	6.5	10.1	**7.8**	-	{3.5}	{12.5}	**{8.0}**
Pentecostal	{2.0}	3.7	5.8	**4.0**	{2.0}	4.8	{7.0}	**5.2**
Other	-	-	-	**-**	{3.5}	{3.5}	{7.5}	**4.8**
Marital status								
In-union	{0.5}	-	{0.5}	**{0.5}**	{1.0}	{3.0}	{3.3}	**{3.3}**
Married	2.8	5.4	5.8	**5.8**	2.1	3.7	5.6	**5.6**
Watch TV								
Never	2.0	6.1	7.7	**5.7**	{1.5}	{4.0}	8.1	**6.9**
1ce monthly	-	4.8	6.6	**5.7**	{1.0}	2.8	{10.3}	**4.4**
1ce weekly	2.2	5.8	8	**5.8**	{2.8}	4.6	7.8	**5.7**
Several times weekly	3.1	5	9.7	**5.8**	2.2	3.4	7.6	**5.1**
Read Ghanaian newspapers								
Easily	2.3	3.5	7.3	**5**	{2.3}	3.0	7.6	**5.6**
With difficulty	1.4	5	7.9	**4.7**	{1.8}	5.1	7.8	**5.7**
Cannot	3.3	6.3	9.6	**6.5**	2.0	3.6	8.7	**5.4**
Level of education								
None	3.6	6.6	6.6	**7.1**	{3.0}	{4.0}	11.3	**8.4**
Primary	2.2	5.6	5.6	**5.5**	1.4	4.1	5.8	**4.3**
JSS/Middle	2.0	3.3	3.3	**4.3**	2.2	4.1	8.3	**5.7**
SSS/VT/PT/U	{2.0}	{3.0}	{3.0}	**4.3**	{2.0}	2.1	5.7	**3.6**
Partner attended school								
1st wife								
None	2.8	6.3	6.3	**6.6**	2.7	4.2	7.4	**6.3**
Yes	2.7	4.2	4.2	**4.8**	1.8	3.1	-	**4.9**
Desire for more children								
Wants another	2.5	3.4	6.3	**3.4**	2.3	3.2	7.5	**4.3**
Want no more	2.6	6.6	9.5	**7.4**	{2.5}	{5.0}	8.8	**7.3**
Wife can't get pregnant	-	{3.0}	{9.0}	**{6.0}**	-	-	-	**-**
Undecided	{12.0}	{10.7}	{3.0}	**9.4**	-	{4.0}	{5.0}	**{4.3}**
Fertility preference								
1 - 4 children	2.3	4.4	7.1	**4.2**	2.0	4.2	8.9	**5.3**
5 - 8 children	3.9	5.6	8.6	**6.4**	{4.5}	4.8	8.6	**7.4**
9 - 21 children	{6.0}	7.8	10.3	**8.8**	-	-	{9.0}	**{9.0}**
Non-numeric	{7.0}	8.5	10.7	**9.6**	-	{3.0}	{7.5}	**6**
Occupation								
None	{1.5}	{3.0}	{5.0}	**3.2**	-	-	{4.0}	**{4.0}**
Farming	-	{4.0}	{8.0}	**{6.7}**	{1.7}	3.2	7.6	**5.6**
Fishing	3.1	6.0	9.8	**6.4**	{3.8}	{5.5}	12.0	**7.8**
Teaching	-	-	-	**-**	-	{3.0}	{5.3}	**{4.8}**
Other	1.4	3.5	6.4	**4.4**	1.1	3.8	7.7	**4.5**
Now using contraceptives								
No	2.9	5.3	10.3	**6.2**	{1.3}	4.2	8.6	**5.2**
Yes	2.4	5.8	8.6	**5.8**	2.9	3.8	7.3	**5.3**

Source: Diffusion of fertility behaviour survey, 1998

It was found that the mean number of children per man increases as the number of wives increases, from as low as five children per man with one wife to over ten children per man with three wives or more in the two communities, as illustrated in table 7.4. Considering childbearing differentials age group, was realised that a positive relationship exists between cumulative fertility and men's age in both communities.

The minimum number of children per man in the 21-30 age group is approximately three in Abuesi and two in Brenu Akyinim, increasing to around eight children per man aged over 40 years in the two communities. Generally speaking, men have more children each than women due to having multiple wives, and across the board, men living in Abuesi have a slightly higher mean number of 5.8 children than men living in Brenu Akyinim who have 5.5 children each. The men in Abuesi have more children due to a relatively larger presence of Muslims, as Islam allows men to have more than one wife.

It is therefore not surprising to find that Muslim men in Abuesi are second in highest rankings for mean number of children ever born as illustrated in table 7.5. The highest mean number of children is found among men in both communities who practice Syncretism (an amalgam of different religious practices). Catholics and Pentecostal/Charismatic Christians have the lowest mean number of 4.0 children. In Brenu Akyinim, there are situations where having multiple wives was not limited to Muslims alone, as polygamy also occurs among Catholics, Orthodox Christians, those who favour Syncretism and a professed Pentecostal. While Muslims in Brenu Akyinim had the lowest mean number of children, due to the fewer than five men in the sample, the same reason could however be adduced for men who practice Syncretism(they had the highest mean number of children but their sample size was less than five). Catholic men follow with about six children each, while men who have no religion also have approximately six children each (data show a relatively higher occurrence of polygamy among these categories of men).

As identified earlier in the third chapter, there are two categories of men according to marital status. It is recognised that males who are in relatively less formalised but socially accepted associations with their female partners ('in union') are fewer in the sample than men who have formalised partnerships (religious, civil, traditional) with their wives. In table 7.5, men in the less formal unions are shown to have fewer children

than those in formalised relationships with the women in the sample. The relative instability and high potential for separation does not create a conducive environment for increased childbearing and associated illegitimacy. This further buttresses the earlier assertion that some women space births bearing in mind the potential for separation from partners.

The possible need to still hook up with another partner makes them decide to have fewer children, which would not be considered 'excess baggage' when they move in with a new partner, having at some point invoked the rule of matrilinearity that bestows ownership of children on women. Conversely, couples that are in more formalised partnerships also use their marital state to have the optimum number of children (see marital status section in table 7.2).

There is a fluctuating but decreasing mean level of number of children ever had by the men with increasing frequency of exposure to any of these two types of media. A clearer relationship is observed when it comes to the ability to read newspapers or magazines in English and local languages. Men who could read newspapers easily in English or in the local language have fewer children than men who cannot read or understand any of these magazines at all. In between these two extremes of course are men who could read with difficulty, whose mean number of children is also in between the two extremes. The ability to read easily is indicative of school attendance and/or a certain level of educational attainment.

Therefore it can be seen that there is a wide disparity between men who have no type of education and those who have attained a relatively high level of education with regard to the mean number of children they have in the two communities. In table 7.5, men who have no education have seven children on the average in Abuesi while those who have gone up to the university level have four children on the average. Similarly but with wider disparity, in Brenu Akyinim, men with no education have up to a mean of eight children while their counterparts with university/polytechnic education have fewer than four children. It is necessary to point out at this juncture that although there are very few men in the highest educational category,we cannot ignore the fact that at different points along the educational attainment scale, childbearing achievement drops for both men and women irrespective of their current age. In addition, men whose partners have some form of education have fewer children than men whose partners are not educated.

Another relationship similar to what was found among the women is that in both communities men who expressed the desire not to want any more children currently have the highest mean number, of over seven children as illustrated in table 7.5. Conversely, men who expressed the desire to want additional children currently still had about three and four children respectively in Abuesi and Brenu Akyinim irrespective of whether they had one or more wives. Rationalisation effects may be adduced more to the positive relationship between numerical preferences and the mean numbers of children ever born (see section 6.3, table 6.3). Also comparable to the women's situation is how men with non-numerical fertility preferences have children on the highest side of the recorded childbearing scales in the two communities.

Fishermen in Brenu Akyinim had nearly eight children, followed by farmers, with approximately six children each. In Abuesi, farmers have the highest number of children (but their sample size is less than five which necessitates taking this observation with caution), while fishermen have as many as children (or even more, on average). Men who did not have the opportunity to work in the year before the survey started in 1998 are shown to have fewer children than those who had been working. However, these unemployed men at the time of survey are shown to have more children on the average than women who expressed being unemployed in the same period too. In Brenu Akyinim, this category of men are more than 40 years old, indicating that they might have worked at some point prior to the survey and were able to support having children but were due to unknown circumstances currently unemployed. These include men who had lost or needed to replace ageing fishing boats but had not been able to gather enough resources in this direction. Some of these men had been recorded as having taken loans from women fish traders in order to re-launch their fishing careers. Methods of repayment include supplying fish to the fishmongers for free until the absolute value and interest is paid off (Bortei-Doku Aryeetey, 2001). Men in the sub-category 'other'[3] have fewer children than farmers and fishermen, but more children than those who were not employed as of 1998. Such men do not need extra hands from within the family to pursuetheir livelihoods; rather when they , they stand to gain more from tutoring 'external' (not immediate family or relatives) apprentices who often pay in cash and kind (for example running errands for the Master) for the apprenticeship.

Different dynamics are observed, however, with regard to the influence of contraception on childbearing among the men. In Abuesi, men who were not currently using any type of contraceptive at the beginning of the survey in 1998 had more children than men who were using contraceptives. This follows the regular expectation that 'current' use of contraceptives is associated with having fewer children, unlike the pattern among the women that contraceptive use is a result of higher levels of childbearing. It means that the men seem to be favourably disposed to taking precautions before reaching high levels of childbearing. In Brenu Akyinim, there is little or no difference in the relationship between mean number of children ever born and whether or not a man is currently using contraceptives.

7.5 Regression Analysis

The examination of fertility differentials in the previous section enables us to subject selected associated variables to more complex analysis in order to ascertain their relative importance as determinants of fertility. It is also necessary to account for the inter-relationships between the selected independent variables. Therefore multivariate analysis using the OLS[4] regression method will be undertaken to examine the determinants of cumulative fertility in Abuesi and Brenu Akyinim. The regression analysis is restricted to women who have ever given birth and those whose age at which they had their first child was successfully derived (see section 5.6.1)[5].

A total of twelve explanatory variables are used in the two regression analyses in the two communities; the dependent variable is the number of children ever born (CEB), which is at a maximum of 12 for some women living in Abuesi and a maximum of 11 children for some women in Brenu Akyinim. Two types of models were generated; in the first one, explanatory variables are treated as pure continuous variables (the age of women, age of women at birth of first child, age of women at first marriage, and numerical fertility preferences). In the second model, these continuous variables were used in conjunction with categorised background variables (religion, desire for additional children, media exposure, occupation, education, approval of contraceptives, current use of contraceptives, and marital status). The second model was employed in two phases; first for all women irrespective of current marital status, and sec-

ondly only for women currently married (or in-union). The second model is represented below in two regression equations respectively:

CEB = f(age, age at first birth, fertility preference, religion, desire for additional children, media exposure, occupation, education, approval of contraceptives, current use of contraceptives).

Hence, for all women irrespective of marital status:

$$CEB = \alpha + \beta_1(age) + \beta_2(AFB) + \beta_3(FP) + \beta_4(REL) + \beta_5(DAC) + \beta_6(TV) + \beta_7(WORK) + \beta_8(EDUC) + \beta_9(CAPP) + \beta_{10}(CUSE)$$

For married women only:

CEB = f(age, age at first birth, fertility preference, religion, desire for additional children, media exposure, occupation, education, current use of contraceptives, age at first marriage)

$$CEB = \alpha + \beta_1(age) + \beta_2(AFB) + \beta_3(FP) + \beta_4(REL) + \beta_5(DAC) + \beta_6(TV) + \beta_7(AFM) + \beta_8(EDUC) + \beta_9(CUSE) + \beta_{10}(WORK)$$

CEB is the acronym for 'children ever born' while α is a constant and $\beta_1 \ldots \beta_{10}$ are regression coefficients for each of the respective explanatory variables. Therefore, the number of children ever born is treated as a function of several explanatory variables. The OLS regression coefficients for the determinants of children ever born using only continuous variables as stated earlier is presented in table 7.6.

Table 7.6
The OLS regression coefficients for the determinants of children ever born (continuous explanatory variables only)

Variables	Abuesi		Brenu Akyinim	
	Coefficient unstandardised	Significance	Coefficient unstandardised	Significance
Current age (age)	0.2577	*	0.2156	*
Age at first marriage (AFM)	-0.122	**	-0.036	***
Fertility preference (FP)	0.1276	***	0.2171	***
Age at 1st birth (AFB)	-0.169	*	-0.158	*
(Constant)	1.3569	***	0.0422	***
R2 (adjusted)	**0.639**		**0.541**	

Note: * - significance at 1%; ** - at 5%; *** - at 10%

It is interesting to note that almost all the continuous explanatory variables are highly statistically significant with the exception of numerical

fertility preferences in Abuesi, together with age at first marriage in Brenu Akyinim. All these independent (or explanatory) variables can explain up to 64% and 54% variation in number of children ever born among 119 and 102 women in Abuesi and Brenu Akyinim respectively. The apparent effect of the current age of women on the CEB is that an increase of five years in the age of a woman results in an increase in the number of births to the woman by approximately one. Based on exact statistical values, the average will be higher in Abuesi than in Brenu Akyinim. For example, if a woman starts childbearing at age 19.3 years as estimated in Abuesi, all things being equal, she is statistically expected to have 7 children at the end of her childbearing period at age 49.3 years. Meanwhile in Brenu Akyinim, using an estimated 20.5 years of mean age at birth of first child, a woman is expected to have approximately 6 children at the end of her childbearing years. These values coincide with the mean number of children ever born calculated for women aged 45-49 years in these two communities in 1998 (see table 7.1).

Also in table 7.6, it is observed that while age at first marriage and age at birth of first child are strong factors in determining the number of children ever born, these two factors are however negatively correlated. Let us consider, for example, the age at first marriage which theoretically marks the beginning of the exposure to chances of childbearing; it is shown here that the older a woman gets before she marries, the fewer children she will have. If we consider in practical terms that marriage may not necessarily be a pre-condition for childbearing based on changing social circumstances, then some women may start to have children outside the confines of marriage; thus we can also consider the age at which a woman has her first child. Indications are that the older a woman gets before she has her first child, the fewer the number of children she will subsequently have in Abuesi. Therefore, women who are on the higher side of the scale of the mean age at birth of first child may not have up to 7 children in Abuesi (or 6 in Brenu Akyinim) at the end of their reproductive years. The age at birth of first child is a statistically significant factor in Brenu Akyinim. However, the age at which a woman first experienced marriage is a weak factor in explaining the number of children ever born in Brenu Akyinim. Though the coefficient of age at first marriage is statistically significant in Abuesi, it does not have a large effect.

Another explanatory factor in the two communities is the numerical fertility preference. A positive relationship between fertility preference and number of children ever born is exhibited, such that as preference increases, the number of children ever born increases. This relationship is however found to be statistically weak.

7.5.1 Determinants of childbearing: regression analysis (all women)

Regression analysis helps in determining the association between fertility and other variables. This is necessary because when independent variables are correlated with each other, their interactions can alter the effects observed in table 7.5; thus the estimation of the net effect of each variable (and its categories) provides a clearer picture of their relative importance when variations in other selected factors are controlled. For each background characteristic (henceforth referred to as independent variable), one category has been selected as the reference category (RC) and is omitted from the equation. For example if we consider 'education' as a variable, women who have no form of schooling are used as the reference category, especially as it was shown in the cross-tabulations in the previous section that women with no education had the highest mean number of children. The unit of analysis once again is all women who have experienced a live birth and whose age at birth of first child was successfully determined, irrespective of their current marital status. In Abuesi (122 women), the addition of the categorical independent variables (to the pool of continuous variables shown in table 7.6) increases the amount of variation explained by the model to 75%, while in Brenu Akyinim (100 women), the additional variation explained rises to 65%.

Results presented in table 7.7 show that when other independent variables are added to the model, it can be observed that women's current age and age at which they had their first child remained statistically significant factors in determining their current association with fertility in Abuesi. Fertility preferences of the women are also positively associated with the mean number of children the women have ever had, but the relationship is statistically weak. This is in contrast to Brenu Akyinim, where numerical fertility preferences showed high statistical significance among women when additional independent variables were subjected to the regression procedure.

Table 7.7
The OLS regression coefficients for the determinants of children ever born (all women)

Variables	Abuesi		Brenu Akyinim	
	Coefficient unstandardised	Level of significance	Coefficient unstandardised	Level of significance
Current age (**age**)	0.237	*	-0.182	*
Fertility preference (**FP**)	0.146	***	0.298	*
Age at 1st birth (**AFB**)	-0.208	*	-0.147	*
Desire additional children				
Want another (RC)				
Want no more	0.94	*	1.304	*
Impossible	-1.474	**	-	-
Undecided/Don't know	0.396	***	2.527	*
Frequency of watching TV				
Never (RC)				
Once monthly	0.204	***	-0.658	***
Once weekly	-0.242	***	-0.35	***
Several times weekly	-0.852	*	-0.48	***
Education				
None (RC)				
Primary	0.258	***	0.171	***
JSS/Middle school	-0.931	*	-0.163	***
SSS+	-0.485	***	-1.393	***
Contraceptive approval				
Dissapprove (RC)				
Approve	1.475	*	0.552	***
Occupation (work)				
None (RC)				
Trading	-0.645	***	0.086	***
Skilled manual worker	-1.242	***	0.36	***
Farming	-	-	0.128	***
Teaching	-	-	-1.949	**
(Constant)	-0.25	***	-0.705	***
R^2 (adjusted	**0.746**		**0.654**	

Note: RC- Reference category; # - No response

Using another variable that indicated desire for additional children among the women, it can be seen in table 7.7 that women who gave the indication of the desire to stop further childbearing in 1998 have about one child more than women who expressed the need to still continue childbearing. This relationship also persists in Brenu Akyinim where women who do not want to have additional children have one child more than those who expressed the desire to continue childbearing. These relationships are statistically significant in the two communities. In Brenu Akyinim, another statistically significant group of women are those who are undecided with regard to additional childbearing, and they are shown to have three times more children than women in the refer-

ence category. This lends further credence to the assertion that women who are 'undecided' or 'don't know' and those that are not definitive about their fertility preferences may end up with the highest number of children of all women at the end of their reproductive careers.

At this juncture, it should be noted that in relation to the data at hand, there is no statistical significance in the association between women's religion and current fertility levels. When fertility change is driven by demand based on poverty or prosperity, no strong impact of community religious practice is to be expected. The frequency of watching TV is used as an indicator of exposure to the media where it is probable that women could access family planning information and other programmes that could modify their childbearing aspirations and behaviour. It was shown in the two communities that negative association exists between the frequency of watching TV and women's fertility. Compared to women who never watch TV, the negative association in Abuesi becomes statistically stronger as women watch TV daily or several times per week. In Brenu Akyinim, this negative relationship increases with frequency of watching TV, but has no statistical significance. Policy implementers may therefore find it more reasonable to use this piece of evidence to redouble efforts in propagating desirable family size virtues through local TV programmes. This is rrespective of the question of how many women have TV or if all those who have access to a TV would watch it regularly; the essence is that the TV provides one good medium in a wide array of current means of social relaxation and entertainment that could help in conveying family-planning information and education directly to beneficiaries.

Generally speaking, it is expected that the higher the education of women, the smaller the number of children ever born. This inverse relationship between education and fertility is reputed to be partly due to value and attitudinal changes that come with increasing level of education. Unlike uneducated women, those who have acquired differing levels of education are more likely to use modern methods of contraception to space childbearing. According to Ngalinda (2000), women with relatively higher levels of education are known to start childbearing late because they stay in school for more years than those with primary education. It is not surprising to find this inverse relationship among women in the two communities; however, a strong case can be found in women with junior secondary education (or its equivalent) who have about one

child less on average than women with no education, and it is of high statistical significance. In Abuesi what goes against the norm in table 7.7 is that women who have primary education have slightly more children than those with no education, but this result is not statistically significant.

Apart from the function of ensuring a safe and satisfying sexual life, contraceptives are commonly used for ensuring adequate spacing and/or limiting childbearing. In Abuesi and Brenu Akyinim, evidence from all women interviewed in the panel survey data indicates that those who approve of contraceptive use have more children than those who disapprove of its use. This relationship is highly statistically significant in Abuesi. A similar relationship was also found among women who indicated they were currently using contraceptives in that they have more children than women who were not using, however this relationship is not statistically significant. This pattern indicates that the usage of contraceptives is triggered when women might have attained their preferred family size or when they are more likely to have reached a threshold where they think that further childbearing could be detrimental to their health, and socio-economic well being. The situation among married women will be considered in the next section while the type of contraceptive that is preferred will be explored in later sections of this chapter.

With regard to economic activity, the only significant relationship observed is found in Brenu Akyinim where women who are teachers have fewer children compared to those who have been unemployed during the year preceding the survey (and relatively fewer children compared to all other categories of workers). Further evidence shows that more than half of those that were unemployed were aged over 35 years and had worked to support themselves and dependants at some point prior to the survey and indicated they could afford family maintenance.

7.5.2 Determinants of childbearing: regression analysis (married women only)

Since childbearing is still largely believed to be a prerogative of married people, regression analysis of the socio-economic determinants of childbearing is specially conducted in this sub-section for 136 and 92 married women in Abuesi and Brenu Akyinim respectively in order to see if there are different childbearing dynamics as defined by the explanatory variables in table 7.8.

Table 7.8
The OLS regression coefficients for the determinants of children ever born (married women)

Variables	Abuesi		Brenu Akyinim	
	Coefficient unstandardised	Level of significance	Coefficient unstandardised	Level of significance
Current age (age)	0.229	*	0.189	*
Age at 1st marriage	0.002	***	0.006	***
Fertility preference (FP)	-0.004	***	0.000	***
Age at 1st birth (AFB)	-0.229	*	-0.164	*
Desire for additional children				
Want another (RC)				
Want no more	1.050	*	1.337	*
Impossible	-3.436	*	-	
Undecided/Don't know	0.549	***	1.757	*
Frequency of watching TV				
Never (RC)				
Once monthly	0.291	***	-0.718	***
Once weekly	0.392	***	-0.439	***
Several times weekly	-0.379	**	-0.441	***
Education				
None (RC)				
Primary	0.373	***	-0.185	***
JSS/Middle school	-1.000	*	-0.115	***
SSS+	-0.410	***	-3.379	*
Contraceptive approval				
Dissapprove (RC)				
Approve	2.224	*	-0.643	***
Occupation (work)				
None (RC)				
Trading	-0.771	***	0.169	***
Skilled manual worker	-1.407	**	-0.577	***
Farming	-		-0.431	***
Teaching	-		-2.203	***
(Constant)	-0.160	***	2.232	***
R^2 (adjusted)	0.750		0.62	

Note: RC- Reference category; # - No response

As observed among all women in the previous section, the age of a married woman is strongly positively related to the number of children she has. In Abuesi, an increase of one child is expected in every four and half years of a woman's reproductive life compared to the statistical likelihood of about five years. This may account for why married women in Abuesi have more children cumulatively than those in Brenu Akyinim. With reference to the age at which they started childbearing, a negative but statistically significant relationship is observed with number of children ever born. In reality, it means that the older a woman gets before

she marries, the fewer the number of children she will have. This relationship was also found among all women in the previous section.

A new factor introduced is the age at which a woman first got married but this is found to have a statistically weak relationship with childbearing in addition to being statistically insignificant. In the two communities, women's age at first marriage is positively associated with childbearing; that is, women who get married at later ages tend to have more children than those who got married at earlier ages. Women who get married at later ages are more likely to be those who have more years of schooling and those who had long periods of apprenticeship or economic activity (fish trading trips); upon settling down (marrying) they may be trying to 'catch up' with contemporaries who started childbearing earlier because they got married earlier. However, we should not forget that the relationship observed in table 7.8 is not statistically significant. The pattern observed in Tanzania by Ngalinda (2000) is no different.

The importance of desire for additional childbearing was further underscored by the strong statistical relationship it has with number of children ever born. It was also noticed among married women that those who indicated they want to stop childbearing actually have more children than women who desire to continue childbearing. Women who wanted to stop childbearing currently had one child more than those who desired to continue childbearing. Women who were 'undecided' about their fertility desires remained on the high side of childbearing, especially in Brenu Akyinim where this category of women have two children more than those who wanted to have more children. It gives an impression that those who have relatively high numbers of children have set numerical childbearing standards for others to achieve.

It is not strange, therefore, that married women who did not approve of contraceptive usage at the first round of survey had fewer children than women who were currently using contraceptives in Abuesi. Invariably, at this stage the trigger for contraceptive use remains a desire to limit further childbearing when a high threshold of about four children is reached. It would be interesting to find out what type of contraceptives are being used, because if the desire to stop childbearing is caused by a woman having too many children by her or society's standards, then the best form of modern contraceptive might be sterilisation.

The association between childbearing and frequency of watching TV (the indicator of media exposure) is statistically weak but it can be seen

that watching TV as an indicator of media exposure is linked to lower fertility. One reason could be that people are replacing sex with watching TV; but there is a popular saying in these communities that a cut in electricity supply implies access denied to electronic means of entertainment. This makes couples go to bed earlier which further offers the opportunity for more regular sexual activity. TV watching in a way distracts their attention. The relationship between childbearing and occupation of married women is weak too. The only significant category belongs to married women who are skilled manual workers, but having fewer children than women who are not employed.

Attainment of high education also suppresses childbearing among married women in the two communities. This is statistically significant in Abuesi where women with JSS level of education had about one child less than uneducated married women; in Brenu Akyinim, it is highly significant that married women with more than senior secondary education had two children less than uneducated married women. While the relationship between numbers of children ever born and other educational categories remains statistically insignificant in the two communities, evidence seems to suggest that married women with primary education have more children than married women with no education. Ngalinda (2000) observed that education may break down birth-spacing practices without lowering fertility desires or increasing age at first birth, hence it will be associated with relatively higher fertility that Cochrane (1979) and Cohen (1993) referred to as a compensation, or what was described as 'catching up' in section 7.4.1.

In general, the relationship between childbearing and occupation of married women is weak. The only significant relationship observed is in Abuesi where those involved in manual skill labour had fewer children compared to married women who had not been in gainful employment one year preceding the survey. Respondents categorised as skilled manual workers include hairdressers, dressmakers and other vocations requiring apprenticeship training. Married women in this type of vocation work for long hours, have no defined vacation period, and festive seasons are significant income earning peaks in their business. These characteristics influence their childbearing aspirations and birth timing because the financial and social cost they potentially incur for ante-natal care, coupled with no official maternity leave or post-natal welfare protection impinge on their reproductive behaviour.

Table 7.9
The OLS regression coefficients for the determinants of children ever born (men)

Variables	Abuesi		Brenu Akyinim	
	Coefficient unstandardised	Level of significance	Coefficient unstandardised	Level of significance
Current age (age)	0.253	*	0.228	*
Age at 1st marriage	-0.167	*	-0.125	***
Fertility preference (FP)	0.482	*	0.176	***
Desire for additional children				
Want another (RC)				
Want no more	0.901	*	0.179	***
Undecided/Don't know	4.545	*	-0.686	***
Frequency of listening to radio				
Never (RC)				
1ce weekly	3.584	**	-2.274	***
Several times weekly	3.777	*	-1.978	*
Education				
None (RC)				
Primary	0.061	***	0.442	***
JSS/Middle school	0.205	***	1.443	***
SSS+	-0.15	***	-0.135	***
University/Polytechnic	0.329	***	-	-
Currently using contraceptives				
No (RC)				
Yes	0.3	***	1.643	*
Occupation				
Fishing (RC)				
Unemployed	-0.741	***	-	-
Farming	-1.079	***	-1.249	***
Skilled manual worker	-0.574	***	-1.328	***
Trading	-0.556	***	-2.689	*
(Constant)	-6.277	*	-0.335	***
R^2 (adjusted)	0.818		0.808	

Note: RC- Reference category

7.5.3 Determinants of childbearing: regression analysis (men)

The male partners of the women who were legally married and in socially acceptable unions were also interviewed. Analysing childbearing patterns among such men is important because of the implications of polygamy, and more importantly, we could find situations where childbearing aspirations of couples may not necessarily converge leading to diverse opinions and adoption of different strategies for achieving family size targets at different times and places. The regression analysis below (table 7.9) is based on 60 men in Abuesi and 33 men in Brenu Akyinim who currently have one wife each. The sample size for men with multiple partners is

relatively small which resulted in 'missing values'; these were thus discarded during analysis.

The level of educational attainment is a statistically insignificant determinant of childbearing for men in Abuesi, as presented in table 7.9. Men in all other types of work had fewer children than fishermen; this is statistically significant for traders in Brenu Akyinim. Men's age and fertility preferences are positively related to the number of children ever born to the men. Men's age at first marriage is negatively related to the number of children they have; this means the older a man gets before he marries, the fewer children that he has compared to men who got married at younger ages (in table 7.7, there was a similar relationship but of weak statistical significance). In Brenu Akyinim, there is also a strong positive relationship between a man's age and the total number of children he had at the beginning of survey in 1998. While age at first marriage was negatively related to childbearing, it was also a statistically weak indicator of childbearing for the married men. In the same way, numerical fertility preference is a weak indicator due to its low statistical significance, despite the positive relationship with childbearing observed among Brenu women (see table 7.7).

In the context of further childbearing, it is noted that men who wanted to stop having children had more children than those wanted to continue having children. Similarly, those who were undecided about further childbearing aspirations had more than four children on the average, more than those who still wanted to continue having children; all these relationships are statistically significant in Abuesi. This brings into relief once again the importance of understanding the childbearing behaviour of people with hazy intentions of childbearing. We must remember that these questions were asked of people who already had children. By the reason of the relatively high levels of childbearing they have already achieved, it might be a bit uncomfortable for some to give intentions for further childbearing, and would comfortably seek solace in replying that they 'don't know'. Added to this is how to confide in an interviewer in whom they are still trying to put their trust when responding to personal questions, especially if such an interviewer is suspected of/perceived to be holding cynical views about how in this day and age, some people have such large numbers of children.

The revelation among men is that those in Abuesi who listen to radio frequently have more children than those who do not,. It is generally ex-

pected that the more an individual listens to the radio, the more the period of exposure to family planning messages relayed on this media, and the higher the chances of assimilating some of the associated childbearing values. In Brenu Akyinim, the expected relationship was observed and men who were more exposed to the media had two children less than those who were not exposed to the media.

Lastly, it is illustrated in table 7.9 that married men who were using contraceptives at the beginning of the survey in 1998 have more children than those who are not currently using contraceptives. This relationship is highly significant in Brenu Akyinim where married men who were currently using contraceptives on the average, had about two children more than those not using contraceptives. Similar to what was observed for the women, it is realised that attainment of large family size triggers the use of contraception. This will come as a result of the decision to stop having additional children and using contraceptives as a means of achieving this goal. Similar patterns of relationships between socio-economic background and childbearing indicate a high level of convergence of fertility aspirations between couples when it comes to childbearing.

In the next section, analysis will be carried out on the categories of respondents that are more likely to adopt contraception.

7.6 Contraceptive use among women in Abuesi and Brenu Akyinim

The establishment and sustenance of family-planning programmes have been conditioned on the negative implications of high population growth rate (resulting from high fertility), coupled with the emergence of new health concerns such as HIV/AIDS and STIs tagged with a higher likelihood of transmission through 'unsafe' sexual practices. This makes the study of factors influencing fertility behaviour and contraceptive use not only useful from a theoretical perspective, but also from a practical viewpoint. The identification of factors influencing prevailing levels of fertility, and responses to sexually transmitted infection conditions may lead to proper designing and execution of family-planning programmes and/or population policies. The use of contraceptives has been touted and is even currently being employed as a panacea to stem birth rates and to tackle sexually transmitted infections in the bid to enable people to have safer and more satisfying lifestyles.

The aim of this section is to therefore examine the demographic, social and economic factors that influence contraceptive use in Abuesi and Brenu Akyinim. The family planning methods inquired about in the survey include the pill, injection, diaphragm/foam/jelly, condom and IUD (Intra Uterine Device). Others are female and male sterilisation, rhythm/periodic abstinence, withdrawal, herbs, Norplant, and an option of 'other' for any method not listed above but known by the respondents. In the questionnaire used for the survey, a concise description was written beside each method so that in case a respondent did not know the specific name of a method ever used but could describe its physical attributes or its use procedure, then the interviewer could tick the appropriate response.

For the purpose of this study, analyses will be based on current use of any method during the first round of data collection in 1998. The use of 'any method' is preferred as the main reference point in the analysis because it is more rewarding to know general use levels, before making appropriate recommendations on usage of specific methods and thereafter graduating to method mix (Akinyoade, 1997).

7.6.1 Approval and use of contraceptives

Newer types of modern contraceptive methods have been developed over the years, some of which have found their way into the Ghanaian market; added to this is the influence of better propagation of information and ingenious strategies of improving the acceptability of some methods among the Ghanaian populace. The 1990s ushered in an era of near-universal levels of knowledge of contraceptive methods generally in Ghana, and to some extent improved use levels among the respondents in the data used for this study. In a study by Agyei and Hill (1997), it was observed that although knowledge of contraception was high at more than 95% for both males and females, and nearly 90% were favourably disposed to the use of contraception before marriage, less than one-third of respondents were actually using contraceptives; a similar disparity between high level of contraceptive knowledge and low levels of contraceptive use was cited in Cóte d'Ivoire by Guillaume and Desgrees du Lou (2002). The percentage distribution of women interviewed in the panel survey data for this study in relation to their contraceptive approval and use levels is given below in table 7.10.

Table 7.10
Percentage distribution of women according to approval and use of contraceptives

Indicators of contraceptive use (%)	All women		Married women	
	Abuesi	Brenu	Abuesi	Brenu
Approve contraceptives	90.1	91.6	89.8	91.0
'Ever-use' contraceptives	66.0	68.7	68.8	72.9
Using contraceptives (1998)	31.9	30.7	36.1	36.1

Source: Diffusion of fertility behaviour survey, 1998

Barring the occurrence of serious errors in reporting contraceptive approval and use characteristics, it can be seen that the approval rating for contraceptive use is very high at approximately 90%, with women in Brenu Akyinim having a slight edge over their counterparts in Abuesi. The same scenario is observed when only married women are considered. But while the level of acceptability is relatively high, approximately two-thirds of all the women interviewed have used contraceptives at some point in time in their lives. This proportion declined to slightly less than one-third of all women when they were asked if they were actually using any method of contraceptives at the beginning of the survey in 1998. Among married women, nearly 40% were using contraceptives at the beginning of the survey.

The huge gap between high contraceptive approval and lower levels of actual use indicates that more programme efforts need to be pursued by policy makers and implementers interested in improving contraceptive use levels for reproductive health care purposes. If Abuesi and Brenu Akyinim are to be used as indicators of what is going on in the rural areas of the Western and Central Regions respectively, then the little light at the end of the tunnel is gradually getting brighter, indicating improvements in contraceptive use. Earlier, while total contraceptive prevalence among married women increased from 12.9 percent in 1988 to 20.3 percent in 1993 generally in Ghana (DHS), the Western, Central, and three northern regions had the lowest prevalence rates. Observing current use levels of nearly 32% for all women and 36.1% of all married women indicating they were using contraceptives, we see a marked improvement based on contraceptive prevalence levels of the late 80s and early 90s.

7.6.2 Women's socio-demographic background and contraceptive use

This section examines current contraceptive prevalence levels among women based on various categories of socio-demographic background, expressed in percentages of women who are currently using contraceptives in table 7.11. Generally, contraceptive use levels among married women are higher than that of all women taken together irrespective of current marital status in all the socio-economic background categories considered.

The pattern in Abuesi indicates that current use levels of contraceptives increases with women's age. Conversely in Brenu Akyinim, contraceptive use is currently highest among women in the age group 25-34 years and is more in vogue among married women in the youngest age group (15-24) where nearly half of all married women are using contraceptives. The older generations are less inclined to use contraceptives due to the fact that they are nearing the end of their reproductive years, may have lower coital frequency with their husbands, or subconsciously having sexual contacts on 'safe' days thereby reducing the chances of getting pregnant, without reporting this rhythmic practice as a form of contraception. The younger generation is more inclined to use contraceptives in Brenu Akyinim based on the high childbearing practice observed among the older generation (see higher cumulative fertility in table 7.1), which is something the younger generation do not want. Coupled with this is the relatively high level of adolescent childbearing in this community that prompts the younger women to have a longer birth spacing between the first child and subsequent children. The itinerant health worker (interviewed in-depth) revealed that this longer birth spacing is maintained by the use of contraceptives such as the Pill.

One interesting observation is that contraceptive use level among younger women is increasing. Even in Abuesi the proportion is nearly the same as the older women; in earlier surveys from the late 70s to early 90s, the lower level of contraceptive use among younger women is attributed either to lack of use or under-reporting to avoid being regarded as sexually active. But the era of increase in incidence of sexually transmitted infections and adolescent pregnancy ushered in the heavy promotion of the use of contraceptives such as condoms, leading to a destigmatisation of contraceptive use,; being a known contraceptive user was better than being branded as having been infected with sexually

borne diseases, and in some cases disrupting life plans due to early childbearing (Henry and Fayorsey, 2002).

The relationship between family size and contraceptive use can be better examined by comparing current total number of children the women have with the pattern of contraceptive use. There is a positive relationship between contraceptive use and the numbers of children ever born by the women in Abuesi and Brenu Akyinim. In the two communities, contraceptive use was lowest among women with no living children. Irrespective of marital status, the proportion of all women using contraceptives doubles by the time they have two children and this proportion stays the same when the women have four children. Having five children or more actually triggers an appreciable increase in the proportion of women using contraception; women with five children or more are relatively older and childbearing is less feasible on health grounds, or they may have lower desires for additional children because they are potential or actual grandmothers. Slightly more than a quarter of all married women with no children were using contraceptives in 1998; in Abuesi, this proportion remains nearly the same among women who had up to four children, by which time an upsurge in proportions using contraceptives is observed among women with five children or more. This upsurge in contraceptive use was more visible in Brenu Akyinim among women who have about two children.

In Abuesi, the proportion of women using contraceptives increased from 40 percent among those who had their first child in their teenage years and early 20s to nearly 60 percent among women who had their first child between ages 25 and 29. In Brenu Akyinim, women who had their first child in their early 20s are shown to be using contraceptives more than those who started childbearing in the teenage years. For the two communities, the pattern that women who started childbearing when older (30+ and 25+ respectively in Abuesi and Brenu Akyinim) reported lower contraceptive use indicates that their desire to have more children is dampening the need to use contraceptives due to the relatively late age at which they started childbearing.

Table 7.11
Percentage distribution of women by contraceptive use by socio-economic background

Background variables		Current use of contraceptives			
		Abuesi	Brenu A	Anuesi (married)	Brenu A (married)
Current age	15 - 24	29.9	30.0	37.7	46.2
	25 - 34	32.1	42.6	33.3	45.7
	35 - 49	33.8	23.5	38.1	26.1
NCEB	0	16.7	14.3	27.3	27.3
	1 - 2	30.3	35.7	26.9	41.2
	3 - 4	29.1	37.2	30.9	43.2
	5+	40.7	28.8	43.4	30.7
Age at 1st birth	13 - 19	40.2	27.8	41.6	31.8
	20 - 24	40.9	43.4	43.6	41.8
	25 - 29	57.1	25.0	60.0	20.0
	30+	{20.0}*	{33.3}*	{20.0}*	{50.0}*
Age at 1st marriage	12 - 19	40	31.9	41.6	33.3
	20 - 24	22.1	40	23.6	43.4
	25 - 29	47.1	30	47.1	33.3
	30+	{0.00}*	{0.00}*	{0.00}*	-
Religion	None	30.4	37.5	40.9	60.0
	Catholic	0	35.7	{0.00}*	42.1
	Orthodox Protestant	35.4	26.3	42.9	29.6
	Muslim	35.2	25.0	41.2	{25.0}*
	Syncretic	27.5	36.4	29.2	50.0
	Pentecostal/Charismatic	32.4	13.6	29	10.5
	Other	-	57.1	-	-
Desire for additional children	Want another	35.5	34.7	42.4	44.6
	Want no more	42.5	40.3	45.3	46.0
	Undecided/Don't know	20.0	8.3	22.2	0
Frequency of watching TV	Never	32.5	20.5	36.1	26.7
	1ce monthly	33.3	46.7	38.9	50
	1ce weekly	29.1	31.8	34.2	36.1
	Several times weekly	34.1	32.1	37.5	37.5
Education	None	33.3	23.2	37.1	26
	Primary	39.1	36.4	41.3	42.1
	JSS/Middle school	23	34.4	26.8	40.9
	SSS+	20	27.3	(25.0)*	50
Occupation	None	15.4	22.2	16.7	44.4
	Trading	35.7	40.0	40.9	46.2
	Farming	-	39.6	-	46.5
	Teaching	-	14.3	-	20.0
	Other	33.7	26.7	36.8	28.4
Contraceptive approval	Disapprove	9.1	20.0	10.0	16.7
	Approve	34.4	31.7	39.1	37.4
	Partner approves	42.5	39.4	42.1	38.7
	Partner disapproves	18.8	30.8	17.7	30.8
	Don't know partner's attitude	19.4	25.0	19.4	28.0

Source: Diffusion of fertility behaviour survey, 1998

Using age at first marriage, it was observed in Abuesi that women who got married for the first time in their teenage years and between the ages 25-29 years reported higher levels of contraceptive use compared to their counterparts in Brenu Akyinim. Conversely, women who got married the first time at age 20-24 years higher levels of contraceptive use in Brenu Akyinim than in Abuesi. However, none of the women who got married for the first time at 30 years and above were using contraceptives; their late entry into marriage, implying late exposure to the onset of childbearing precludes them from considering the use of contraceptives since childbearing is expected within a year of one's marriage. While the proportion of these women is small, the observation on contraceptive use is not surprising; even if the number of respondents in this category is large, a lower contraceptive use level is very much expected due to higher desire to start childbearing.

Contraceptive use according to the religious affiliation of the women varies in the two communities. In Abuesi, contraceptive use is non-existent among Catholics (due to low representation), about one-quarter of women in Syncretic practice use contraceptives, and the proportion increases to approximately one-third of women in all the other categories considered. In Brenu Akyinim, the chances of a woman not using contraceptives is lower among Pentecostal Christians, Muslims, and Orthodox Protestant Christians; this increases to nearly 40 percent among Catholic women, those with no religion and those with Syncretic leanings. Thus, there is no clear pattern of commonality of religious influence on contraceptive use in the two communities.

Furthermore, women who desired to stop childbearing are shown to be using contraceptives in higher proportions than women who still wanted a child or additional children in the two communities. Women who were undecided on their fertility preferences showed a lower proportion of contraceptive use. Again this is an indication that women with non-numeric preferences or who are less inclined to reveal their childbearing preferences are those who want to have a larger number children, and are at this time less likely to be using contraceptives to limit their subconscious childbearing aspirations.

Also, the frequency of watching television is used as indicator of media exposure in relation to their contraceptive use. While there is an indication of a positive relationship between frequency of watching TV and contraceptive use, not much increase in contraceptive use levels was ob-

served between women who never watch TV (32.5%) and those who watch daily (34.1%) in Abuesi. A fluctuating increase in contraceptive use levels was also observed among the women in Brenu Akyinim, from 20 percent among women who never watch TV to 32.1 percent among women who watch TV daily.

One of the indicators of modernisation is education, which exposes individuals to new ideas and at times can detach them from the local traditional ways of life because of widened horizons. Education also facilitates the understanding and acceptance of the use of modern contraceptives by an individual who is exposed to the information. However, it was observed that while there is a near-universal knowledge of contraceptives in the two communities, women with lower educational attainment represented higher proportions of contraceptive users in Abuesi. Contraceptive use was highest among women who had primary education, and in descending proportions, women with no education, followed by those who have acquired JSS education or higher. In Brenu Akyinim, there was a semblance of increasing levels of contraceptive use with increase in educational levels but again, women with primary school education used contraceptives more than those in any other category. This pattern remained the same when married women only are considered, but those using contraceptives were in higher proportions.

It was not out of place therefore to find that 'other' workers (defined in this study to have manual skills and lower levels of educational achievement) are the highest proportion of contraceptive users, compared to teachers (by the reason of their profession had acquired relatively higher levels of education) who are the lowest proportion of contraceptive users. Blanc and Grey (2000) pointed out that women who are not using contraception could modify their coital frequency in accordance with their fertility desires; this can be done irrespective of level of educational attainment. In fact, it was revealed that a relatively smaller proportion of traders were current users of contraceptives in 1998, probably because their economic activities, especially market trips inland, make them prone to lower coital frequency with their spouses. Married women with primary education have more children than married women in other educational categories in Abuesi (see table 7.8). Thus, if women who have more children are inclined to use contraception to limit childbearing, then the observation in table 7.11 that women with primary

education are the highest proportion of contraceptive users according to educational categories is quite logical.

Finally in this section, approximately one-third of all women who approve of contraceptive use were current users in 1998. This is a far cry from the 90 percent highs for all women who claim they are favourably disposed to the use of contraceptives. There is a huge gap in the translation of positive attitude into practice. What is also baffling in 1998 are women who clearly disapproved of contraceptive use but were current users; this category of women includes those secretly using contraceptives, mostly those wishing not to have more children and those who are likely to be involved in extra-marital affairs.

The importance of male involvement in adoption of family planning methods for its success in the Ghanaian society is considered too. Women whose partners approve of contraceptive use form a large band of contraceptive users with a slightly larger proportion in Abuesi compared to Brenu Akyinim. On the other side of the scale are married women who reported that their husbands do not approve of contraception; nearly 20 percent of these women in Abuesi and almost one-third of all married women in Brenu Akyinim use contraceptives despite knowing of their husbands' disapproval. This category runs a risk of marital dissolution if the practice is discovered by their husbands, as the accusation of extra-marital affairs can be levelled against the women by their husbands. In many cases, secret use of contraceptives is done in connivance with health officials. For instance, in Brenu Akyinim, one health official who participated in the in-depth interview conceded that women who want to use contraceptives despite their husbands' negative attitude are encouraged to do so and method use is facilitated by the officials. Asked what the negative consequences might be if a concerned husband finds out, the official said that the man will be 'cajoled to submission and acceptance', citing health reasons for the wife's contraceptive behaviour and with threat of legal action if the man is unyielding. However, such field practices are not in the health official's manual of instruction and adaptations of decisions are made on a case-by-case basis.

Inasmuch as knowledge, positive attitude and high levels of educational attainment are essential factors to contraceptive adoption, these do not generally imply its use. The gap may be due to financial constraints

in obtaining some methods, inaccessibility in terms of location and supply logistics due to inefficient family planning systems.

Table 7.12
Logistic regression of current contraceptive use for married women in Abuesi and Brenu Akyinim

Variable		Abuesi		Brenu Akyinim	
		Coefficient	Signifi-cance	Coefficient	Signifi-cance
Age group	15 - 24	-0.096	***	3.1524	*
	25 - 34	-1.9173	*	2.9523	*
	35 - 49				
Children Ever Born	No child (RC)				
	1 child	-3.3288	**	-3.5324	***
	2 children	0.257	***	-1.2346	***
	3 children	-2.4029	***	-1.4978	***
	4 children	##		-2.9446	***
	5 children +	1.5511	***	-1.447	***
Age at 1st marriage	<19 years	-0.1361	***	-2.0511	**
	20 - 24 years	-1.1255	***	0.49	***
	25 years + (RC)				
Desire for children	Want no more (RC)				
	Want more	2.9056	*	-1.6159	**
	Undecided	3.7142	*	##	
Level of education	None (RC)				
	Primary	-0.799	***	3.3672	*
	Junior Secondary	-3.4066	*	-0.0776	***
	Senior secondary +	-3.7176	*	-2.7111	***
Occupation	None (RC)				
	Farming	#		-2.4634	***
	Trading	-1.7782	***	-4.303	**
	Teaching	#		-5.2433	**
	Other	-0.3399	***	-0.3478	***
Partner approve contraceptive	Yes	1.4279	***	2.0852	***
	No	0.1318	***	4.9463	*
	Don't know (RC)				
Child preference	(Numeric)	0.1998	***	#	
Watch TV	Never (RC)				
	1ce monthly	#		4.1498	*
	1ce weekly	#		4.2936	*
	Daily	#		3.3347	*
	Constant	1.2868	0.675	-0.1912	0.954

Source: Diffusion of fertility behaviour survey, 1998
= dropped due to co-linearity; # = category not applicable or not used
Abuesi - cases = 89; pseudo R^2 = 0.4096; LR chi^2 (18) = 49.50; Prob. chi^2 = 0.0001
Brenu Akyinim - cases = 79; pseudo R2 = 0.3230; LR chi2 (22) = 34.68; Prob.chi2 = 0.0419

7.7 Determinants of Contraceptive Use

The logistic regression method was employed in estimating the probability that a married woman was using contraceptives in the first round of the survey in 1998. The choice of logistic regression is based on the dichotomous nature of the dependent variable – currently using contraceptive (in 1998) – that is, the two categories 'yes' and 'no'. The independent (or explanatory) variables used are from the results of the percentage distribution of respondents by background characteristics according to 'current use' of contraceptives. These independent variables include the age group of women, number of children ever born, age at first marriage, desire for a child/additional children, level of education, occupational status, and partner's approval of contraceptives, as well as the frequency of watching TV as an indicator of media exposure. The choice of reference categories (RC) is on the basis of sub-categories of independent variables that exhibited the smallest percentage of women currently using contraceptives in the previous section. The results of the logistic regression are presented below in table 7.12. The variables included in the model gave an overall prediction of 41% and 35% for Abuesi and Brenu Akyinim respectively. The log odds (β) of the reference category of all the independent variables included in the model is 0. Different dynamics of contraceptive use were observed among the married women in the two communities despite using similar reference categories. Descriptions of results below are mainly of the independent variables or their sub-categories that are of statistical significance.

While younger women were less likely to be using contraceptives in Abuesi, the reverse was the case in Brenu Akyinim where it was statistically significant and showed that younger women had higher odds of using contraceptives. For example in Abuesi, married women in the middle of their childbearing career (aged 25-34 years) showed significantly decreased odds of using contraceptives than married women aged 35-49 years who were nearing or at the twilight of their childbearing careers. If older women were therefore more likely to be using contraceptives, this could be as a result of the relatively high level of cumulative fertility attained at this age. These women were not taking any chances of 'accidental'[6] pregnancies increasing their family size; they also did not wish to be seen as competing in childbearing with their daughters, some of who would be entering or currently in early childbearing ages. This finding also has implications for the calculation of the index of contra-

ception in the Bongaarts (1978) model of the proximate determinants of fertility.

Queries have been raised as to how to cope with the quantitative effect of some women who are sterile (in this case, through menopausal effects) and are using contraceptives anyway; this is one of the reasons Stover (1998) cited for introducing modifications to the quantification of Bongaarts' proximate indices. In Brenu Akyinim, married women in the youngest age group are predicted to be three times more likely to be using contraceptives than married women in the oldest age group. The reason is not far-fetched; higher incidence of adolescent childbearing with its attendant disruption in socio-economic progress makes the use of contraceptives an attractive option for the younger generation in this community.

Generally a positive relationship is shown between contraceptive use and age at first marriage; the only statistically significant relationship in this group is observed in Brenu Akyinim where women who got married in their teenage years were less likely to be using contraceptives compared to counterparts who got married at older ages.

Logically, married women who desire to have a child or additional children are shown to have a lower probability of currently using contraceptives than women who expressed the desire to stop childbearing in Brenu Akyinim. The reverse is the case in Abuesi where married women who wanted a child or additional children were more likely to adopt contraceptive use than women who desire to stop childbearing. This is not out of the ordinary because the expression of desire does not translate to taking action, as was seen earlier where the positive attitude to contraception is near-universal among the women but just one-third were moved to the level of practice. Thus many may have the inward desire to stop childbearing but have an outward reluctance to take steps in that regard.

At another level, there is a positive correlation between contraceptive use and education (FOS, 1992; Akinyoade, 1997). Contrary to this expectation, it was found in this study that the probability of a married woman currently using contraceptives in 1998 decreased as the level of education increased in Abuesi. Given the boosting effect education gives to the appreciation of contraceptive use, the relationship found in Abuesi is an unusual norm, but could only be linked to the sign of the times. This could be a time of an upsurge in childbearing, which had been stifled

earlier by the economic doldrums of the preceding decades. Married women in the upper rungs of socio-economic status[7] might have started seeing signs of recovery and experiencing some relief (after all, the International Financial Institutions – IFI – touted Ghana and Uganda as models of policy success in the 1990s). Married women with less education, having experienced more of the bite by the virtue of their socio-economic status, have reasons not to be cautiously optimistic, and have it ingrained in them that increasing family size is not a viable option and are more likely to adopt the use of contraceptives. However in Brenu Akyinim, the normal relationship between contraceptive use and women's education was observed, though this was only statistically significant among women with primary education, who were three times more likely to be currently using contraceptives. The strong positive effect of literacy is a confirmation of what Caldwell (1980) has termed the influence of mass education on the outset of fertility decline. The regression analyses have not fully identified the pathways by which other social norms influence contraceptive use. Also, the speed at which contraceptive use is accepted and fertility declines depends on the current levels of willingness to accept and institute change in a community, which may in turn be affected by religious practice and literacy.

Checking the influence of occupational status, teachers and traders were less likely to be using contraceptives than women who had had no occupation in the year prior to the survey in Brenu Akyinim. Again, it is logical that married women who have no occupation (thus no adequate means of income) would prefer not to increase the family size and would take measures to forestall it by using contraceptives. To tie this with the relationship observed according to educational categories, married women who are teachers (who presumably have relatively higher education) are five times less likely to be currently using contraceptives in 1998, and their employment status with guaranteed regular income provides a basis to implement childbearing desires. Traders were also shown to have increased odds of using contraception, which was related to their relatively regular source of income which provides some economic security with which to attain childbearing aspirations.

Husbands' approval of contraceptive use is a motivating factor for using contraception but the relationship was found to be of no statistical significance in the two communities. In fact, in Brenu Akyinim, married women whose husbands did not approve of contraceptive use were four

times more likely to be using contraceptives than women who were not sure of their husbands' attitude to contraception.

Lastly, a positive association was identified in the relationship between contraceptive use and the frequency of watching TV. It is of high statistical significance that married women who watch TV daily are three times more likely to be currently using contraceptives than married women who never watch TV. In this sense, the TV is seen as a useful medium for campaigners interested in transmitting messages and images aimed at promoting different contraceptive methods.

Table 7.13
Percentage distribution of women by contraceptive use according to childbearing background in 2003

Background variables	Current use of contraceptives (%)			
	Abuesi (All)	Brenu (All)	Abuesi (Married)	Brenu (Married)
Attitude to contraceptives				
Disapprove	0	0	0	0
Approve	23.6	18.8	26.7	24.1
Undecided	-	{25.0}	-	{33.3}*
Partner approves	**	**	26.5	26.3
Partner disapprove	**	**	{0.0}	0
Don't know partner's attitude	**	**	{0.0}	13.3
Current age				
15 - 24	9.7	15.4	11.1	22.2
25 - 34	20.2	23.5	22.7	29.3
35 - 49	29.3	19.8	33.3	16.1
Number Children Ever Born				
0	4	6.7	5	11.1
1 - 2	15.0	15.8	16.1	21.4
3 - 4	29.7	17.8	32.8	21.6
5+	30.6	18.2	34.9	23.5
Desire for additional children				
Want another	18.8	14.3	20.9	20.0
Want no more	30.4	18.9	34.7	24.2
Undecided/Don't know	29.4	{66.7}*	33.3	{66.7}*
Total	23.1	16.3	26.0	21.6

Source: Diffusion of fertility behaviour survey, 1998.
Note: { } less than 5 respondents; ** = Not applicable

7.8 Levels of Contraceptive Use in 2003

Changes in level of contraceptive use were also analysed over time. It was found that approval of contraceptive use had reached an all-time high of approximately 98 percent among the women in the two commu-

nities. Whether this positive attitude can be translated into practice is another issue entirely. Table 7.13 shows the percentage distribution of women by levels of contraceptive use according to childbearing aspirations and experience.

In fact the story did not change much over time, as the pattern remained more or less the same, with high levels of positive attitude to contraception but low levels of use (lower than the heady heights attained earlier in 1998). In the two communities, women who disapproved of contraceptive use illustrated their disapproval by going to the extent of not using any method. This is also contrary to the situation in 1998 where contraceptive use level was at least 10% among women who had a negative attitude to contraception.

A positive relationship between contraceptive use and age of women was also observed in Abuesi; this positive relationship is sort of partial in Brenu Akyinim as it can be seen in table 7.13 that contraceptive use level increased up to the 25-34 age group, but dipped among women aged 35-49 irrespective of marital status, though the level of use among the older women was still higher than what was observed among women in the youngest age group (20-24 years).

Inasmuch as contraceptive use was positively related to the age of women, inclination to use contraceptives is higher as childbearing among women increases. For example in 2003, Abuesi women with five children or more using contraceptives was about seven times the proportion of those who have no children; the scale is smaller in Brenu Akyinim but the pattern remains the same as women with 5 children or more are approximately three times the proportion of contraceptive users than those who have no children. Consequently, it was not surprising to find that in both communities, women who do not desire to have additional children exhibited a higher proportion of contraceptive use than those who still harboured the desire to have a child or children at some point in the future.

By the year 2003 after the seventh round of field surveys, the level of contraceptive use among women had declined to 23.1 percent in Abuesi and 16.3 percent in Brenu Akyinim, from nearly one-third of all women recorded in 1998. The reason for this can be deduced from a reduction in use among women who favoured the use of a specific contraceptive in 1998, shown in table 7.14. A perceptible change from less effective contraceptive methods to more effective ones was evident from 1998 to

2003. In the two communities, there is nearly a three-fold increase in the five-year period in the proportion of women using the Pill. Other increases in proportion of users were recorded for Condom use and Female Sterilisation in Abuesi, while users of the Injection and IUD went up in Brenu Akyinim.

Table 7.14
Percentage distribution of married women according to the current use of specific methods of contraceptives in 1998 and 2003

Contraceptive method	Married women using specific methods (%)			
	Abuesi (1998)	Abuesi (2003)	Brenu (1998)	Brenu (2003)
Pill	1.6	4.0	2.8	7.4
Injection	6.3	5.7	5.0	8.4
Diaphragm	-	0.6	-	-
Condom	3.1	3.4	7.1	4.2
IUD	0.5	-	0.7	3.1
Female sterilisation	1.0	2.3	1.4	-
Male sterilisation	-	-	-	-
Rhythm/Abstinence	29.8	10.2	23.4	-
Withdrawal	3.7	0.6	9.2	1.1
Herb	2.1	0.6	5.0	-

Source: Diffusion of fertility behaviour survey, 1998 and 200

Common to the married women of the two communities is the drop in proportions using methods such as Rhythm, Withdrawal and Herbs. Likewise, none of the women reported their husbands/partners as having undergone sterilisation. While male sterilisation has not caught on in the two communities, it is observed that the increase in the proportion of women using the Pill is not unconnected with the efforts of the itinerant health worker, who expended a lot of effort to see that her clients were in control of birth spacing (if not birth limiting in the near future). In Pakistan, interpretations from the Koran have been enlisted on both sides of the debate to support opposing viewpoints regarding choice of methods (Amin and Hossain, 1995). The impact of religion is strongest on sterilisation, suggesting that legitimacy for contraceptive choice varies depending on methods that appear to go along with religious doctrine. For example, right now in 2006, the Catholic Church has warmed up to the idea of allowing condom use for the sole aim of stemming the spread of HIV[8].

The socio-economic backgrounds of individuals are not the ultimate determinant of childbearing behaviour. While such background characteristics might facilitate in the actualisation of childbearing aspirations, they indirectly affect childbearing through other, subtler factors. In light of this, the following sections are devoted to analyzing the proximate determinants of fertility in Abuesi and Brenu Akyinim, and identifying which of these factors has the strongest influence on childbearing outcomes.

7.9 Proximate Determinants of Fertility in Abuesi and Brenu Akyinim

In ideal conditions, all women are expected to be fertile during their reproductive period, which is usually considered to occur for 35 years spanning from as low as age 15 to 50. Practically, the reproductive period lies from age at menarche to the point in the woman's life when menopause begins. Bongaarts and Potter (1983) stated that natural fertility could be as many as 35 births per woman if a woman gives birth at 12-month intervals between successive births. This hypothetical upper limit situation is based on 9 months of full pregnancy and about 3 months post-delivery period when the woman cannot get pregnant. Based on a stricter practical scenario, natural fertility may be as high as 15 births per woman when certain forces act against childbearing. A range of physiological and behavioural factors intervenes to suppress the natural fertility potential ; these mechanisms of suppression are referred to as the proximate determinants. Socio-economic and cultural background factors affect fertility through one or more of these proximate determinants. While it is recognised that fertility levels vary between populations (for example rural residents in Guinea had a mean of 6.1 children compared to 4.4 children for women in urban areas[7]), differences can be explained or quantified in terms of the proximate determinants. According to Bongaarts (1978), such fertility-inhibiting effects include delayed entry into sexual unions[8] or time spent in a sexual union (with marriage serving as the right environment), birth control (contraception and abortion), and natural protection from the risk of pregnancy by means of breastfeeding and abstinence from sex after childbirth.

Breastfeeding normally results in a condition called lactational amenorrhea which delays the return of ovulation. Though the relationship is complex due to frequency of breastfeeding and introduction of

supplements for the suckling child, the effect can be considerable as it can provide a year or more protection from conception. In many African societies where breastfeeding can last up to two years, some societies use postpartum taboo on sex to re-enforce the protection period. Nowadays, the influence of modernisation and urbanisation has brought about a reduction in the length of postpartum non-susceptibility to pregnancy; but a compensation effect is derived from increased use of modern contraceptives. Contraception and abortion may also be used to facilitate birth spacing or to prevent additional births.

It is assumed that all women are fertile between the ages of menarche and menopause. But in reality, a small proportion of women or their partners may be sterile throughout the reproductive age span, while most women or their partners may not be engaged in active reproductive activities for some parts of the reproductive period. In order to have some knowledge of the proportion of women who are sterile at different ages, the age-specific fertility schedule (in the absence of contraception) of a country or region is first calculated. The age-specific fertility rate is obtained through dividing the total number of births in a specific age group of women by the total number of women in that age group in the past 12 months (1 year) preceding a survey or an enumeration. Looking at the hypothetical model, there is a generally low rate of age-specific fertility among females aged 15 years, which then rises to a maximum among women aged between 20 and 29 years (or sometimes 25-34 years). Childbearing thereafter decreases gradually as the women grow older, the decline becoming steeper until the lowest level is attained by age 50 years (or at the prevailing general relative age at menopause).

The assessment of the shape of the age-specific fertility schedule in fertility studies is very important because of its bearing on total fertility rate (TFR) and population growth. The age-specific fertility schedule also serves as a useful link between the TFR and both the childbearing starting point such as the age at first birth and the endpoint of reproduction, which is the age at menopause for women. For instance, a decrease in the age at which women have children for the first time will affect the early part of the age-specific fertility schedule, with further impact on the total fertility rate.

The policy implication of the study of age patterns of fertility is also important because of its bearing on natural growth rate. If a country wants to reduce its natural growth rate, one policy measure is to raise the

legal age at first birth so that fertility rates at young ages can decline. Ghana's population has a broad-base age structure, thus the adoption of such a policy in Ghana could lead to a reduction in the number of infants being born and in the crude birth rate. Presently, Ghana is experiencing a fertility transition period and its population can decline even at constant fertility levels if the average span between generations is growing.

As explained earlier, the calculation of age-specific fertility rates is based on number of births accruing to women in particular age groups in a 12-month period prior to an enumeration exercise. Thus, age-specific fertility rates are obtained for women in the reproductive age range of 15-49 years using five-year groups from 15-19 through 45-49 years. Table 7.15 contains the reported age-specific fertility rates for all women aged 20-49[9] years in Abuesi and Brenu Akyinim.

Table 7.15
Reported age-specific fertility rates in Abuesi and Brenu Akyinim in 2003

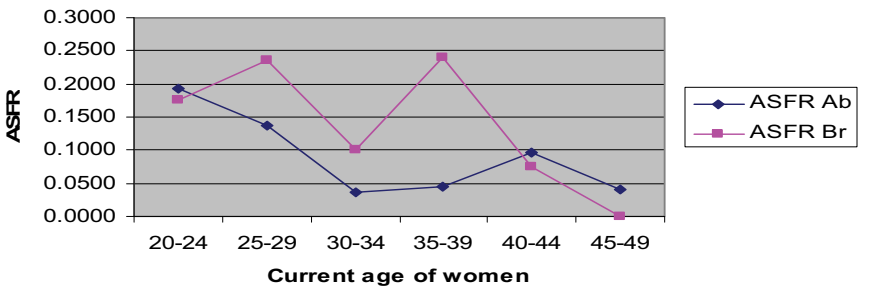
Age group	Abuesi			Brenu Akyinim		
	Women	Births	ASFR	Women	Births	ASFR
20-24	26	5	0.1923	17	3	0.1765
25-29	44	6	0.1364	17	4	0.2353
30-34	28	1	0.0357	20	2	0.1000
35-39	45	2	0.0444	25	6	0.2400
40-44	31	3	0.0968	27	2	0.0741
45-49	25	1	0.0400	19	0	0.0000
			0.5456			0.8258
TFR	5x0.5456 = 2.7			5x0.8258 = 4.1		

Source: Diffusion of fertility behaviour survey, 1998

In order to estimate the age-specific fertility rates of women in Abuesi and Brenu Akyinim, data was obtained from the seventh round of survey exercise (year 2003). The seventh round is used because it offers the opportunity to have clear estimates of births in the one-year period that preceded the survey. Using these births to calculate current age-specific fertility rates leads to a consequential estimation of the total fertility rates (TFR), which provides a window of opportunity through which reliable post-2003 estimates of the picture of fertility levels is derived.

Figure 7.1 further illustrates the pattern of fertility by ages as reported by the respondents aged 20-49 years in the seventh round of the panel survey. The shape of the curve in Abuesi is similar to those observed in developing countries where age-specific fertility rates are high among women in the younger age groups 20-24 and/or 25-29 years. Thereafter, a sharp decline in ASFR is observed among women aged 30-34 years and from this point, the ASFR declines in an undulating manner till the end of the childbearing age (49 years).

Figure 7.1
Age pattern of fertility in Abuesi and Brenu Akyinim, 2003



The UN (1963) provided a classification of the age-specific fertility distribution into three broad groups. These are:

- Early peak type (maximum fertility in the age group 20-24)
- Late peak type (maximum fertility in the age group 25-29)
- Broad peak type (maximum fertility at same level in age groups 20-24 and 25-29)

The calculation of ASFR for this study started among the age group 20-24 years. The shape of the curve in figure 7.1 shows that the Abuesi women in 2003 illustrated the early peak type of age-specific fertility distribution. Women living in Brenu Akyinim exhibit what can be called 'twin-peak'. At the beginning of the curve, one could easily see a late peak resulting from high ASFR among women aged 20-24 years, which declines among women aged 30-34 years; a sharp rise in ASFR (up to level attained by women aged 25-29 years) is observed among women

aged 35-39 years. Thereafter, a sharp decline in ASFR is seen until the end of childbearing ages.

The TFR is defined as the number of children a woman would have by the end of her childbearing years if she were to live those years bearing children based on currently observed age-specific fertility rates. Women living in Brenu Akyinim in the reproductive age group 20-49 years are found to have a higher TFR (4.1 children) than those in Abuesi (2.7 children) as shown in table 7.16. A relative comparison of the reported TFR is made to the Completed family size in 2003, which is represented by the average parity at 45-49 age group (see table 7.1). In the 45-49 age group, the average number of children reported by women in Abuesi is about 5.8 children, higher than the 4.4 children for their counterparts living in Brenu Akyinim. The implication of the comparison with the TFR in 2003 is that over time, women living in Abuesi are likely to experience a sharper decline in fertility levels. The decline is such that if new cohorts of women enter into the childbearing years and experience the reported age-specific fertility rates of 2003, by the time they reach age group 45-49 years around the year 2020, women in Abuesi will have a completed family size that will be about 50% less than what their predecessors had in 2003.

Ngalinda (2000) warned that when using information on children ever born to a total number of women in the age group in question, average parities calculated from such data can be distorted either by errors arising from misplacement of women in wrong age groups or in over-reporting or under-reporting the children ever born. Brass (1980) suggested a method derived by Brass, Coale and Demeny to minimize these distortions. Therefore if we want to use Parity Ratio methods of estimating fertility, Coale and Demeny demonstrated that the period TFR could be approximated as:

$$\text{TFR} = \frac{P_3^2}{P_2}$$

Where

P_2 = MNCEB for women aged 20-24 and,

P_3 = MNCEB for women aged 25-29

The relationship between parities of women in age groups 20-24 and 25-29 years illustrated above is empirical rather than theoretical, and the formula can be adopted based on the following conditions that:

- P_2 and P_3 are not biased by omission of births by women and misplacement of women in wrong age groups
- the parities are based on women in the younger ages when reporting is assumed to be more accurate (in this case I suggest a verifiable multi-round survey), and
- fertility for women aged 15-29 years has remained constant in the recent past.

The implication of deviations from these assumptions is that biased estimates of TFR may be the end result. Using MNCEB information from table 7.1, the TFR estimates for the year 2003 in Abuesi and Brenu Akyinim are as follows:

Women (year 2003)	MNCEB Abuesi	MNCEB Brenu Akyinim
20-24 years (P_2)	1.290	1.115
25-29 years (P_3)	2.289	2.381
TFR (Parity Ratio Method**)**	**4.1**	**5.1**

Source: Field data – 7th round of Diffusion of Fertility Behaviour

The TFR obtained for younger women by using this method further corroborates the level of TFR found by using the ASFR method (table 7.15). It is noticed once again that younger women living in Abuesi were likely to have fewer children at the end of their childbearing years compared to women living in Brenu Akyinim in the same reference period. This represents a shift in trend of levels of fertility to more childbearing among women living in Brenu Akyinim, in contrast to levels attained earlier among older women in the first round of survey data (in 1998) when women who were near the completion of their reproductive years had fewer children than those living in Abuesi.

7.10 Measuring the Proximate Determinants of Fertility

In order to understand the causes of fertility decline or otherwise in Abuesi and Brenu Akyinim, it is necessary to study factors that serve as

the determinants of fertility. Some intermediate variables were seen as providing the link between social, cultural and economic factors on one hand, and the physiological processes which ultimately determine fertility on the other. These intermediate variables for analyzing fertility are called proximate determinants. The framework they are based on was developed by Bongaarts (1978), and the model was further elaborated by Bongaarts and Potter (1983).

The Bongaarts framework identified four principal proximate determinants that are considered inhibitors of fertility because fertility is lower than its potential maximum value due to delayed marriage and marital disruption, the use of contraception and induced abortion, and postpartum infecundability induced by breastfeeding or abstinence. For example, practices such as prolonged breastfeeding tend to inhibit ovulation while postpartum abstinence could also lower fertility to well below its biological maximum. This biological maximum could be affected by further reductions caused by delayed marriage and marital disruption, especially in societies where marriage is taken seriously as a pre-condition to commencement of childbearing activities. The hypothetical maximum is the Total Fecundity Rate (TF), the average number of children a woman would have assuming universal marriage, no breastfeeding or postpartum abstinence, and no contraception or abortion.

The fertility effects of the four most important proximate determinants, that is, proportion married, contraception, induced abortion, and postpartum infecundability, are measured by the four indexes C_m, C_c, C_a, and C_i, respectively. Mathematically, these indexes can only take values between 0 and 1. Thus:

- Cm (index of marriage) equals 1 if all women of reproductive age are married and 0 in the absence of marriage
- Cc (index of contraception) equals 1 in the absence of contraception and 0 if all fecund women use 100% effective contraception
- Ca (index of induced abortion) equals 1 in the absence of induced abortion and 0 if all pregnancies are aborted, and
- Ci (index of postpartum infecundability) equals 1 in the absence of lactation and postpartum abstinence and 0 if the duration of infecundability is infinite.

The general form of the Bongaarts model is given as follows:

$$TFR = C_m \times C_c \times C_a \times C_i \times TF \qquad [7.1]$$

TF is the total fecundity rate: the maximum number of children a woman can have in her reproductive years in the absence of lactation, abstinence, and contraception, provided she remains married during the entire reproductive period.

7.10.1 Estimation of C_m from proportions currently married

The index C_m is estimated as the weighted average of the age-specific proportions of females currently married, using weights provided by the age-specific marital fertility rates. Weights are used based on the recognition that married women in the central childbearing years contribute more to the TFR than the youngest or oldest. This buttresses the reality that fertility impact of marriage also depends on the age distribution of married women because age-specific marital fertility rates reach their maximum in the central childbearing ages. Thus, C_m is not simply equal to the proportion of all women of reproductive age who are married. Therefore:

$$Cm = \{\sum m(a)*g(a)/\sum g(a)\} \qquad [7.2]$$

Where:
m(a) = age-specific proportions currently married (or in consensual union) among females
g(a) = age-specific marital fertility rates[10]

Measurement problems may arise in societies with complex cohabitation patterns, as in some Caribbean countries where we find distinctions between visiting unions, consensual unions, and formal marriages.

7.10.2 Estimation of Cc from contraceptive prevalence and use effectiveness

The following equation is useful for deriving the index of contraception:

$$C_c = 1.00 - (1.08 \times u \times e) \qquad [7.3]$$

Where:
1.08 = the coefficient representing an adjustment for the fact that women (couples) do not use contraception if they know or believe that they are sterile

u = the average proportion of married women of reproductive age currently using contraception (also included are male-specific methods, abstinence other than postpartum, and sterilising operations), and
e = the average use-effectiveness of contraception.

The value of e can be obtained by computing the weighted average of the method-specific effectiveness, e(m), by the proportion of women using a given method u(m). Thus:

$$e = \{\sum e(m)*u(m)\}/u \qquad [7.4]$$

7.10.3 Estimation of the index C_a from the total abortion rate

According to Bongaarts and Potter (1983), an induced abortion averts less than one birth on the average. One reason given for this assertion is that in the absence of an induced abortion, a spontaneous abortion or stillbirth could prevent a pregnancy from ending in a live birth. A more important consideration is that with an induced abortion, a woman resumes ovulation sooner than would have been the case if she had carried a pregnancy to term, more so if the pregnancy would have been followed by a long period of infecundability. In this setting, the probability of another conception during the period in which the woman would have been unable to conceive if she had had no induced abortion must be accounted for when calculating the net fertility effect of an induced abortion.

Computation of the index of abortion can be carried out using the formula:

$$C_a = TFR/(TFR + b \times TA) \qquad [7.5]$$

Where
TA = the total abortion rate based on the average number of induced abortions per woman at the end of the reproductive period on the condition that induced abortion rates remain at prevailing levels throughout the reproductive period (excluding abortions to unmarried women).
b = number of births averted per induced abortion, mathematically represented as:

$$b = 0.4 (1 + u) \qquad [7.6]$$

In this case, 'u' is taken as the prevalence of contraception among all married women. Bongaarts and Potter (1983) contended that the practice of contraception following the induced abortion has a strong relationship with the number of births averted per induced abortion. Equation 7.6 above was based on the fact that an induced abortion averts about 0.4 births in the absence of contraception. In a situation where moderately effective contraception is practiced (that is, when u = 1), then 0.8 births are averted.

In general, the calculation of index C_a requires estimates of the TFR and the prevalence of contraceptive use u, in addition to the TA, as shown in equation 7.5. In cases where there are no data with which it would be possible to estimate TA, the index of abortion C_a is always assumed to be 1.0.

7.10.4 Estimation of the index C_i from the duration of postpartum infecundability

The effect of postpartum infecundability on fertility operates entirely through the modification of birth intervals, and it does not influence the number of reproductive years. If no breastfeeding or postpartum abstinence are practiced, the birth interval averages about 20 months. The estimate of 20 months is based on the sum of 1.5 months of minimum postpartum anovulation, 7.5 months of waiting time to conception, 2 months of time added by spontaneous intrauterine mortality, and 9 months of full-term pregnancy. Taking into consideration the presence of breastfeeding and postpartum abstinence, the average birth interval is estimated at approximately 18.5 months (7.5 + 2 + 9) in addition to the duration of postpartum infecundability. Thus, the index of postpartum infecundability is estimated by using the formula:

$$C_i = 20/(18.5 + i) \qquad [7.7]$$

Where

i = average duration of postpartum infecundability caused by breastfeeding or postpartum abstinence

Determining *i* (or an approximate duration of postpartum amenorrhea) is possible in populations where estimates of the average duration of breastfeeding exists. Therefore:

$$A = 1.753e^{0.1396(B) - 0.001872(B)2}$$

where
A = mean or median duration of postpartum amenorrhea, in months
B = mean or median duration of breastfeeding, in months.

7.10.5 Estimation of TF

Apart from the principal indexes of marriage, contraception, abortion, and postpartum infecundability, there are other fertility-inhibiting indexes such as waiting time to conception, the risk of intrauterine mortality, and the onset of permanent sterility. The combined impact of the last three factors is measured by the TF (Bongaarts and Potter, 1983). TF in its simplest sense can be estimated by assuming that, given an approximate 25 years of childbearing available between the age at menstruation and age at menopause, a woman could bear 15 children based on the average birth interval of 20 months (see section 7.9.4).

Bongaarts (1978) established that TF could range between 13 and 17 births per woman in the vast majority of populations, despite the existence of differences in natural fecundability, spontaneous intrauterine mortality, or permanent sterility among populations. TF can also vary over time in the same population. In some exceptional cases, lower TF occurs in populations where 'spousal separation is unusually frequent or prolonged', and among those with 'a high incidence of disease-induced sterility'.

7.10.6 Stover's suggestion for modification to ways of quantifying proximate variables

According to Stover (1997), a wealth of new data has become available since the development of the proximate determinants framework more than twenty years ago, and it necessitates the revision of ways of estimating the proximate determinants of fertility in the framework provided by Bongaarts. For example, data on sexual activity were scarce in 1978, thus marriage (formal or informal) was used as a proxy for understanding the

exposure of women to sexual activity and childbearing. Today data on recent sexual activity are available for a number of countries.

In addition, data collected by DHS surveys show that the distribution of breastfeeding duration is highly skewed with a few individuals breastfeeding for considerably longer than average. In this case the median duration is probably a better measure than the mean. Also, although more information on abortion is available today than two decades ago, the information is so limited and of uncertain accuracy that no detailed examination of this is possible. The only suggestion offered here is that contraceptive prevalence should be multiplied by the effectiveness of contraception to more accurately describe the proportion of women protected by contraception. In estimating the index of contraception, the equation assumes that only fecund women use contraception. However there may be considerable use of sterilisation by infecund women, since protection from contraception by sterilisation is assumed to continue until the end of the reproductive years. This problem is most serious in a country such as India, where sterilisation is the major method of contraception. In this case, if more than 48 percent of women are sterilised the contraceptive index would become negative. To solve this, one way is to consider sterilisation separately. Since we cannot assume that sterilised women were all fecund, it is not necessary to adjust the prevalence of sterilisation for the proportion fecund.

There could also be an overlap of contraception with amenorrhea; though low for most countries, it could be significant for some methods. Contraceptive prevalence should be defined to exclude use that overlaps with portpartum amenorrhea. It is more important when the model is used to project future changes in fertility as a result of assumed changes in the determinants. In a real situation, it is unlikely that postpartum amenorrhea would increase to such an extent without a compensating decline in contraceptive use.

Therefore, the following changes in the estimation procedure are advocated: First, sexual activity should be used in place of marriage as the indicator of exposure to pregnancy. Secondly the infecundity term should be been removed from the contraceptive index. Third, in order to use these equations it is important to define 'u' to be the proportion of sexually active, fecund women using contraception. Since most fertility and family planning surveys report contraception among all women as well as among married women, it is not difficult to calculate prevalence

according to this new definition. The availability of this new data presents the opportunity to refine the proximate determinants indexes. These refinements produce the following model:

$TFR = C_m * C_i * C_a * C_s * C_c * TF$

C_m = s, which is the proportion of women 15-49 sexually active (where sexually active in the last month or pregnant or abstaining postpartum)

$C_i = 20/(18.5+i)$ where 'i' is median duration (in months) of postpartum insusceptibility

$C_a = TFR/(TFR + 0.4 * (1 + u * e) * TAR)$ – where 'u' is the proportion of sexually active fecund women using contraception; and 'e' average effectiveness of contraception; and TAR = Total abortion rate

C_s = f, where 'f' is the proportion of women who are infecund.

This model can be applied equally well to the aggregate age group 15-49 or to five-year age groups. But suggested modification has its own problems too. For example, reported sexual activity is likely to be less accurate than reported marriage or cohabitation; also there may well be more problems with the infecundity estimates than with estimates of childlessness at ages 45-49; and there is no difference in the data used to construct the contraceptive index.

However for this study, the refinement suggested by Stover (1997) was not employed in estimating the proximate determinants of fertility due to paucity of data; thus the original Bongaarts model was used. The four proximate determinants were calculated for Abuesi and Brenu Akyinim, and their influence on fertility behaviour of the women is presented below in tables 7.16. We see that mean duration of breastfeeding of 20.4 months and 19.2 months was obtained from the panel survey data, in conjunction with other evidence that breastfeeding of newborns is universal and prolonged. Among the four indices, postpartum infecundability (postpartum amenorrhea and postpartum abstinence) has the strongest fertility-inhibiting effect of the indices, with estimated C_i of 0.62 and 0.64 for Abuesi and Brenu Akyinim respectively. This compares favourably with Ngalinda (2000) that postpartum infecundability is the

Table 7.16
Indexes of marriage and abortion as proximate determinants of fertility in Abuesi and Brenu Akyinim, 2003

Index | **Required measures of the proximate determinants** | **Estimate**

C_m

Abuesi

Age	BCMW	CMW	AW	m(a)	g(a)	m(a)*g(a)
20-24	5	22	26	0.8462	0.2273	0.1923
25-29	6	41	44	0.9318	0.1463	0.1364
30-34	1	24	28	0.8571	0.0417	0.0357
35-39	2	43	45	0.9556	0.0465	0.0444
40-44	3	28	31	0.9032	0.1071	0.0968
45-49	1	18	25	0.7200	0.0556	0.0400
Total					**0.6245**	**0.5456**

$C_m = \{\sum m(a)*g(a)/\sum g(a)\}$
$C_m = 0.5456/0.6245$

C_m (Abuesi) = 0.8737

Brenu

Age	BCMW	CMW	AW	m(a)	g(a)	m(a)*g(a)
20-24	3	10	17	0.5882	0.3000	0.1765
25-29	4	14	17	0.8235	0.2857	0.2353
30-34	2	18	20	0.9000	0.1111	0.1000
35-39	6	20	25	0.8000	0.3000	0.2400
40-44	1	20	27	0.7407	0.0500	0.0370
45-49	0	13	19	0.6842	0.0000	0.0000
Total					**1.0468**	**0.7888**

$C_m = \{\sum m(a)*g(a)/\sum g(a)\}$
$C_m = 0.7888/1.0468$

C_m (Brenu Akyinim) = 0.7535

C_a

Abuesi
Abuesi
TA = 0

C_a = TFR/(TFR + b x TA)
C_a = 1.0

Brenu
Brenu Akyinim
TA = 0

C_a = TFR/(TFR + b x TA)
C_a = 1.0

C_c

Abuesi

Contraception	Nos. using	u(m)	e(m) [typical]	u(m)*e(m)
Pill	7	0.0398	0.95	0.0378
Injection	10	0.0568	0.99	0.0563
Foam/Jelly/D	1	0.0057	0.80	0.0045
Condom	6	0.0341	0.86	0.0293
Fem Ster.	4	0.0227	1.00	0.0227
Rhythm/Abs	18	0.1023	0.87	0.0890
Withdrawal	1	0.0057	0.81	0.0046
Herbs	1	0.0057	0.70	0.0040
Total		**0.2727**		**0.2482**

$e = \{\sum e(m)*u(m)\}/u$
$e = 0.2482/0.2727 = 0.91$
C_c = 1.00 – (1.08 x u x e)
C_c = 1.00 – (1.08 x 0.2727 x 0.91)
C_c = 1.00 – 0.2680

C_c (Abuesi) = 0.732

Brenu

Contraception	Nos. using	u(m)	e(m) [typical]	u(m)*e(m)
Pill	7	0.0737	0.95	0.0700
Injection	8	0.0842	0.99	0.0834
Condom	4	0.0421	0.86	0.0362
Withdrawal	1	0.0105	0.81	0.0085
IUD	3	0.0313	0.99	0.0313
Total		**0.2421**		**0.2294**

$e = \{\sum e(m)*u(m)\}/u$
$e = 0.2294/0.2421 = 0.9474$
C_c = 1.00 – (1.08 x u x e)
C_c = 1.00 – (1.08 x 0.2421 x 0.9474)
C_c = 1.00 – 0.2477

C_c (Brenu Akyinim) = 0.7523

C_i

Abuesi
Mean duration of breastfeeding = 20.4 months
$A = 1.753e^{0.1396(B) - 0.001872(B)2}$, A = 13.9

C_i = 20/(18.5 + i)
C_i = 20/(18.5+13.9)
C_i (Abuesi) = 0.6173

Brenu Akyinim
Mean duration of breastfeeding = 19.20 months
$A = 1.753e^{0.1396(B) - 0.001872(B)2}$
A = 12.8

C_i = 20/(18.5 + i)
C_i = 20/(18.5+12.8)
C_i (Brenu Akyinim) = 0.6390

Source: Diffusion of fertility behaviour survey, 1998-2003

Note: BCMW = Births Currently Married Women; CMW = Currently Married Women; AW = All Women
Fem Ster. = Female Sterilisation; Rhythm/Abs = Rhythm/Abstinence; Foam/D = Foam/Diaphragm

main factor reducing prevailing levels of fertility or its biological maximum in Tanzania. The prominence of postpartum infecundability may have received a boost from livelihood activities such as men going on long-term fishing trips (far a-field to coastal parts of Liberia and Senegal), and other periods of separation where women travel inland for processed fish trading.

7.11 The Fertility-Inhibition Effects of Proximate Variables in Abuesi and Brenu Akyinim

Given the background that fertility has started declining in Ghana generally, it is believed that the dynamic change in a population's level of fertility is caused by a change in one or more of the proximate determinants. Delayed marriage and marital disruption, the use of contraception and induced abortion, and postpartum infecundability induced by breastfeeding or abstinence constitute the four principal proximate determinants. They are considered inhibitors of fertility because of their depressing effect of their presence on a population's actual level of fertility, measured by the total fertility rate (TFR).

Table 7.17
Decomposition of change in fertility caused by the proximate determinants

Fertility Rates	Abuesi	Brenu Akyinim
TMFR (Total Marital Fertility Rate) = sum of ASMFRs x 5	0.6245 x 5 = 3.1	1.0468 x 5 = 5.2
TN (Total Natural Marital Fertility Rate) = TMFR/ $\mathbf{C_c}$	3.1/0.732 = 4.2	5.2/0.7523 = 6.9
TFR (Total Fertility Rate) = TMFR x $\mathbf{C_m}$	3.1 x 0.8737 = 2.7	5.2 x 0.7535 = 3.9
TF (Total Fecundity Rate) = TN/ C_i	4.2/0.6173 = 6.8	6.9/0.6390 = 10.8

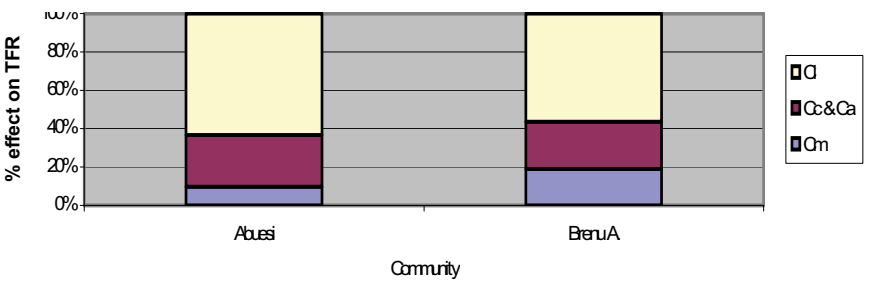
Source: Diffusion of fertility behaviour survey, 1998-2003

The TFR is expressed in (legitimate) births per woman at the end of the reproductive years. Bongaarts and Potter (1983) adjudged that, if the fertility-inhibiting effect of delayed marriage and marital disruption is removed without other changes in fertility behaviour, fertility will increase to a level TM (the total marital fertility rate). Further removal of

the effects of contraception and induced abortion will result in a rise in fertility to a level TN (the total natural marital fertility rate). At this point, if we discard the effects of the practice of lactation and postpartum abstinence, fertility will rise to another level called the TF (total fecundity rate). Table 7.17 contains the computation of the decomposition of change in fertility with respect to the proximate determinants.

The relative contributions of the four proximate determinants to fertility levels in Abuesi and Brenu Akyinim are illustrated in figure 7.2.

Figure 7.2
Relationships between the fertility-inhibition effects of proximate variables and various measures of fertility



Source: Diffusion of fertility behaviour survey, 1998-2003

Decomposition of the effects of the proximate determinants presented in table 7.18 and figure 7.2 confirms the strong effect of postpartum infecundability on fertility levels in Abuesi and Brenu Akyinim as it is shown that the index C_i suppresses maximum potential fertility by about 63.4% and 56.5% in the two communities respectively. In the demographic literature, continuous and exclusive infant suckling uninterrupted by supplementary food and long nocturnal separations constitutes a 'natural' contraceptive, because suckling stimulates hormonal activity that suppresses ovulation (Schneider and Schneider, 1992). Once suckling becomes less exclusive owing to the introduction of supplementary foods and less continuous owing to maternal separation (possibly due to resumption of work), the protective shield disappears, and conceptions follow prior births more closely. To some demographers (Short 1976), a change in breastfeeding, with the associated loss of 'natural' contraception, is the most powerful force in modern population growth.

The indexes of contraception and abortion account for approximately one-quarter of the fertility suppression effect in the two communities, while C_m gave the lowest contribution to suppression. This is not unexpected as nearly all the women in the survey are married; this may have biased the outcomes of the fertility-inhibition computations. With regard to abortion, it was pointed out earlier that there are no data with which it would be possible to calculate the value of the index of induced abortion, thus the index C_a was assumed to be 1.0 in the two communities.

7.12 Conclusion

Generally, the fertility level is declining, albeit marginally, between 1998 and 2003, in the two communities. However, there is a shift in family sizes when older women in different age groups are compared across the two communities. For example, completed family size (MNCEB) of women aged 40-44 and 45-49 years was higher for women in Abuesi than in Brenu Akyinim; but it is also evident in table 7.1 that a reverse trend has begun and in the near future, women living in Brenu Akyinim would have higher completed family sizes as MNCEB outcomes estimated in 2003 indicate. While all the demographic surveys and analyses since 1988 point to declining fertility, the 1990s were particularly significant in Ghana due to the relatively large magnitude (decline of about two children per woman) achieved in a short duration (1988-1998). Judging by the current TFR of 4 children per woman obtained in Abuesi and Brenu Akyinim, the more persuasive evidence that fertility decline is underway in these two rural coastal communities is the marked increase in the contraceptive prevalence rate which now averages 33 percent, with corresponding declines in fertility/family size preferences.

Common to the two communities in 1998 is that fertility levels (using MNCEB) were higher among women who were currently married, women with low frequency of exposure to the media, having relatively little education, and occupied with vocations such as trading in Abuesi and farming in Brenu Akyinim. A positive relationship was observed between numerical preferences and fertility levels; women who did not want additional children or wanted to stop childbearing had the highest number of children, while women who were currently using contraceptives or had used them at some point when surveyed in 1998 had more children than those who were not using. This indicates a possibility of contraceptive use spurred by the attainment of large family sizes or de-

sired fertility levels. Similar patterns of childbearing were found with the men. In addition, the men were shown to have higher MNCEB as the number of wives increases while fishermen had relatively higher family sizes when the fertility pattern is viewed with reference to occupational status. Despite the discovery of approximately a 90% rate of positive attitude to contraceptive use for all respondents in 1998, this was not matched with practice, as it was shown that only about one-third admitted current usage.

A number of changes in the composition and dynamics of contraceptive use occurred over the five-year period that will in the near future contribute to an increasingly strong effect of contraceptive prevalence on fertility reduction. A marked method shift was seen from the decline in proportion of women using less effective methods like Rhythm and Withdrawal and increase in proportions of women using the Pill and Female Sterilisation in Abuesi, while in Brenu Akyinim none of the women reported using sterilisation in 2003, largely because the previous users in 1998 had dropped out of the sample as they were aged over 50 years in 2003. Therefore in Abuesi, there is an indication of possible reallocation of the use of contraceptives from birth spacing to use for limitation of births, implying a longer average duration of use. As the years go by, this could result in the occurrence of a larger fertility reduction in Abuesi because more users are adopting long-term contraceptive methods, even if given similar levels of contraceptive prevalence with Brenu Akyinim (which has a different method mix that still exposes the women to higher odds of pregnancy).

One major reason why the 1969 Ghana Population Policy had to be revised was the over-concentration on the family-planning aspects of the policy. Population policy was equated to fertility control through family planning. Even if this was the unintended main area of concentration, the results 25 years on were dismal in the sense that achievements could only be related to a near-universal awareness created for contraceptive methods while contraceptive use remained at woefully low levels. Even though contraceptive prevalence increased in the decade after the promulgation of the 1994 policy, current use levels float around one-third of all women in Abuesi and Brenu Akyinim, and a huge gap still exists between knowledge and practice. The unmet need for contraception in these communities further indicates the gulf in the desire to stop childbearing and the ability to do so by using contraceptives. All stakeholders

need to be more involved in provision of contraceptives, not only for limiting births but also for preventing STIs, cited as new reasons for coming up with the policy in the first place.

Fertility levels and contraceptive use levels have been established in Abuesi and Brenu Akyinim. But are these in line with the population policy targets envisaged by the Ghana government? How feasible are the population policy targets in the rural context in the Western and Central Regions where Abuesi and Brenu Akyinim administratively respectively belongs? These and other questions will be answered in the following chapter by assessing the views, attitudes, and procedures of officials in the regional offices of National Population Council and other reproductive health-related organisations.

As explained earlier, the calculation of age-specific fertility rates is based on number of births accruing to women in particular age groups in a 12-month period prior to an enumeration exercise. Thus, age-specific fertility rates are obtained for women in the reproductive age range of 15-49 years using five-year groups from 15-19 through 45-49 years. Table 7.15 contains the reported age-specific fertility rates for all women aged 20-49[11] years in Abuesi and Brenu Akyinim.

Notes

1. Country Studies: Population http://country-studies.com/ghana/population.html accessed 2 May 2005.

2. However, evidence shows that a few women who are currently menopausal underwent fertility treatment which allowed them to have children – e.g. at age 66 years in Romania.

3. The occupational sub-category 'Other' comprises men in the construction business (carpentry, masonry etc.), transport business (driving), and apprentices of all kinds; and these men could be generally seen as involved in jobs that entail manual skills.

4. Count data models can also be applied given the nature of the dependent variable. However in practice for this analysis, the results did not differ much when the OLS technique was applied.

5. There is no question that required the women to directly state the age at which they gave birth to their first live child. The procedure for how this statistic was derived is given in chapter 5

6. Accidental pregnancy - Term used for mistimed pregnancies which older women have no intention of aborting.

7. A salient example illustrated earlier in chapter 4 was how numeric fertility preferences declined at the height of economic belt-tightening imposed by the new government by the year 2000.

8. Cardinal Carlo Maria Martini, one of the Roman Catholic Church's most distinguished cardinals, has publicly backed the use of condoms among married couples to prevent Aids transmission. The support was given based on the premise that in couples where one had HIV/Aids, which could pass to the partner, the use of condoms was 'a lesser evil'. The Vatican had always been against the use of condoms, even to stop Aids spreading from one married partner to another. The Church teaches that abstinence is the best way to tackle disease. http://news.bbc.co.uk/2/hi/europe/4929962.stm 21st April 2006.

9. Studies in Family Planning, Volume 33, Number 2, June 2002: Data. Guineé 1999: Results from the Demographic and Health Survey.

10. In recent times, technological advances such as in vitro fertilization (IVF) may start displacing sexual activities for childbearing purposes.

11. Normally, women in the age range 15-49 years ought to have been considered, but due to the nature of the multi-round survey, most women who were aged 15-19 years during the first round (October 1998) were in the 20-24 years age group during the seventh round of surveys. In the first two rounds of surveys, data was not obtained on the women's birth performance one year (12 months) prior to the exercise; the absence of this data makes the calculation of the age-specific fertility schedule difficult. In addition to this, it is at the seventh round that reliable estimates of breastfeeding information (useful for the estimation of lactation effects on childbearing) can be obtained. Thus the calculation of age-specific fertility rates was done for women aged 20-49 years.

12. The g(a) is often obtained by dividing the age-specific fertility rate by the proportion of women who are currently married in each age group. This procedure can give erratic results for the age group 15-19 years especially when incidence of pre-marital conceptions is not negligible. Though there is a method of avoiding the unreliable results for this age group, in the ensuing estimations, it is noted that age group 15-19 years was avoided for practical reasons that data for the age group was not collected.

8 State Control Over Reproduction: Myths and Realities in Ghana

Why family planning? If it's for saving the life of the mother then it is the responsibility of both husband and wife. Have we exhausted the oxygen, cultivated all the arable land or are we about to exhaust all the resource God gave us? No to family planning. Let us make as many children as God wishes us to make. They are the real joy of this life.

Hamid Alsharief, Lagos[1]

8.1 Introduction

There is an official desire at the governmental level, made manifest in the 1994 National Population Policy, to help women lower their childbearing desires and curb natural population growth. In the 1990s, an appreciable decline in aggregated national fertility rates was observed in the three GDHS. Analysis of more recent data at the local level also signifies that indeed, fertility desires are getting lower (Chapter 6), more people are postponing entry into marriage (Chapter 5) which used to be the acceptable social institution for childbearing, and that fertility rates are on the decline in Abuesi and Brenu Akyinim (Chapter 7).

In this chapter, we explore the contribution of the 1994 National Population Policy to the development of the new demographic picture at the local level. This is to find out if the 1994 policy in any way affects people's childbearing aspirations and whether it influences reproductive behaviour at the local level. First, a brief background of the 1994 population policy is presented. Demographic targets of the policy are thereafter compared to estimated demographic rates presented in the preceding three chapters. In addition, we look at how the implementation process of this policy, that is, the interaction between programme-related officials and the people of Abuesi and Brenu Akyinim reaches out to local lives. In the final analysis, we endeavour to reveal the gap between population policy objectives and peoples' aspirations and expectations. This

helps us answer the question whether in reality, national population policy affects demographic processes at the local level.

8.2 Objectives of the 1994 Population Policy and Demographic Indicators in Abuesi and Brenu Akyinim 1998-2003

An underlying objective of the 1994 population policy according to Government of Ghana (1994) has been to evolve a system which ensures that population issues are systematically integrated in all aspects of development planning and activity at all levels of the administrative structure. Thus, the government was pre-occupied with gearing policies toward giving couples the means to safely and effectively control their fertility in a bid 'to contain and prevent harmful effects of unlimited population growth'.

In the following subsections, the perceptions of officials in agencies charged with (among other things) implementing the objectives of the 1994 population policy are explored in order to present their views on the potential success or otherwise of programmes and procedures in the implementation of the policy.

8.2.1 Fertility levels, preferences and family planning

One of the goals of the population policy has been to ensure the accessibility and affordability of family planning means and services for all couples and individuals to enable them to regulate their fertility. The main expected indicators of success have been: to reduce the total fertility rate (TFR) to 5.0 children per woman by the year 2000, 4.0 by 2010 and 3.0 by 2020, which will culminate in the reduction of the 1994 annual population growth rate of about 3 percent to 1.5 percent by 2020. This will also be facilitated by achieving a contraceptive prevalence rate of 15% for modern methods by the year 2000, 28% by 2010 and 50% by 2020.

The target set for achieving minimum birth spacing of at least two years for all birth intervals by the year 2020 challenges the Finance Minister's statement that the document represents the collective will of the people. The issue of birth spacing has not been problematic in that, traditionally and locally, the minimum has been three years (see chapter 5). For the government to reduce it to 2 years in the absence of societal preference for this lower minimum makes one wonder how this recom-

mendation was reached. Moreover, the recommendation did not set an upper limit for the number of children women should have. Implicitly, a two-year birth spacing with improvements in women's health and child survival, with a positive outlook to the economy, in the short run, is counter to the target of the reducing annual rate of growth of the population. This particular target reflects a coercive top-down approach that targeted women but excluded them from the process of planning, implementation or assessment of the efficacy of what is recommended.

Analysis of demographic data collected in Abuesi and Brenu Akyinim between 1998 and 2003 suggests that these targets are attainable at the local level. The TFR is estimated at 4 children per woman in 2002-2003, and the proportion of 'current' users of contraception is nearly one-third of the women in both communities, indicating that targets set for the year 2010 are already being attained five years before time.

Two officials interviewed in the regional offices of the National Population Council attributed the current decrease in family sizes to the implementation of the 1994 population policy, especially the success of the family planning IEC campaigns. It was also regarded as a rational reaction on the part of parents to rising costs of living, which can be mitigated by having fewer children, thus lowering the dependency burden. However, the exact number considered 'few' was left vague, and opinion is divided with regard to sustainability of the current fertility decline. While the NPC official in the Western Region believes that childbearing will rise again once the economic dip has passed, his counterpart in the Central Region said that the decline in fertility is irreversible. In his words,

> […] where they have reached now, there is no going back to large family sizes; a lot of people have been sensitised, farmers in rural areas are now enjoying FM (radio) and TV, education awareness campaigns have improved and people have accepted the norm of small family sizes, urban influences are being felt in rural areas and the economic hardship which brought huge burdens on large families is strengthening the resolve not to have large families among younger couples.

Irrespective of the views of the NPC officials in these two regions on the permanency of current fertility decline, both agreed that reducing births is good for individual and national interests. Advantages will accrue to couples because they will be able to cater for small family sizes, educate their children and save some money. This will lead to a reduction in

numbers of street children, and social vices (which normally arise from people resorting to negative practices in order to satisfy basic needs) will be under control. The official from Central Region envisages a larger per capita income but he gave a rider that:

> […] however, for whatever number of children God gives, we should not reject.

This view was further supported by the stance that there is no need to promulgate or enforce a law restricting women to certain limits as practiced in China. According to the NPC official from the Western Region:

> […] what needs to be done is to educate couples and prospective parents more on the economic costs of childbearing.

In the Central Region, the official interviewed maintained that Ghana is democratic and that the best government can do is to provide information to people, who will decide what is best for themselves. Otherwise the government or the country can be isolated from the international community and it can take a long time for it to be re-admitted; therefore

> […] government is shying away from recommending ideal family size or force women not to go beyond a particular maximum because it goes against international wishes.

One of the advantages of setting childbearing limits is that they provide a framework for parents to operate within, even if it is difficult to achieve or enforce. One of the ways to facilitate couples' implementation of family size desires is to encourage the use of contraception.

8.2.2 Special target groups

In the 1994 population policy document, youths and women have been identified as vulnerable groups that need special intervention. Thus, one of the population policy targets envisaged a reduction in the proportion of women who marry before the age of 18 years by 50 percent by the year 2000 and 80 percent by the year 2020. Officials of institutions linked directly or indirectly to the implementation of the population policy know very little about the targets or at best link it to the objectives of the organisations they work for. The PPAG official who was interviewed in the Western region claimed he knew what the National Population Policy was all about, especially its aim to:

> …make about 20 percent of youths aged 10-24 years well informed about their sexual and reproductive health and how to confidently exercise the right to use any contraceptive method

However, in Brenu Akyinim, the nurse in charge of the Child Welfare Clinic (CWC) had never heard of the 1994 Ghana Population Policy and yet she took it upon herself to 'counsel clients on the need to have smaller family sizes and contraceptive use' in general. But the stumbling block in the path of achieving this is the low level of literacy in the rural areas. The nurse recommended using community surveillance workers to overcome the obstacle of illiteracy, because as active volunteers they can interact well with the local populace, in addition to the fact that they are indigenous and can pass the message across easily in vernacular vocabulary.

Where the quality and availability of health workers was poor, many women were likely to depend on private practitioners, rarely trained in Western medicine but nonetheless offering Western medical services. Alternatively, women may have access only to the local medical systems, for example, the traditional birth attendants. This has both direct and indirect implications, such as dampening expectations of huge percentage reductions in infant and maternal mortality rates, and making family planning services available, accessible and affordable by the year 2020 to at least half of all adults in the rural areas where approximately 60 percent of the total population currently reside.

The Brenu Akyinim community is a classic example of why it will be difficult to achieve the coverage target of supervised deliveries at 80 percent by the year 2010. Nine years after the inception of this population policy, the community enjoys health care based on the monthly visit by a nurse whose primary aim is to inoculate children against childhood killer diseases. She is also saddled with the 'unofficial' duty of attending to other health and family-planning complaints of the residents during the brief service period. Apart from this, the village is located approximately thirty minutes away from the nearest health facility. Even though one of the 1994 Population Policy objectives is to integrate family planning into maternal and health care services, the coverage area is too large for a single staff member. In addition it illustrates the problems faced by other communities in the coverage area of the nurse's circuit.

Parents are also regarded as stumbling blocks in the delivery of family life education and services to youth. The PPAG official in Abuesi traced

the lack of support to a culture that lacks motivation in seeking family life education; the nurse in Brenu Akyinim saw it as an indirect support for large family sizes if parents were not encouraging their children to seek family planning services. The absence of such services has caused a high rate of teenage pregnancy estimated at about six cases per month in Brenu Akyinim, and a significant proportion of reproductive health problems experienced by the teenagers in the larger area of Takoradi. Here, the PPAG official asserted that 'it is almost a daily affair dealing with teenage pregnancies'.

In Brenu Akyinim, the nurse in charge of the CWC revealed that although women come on the pretext of immunising their children, they ended up spending more time being counselled on family planning methods. Abuesi women were also found to be more interested in the family-planning methods (especially long-term contraceptives). Interestingly, the service men use most is immunisation of children; they are less concerned with family planning issues, although on Tuesdays some men come around to check their sperm count[2].

Women's secret use of contraceptives was discovered in Brenu Akyinim. According to the CWC nurse, husbands normally desire large families, therefore when women visiting the clinic complain about it, they are encouraged to use contraceptives secretly or without the husbands' consent[3]. On one occasion, one man found out that his wife was using Norplant without his knowledge and consent, and lodged a complaint at the clinic. At the end, after much counselling, he agreed that the wife should continue to use Norplant for the 5-year period. The nurse does not see anything wrong in advising the woman to use contraceptives without her partner's consent, and even made a case of threatening the man with court action.

The two officials interviewed from the different regions revealed that contraceptive methods are now affordable in rural areas. Buttressing this point, the example of Norplant was used because it costs about five thousand cedis (¢5000, converting to around USD $0.60 at current exchange rates,) and it protects women against pregnancy for five years. In order to make family planning services more accessible, the nurse advocated the setting up of a permanent and properly equipped office in Brenu Akyinim, and in Abuesi, the PPAG official felt that acquisition of a mobile van would improve service delivery. Overall, the advice given by the officials for the successful implementation of the 1994 Ghana

Population Policy was to further sensitise women and youth generally about their right to information about and access to reproductive health care (preferably inexpensive contraception).

In both communities, married women can go for consultation in the make-shift clinic in Brenu Akyinim and the PPAG office in Abuesi without needing permission from their husbands. There are times when clients actually visit as couples; at the Abuesi clinic they are often seeking STI treatment together. Potential clients of the PPAG family planning clinic refuse to visit it claiming that its location is in 'faraway Takoradi', although they will visit if they have a 'life-threatening' illness or one that might immediately affect their sexuality.

Circumstances may force individual women to take decisions that have wider implications on their relationships, especially when decisions useful for solving personal problems turn into ethical issues. It underscores the internal struggle women have to go through in making decisions in the environment pseudo-official counselling that flourishes in the absence of inter-spousal communication. The arm-twisting tactic of the nurse that resulted in the man's understanding the dangers of continued childbearing by his wife, is not something written or taught as standard practice for health workers and family-planning officials. Proper family-planning information, education and communication and better inter-spousal communication among the community's inhabitants would not have made this nurse cross the ethical boundary which she construed as counselling.

8.3 Nine Years On: Role of the National Population Council in the implementation of the 1994 National Population Policy

The National Population Council (NPC), inaugurated in 1992 was charged with the responsibility to 'recommend for government consideration such policies or changes in population policy as it may deem necessary', and to guide and promote the implementation of a comprehensive population programme, which should be integrated within the framework of the development policy of the country (GoG, 1994).

One high-ranking official in each of the regional offices of the National Population Council (NPC) in the Western and Central Regions was interviewed[4] to probe their knowledge and responsibility of implementing programmes in line with the objectives and targets of the 1994 Ghana

National Population Policy. Both officials found the 1994 Population Policy important because:

> [...] human resource is needed for socio-economic development so population policy is needed as a guide in building valuable human resource (NPC Official, Takoradi, August 2003)

Also:

> […] it is the blueprint of government on population issues and it is in line with demands of the international community. Lots of work needs to be done on human management and if there is no blueprint, haphazard work will be carried out by bodies that have the responsibility of carrying out population programmes (NPC Official, Cape Coast; August 2003).

This latter view was based on a further premise that there are many NGOs working in Ghana with many programmes on health and population, and their activities must be regulated and coordinated by the government. Otherwise these bodies might carry out programmes of their own accord that can run counter to the prevailing socio-cultural and economic expectations. However, while the two officials saw the 1994 Population Policy as necessary, they could not recollect specific targets of the policy.

This is indeed surprising because the NPC was heavily involved in drawing up the 1994 version (updated from the 1969 version). One would expect their high- level operatives to be conversant with targeted objectives while they sought to measure the impact (successes or failures) of implementation, ten years after the policy came into operation. In Takoradi, the official was able to briefly mention the need to address adolescent reproductive health and stem sexually transmitted infections in general, but could not recount indicators of impact or at what time certain indicators needed to be measured or achieved. In the two regions, the main idea expressed by the officials was that the preferences for large family sizes must be discouraged among women, and that parents should be encouraged to have fewer children than they used to or intended to have.

Though the officials could not express specific targets of the policy, they were aware of problems militating against the attainment of small family sizes. Common to their statements were what they considered '*bad cultural practices that still encourage large family sizes*'. Family planning Information, Education and Communication (IEC) campaigns are carried out

more in urban areas than in rural areas where 'people are not changing their poor attitudes on family size issues'; however, this is largely due to inadequate information being made available in rural areas.

This honest assessment further serves to point out the root of the problem as the inadequacies of the NPC in carrying out awareness campaigns that could have served as a catalyst for attitudinal change with regards to modifying values that used to uphold relatively large family sizes. The official in Central Region cited the example of Islam as a religion that encourages early teenage marriage among females, which potentially leads to early childbearing (and attendant physiological implications) and prospects for longer reproductive lifespans for women. The practice of betrothal was identified as a bad cultural practice that could be curbed if any member of parliament (MP) or any other advocate made public pronouncements denouncing the practice and sensitising the people to the negative implications of early female betrothal for population growth and human capital development. But it was felt that 'marriage in Africa is a process' so in some cases many families can argue that the event of betrothal does not necessarily mean marriage has started for the couple and therefore does not imply immediate childbearing; betrothal is also useful for cementing relationships between the contracting families.

If indeed part of the mandate of the NPC is to sensitise the public at large against large family size, in addition to co-ordinate sensitisation efforts by other organisations, it is either not doing its job well or shifting responsibility to individuals or groups that they think have more clout in reaching the people more effectively with the IEC messages. One thing it could do would be to link up with the local representative of the national parliament who would be prodded to make such sensitisation comments. This carries a double benefit; it will reach out to the people in a way that makes the MP and NPC address the roots of the problem and at the same time exhibit intention of the political will of government in seeing its programme through[5].

The NPC officials talked about improving 'socio-economic well-being of people' and reducing population growth rate, however, with factors such as population density reduction in overcrowded areas not taken into cognisance. This can be solved by encouraging population redistribution through the creation of new growth nodes or making rural-urban migration less attractive. For example, it is believed that in-

migration plays a highly significant factor in the bourgeoning sizes of the six major cities in Ghana. It would be worthwhile to look at issues of population redistribution rather than limiting births in order to reduce population densities. Creation or enablement of other growth nodes may dampen the desire to move to the bigger cities such as Accra and Kumasi. Reducing population density in cities like Accra could help lower housing rents and overcrowding, reduce pressure on health, education and other social services, ease traffic congestion, increase the lifespan of social infrastructure, which all together with other factors could foster socio-economic well-being and improve living standards.

Despite lofty implementation strategies, rapid urbanisation and deepening rural poverty continue to encourage rural-urban drift among young people. But can they be blamed for this migration stream? No; the elements of the deplorable situation in rural areas, such as the lack of potable water, electricity, job opportunities and farmers having no market for their produce, all act together as catalysts drawing youth to urban centres where huge amounts of taxpayers monies are spent on establishing and maintaining social infrastructure. With relative inequities continuing to fuel urbanisation, rural-urban movement will not be curtailed, at least not until the government demonstrates the political will in spending Ghana's millions where most Ghanaians live (Akosa, 2005).

While the NPC is expected to set operational targets for monitoring programme performance and expected impact and to recommend strategies for their attainment, one cannot but realize the huge financial requirement for this type of undertaking. However, reading between the lines, the NPC was made to realize that government's commitment as a major financial source would not be total. During the presentation of the 1994 policy document, the Finance Minister noted that implementation strategies would be pursued 'subject to availability of resources' and while government would make available to the NPC the necessary resources to enable it to function effectively, the NPC should remember that 'population programmes have therefore to compete with other sectors for the very limited resources available to the nation'. More often than not, it is local conditions and power relations between ministries rather than technical problems that often limit or affect budgetary allocations, and this sometimes undermines policy implementation at local level. In addition, Sutton (1999)[6] stressed that policy is also largely shaped by those implementing it – the 'street-level bureaucrats' – who

are often constrained by limited resources, and continuous negotiations to make sure they are meeting targets, and their relationship with clients. At the local level, such implementers exercise considerable flexibility during implementation, often producing outcomes that may be different from those expected, depending on contextual settings.

8.4 Problems with Enforcing the Population Policy: The Legal Angle

Implementation procedures of some of these programmes are sometimes notorious. In China, local officials were pressurised to fulfil birth targets for the locality under their control. These officials in turn put enormous pressure on women who had unplanned pregnancies to undergo abortions. Some abortions were carried out late in the pregnancy and the programme began to fall into disrepute (Crook, 1997). The financial implication for the State was also enormous in the area of subsidies. Economic change and opportunity still dominate fertility decisions in many households but as it happened in China spatial differences persist in fertility levels as in in other societies because some provinces (like Guangdong) did not implement the one-child programme rigorously. Even though there was no evidence of coercion, the programme was adjudged ill-managed, with inadequate training of personnel and follow-up of users. It was revealed that in some northern states of India, sterilisation was forced on people who were either unwilling or ineligible (for instance, couples who were beyond the age of childbearing) (ibid).

Among many other objectives of the 1994 Ghana population policy is the need to ensure that the Law Reform Commission, Parliament and other law-making agencies are well sensitised on population issues so that the law would serve as an effective instrument for promoting the objectives of the Population Policy. However, the case presented below from northern Ghana shows that a systematic integration of the population policy in aspects of social welfare planning and administration is still a long way off.

But one question that must be asked here is the appropriateness of a 14-year sentence on someone perceived as a criminal by the State, as opposed to villagers who saw nothing wrong with the act[7]. A hard-line

It was reported in the Daily Graphic (national newspaper) on August 15, 2003, that the Wa circuit court sentenced a 21-year-old farmer to fourteen years imprisonment for eloping with a sixteen-year-old girl of the Wechau primary school in the Wa District of the Upper West Region of Ghana. The prosecuting Police Inspector told the court that the District's Child Education Officer (a woman) had received a report from the Parents Teachers Association (PTA) of the Wechau-Bao primary school that the 'accused' eloped with the 'victim' and that the two were living as man and wife. The Presiding Judge (Muslim, male) 'took a serious view of the offence of impregnating a girl-child when the government is spending huge resources to retain girls in schools'. The seriousness of this offence was underscored by a decision that the '14-year imprisonment in hard labour will therefore serve as deterrent to others who commit similar offences' especially as 'girl-child drop-out rate in the region is on the ascendancy'.

stance has in some cases driven so-called repugnant practices underground or across the border (Aberese-Ako, 2004). The Prosecuting Officer and Presiding Judge may have had their hands tied in enforcing the law. However, sending a man to jail for such a long period without the option of a fine or the girl going back to school, and the lack of any appropriate welfare programme for the mother (and child after delivery) will further compound the girl's misery for years to come. She will have a hard time trying to gather resources to go back to school or acquire vocational skills. In addition to this, she is alienated in a family that strongly supported the elopement, and not really welcome by in-laws who had lost a budding breadwinner who now would probably come out of jail years later as an additional family burden.

The Ghanaian government is still faced with institutionalising appropriate legal measures to protect and support the family, which is the basic unit of society, in order to protect the rights of the more vulnerable members such as children, and the widowed. Judging from the case cited above, there is an apparent lack of strong links between lawmakers and population activists and social researchers; it seems that laws and population programmes are not properly rooted in culture or socially responsive to the needs of the people. The danger according to Akosa (2005) is that 'Ghana is currently going through an unfortunate transition that appears to reject all its enviable cultural values'.

8.5 Population Control: Demographic Motives Versus Women's Health Rights

Three separate objectives have been identified to overtly motivate family planning programmes in the south (Phillips, 1990). The first motivation is based on the demographic objective where population growth is seen as a fundamental cause of poverty, under-development and environmental degradation, the solution to which can be attained by fertility reduction through family planning. For example, some targets of the 1994 Population Policy are thought to be enshrined in the current Ghanaian government's Poverty Alleviation Programme as 'empowering the people and enlightening them on the economic costs of high birth rate'. Another objective is to prevent maternal morbidity and mortality in pregnancy and childbirth, and to promote maternal and child health through birth spacing. The third objective is to advance human rights, a portion of which according to the UN (1990) includes knowledge of and access to safe contraception.

But Freedman and Isaacs (1993) observed a dominance of population control motives in these programmes that relegate the enhancement and safeguarding of women's reproductive and general health and their rights to a secondary position. The dominance of the demographic motive is exemplified in the use of numerical targets, incentives and disincentives, which according to Smyth (1991) are often the immediate causes of coercive family-planning practices. On both the national and international levels, broader socio-economic policies that are, for example, advocated to foster women's education or employment opportunities also often have the ulterior goal of controlling population growth through fertility reduction. The feeling is that one set of policies can be utilised to effectively deal with a diversity of issues, so that interventions aimed at improving women's positions will also, supposedly achieve environmental, economic or demographic objectives (Jackson 1993a, 1993b in Smyth, 2000). An illustration was made available when the World Bank (1991) listed gains that would accrue from educating women in the 1991 World Development Report as follows: reducing the need for community health programmes; lowering infant mortality to compensate for the absence of medical facilities, and increasing contraceptive use.

There is no harm in governments legitimately developing policy objectives based on their country's demographic and economic conditions, but they should be aware that women's needs can be susceptible to shifts

in political and economic outlooks. For example, in the former GDR, falling birth rates in the 1960s led to the introduction of various material incentives designed to induce women to increase their family size. But according to Einhorn (1993), the switch to marketisation policies and labour-force rationalisation after the German Unification led to the reduction of paid leave to care for sick children from five weeks to five days per year, with obvious implications for women who had been encouraged to have more children under the old regime. In essence, the means through which demographic objectives are achieved should never jeopardise women's reproductive rights. This can be realised when policies offer women safe, accessible services which correspond to the different needs that women of different classes, ethnic groups and ages have (Smyth, 2000) and the situation underscores the call by Keysers and Smyth (1991) for an initial deconstruction of the multiplicity of identities.

8.6 Population Policy as Catalyst for Fertility Transition: the International Dimension

Fertility change also occurs in the absence of official population control programmes. In Taiwan for example, households began to acquire modern consumer goods like radios before the birth-control programme really got underway. The situation is comparable to what obtained earlier in Europe where rising incomes and the increased availability of manufactured goods on the market resulted in a substitution effect in household behaviour. That is, people began to spend their incomes on household items rather than on bringing up large numbers of children. Recently in Taiwan, the households that were adopting lower fertility norms were those in possession of these modern goods. It was probable that at the tail end of the 20th century there would have been a fertility reduction without the State-sponsored programme.

In Europe, there is no evidence that the State was interested in trying to control population growth through family planning judging from the fertility change that accompanied the age of industrial revolution. Far more people must have known about birth control techniques than if the government had started a programme itself. Employment of children was important in the early days of the Industrial Revolution (as they were the cheapest source of labour). However, children ceased to be a source of income for poor families as elementary school attendance came into force in 1880. Around this time, it also became increasingly clear that

the demand for skilled labour was growing faster than the demand for the unskilled, thus raising the appeal of secondary education. All these developments made the reproduction of the labour force more costly, and children (as they became of higher quality) more expensive to rear.

Based on historical perspective in Ghana, the Nkrumah government in the 1960s felt that population growth could be beneficial; a large population was considered an important ingredient for social and economic development, even though it did not encourage childbearing directly. In early 1969, the government in power formulated a population policy aimed at bringing down fertility rates. There is virtually no evidence that people in Abuesi and Brenu Akyinim took these measures seriously, and it is more likely that continued decline in mortality, with sustained high fertility of about 7 children per woman, plus in-migration of fishermen from neighbouring communities to Brenu and the vantage point of Abuesi as transit area for potential fishing migrants to other parts of West African coast accounted for most of the population growth. The Rawlings government amended the 1969 population policy in 1994, and new targets were set because the old ones were obsolete, the former objectives were not met, and new socio-economic (illegal or 'galamsey' mining and gender) issues and health concerns (HIV/AIDS) had emerged.

Some of the inhabitants spontaneously attribute the high fertility of the pre-Rawlings years to factors which include the necessity for a man to prove his manhood, or the pride of a woman in attaining the badu guan status (see pg. 120), and the will of God. Schneider and Schneider (1992) found in Sicily that the often repeated 'expression Ogni bimbo, providenza di Dio ("every baby is the providence of God") suggests precisely the religious fatalism that demographers often assume to be casual'. People were accustomed to marrying within their class (defined by the man's vocation) such that the connubial pair was likely to cooperate in the work itself, which brought continuity with household arrangements where wives are either fishmongers or traders.

The 1960s and 1970s were characterised by decline in mortality. As a result, birth rates exceeded death rates, and the overall population grew at approximately 3 percent per annum. While fertility increased until the late 70s, it started to decline in the 80s. It can be safely assumed from this that the 1994 population policy had nothing to do with the fertility decline of the previous decade. From the 1980s onward, despite declin-

ing fertility, population growth continued because Ghana's population already had an inbuilt momentum by the young constituting nearly 45 percent of the total population. By the mid-80s the inhabitants were strongly motivated by the prevailing socio-economic situation to redefine family ideals. For example, in Abuesi and Brenu Akyinim, increasing costs of operations (such as boat maintenance) led to the reliance on manual labour, especially the use of close family members. Trusted relatives in this case included one's own children in the bid to lessen cost of inputs – be it fish harvesting or processing. There is an on-going tradition where male offspring of farmers and fishermen are apprenticed to succeed their fathers; female children are groomed to take over fish processing and trading. Working with their parents, apprenticed boys did not earn a full income but were given token gifts especially on festival days (for example, the Bakatue festival mentioned in chapter 6); in addition some of the budding fishermen have taken to selling small quantities of the fish catch on landing at the beach, while some peddle fish from house to house in the bigger cities such as Cape Coast in order to earn their keep. On Tuesdays, artisans enjoyed a distinct pattern of leisure – repairing and cleaning their nets.

Statistical evidence suggests that birth control (an essential element of the 1969 population policy) did not gain acceptance among inhabitants until the early 1990s when the proportion of couples using contraception started showing signs of increase. The increase in the proportion using contraception was associated with a substantial change in the circumstances of these families. First there was a drastic increase in the cost of living associated with food shortages in the 1980s. This plus overall economic instability was reflected in the reliance on abortion. The abortions sometimes resulted in complications thereby requiring the involvement of state-licensed midwives or the doctors who had provided the illegal practices, to solve the complications for a fee. Some interviewees on this subject cited examples of women they knew who had had an abortion or were affected by its consequences. In China, despite the stringent birth control programme, there were indications that as people became less impressed by social welfare initiatives of the State and were faced with economic reality that made family growth undesirable, they responded accordingly and implemented measures not to have many children. In India, one feature of the family-planning programme was that it did 'not create a demand for birth control' but 'accelerated change' that was al-

ready taking place. Sometimes, such acceleration may be in the public interest; for example where parents had to pay for their children's schooling, they preferred to have fewer children.

8.7 Conclusions

A persistent mistake during the past three decades has been to equate population policy with the singular aim of improving family-planning services (i.e., through family-planning programs). According to Stein (1995), family-planning programmes can be interpreted as the sinister arms of a world-wide conspiracy which includes western governments, the UN, private foundations and NGOs, the educated elites of developing countries, medical workers, academics and researchers, pharmaceutical companies and other manufacturers of contraceptives. It is believed that 'these groups are suspected of caring less about the people they claim to be serving, or the environment, than about making profits; advancing their own careers; feathering their own nests; keeping down the number of "others" at home and abroad; and reducing immigration pressures' (Sexton, 2000; Smyth, 1991; Wiarda and Helzner, 1981). This has stoked the fire of suspicion by feminists that all the attention to women's welfare is motivated primarily by a wish to decrease fertility, which uses the betterment of women as a means rather than an end in itself (Young, 1989). Lower fertility may be welcome by women themselves if allowed to exercise the right to control childbearing on the basis of individual choice; but stories on coerced[8] childbearing still abound.

The implementation process of the Ghana population policy remains abstract because of the gap of its operation in theory and practice. Specifically in the study areas, the awareness, understanding, and implementation of the 1994 National Population Policy do not seem to penetrate to the local level. In practical terms, nothing is being offered officially in a practical way in favour of or against modifying childbearing behaviour of rural coastal dwellers other than the indirect interventions of the PPAG in Abuesi, and the ingenuity of the itinerant nurse in Brenu Akyinim.

This aside, one can see both the open and hidden loopholes that make some targets of the 1994 Population Policy unrealistic. In theory, the Revised National Population Policy of 1994 tried to cover the full gamut of concerns, from birth to death and the quality of life in-between. Caveats like 'subject to availability of resources' which the gov-

ernment embedded in the presentation of implementation strategies of the 1994 Population Policy not only show its lack of readiness to strengthen political will, thereby rendering the document another lip-service, but they also give credibility and weight to feminist scepticism about the motives and seriousness of the population establishment.

That the government is taking steps to ensure that it achieves an appreciable reduction in the proportion of women who marry before the age of 18 years is laudable. However, the current mode of legal enforcement leaves much to be desired if the populace feels alientated. Practices that should be corrected are instead driven underground. Harsh jail sentences that have been meted out without options of a fine on culturally sensitive issues have not helped the intended collaboration of government with traditional authorities and other interested organisations in instituting measures to enhance the status of women in societies as stipulated by the 1994 population policy. High-handedness and over-zealousness in meting out punishment on one hand and the ineffective information, education, and communication strategies for combating unwanted socio-cultural practices could further push negative practices underground[9].

What remains necessary is a revision that takes into consideration the viability of current short-term targets and potential political will of the State to see its acts through in a manner devoid of paying lip-service to its commitments. The NPC official interviewed in the Central Region was spot-on in re-iterating the need to co-ordinate and monitor population programmes of other organisations, both public and private, within the country. This is actually one of the mandates of the NPC. A review of implementation strategies is clearly needed rather than a whole-scale start-from-scratch approach that could take longer for implementers to internalise and use. If the NPC remains the main coordinating arm of government for the implementation of its population policy, this study has identified the need to raise and standardise the technical competence of its operatives, and to give them much-needed financial and logistical support to boost their work and morale. In addition, the impression obtained was that those who formulated the policy are far removed from those who are supposed to put it into operation at the local level – either their views are not taken seriously or they are not even invited to be part of the policy-making process in the first place. The revelation that the

CWC nurse encourages the secret use of contraceptives has the potential to destabilise local equilibrium in the short run.

Findings suggest that although some personnel interviewed are aware of the existence of a national population policy, their lack of knowledge about basic objectives and targets of the policy has ramifications for successful implementation of the policy in the two regions. While they agree on the need to have a national population policy, their views about policy implementation, on various issues, reflect distinct personal and local perceptions of how targets could be achieved and how they are linked with development. Issues brought out include suspicions about motives of NGOs that work parallel to government agencies, contradictions inherent in policy objectives and mode of implementation, the legitimacy of governmental authority in matters concerning reproduction, government commitment to international statutes and of foreign intervention in national affairs.

The government does not have a well-articulated and coordinated institutional machinery to translate policy objectives into programmable action plans. This was also a serious deficiency of the 1969 policy (GoG, 1994). For national population policy to make a meaningful impact on the lives of the people at the local level, the implementation process of targets to be achieved needs to reinforce or challenge certain trends in values and attitudes in much more harmonious ways. There is therefore the need to invest in non-coercive forms of intervention at the local level.

In the preceding analytical chapters, we have established the levels of some indicators of reproductive behaviour – fertility desires, birth timing, marital patterns, contraceptive use – all working together to manifest as current fertility levels. The next chapter, which is the concluding one, is devoted to understanding these empirical results in the evolving sociocultural and economic context in which childbearing is actualised.

Notes

1. http://news.bbc.co.uk/2/hi/africa/4536554.stm

2. This may be better than a man trying to impregnate a potential bride to find out if she is fertile before a marriage is contracted as some used to do. In some cases the pregnancy is aborted if the potential bride gets pregnant but it reassures the couple that there is no likelihood of infertility so the decision to get married is subsequently taken.

3. Health workers giving contraceptives secretly to clients in rural areas are not a new phenomenon. In Bangladesh, a health worker named Nazma offers more guidance to young mothers outside her normal schedule. She was reported on BBC as saying 'As a health worker, women ask for advice. Secretly, they ask for contraceptives'. http://news.bbc.co.uk/1/shared/spl/hi/picture_gallery/04/south_asia_bangladesh_small_victories/html/8.stm

4. Interviews were conducted on the spot in their offices after a few repeated visits as the officials were away on assignments at different times. Though messages were left in their absence with respect to impending interviews, the exact nature of the interview was not disclosed in these messages in order to preserve the natural way questions would be asked and answered. This is because certain questions were designed to pry into their knowledge of specific National Population Policy targets; thus if they already knew the type of questions to be asked, that required specific answers, one would not have a clear view of their fingertip knowledge of targets. More so, these officers are charged with stimulating the implementation of different facets of the policy in the Western and Central administrative regions where Abuesi and Brenu Akyinim are respectively located. In-depth interviews were carried out (in English).

5. Part of the inability of the NPC to work conscientiously on the implementation of the 1994 population policy is the concurrent running of the other programmes instituted by successive governments in the past decade. Such programmes include the VISION 2020 introduced by the NDC government (1992- 2000) with the primary aim of turning Ghana into a middle-income earning country by the year 2020. This was replaced by the Poverty Alleviation Programme of the National Patriotic Party (NPP) government when it came to power in 2001. These two governments were more attentive to their pet programmes, aimed primarily at economic growth and the NPC officials felt that some (if not most) of their activities were subsumed in the governments' pet programmes. In achieving the economic goals, human capital development is needed and human resources should be employed around the capacity the government thinks it can comfortably deal with when it comes to implementation of social welfare programmes; in other words, reduce the current growth rate by encouraging small family sizes. This has implications for overall population size reduction, and by extension a reduction in government spending.

6. Crewe and Young (2002), in relation to Lipsky's argument.

7. Elopement is an integral part of the custom of the people in the area as contained in this report certified by the newspaper editor. The newspaper report contended that it took 'a hell of time' for the DCEO and the PTA and some village elders to have the farmer prosecuted for defilement. Whether a PTA meeting was convened to thrash the matter out before it was made official re-

mains a mystery. It seemed that the decision to prosecute and convict had already been taken irrespective of the prevailing background. What is absent is information about public awareness campaigns organised by any governmental institution or any other organisation aimed at educating the members of the community about the need to stop the 'elopement' practice, its implication on female anatomy and physiology and the legal implications. Ignorance of the law is no excuse for committing crimes, but it is good for the organisations and the communities to be in harmony with each other in trying to solve what is perceived as a societal ill, especially if it involves age-old cultural practices.

8. Whether due to state laws against abortion, to spousal veto over family planning services, to social denigration of large families, or to the inaccessibility of contraceptives.

9. In November 2003, a Court in Ghana's Upper West Region jailed a 45-year old woman farmer, Fefe Dari, for five years for circumcising three girls, including a three-week-old baby. Earlier in same month, another court in the adjoining Upper East Region gave a five-year jail term to a 70-year-old woman for circumcising seven girls. In these cases, questions have been raised on the fairness of arrests and the impact of arrests on the community. In the former case, the residents have blamed the nurses at the Loggu Health Center; even the nurses contended that the villagers' hostility towards them has affected their work and since the arrest they have not been able to travel to that community to work. While the president of Ghanaian Association for Women's Welfare (GAWW), a NGO said that stopping FGM is 'a question of education', some of the villagers claimed there has been a lack of effective communication one saying : 'you see, they have been telling us that it isn't good, we shouldn't do it, but we don't really know why'. Furthermore, the wisdom of the Presiding Judge has been queried as to why he gave a five-year jail sentence when the law recommends a three-year maximum penalty (Stephens-Davidowitz, 2003). Even if the victims are three, a concurrent three-year jail term could have been given, which would help more as serving as a deterrent than help in driving the practice underground because of the harsh nature of the sentence and subsequent negative impact on the family and social position of the accused. Coincidentally, this Judge is the same person that imposed a 14-year jail sentence on the farmer that eloped with the minor girl.

9 Fertility Transition in Coastal Areas of Southwest Ghana: Conclusion

9.1 Introduction

The main objective of the study is to identify and understand the factors facilitating and/or constraining changes in fertility behaviour in Abuesi and Brenu Akyinim based on the background of fertility decline observed in Ghana (GDHS of the 1990s). In this chapter we will examine changes in reproductive behaviour among inhabitants of Abuesi and Brenu Akyinim in the context of the theory of culture and political economy of reproduction.

This research seeks to understand reasons behind the drop in fertility level. We have gauged the transition in childbearing behaviour by examining changes in the following areas of peoples' lives: fertility preferences, costs and benefits of childbearing (value of children) and birth timing (age at first birth and birth intervals). Fertility levels have been established to facilitate the exploration of variations within and between two rural communities whose inhabitants had previously experienced relatively high levels of fertility. In these local settings, it is pertinent to understand what has been happening to the values that used to sustain the desire for large family sizes or high levels of childbearing. Hence, we will seek to find out the costs and benefits that parents associate with values of children in the process of actualising their family size aspirations.

Tracking changes in fertility desires is important for understanding fertility decline in the current transition, because of its impact on the need for contraception in spacing and/or limiting childbearing. Attention has been given to understanding how individual fertility decisions are being formulated and implemented. This takes place against the backdrop of recent changes in the economic and political environment

which impacted on the Ghanaian people's intentions to have children irrespective of whether childbearing takes place within marriage.

In the following sub-sections, discussions centre first on the methodological importance of the culture and political-economy approach used to probe the remote and immediate causes of the observed changes in fertility since the late 1980s.

9.2 The Culture and Political-Economy Approach

The theoretical framework of the study is based on the culture and political-economy approach advocated by Greenhalgh (1995). This approach to understanding fertility dynamics was adopted after considering a variety of theoretical constructions like the Demographic Transition theory, Diffusion theory, the New Household Economics (Becker, 1969), and the Institutional approach. The culture and political-economy theoretical approach is seen to be unique because of its different set of assumptions that takes into consideration the likelihood of internal variations in fertility processes and behaviour, even when two high-fertility societies are compared. In addition, the approach questions the logic that demographic change invariably follows western patterns, where low fertility driven by modernisation will be the end-point of demographic history. The contention is that there are many types of fertility patterns, and each is likely to be influenced by a combination of forces that is to some extent spatially, chronologically, and locally specific.

This expectation has been met when childbearing was situated in the context of Abuesi and Brenu Akyinim, two rural coastal settlements with potentially high fertility. Drawing on both quantitative and qualitative research methods and the materials that the culture and political-economy approach permits us, differentials in reproductive attitude and behaviour were documented in the two communities. It was discovered that despite ethnic similarities between peoples of Abuesi and Brenu Akyinim, contextual community differences exist in reproductive behaviour, especially on issues of fertility preference, early childbearing, contraceptive use, abortion, and marital life. The results strongly confirm the proposition that intriguing variations can exist between two high-fertility communities (Greenhalgh, 1995); the factors influencing fertility change in each community point to the fact that they are bestowed with unique reproductive arrangements worthy of investigation in their own right.

Analyses of longitudinal data show a decline in the trend of mean number of children ever born between 1998 and 2003 and that community differences exist in family size desires and in the total fertility rates (TFR). The TFR derived for Brenu Akyinim women was higher (4.1 children) compared to that of women in Abuesi (2.7 children). Thus in predicting future fertility levels, there is a greater chance of faster fertility decline in Abuesi if women living there continue childbearing with the age-specific fertility rate patterns shown in the 12-month period before the seventh round of survey exercise in 2003. This buttresses the fact that national aggregate fertility levels may mask differences; micro-level studies may help unravel these differences in order to ascertain areas where fertility transition and factors influencing such changes may be more visible. Using single-round surveying to capture such information is not realistic. The problems of single-round data collection cannot be over-emphasised and the advantages of longitudinal data far outweigh the costs and logistics involved in using it. In order to comprehend the reasons people marry, cohabit, have children, divorce or migrate, the demographic life transitions must be viewed against the background of the experiences people accumulate and the expectations they have about how those transitions will affect their lives, which has implications for theory and data (McDonald 1996; Giele and Elder, 1998).

Contraceptive use levels estimated for each community were higher than the regional average reported for women in the 1998 GDHS data for Western and Central regions where Abuesi and Brenu Akyinim are respectively located. However, logistic regression revealed that socio-economic factors operate differently when it comes to predicting which groups of women are more likely to be using contraceptives in each community. For example, while women who had a higher likelihood of adopting contraception in Abuesi included those whose husbands approved of contraception, the reverse was the case in Brenu Akyinim. In the latter community, interestingly, married women who were more likely to use contraceptives were those whose husbands did not approve of contraception (this group showed signs of secret use of contraceptives), and those who watch TV weekly, compared to those who do not watch TV regularly.

Inasmuch as we were able to derive statistics on different measures of fertility attitudes and behaviour, and contraceptive use, qualitative analyses also shed more light on the occurrence of these relative values.

Crook (1997) argues that 'besides statistical analysis of large population samples, one needs small-scale intensive anthropological-style investigations really to understand the processes at work in fertility decline'. For example, in-depth interviews revealed that some women in Brenu Akyinim took physical or aesthetic factors into consideration for marital stability and birth timing. In addition, the rare occurrence of voluntary childlessness in the West African sub-region was reinforced as it was found that no respondents in either community stated a preference for not having any children. Although (of all women interviewed) one woman in Abuesi could be termed sterile because at age 45 she did not have children, she still expressed the desire to have five children if possible. There is an ingrained desire for locals to have children at some point in their reproductive and/or entire lifespan.

One highlight of the complex character of change underlying gender relations can be described by the changes observed in the social occupational structure for men and women in the fishing sector. While the selling of fresh fish and smoking and trading the preserved stock is the responsibility of women, the social context is changing as some men are gradually taking over the role of selling fresh fish as soon as the boat anchors. This could be initially traced to activities of younger members of the fishing expedition who sell small quantities of fish regarded as dispensable compared to the main catch. In some instances, some men even walk the streets of residential areas of bigger cities like Cape Coast offering fish for sale either to attract higher profits from customers who are not inclined to go to the market or simply to dispose of excess stock. Additionally women are taking up 'middlemen' roles – that is, buying directly from the fishermen as the boat anchors, then taking the stock to the local market for immediate re-sale.

Given this background, we will now take a closer look at the more direct causes of the observed changes in reproductive behaviour, such as changes in family structures and marital relationships, changes in demand for children, and changes in factors constraining contraceptive use.

9.3 The Effect of Marriage on Reproductive Behaviour

Marriage patterns are changing with time; age at first marriage is nearly 20 years for women in the two communities, higher than the minimum of 18 years prescribed for women in the 1994 Ghana population policy. Though this seems like a success, the range of age at first marriage for

women in these communities is still between 12 and 30 years. Some women choose to marry late in life (late 20s and 30s) due to several reasons including early teenage childbearing experience, apprenticeship in vocations related to the fishing industry and educational pursuits. However, with the relatively decreasing age at first sex, and increasing rate of pre-marital births and adolescent childbearing, the influence of age at first marriage as a measure of exposure to risk of pregnancy is gradually being eroded. This has methodological implications for the estimation of fertility levels as we witness the on-going social transformation in which childbearing may no longer be determined by marriage.

Therefore we need to consider other types of union between couples that could result in reproduction (or reproductive outcomes determining types of union). Factors such as age at first sexual intercourse and age at first birth, and subsequent birth timing can be used to modify the index of marriage in explaining the levels and trends of the proximate determinants of fertility. Intergenerational evidence obtained from women indicated that younger people's first sexual experience is now taking place in a different social context from those of previous generations. Lifetime experiences indicated that the age at first sexual intercourse for modern-day adolescents is relatively lower compared to that for older generations.

9.3.1 Changes in marital stability and marital fertility

Marriage has ramifications for social status, economic dependency, survival strategies, sexual expression, and childbearing. But disruption of marriages is also gradually becoming more common. This is attributed to the gradual breakdown of traditional sanctions. It was discovered that nearly half of all married women in this study had experienced marriage more than once. According to Nukunya (1992), studies in the Volta Region of Ghana suggest that about 40 percent of all marriages end in divorce; frequencies are even higher in the Ashanti and other Akan areas (like in Abuesi and Brenu Akyinim). Sources of discord in the household include inadequate financial assistance from the husbands, wives not making regular meals, drunkenness on the part of men (Magazine, 2004) and wife-beating (Idoko, 2004). Thus, for some, first marriage or first union is like testing the waters in preparation for longer-lasting unions. Real or imagined reasons that first unions do not last make the woman adopt measures against having more than one or two children in the first

attempt at union with a supposed life partner. Younger women, in Brenu Akyinim for example, put a temporary halt to childbearing after having one child with the first partner, so that if a woman needs to move on to another partner, she will not be encumbered with too many children and at the same time still look beautiful (not characterised by sagging breasts) in the eyes of other suitors.

In Abuesi and Brenu Akyinim, decline in fertility is traceable in part to an increase in the age at marriage, and increase in the number of years between births. The implication for childbearing for some women is the consideration to delay childbearing, which results in longer intervals between children. In the meantime, childbearing is prevented by the use of modern and traditional contraceptives, and tactics that prevent sexual contact such as a woman wearing tight shorts to bed to discourage sexual advances from their male partners. Some women also work longer hours than necessary in their daily vocations or embark on longer trading trips to the hinterland in a bid to avoid sexual contact with their partners. Men are often as devious and innovative as the women. Married men who are planning a 'match' (sexual escapade with another woman) also feign tiredness or decline to make sexual advances to their wives, inasmuch as women are not expected to be sexually forward. The type of conjugal relationship a couple has and the nature of adversity the couple experience contributes to the timing and extent of childbearing.

In the context of marriage, the first child is normally timed to arrive within the first year of marriage. Societal expectations regarding the ideal starting time for childbearing are similar in the two communities such that a couple is expected to have their first-born iwithin one year of marriage. In Brenu Akyinim, some of the family members can question the couple's ability to have children after one year[1]. Childbearing is deeply embedded in the social institution of marriage, as marital union is a major determinant of the commencement of childbearing. Shifts in marriage patterns or marital characteristics could be symptomatic of the prevailing economic situation, and entry or non-entry into marriage in itself could also be a way people cope with making and sustaining a living and generating a new labour force. Marriage, like fertility, has its own costs and benefits.

9.3.2 Restructuring the authority system within the family

The influence of the extended family is on the wane; families are now more nucleated, leading to an increase in the autonomy of couples. Kinship relations and household structures have evolved in such a way that as family matters became more nucleated, the power of elders and other relatives on decision-making has gradually eroded. Consequently, part of the effects of the increasing freedom of the conjugal unit has been greater consensus between spouses in their assessments of domestic issues, especially about the costs and benefits of childbearing.

What has further eroded the influence of the extended family is the involvement of agencies such as the school, the peer group and the mass media in the socialisation of children. The knowledge and skills needed for modern life often shows that what the child learns directly from the parents (who grew up under different socio-cultural and technological conditions) is very much limited. For many children, the acquisition of literacy and new skills means economic power, and may entail the adoption of a new attitude to family structure and sizes. Children and adolescents are learning about new modes of lifestyle and their experiences of sexuality are at odds with what the generation before them experienced. Changing sexuality characterised by increasing levels of awareness and boldness in practice have been linked to influence of factors such as peer pressure and the media. This accounts for relatively higher levels of teenage pregnancy and childbearing (in Brenu Akyinim), resorting to abortion (in Abuesi) and generally high levels of awareness of modern contraception among teenagers and young adults who now form the bulk of people in the reproductive age group[2].

9.4 Demand for Children and the Economy

Most fertility transitions, if observed over an entire period from pre- to post-transition, are probably characterised by large declines in desired fertility, without which it would be difficult to understand the catalysts of fertility decline. Fertility demand, measured as number of children desired in this study, is also declining. Suffice it to say that the strength of desires or preferences is difficult to measure. In Abuesi and Brenu Akyinim, the average number of children desired by individuals has declined considerably, but fertility still remains far above population replacement levels at approximately 3 children per woman in Abuesi and 4 children

per woman in Brenu Akyinim. Irrespective of the number of children desired, the commitment of individuals and couples to actualising their childbearing desires may vary due to 'perceived magnitude and costs of an additional child' (Bongaarts, 1993). An emerging trend is the way some women take physical appearance and aesthetics into consideration as part of the costs of childbearing and possible remarriage.

The advent of the declining childbearing aspirations can actually be traced back to the mid-80s when the Ghanaian economy suffered a downturn, exacerbated by bad weather that led to crop failure and near-famine conditions. Constraining forces in the international economic setting (the high cost of oil imports and low spot process of Gold and Cocoa – Ghana's main exports) helped the government to further justify its continuing to cut subsidies from main welfare services, based on conditions laid down for embracing the World Bank/IMF SAP initiative. As the country was plagued by the underemployment and pauperisation of labour, the value of earnings was increasingly eroded by the gradually depreciating national currency (the Cedi). The populace responded to the political and socio-economic crisis by taking steps to reduce family size. In the space of just 19 years (1980-1999), a dramatic drop in TFR was observed. The general crisis affected all sectors and left almost nothing to fall back on. Nevertheless, people associated with the different sectors experienced the crises in different ways. Several changes, all more or less related to occupational spheres, converged to induce births and at the same time slow the childbearing rate; small family size norm got developed at this time.

By the year 2000 in Ghana, the newly elected NPP-led government capitalised on a wave of popular support to embark on a new economy-stabilising venture, the HIPC initiative, which further indirectly raised the costs of raising children. Whether this was intended to dampen childbearing desires could not be proved, but it did have an effect in that direction (see chapter 6). This era saw the continued removal of government subsidies from sectors such as education and health in order to jump-start the economy, given the constricting influence of unfavourable balance of payments and budget deficits. Belt-tightening economic policies like the HIPC initiative suppressed aspirations for large family sizes without the state directly coming out to force the hands of parents as done in China. All these factors together acted to make household earnings low and large families unattractive, resulting in fluctuating declines

in fertility aspirations in the 1990s and early 21st century. Changes in fertility preferences occur in a cyclical fashion in response to short-run changes in economic prosperity, changes in household formation, and costs of child maintenance. As Sathar and Casterline (1998) observed in East Asia, the historical process was such that 'economic development of a different character fuelled an upsurge in desires to restrict fertility'.

In exploring the micro-history of reproductive decision-making, researchers should take into consideration the view that decisions are distributed along the whole reproductive life cycle; the dynamism of childbearing aspirations cannot be accounted for in a single-round survey. Reproductive decision-making is essentially distributed along the whole reproductive life span; if we are able to follow changes in value orientation over life courses of individuals or groups of people (for example the rise in proportion of males wanting to have more children between 2001-2003 in Abuesi and Brenu Akyinim) by employing multi-round inquiries, the usefulness and validity of studying changes in attitudinal attributes increase. In this way, the direction of intentions and reasons for changes can be traced and continually monitored. The relevance of this new anthropology of micro time to childbearing practices is made greater by the fact that demographic actors use their agency to constantly review their reproductive activities, fine-tune and micro-modify them as the need arises. It is also tempting to characterise the transition to lower fertility as a cultural transformation to Western values of childbearing; cultural patterns did not solely explain the timing of fertility decline in Abuesi and Brenu Akyinim, but they are relevant to the process of population change.

9.5 Teenage Pregnancy and Birth Timing

Childbearing aspirations of the inhabitants of these two communities are affected by some background socio-economic and political factors which operate in a complex way to influence the proximate determinants of fertility. The complex nature of factors often results in some contradictions in the people's reproductive behaviour. Theoretically, unmarried young women face long years of sexual activity before marriage. The absence of deliberate efforts by those sexually active to prevent pregnancy sometimes results in early teenage pregnancy or motherhood. In Brenu Akyinim, there is an ongoing annual event where short-term in-migrant fishermen impregnate some of the local women by the third week of

January, in 2006 reportedly leaving four schoolgirls pregnant (one in primary, three in the JSS level). Teenagers who experience early childbearing cannot boast that they had a plan when they started – it was not a matter of deciding the right number of children in advance but of having them as circumstances permit.

The evaluation of childbearing behaviour typifies a situation where individuals reflexively monitor and adjust their fertility aspirations with occurrences in their socio-economic environment, irrespective of official population policy targets. Negative socio-economic conditions stimulate the childbearing teens to have longer intervals (5-7 years) before the birth of the next child and subsequent late entry into marriage. After a period of socio-economic stabilisation, subsequent childbearing by these women takes place at shorter intervals. In Abuesi, teenage childbearing is lower because the young women are reported (by other young women) to favour the use of abortion to terminate unplanned pregnancies. However, there is no evidence that preference for particular sex of children is a motivating factor for abortion (as in India and China). In Brenu Akyinim, the teenage girls carry the pregnancy to term and thereafter embark on a long delay before having the next child. The use of abortion this way and the longer birth interval experience contributes very much to having and maintaining small family sizes and lowering fertility rates.

9.6 Attitudes towards Children and their Treatment

Prior to current fertility declines in Ghana, the total fertility rate of about 7 children per woman was partly sustained by the desire of women to attain the socially acclaimed *badu guan* status – that is, having 10 children. But the *badu guan* status is no longer prestigious. Having large numbers of children is becoming more of a burden than a source of pride due to the high cost of living and childcare expenses. In addition, new sources of pride, including the formal education enjoyed by an increasing proportion with its concomitant increase in acceptance of family planning methods, and (recently) aesthetic considerations among women, are competing with the prestige of *badu guan*.

Nowadays, couples with relatively small family sizes participate in the stereotyping of few nonconformists – families with 'too many' children, with no prescribed benchmark but defined by the apparent capacity to take adequate care of ones children. In Brenu Akyinim, couples that are seen to have 'too many' children now run the risk of being labelled 'pigs'

or their children referred to as a 'football team[3]' or 'Nigerian rats'. The prestige value the large numbers of children confer has to be weighed against the expenses involved in maintaining them. In the face of dwindling employment opportunities for school leavers and rising tuition fees, the economic value of children has been drastically reduced for some parents who would like to provide for their wards.

On the other hand, there is some evidence that the value of child labour has been increasing in fishing communities faced with little or no expansion of urban, industrial, technical, or white-collar employment opportunities. Thus some couples may be bent on having large family sizes in order to use their children to make ends meet under exploitative economic conditions. They may also prefer not to send their children to school but rather engage them in main occupational activities of farming and fishing that require less investment in formal education. The government's adoption of the strict conditions (such as reducing or even eliminating subsidies to social sectors including education, health and agriculture) imposed by international financial bodies to boost national economic performance has led to rises in the cost of fishing and farming inputs. Coupled with rising unemployment, this all acts to make the inhabitants of the rural areas adopt labour-intensive livelihood strategies.

Contradictions in parental family size desires invariably occur in a society experiencing shrinkage in public-sector performance that exposes adults to a harsh economic environment. It may dissuade couples in both the formal and informal sectors from having large numbers of children, especially among farmers and fishermen. In this situation children ironically become potential contributors to the family economy in the face of dwindling fortunes as they are encouraged to earn a living to boost family income. However, fertility behaviour is bound to favour large families rather than small ones in the two rural communities investigated (whether this is true for all social classes is arguable). Even if women and men would prefer to have fewer children, they are not likely to take any serious measures to limit births, because given the present socio-economic setting in the rural communities people thrive on labour-intensive livelihood strategies, and also rely on local norms of social welfare protection.

Irrespective of the situation, some scholars have questioned the traditionally held view that Africans or Ghanaians specifically love large families. The love for children should not be measured in terms of the num-

bers produced, or in positive attitude parents overtly express towards large family sizes, but for the quality of care given to children (Nukunya, 1992). The recognition of children as rightful heirs props up the desire to have children but the costs of childcare and upbringing have taken their toll on the desire to have large family sizes. Some benefits parents hope to accrue from children include their being potential sources of social protection at old age, and to be survived by rightful heirs for the continuity of the family name. Relating this to kinship and descent, matrilineal rules confer ownership of children to women and inheritance to maternal uncles. This puts the pressure of childcare on women. However in event of marital separation, children who are initially valued because they are offspring of current unions, can be just as easily de-valued and deprived of resources when the union is broken. Therefore at the remarriage of either parent to new partners, a new level of acceptance is established for an existing child. In this analysis, 'time' exposes children as symbolic values in high and low points of adult relationships. Matrilineal rules can also be suspended in the context of a rich man's death, because the widow can seek succour from the Intestate Succession Law 1985[4] that legally gives the woman and her children the right to inherit the dead man's estate.

9.7 Gender Relations, Household Decision-Making Environment and Reproduction

Changes in the socio-cultural environment that have to do with changing societal notions of relations between the sexes and the redefining of women's roles affect reproductive choice (Obermeyer, undated). Adolescents are growing up with new socio-economic realities that show women are important, as well as integral parts of new labour force, and increasingly found in many areas of decision making or influence. As a result, adolescents hold the view that couples hold joint decision-making powers as opposed to what used to obtain, with men holding sway as breadwinners and benevolent heads of households. For example, (female) fishmongers are known to be economically powerful enough to fund or give loans to fishermen for fishing expeditions, which is often repaid in kind (fish harvests) or in cash. These women are less dependent on their husbands' handouts and are less likely to be subjugated in the household. Also occurring at an increasing rate are cases of fallout, di-

vorce or separation among female heads of households from their partners who are away on international fishing trips.

In some cases it is noted that couples in marital unions operate mostly on an unwritten law of complementarity. The man is expected to contribute large proportions of his income to household expenses while the wife sees to the housekeeping. Complementarity can break down if the man fails to fulfil his marital obligations. If a wife decides to ask her husband why he is not fulfilling such obligations, it can be taken as an affront. Though the husband's authority had earlier thrived due to complementarities, discord arises when the husband interprets such demands as an infringement on his manliness as observed by Magazine (2004).

The synchronisation of household decision-making in an area as personal as reproduction depends to an extent on socio-economic equalities and inequalities among couples, and on specific interests of individuals and couples. In this study, it was noted that local characteristics put household power dynamics in favour of men; but women use various coping mechanisms to either accommodate or modify implementation of decisions, and these are important factors in shaping reproductive behaviour in the local setting. For example, the apparent increase in age at marriage among women as wage earners and active participants in the labour force is related to a deferment of childbearing careers. Late entrance into marriage therefore means fewer years of exposure to likelihood of getting pregnant, irrespective of fertility desires.

Fuchs and Moch (1990) have argued that women are actors of their own reproductive destinies and are social actors who use the resources at their disposal to devise strategies that challenge (and could even alter) the systems that oppress them. Smyth (1991) contended that it would be a fallacy to depict women as inert victims, unaware of the constraints and controls being imposed on their fertility by outside agents. On the contrary, women always seek ways to manage their fertility: research shows that women in most societies have knowledge and experience of 'traditional' methods of contraception (Pittin, 1986), that there is a great unmet demand for contraception among them (Hartmann, 1987), and that their motivation to regulate births is so strong that, when other methods fail or are unavailable, they will use abortions even at great health risk.

Women could have a gender-specific interest in controlling fertility, regardless of men's interests; reproduction is a bodily process and women's bodies are centrally involved. But the apparent inequalities in

decision-making power in the household weighted in favour of men (differential in spousal income, payment of a bride price, and the changing value of children in household based on costs and benefits) could result in exceeding their numerical desire for children.

9.8 Family Planning

9.8.1 Access to contraceptives

Another contributing factor to fertility decline in Abuesi and Brenu Akyinim is the improvement in access to family-planning methods. The inhabitants of Abuesi and Brenu Akyinim may well be on course to achieve the population policy target of 50% use level by the year 2020 if the current (now at 30%) momentum is maintained and if factors that will enhance an increase in contraceptive prevalence are supported. Initiatives that potentially contributed to this improvement include the primary health care outreach programmes which saw health workers taking on roles as active counsellors and providers of contraceptive methods, the frankness of TV and radio messages in legitimising acceptance of family planning and subtle improvements in access to contraceptive methods.

Despite these improvements, family planning services still remain deficient, especially in the rural communities. A large proportion of the population still does not have immediate or convenient access to any type of service. For example in Brenu Akyinim, except for the monthly visit of the itinerant nurse, the nearest health facility is more than five kilometres away; choice of methods are rarely offered, and the staff need more training as their work overlaps with other issues they are not trained on. Although one-third of the women reportedly use contraceptives, there is an underlying perception of secret use, implying that a larger proportion of women might actually be using contraceptives.

The increase in the proportions of people using contraceptives is sometimes the result of increased demand for family size limitation. However, we are cautioned that significant increases in contraceptive prevalence can occur with/without accompanying changes in fertility desires especially when contraception is used more for spacing than for limiting childbearing, or for the prevention of sexually transmitted infections. In this case, increase in contraceptive prevalence is related to im-

proved supply of contraceptives to satisfy existing demand (Feyisetan and Casterline, undated).

Since the goal of birth control is to assist couples in achieving their family size desires, with appropriate timing and spacing to ensure optimal growth and development of each family member, it is important for each family to adopt the best method of family planning to achieve the set goal. Logistics regression showed that concentrating and improving family planning IEC and service delivery on adolescents currently aged 15-24 years, those who express the desire to stop further childbearing, and women whose husbands approve of contraception, may contribute to increasing contraceptive use levels.

9.8.2 Contraceptive use and women's empowerment

One crucial feature of the Ghanaian family planning programme (like that in Indonesia) is its use of quantified targets, fixed in terms of numbers of acceptors of modern contraceptives. The system created in the rural areas made services accessible to actual and potential acceptors because it promoted individual acceptability of family planning practices and counsel. Whether it can be inferred that women are empowered by the implementation of the family-planning programme is a different story altogether. In this context, empowerment refers to the process through which women can achieve autonomous control of their lives, including their fertility (and which for some represents the only legitimate aim of family planning programmes). One measure of empowerment is that acceptors' freedom should be free from outside pressure. The conditions prevailing in Abuesi and Brenu Akyinim indirectly allow women to have some form of autonomous control over their fertility, but not in genuine choices of access to contraceptive methods. Although financial incentives for those who voluntarily undertake the state-controlled family planning programme (as in China and India) are not evident in Ghana, the subtle coerciveness (in the guise of counselling) by the nurse represented an infringement on the women's freedom to choose.

Another measure of empowerment is an assessment of the women's ability to make an informed choice based on access to a variety of contraceptive methods. Here, the women living in Abuesi are better off in terms of their proximity to Sekondi-Takoradi, twin cities of regional administrative status where there is relatively better access to a variety of

drug stores and pharmacies where contraceptives can be procured, compared to Brenu Akyinim, which is remotely located. A cursory look at the methods of choice among local users indicates preference for the Pill and Injections in this rural area. Although undeniably these types of women-controlled contraception offers women the advantage of being in control, the poor availability of male contraceptives effectively removes one element of choice from women (and couples) who intend to practice birth control. This is more apparent in Abuesi where nearly 40 percent of women currently using any form of contraception rely on the 'withdrawal' method.

9.8.3 Costs of contraception

The increasing proportion of people adopting the use of modern contraception suggest in part that the birth-control element of the 1994 policy may be achieving some form of success as contraceptive prevalence has increased. In Brenu Akyinim today the contraceptive pill is readily available from the itinerant nurse and can be purchased in other towns without prescription. According to the nurse, young women, almost all married, are the major source of demand. Other ingenious practices adopted by the women in Brenu Akyinim to discourage sexual advances from their partners play important roles in birth-spacing and limitation, thus contributing indirectly to fertility decline.

In Ghana in general, there has been increase in variety of choice of contraceptive methods since the 1970s, giving potential users more options than the fewer and less easily procured local/traditional family planning methods. There is the argument that the financial cost of getting the modern contraceptive methods is higher than for the local methods; but the increase in relative proportion of contraceptive users in Abuesi and Brenu Akyinim could have also been a consequence of the lowering of non-access costs of using contraceptives.

Non-access costs were earlier identified by Easterlin (1975) as the social, psychic, health and cultural factors as well as financial and time costs that could hamper the spread of contraceptive use. I add to this list the influence of other voices on fertility decisions of a couple, which cannot be easily measured. Changes in family structure in recent times have seen erosion of the power of extended kin which has resulted in greater concurrence, and most likely better communication between spouses about

the costs of children and how these costs have to be borne, and to reaching a decision on family size limitation.

In addition, there is the 'open secret' that some women use modern contraceptives without their partner's knowledge or consent. But this has some form of indirect connivance from their partners in the sense that while these males are aware of the unpleasantness of having an unwanted birth, the responsibility for preventing it is put on the woman. The realisation of the increasing costs of raising children coupled with unpleasant appellations given to couples with large family sizes increased the acceptance of modern contraceptive methods. In order to prevent pregnancy, some women use contraceptive pills secretly (in Brenu Akyinim) and abortion (in Abuesi); some men in local discussion circles boast about how their partners know what to do to prevent unwanted pregnancy. In the course of time, the satisfaction of individual family size goals through the prevention of unintended pregnancies contributes to fertility decline.

9.8.4 Husbands as barriers

The use of modern methods of contraceptives is on the increase although obstacles remain to adopting and continuing their use. Husbands are generally perceived to represent barriers to their wives' use of contraception. There are a couple of reasons for this; first, it could be that wives frequently misread their husbands' preferences and attitudes. In Punjab, it was also discovered that the most decisive obstacles to family planning stated by women include the perception of husband's disapproval, fear of detrimental side effects, and the socio-cultural acceptability of birth planning (Casterline and Sinding, 1998). Secondly, and more importantly, only a minority of husbands are more strongly opposed to contraception than their wives, and in these instances the husband's view typically wins out (Casterline and Sinding, 2000). Despite the increase in contraceptive prevalence, the unmet need[5] of contraception remains high. In northern Ghana, most women with unmet need and their husbands are unsure about whether their spouses, relatives, and friends approve of contraceptive use, and this uncertainty makes them hesitant to adopt a radically new technology.

Husbands' approval of family planning is an important determinant of contraceptive use (Joesoef et al., 1988). Information obtained on women's ability to decide freely on matters of reproduction, especially contraceptive use shows that they are influenced by the husband's atti-

tude which makes some of the women resort to use contraceptives secretly (like in Brenu Akyinim). Such information may be missed in surveys if probing is not done adequately. This type of denial could mean that contraceptive use levels may well be higher than reported. In Brenu Akyinim, the secret use of contraceptives by some women was uncovered. However, this phenomenon is not so secret since contraception is used in a procedure encouraged by one of the service providers, without their husband's or partner's approval. Some men claim to know about the clandestine use, but they prefer to remain silent.

9.8.5 Educational attainment and fertility change

Education and societal expectations are strong forces that create, assign and perpetuate values associated with childbearing. It has been discovered in the two communities that women who have some form of schooling prefer to have fewer children than those who are not educated. The difference is much more pronounced in Brenu Akyinim than in Abuesi. Whereas education may influence childbearing aspirations and encourage women to have smaller families, only a small proportion of people in rural areas have secondary or higher education. Some parents withdraw their children from schools to undergo apprenticeship for vocational skills in light of day-to-day socio-economic necessities. This often yields two results in the area of childbearing: on the one hand, as women spend more time engaging in economic activities to raise their standard of living, they delay having children, especially when they are under apprenticeship. When they finally commence childbearing, it is with longer birth intervals, ultimately leading to lower total fertility rates (as in Abuesi). On the other hand, there could be higher TFR (as in Brenu Akyinim) where some women who start childbearing in the late 20s implement shorter birth intervals, trying to 'make up for lost time'.

Many researchers, for example Sathar and Casterline (1998) in Pakistan, and Crook (1997) in India and China have shown that households that have lower fertility or have experienced greater use of family planning, tend to include more highly educated mothers than the rest. In Pakistan for example, sample surveys have shown that households with better educated women have lower fertility, irrespective of the level of education of the men in the household. In Abuesi and Brenu Akyinim this does not simply mean that households with women of higher education tend to have better household incomes and more modern expendi-

ture patterns or husbands with higher levels of education, both of which also have influence on the fertility decline. For instance, in southwest Nigeria it was discovered that whatever the level of education of women, husbands' approval of family planning was more important for implementing the decision to have fewer children (Akinyoade, 1999). Similarly in Saudi Arabia, many women are highly educated but the education does not expose them to society, new ideas, or travel. Women who lack autonomy may face social or family pressure to bear many children, even at shorter birth intervals (Crook, 1997).

9.9 State Population Policies and Reproduction

Some states adopt population policies to tackle overpopulation which they perceive as population problem Overpopulation has been invoked as an explanation of famine and death, conflicts in Africa, surplus migration from the third world to the first, and more recently to justify the necessity of GM crops (Sexton, 2000). Right from the time of Malthus, poverty has been seen as the natural product of the fertility of the poor; and in Ghana, the 1994 population policy was based on the premise that millions will be condemned to life-long poverty if the country's rate of population growth is not deliberately slowed. Calling this assertion into question is tantamount to asserting that the numbers of people in any given locality can continue to increase indefinitely. In Ghana, the direct influence of the state is highlighted in its attempt to modify the childbearing aspirations and behaviour of its citizens by formulating the 1994 national population policy which advocates smaller family sizes. But we cannot attribute the fertility decline to the implementation of the national population policy.

9.9.1 The 1994 Ghana population policy

One of the numerous faults of the 1994 Ghana national population policy targets was explicit reliance on demographic imperatives, some of which were misplaced in the bid to stimulate change in women's attitudes to reproductive change. For example, there was a recommendation for a 2-year birth interval for women (compared with the local practice of 3-year birth intervals); some other recommendations were out of place (for example, the intention to increase contraceptive prevalence rather than focus on unmet needs for contraception). We can safely say that

fertility decline had already commenced prior to the introduction of the population policy. With the benefit of hindsight, one could see the introduction of the policy as a belated effort to stimulate fertility change, although it did have a potential to consolidate and strengthen the fertility change that had begun much earlier in the 1980s.

Furthermore, almost from its inception, the political will of the Ghanaian state to assign and enforce values was called into question, based on the furore in the parliament early in 1996 when a member vehemently opposed the idea to set an upper limit to the number of children a woman can have irrespective of her aspirations and potential to translate fertility preferences to behaviour. The silence in official quarters could be interpreted as leaving the doors of fertility decision-making open to the players – that is, any couple involved in and/or aspiring to the process of childbearing should have the number of children they can cater for.

Crook (1997) contends that the dramatic fertility decline observed in many Asian countries and ongoing in some African states cannot be attributed to family-planning programmes instituted by the State. In many instances, the birth rate had begun to decline before the major launching of family planning. For example, in Thailand it was discovered that fertility had begun to fall before the introduction of the inadequately tested Depo-Provera (contraceptive for women), and even that the fertility decline continued at more or less the same rate after its introduction by the Thai State. In Sri Lanka, it was also found that birth control was not the only important mechanism for fertility reduction. An examination of proximate determinants of fertility showed that rising age at marriage was largely responsible for the declines in fertility. In Java, Indonesia, although the fall in fertility levels was attributed to contraception rather than delayed marriage, it appeared that the family-planning programme introduced in 1970 was indeed an influencing factor. The family-planning programme in Indonesia was long hailed as a success story for its contribution to the reduction of fertility rates in many parts of the country. However, the fertility decline also coincided with Suharto's economic development programme and consumerism (ibid), which diluted any attempt to give too much weight to family-planning programmes as main determinant of fertility reduction.

9.9.2 The politics of implementing a population policy

Finkle and McIntosh (1994) observed that politics at any level cannot be divorced from the implementation of population policies; relationships exist between external influences and a nation's domestic policies. The 1994 Ghana population policy's strategy for implementation with built-in caveats such as 'subject to availability of funds…' add little value to the government's intention to fulfil even the noble intentions of the targets. Also, in some cases the timing of population policy implementation is done to sustain conditions attached to economic 'pills' of the World Bank such as the SAP prescribed to developing countries to help them come out of economic doldrums (Ehusani, 1994). The issue is not whether these were correct policy decisions but rather the public image of the SAP which has been viewed as contributing to increasing costs for citizens to utilise products and services. Down the line, this can even boomerang on some targets of the population policy. For example, Ejembi (1995) feared that the deterioration of public health care which is one of the (unintended) fallouts of adopting the structural adjustment programme may lead to higher infant and child mortality rates, as it did in northern Nigeria, which, in turn, may make family planning an inappropriate as well as an unpopular option.

9.10 Methodological Drawbacks

The political economy of fertility is regarded as a multi-levelled field of inquiry that could take on an explicitly historical feature. This study did not rely fully on a full-scale historical inquiry. Instead, intergenerational accounts of reproductive behaviour were collated to show that vital rates have been declining down the generation line. Another entry point for understanding fertility changes could have been through the lens of social class structures; however, having observed little or no class differentiation in the communities, it was expedient to view the changes in fertility levels within fishing and farming vocational groups. Also, the study could not ascertain if ethnic groups inhabiting the two study areas had different reproductive strategies. Even though it would have been useful to explore ethnic differentials of fertility behaviour, such an analysis could not be made in this study and conclusions could not be drawn due to low proportional representation of other ethnic groups in the community, as well as in the sample size.

Furthermore, it would have been beneficial to obtain some 'narratives' from government officials that give a human face to the population policy document. However, the officials interviewed were stingy with comments, not wanting to be reported as critical of the establishment; this may be due to the fact that the interviews were conducted in their offices. Earlier it had been difficult to track down the officials as they were always almost on 'trek'[6]. Other than this, the officials restricted themselves to reciting their awareness of a population policy document and why it should be amended soon because it was close to ten years old. Its age alone made the document obsolete, and the officials were not specific about areas that needed modification. This indicates a lack of interest in either the policy document itself or lack of knowledge as to how the policy should work.

While maternal mortality continues to assume a dubiously important role as the leading cause of death among women in the reproductive years in most poor countries, frequent and prolonged childbearing has serious implications for women's health and well-being. However, the physical costs of giving birth and of repeated deliveries, and the energy costs of breastfeeding are rarely factored into economic models. Thus according to Watkins (1993), whether or not the economic costs and benefits differ for women and men, the non-economic 'bodily' costs are undeniably very different and this could give women a distinctive and highly gender-specific interest in the spacing and frequency of births. However, the women still believe in having children irrespective of the travails they may have to go through.

9.11 The Reversibility of Fertility Transition

The contradictory nature of the process of fertility transition in Ghana is imbued with some realities that cannot be discounted. State involvement in popularising the use of modern contraceptives or making them more available through various programmes has undoubtedly helped households to act more efficiently on their need to limit their families. However, economic and social changes also affect households' fertility behaviour and to some extent this occurs both in urban and rural areas of Ghana irrespective of government's wishes in its population policy.

One possible reality in Ghana is that fertility levels may indeed stay high. The non-expansion of bureaucratic, commercial, and technical employment opportunities has been a stumbling block in parental shifting

of emphasis from large to small families. If parents in Abuesi and Brenu Akyinim continue to see an economic advantage in having a large number of children, they will tend to have them. This desire is prevalent in the least developed countries where children begin to contribute to family income at an early age, and are the main source of support for parents too old to work (Buckley 1984:679).

Households engaged in cottage industry or relying on family labour can intensify their labour use during economic recession in order to boost or maintain their household incomes. Such households need abundant labour to be able to react in this way; it was seen in many fishing communities in the coastal parts of Ghana that boys get engaged as full-time fishermen during harvest periods that usually coincide with the opening of the school year, and girls also get engaged in fish processing activities at the expense of educational opportunities. A similar situation is found in India where fertility levels remain high in some households due to the precarious nature of the livelihoods of the people. As they have in the past, children provide the best security and feel duty-bound to provide it on the spot if their parents fall sick and are unable to work. Social welfare protection services are not provided by the State, or by any local official institution.

One main approach in demography has been the reliance on statistical estimations in trying to understand the fertility transition process in these countries; but many underpinning factors influencing fertility decline are not easily measurable. While it is relatively easy to discover and measure the extent to which conventional factors such as education, exposure to the media, women's age, and so on have an influence on demand for children, birth spacing, and age at marriage, emerging factors such as aesthetic considerations (by women in Brenu Akyinim) are not easily discovered or measurable by orthodox modes of demographic inquiry. In addition, the circumstances of individuals in different social groups or classes at different stages in a nation's economic development may differ in ways that promote and retard fertility simultaneously (Crook, 1997). For example in Indonesia and Kerala in India, two contrary processes both lowering fertility have been detected to be operating simultaneously. On one hand, those sectors of society that have benefited from the new industrial revolutions in Asia have seen advantages from fertility decline in terms of more household resources for education, the possession of consumer durables, and upward social mobility. On the other

hand, among the poor and the landless having many children is becoming less fashionable because the prospects of employing them on their land or in the overcrowded cities have become more dismal than they were three decades ago. Invariably, fertility is also falling among the poor; not that they are benefiting from prosperity, but rather because of the need to prevent a slide into further hardship.

In addition, there are opposing views on the nature of fertility decline. On one side, regional Population Council officials are optimistic that smaller family size desire is now the norm and fertility levels will continue to decline to the lowest point possible because of the increase in contraceptive use. The lowest point currently is still above replacement fertility when compared to the experience in some European countries, some of which are now giving incentives to couples to stimulate an increase in fertility (The Economist, 2004). Conversely, there is also the view that the current decline in fertility levels in Ghana is temporary and it only came about due to dwindling economic fortunes which affected general standards of living. Consequently, if there is a turnaround in the economy and the parental capacity for childcare improves, people's preferences for large families will come back to the fore and fertility rates will increase, though not to the highs attained in previous generations.

9.12 The Two Propositions

With regard to the propositions in the first chapter on the relationship between premarital pregnancies and marriage, an after-effect on birth timing is being manifested in the transition to lower fertility. This study presents evidence that women's age at first marriage is rising subtly (section 5.1.1); and that there is a near congruence of women's age at first marriage and age at birth of first child (section 5.6.1). In addition, many of the women have re-married as a result of unstable first unions (section 5.4). This is paving the way for the implementation of longer birth intervals between the first and second child of affected women. In this situation, a decision on birth timing is largely influenced by prevailing socioeconomic conditions such as the need to have some form of social stability (guided by aesthetic reasons) and the need to secure financial stability (for childcare) before continuing childbearing with shorter birth intervals. To a large extent, this birth timing is carried out through contraception and sexual abstinence (or less coital frequency) due to vocational demands. Consequently, the fertility decline exhibited now is a

reflection of changes in birth timing, in the context where women's reproductive lifespan is shrinking due to increase in the age at which they have their first child, or delayed entry into marriage.

The second proposition outlined in the first chapter touched on the link between convergence of gender-specific interests and bridging the gap between fertility desires and behaviour of couples. How couples take decisions on how to spend their incomes was used as a measure of gender interests. Partners who take decisions jointly have higher childbearing desires compared to those who do not seek their partner's opinion on how their income is to be spent (section 4.4). Where one partner is the sole decision-maker, he/she is more likely to be gainfully employed, while the other partner is relatively dependent. On the other hand, couples who take joint decisions usually are both engaged in gainful employment. This lends credence to the notion that fertility levels may indeed rise in a situation of general economic improvement. Where couples' decision-making converges – either in re-marriage or for economic reasons, there is a higher chance of an increase in fertility. Economic clout thus plays a decisive role in the arena of decision making. For as long as economic conditions remain unfavourable, especially where only one of the partners in a marriage is gainfully employed, this study shows that it is the lower fertility desires of the working partner that is more likely to be actualised.

9.13 Some Suggestions

This section is divided into two parts. The suggestions it contains have both practical and methodological implications for policy and further studies.

9.13.1 Practical implications

Improving contraceptive use

Irrespective of the motive for promoting contraceptive use, it has more positive outcomes for people's health and well-being. This study has revealed an appreciable increase in the proportion of women using modern contraceptives especially among those who watch TV regularly and young women aged 15-24 years; a gap of unmet need for contraception has also been discovered based on the difference between the proportion ready to stop additional childbearing and those using contraceptives. In

order to step up contraceptive use, innovative advertisements on TV, drawn from or designed around local contexts that fishermen, fishmongers, and farmers can easily relate to could boost further acceptance of contraceptives in these rural areas. This will not necessarily be aimed at limiting childbearing, but at reducing the likelihood of unsafe abortion, and guaranteeing some form of protection from sexually transmitted infections. Now that Ghana is achieving success in halting the spread of HIV, more could be achieved in rural areas where a major proportion of carriers of the virus reside.

Official stimulation of childbearing desires

The NPC can initiate the development of locally relevant strategies and action plans for promoting the use of appropriate contraceptive methods. Public figures who have small family sizes can be used on catchy adverts to portray the advantages of having numbers of children parents can adequately cater for. This could be designed on the basis of a competition to encourage participation[7]. Other strategies can be adopted to address misconceptions and bias which often limits choice among users and providers of contraceptives. The role of community-based agents should be further strengthened by seeking donor assistance for employing more personnel and reducing their area of coverage for effectiveness and quality service.

Parents' occupation and children's schooling

In the context of current poverty-alleviation strategies, the dilemma posed by parents' occupation, skill acquisition realities for children and schooling opportunities can be amicably addressed. The annual cycle of low school attendance during peak fishing season can be broken if we consider two factors. The 6-3-3-4 education system and family fishing business can be fused in a way to maximize the potential to formally educate children and provide them with the adequate skills necessary for the continued operation of their family business. One way is to use a modified staggered school resumption system. Therefore in the coastal areas of Ghana, especially in the fishing communities found along the 536 kilometres of coastline[8], the school system could be altered such that the normal school year begins in late October to end late July (both off-peak fishing seasons). During the peak harvest season which will now coincide with the school vacation, children will have the chance to par-

ticipate in the family business in the tasks which they enjoy doing, but will not miss out on developing their skills through formal education. Subsequently, if their interest at the end of the junior secondary school phase is to go for more vocational training and getting more involved in the family business, a system can be put in place where the fishing industry ultimately benefits in a manner consistent with more regularised operations by efficient operators and managers, responsible tax-payers whose records can be traced, good home makers, and improved local economy. The staggered school resumption system offers a silver-bullet solution to the problems of peak-season fishing, school attendance, and unemployment; but if the staggered approach is not backed up with political will, it will become a passing fancy.

Generating community-specific information

This complex and contradictory nature of fertility change and the reasons behind it confirm the notion that each community is worthy of study in its own right; vital information could be lost when communities are lumped together in order to obtain aggregate statistics. Studying individual communities could be more expensive and time consuming. From a statistical point of view, the advantages of big sample size far outweigh the problem of the cost incurred in collecting it. For example, the larger the sample size, the lower the associated sampling error. Generating reliable and comprehensive demographic data in developing countries like Ghana is good for socio-economic planning, but where agencies of government have to compete for scarce funds, this hampers the performance of agencies like the NPC at the regional level. The Netherlands, Israel and some other developed countries have been able to put systems of regular and up-to-date data collection in place. Such data in the form of population registers obfuscate the need for national censuses because the completeness of data and an active approach to recording vital events makes censuses less necessary; even when conducted, results can easily be verified with the existing efficient vital registration system. In developing countries, the cost of conducting a census every ten years can be used to set up efficient vital registration systems where all these demographic indicators can be safely and easily collated at regular intervals.

9.13.2 Methodological issues

On the methodological front, for proper understanding of demographic life transitions, the collection of histories of experienced events in a longitudinal fashion is hereby advocated. The experiences and expectations of individuals depend not only on personal factors but also on the social and historical context. Immediate effects of factors can be distinguished between medium and long-term effects as patterns emerge as people strive for consistency over the course of a lifetime.

Longitudinal data is useful for examining behavioural changes and determining the part of the change that may be attributed to personal experiences or interventions (for example, policy measures). The effect of an experience or intervention is not always immediate and may be enhanced or inhibited by intervening or confounding factors. Repeated measurements reveal these dynamics (Willekens, 2001) and are helpful for making causal inferences and causal statements (Blossfeld and Rohwer, 1995). Another viable research design is life histories based on retrospective recollection of respondents' reproductive careers. However, this method can be biased by human memory lapses and sample selection biases since only survivors report their life histories. Even though the advantages of longitudinal data cannot be questioned, it must be recognised that the cost and other logistical implications of following respondents for a long period of time make it a challenging method of data collection.

9.14 Areas for Further Research

a. Birth-timing: There is evidence of increasing variability in the timing of childbearing among the inhabitants of the rural coastal settlements. More rigorous research needs to be conducted on late fertility because of its consequences for children and for their parents in relation to socio-economic achievement and to societal socio-economic inequality.

b. Partnerships and childbearing: Due to the increasing proportion of births among unmarried women, there is a need to study in depth the effects of childbearing on partnership formation and stability, establish men's role in the out-of-wedlock childbearing phenomenon, and explore reasons for the emerging changes in marital aspirations.

c. HIV/AIDS and Fertility: HIV prevalence is still high and the extent to which it influences childbearing is unclear at the local level. This is an area that needs further exploration, so that concrete conclusions can lead to health policy action.

d. Low fertility as endpoint of fertility transition: Societal-level questions about low fertility need to be addressed. Thus, one could initiate the exploration of the determinants of post-transition fertility levels, so that developing countries would be better prepared policy-wise for what they are likely to experience with regard to below replacement fertility, if it occurs.

e. Seasonal in-migrant fertility and teenage pregnancy: It will be pertinent to know the effect of seasonal in-migration on the demographic structure of the coastal communities of the Western and Central regions that continue to be the destination of non-Fanti fishermen from other parts of Ghana. More so these Fanti communities are vantage transit or temporary settling points for those who intend to migrate to other fishing communities in West Africa.

Notes

1. In fact, during FGD sessions with adolescents and mixed adult groups, one common observation is that within six months of getting married, some women deliver their first child, implying a condition of three months' pregnancy prior to the marriage ceremony. However, having other children in quick succession after the delivery of the first-born may not necessarily occur. For females who experienced teenage pregnancy and childbearing especially in Brenu Akyinim, there is a relatively long interval before the birth of the subsequent child. This arises from the experience of being cut off from schooling opportunities, temporary social exclusion due to the pregnancy stigma, and the struggle to get required assistance from immediate family and the responsible partner's support. These teenagers have to cope with the uphill effort to get back into the mainstream of socio-economic life after weaning the child, and these factors work together to delay having another child in the socially approved setting of settling down with a partner.

2. In addition, the relatively stronger bond of the extended family in Brenu Akyinim creates a more conducive atmosphere to early childbearing among teenagers in Brenu Akyinim because of the background notion that the extended family will offer some form of help. But in Abuesi, a teenager would prefer to abort a mistimed or unwanted pregnancy due to relative lack of support and care from the extended family.

3. Having small family size is a new norm attached to social dignity and respectability.

4. The Intestate Succession Law provides protection for children in communities where they are not entitled to shares of their deceased parents' estates (http://www.law.emory.edu/IFL/legal/Ghana.htm)

5. Unmet need is an indicator of non-use of contraception by women at risk of pregnancy though with the desire to avoid becoming pregnant. In their study of unmet need in developing countries and its implication for population policy, Casterline and Sinding (2000) outlined the causes of unmet need as lack of necessary knowledge about contraceptive methods, social opposition to their use, and health concerns about possible side effects.

6. Local terminology for fieldwork or any official exercise conducted outside the office.

7. In Nigeria, the 'four is enough' campaign was used in 1988 to promote the national population policy. Colourful posters were made of the President of Nigeria, his wife and four children to promote family planning nationwide.

8. http://www.ghana-travel.com/ghana/ghanainfo.htm

Bibliography

'Abd al 'Ati, H. (1982), *The Family Structure in Islam.* Lagos, Nigeria: Islamic Publication. p.52.

Abayie, H. (2005), 'Nuclear family units destroy foundation of society.' *Daily Graphic*, Graphic Communications Group Limited, Accra, Ghana Saturday, July 16, 2005.

Abdul Aziz. (2003), 'Farmer jailed for eloping with girl.' *Daily Graphic*, Graphic Communications Group Limited, Accra, Ghana Saturday, August 15, 2003.

Adongo, P.B., Phillips, J.F. and Binka, F.N. (1998), 'The influence of traditional religion on fertility regulation among the Kassena-Nankana of northern Ghana.' *Studies in Family Planning* 1998 March: 29(1): 23-40.

Agadjanian, V. (2002), 'Is "Abortion Culture" Fading in the Former Soviet Union? Views about Abortion and Contraception in Kazakhstan.' *Studies in Family Planning* 33[3]: 237-248.

Agyei, W.K.A. and R.B. Hill (1997), 'Sexual behaviour, reproductive health and contraceptive use among adolescents and young adults in Ghana.' A paper presented at the Research Seminar to Disseminate some of the Findings of the Ghana Adolescent Fertility Survey undertaken by the Department of Community Health, Ghana Medical School, and the Institute of Urban Research, Morgan State University.

Agyeman D.K., W. Boateng and A.Akinyoade (2001), 'Structural Adjustment Programme (SAP) and Tertiary Education in Ghana 1983-1999.' Research report submitted to SAPRI (Joint project of the Government of Ghana, the World Bank, and a network of Civil Society Organizations) Accra, Ghana.

Agyeman, D.K. and Casterline, J.B. (2001), Social Organization and Reproductive Behaviour in Southern Ghana (Draft).

Ahiadeke, C. (2001), 'Incidence of induced abortion in southern Ghana.' *International Family Planning Perspectives* 2001 27(2):96-101.

Akinyoade A. (1999), 'A Comparative Study of Fertility Preference in Northwest and Southwest Nigeria.' *Ife PsychologIA* Vol. 7 No. 1 pp. 96-122.

Akinyoade A.A. (1997), 'Fertility Preference and Contraceptive Use: A Comparative Study of Northwest and Southwest Nigeria.' M.Phil Thesis, United

Nations Regional Institute for Population Studies, University of Ghana, Legon, Ghana.

Ako Aberese, M. (2004), Female Genital Mutilation (FGM) in Ghana: Bridging the Discrepancy Between Law and Everyday Practice. The Hague: Institute of Social Studies 2004. MA Research Paper.

Akosa, A.B. (2005), 'Who is an orphan in Ghana?' *Daily Graphic*, Graphic Communications Group Limited, Accra, Ghana Saturday July 16, 2005.

Alsharief, H. (2005), 'Whose role is birth control?' Online debate: http://news.bbc.co.uk/2/hi/africa/4536554.stm.

Amin, S. and S. Hossain (1995), 'Women's reproductive rights and the politics of fundamentalism: A view from Bangladesh.' *The American University Law Review*, 44:1319-1344 .

Ampofo, D.A. (1986), In, Population, Environment & Development in Ghana Research Update, *PIP News Magazine* Vol.2 No.1 1997 p. 6.

Ampofo, D.A. and Gyepi-Garbrah, B. (1986), 'Dimension of Adolescent Pregnancy in Korle-bu Teaching Hospital 1983-85.' Paper presented at the National Conference on Population and National Reconstruction, University of Ghana, Legon.

Anarfi J.K. (1996), 'The role of local herbs in the recent fertility decline in Ghana: contraceptives or abortifacients?' Paper presented at the International Union for the Scientific Study of Population Seminar on Sociocultural and Political Aspects of Abortion from an Anthropological Perspective, Trivandrum, India. March 25-28, 1996.

Appadurai, A. (1996), *Modernity at large: Cultural dimensions of globalization*. Minneapolis: University of Minnesota Press.

Araoye, M.O. and O.O. Fakeye (1998), 'Sexuality and contraception among Nigerian adolescent and youth.' *African Journal of Reproductive Health* 2(2): 142-150.

Arnold, F. and A.K. Blanc (1990), 'Fertility Levels and Trends.' *Demographic and Health Surveys Comparative Studies* No.2 Columbia, Maryland, USA: Institute for Resource Development/Marco Systems. .

Atkins, A. (2004), 'Why can't the young just say No in sex-mad Britain?' *Daily Express* July 29, 2004.

Bankole A., Singh S. and Haas T. (1998), 'Reason why women have induced abortions: evidence from 27 countries.' *International Family Planning Perspectives* 1998 24(3): 117-127 & 152.

Bankole, A. and Westoff, C.F. 1998. 'The consistency and validity of reproductive attitudes: Evidence from Morocco.' *Journal of Biosocial Science* 30 (4): 439-455.

Barroso, C. and Bruschini, C. (1991), 'Building Politics from Personal Lives: Discussions on Sexuality among Poor Women in Brazil', in Chandra, T.

Mohanty, Ann Russo and Lourdes Torres (eds) *Third World Women and the Politics of Feminism*. Bloomington: Indiana University Press.

Becker G.S. (1991), *Fertility and the Economy*, paper presented at the Nobel Jubilee Symposium, Lund, Sweden, December 1991.

Becker, G.S. (1960), *An Economic Analysis of Fertility*, in Demographic and Economic Change in Developed Countries conference of the Universities-National Bureau Committee for Economic Research, a Report of the National Bureau of Economic Research, Princeton University Press, Princeton, N.Y. 1960.

Becker, S. (1996), 'Couples and reproductive health: a review of couple studies.' *Studies in Family Planning*, vol. 29, pp. 291-306.

Bélanger, D. (2002), 'Son Preference in a Rural Village in North Vietnam.' *Studies in Family Planning* 33[4]: 321-334.

Beneria, L. and M. Roldan (1992), Las encrucijadas de clase y genero: Trabajo a domicilio, subcontratacion y dinamica de la unidad domestica en la ciudad de Mexico. Mexico City: El Colegio de Mexico y Fondo de Cultura Economica, in, Roger Magazine. 2004. Both Husbands and Banda (Gang) Members Conceptualizing Marital Conflict and Instability among Young Rural Migrants in Mexico City. *Men and Masculinities*, Vol. 7 No. 2, October 2004 144-165.

Benneh, G. (1990), *Population Growth and Development in Ghana*. Population Impact Project. Department of Geography, University of Ghana, Legon. Ghana.

Bhabha, H. (1995), 'Are you a man or a mouse?' in *Constructing masculinity*, edited by Maurice Berger, Brian Wallis, and Simon Watson, 57-68. London, Routledge.

Blanc, A.K. and S. Grey (2000), Greater than expected fertility decline in Ghana: An examination of the evidence. Calverton, Maryland: Macro International Inc and National Population Council Secretariat [Ghana].

Blaut, J.M. (1993), *The Colonizer's Model of the World: Geographical Diffusionism and Eurocentric History*. New York: Guilford Press.

Bledsoe, C. (1995), 'Marginal members: Children of previous unions in Mende households in Sierra Leone.' in S. Greenhalgh (ed.) *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press.

Bledsoe, C. and B. Cohen (1993), Social Dynamics of Adolescent Fertility in Sub-Saharan Africa. Washington. DC: National Academy Press, cited in, Varga, Christine A. 2003. 'How Gender Roles Influence Sexual and Reproductive Health Among South African Adolescents.' *Studies in Family Planning* 2003; 34[3]: 160-172.

Blossfeld and Rohwer (1995), Techniques of event history modeling. New approaches to causal analysis. Lawrence Erlbaum, Mahwah, New Jersey. Cited in, Hideko Matsuo and Frans Willekens. 2003. *Event Histories in the Nether-*

lands Fertility and Family Survey 1998. A technical report. Population Research Centre Research Report 03-1, February 2003.

Bongaarts, J. (1978), 'A Framework for Analyzing the Proximate Determinants of Fertility.' *Population and Development Review* Vol. 4, No.1. pp. 105-129.

Bongaarts, J. (1993), 'The supply-demand framework for the determinants of fertility: An alternative implementation.' *Population Studies* 47 (3): 437-456.

Bongaarts, J. and R.G. Potter (1983), *Fertility, Biology, and Behavior: An Analysis of the Proximate Determinants*. New York: Academic Press.

Bortei-Doku Aryeetey, E. (2001), 'Small-Scale Fisheries, Population Dynamics and Fishery Management at Moore' in *Population Dynamics and human Migration in Small Scale Fisheries in Africa* The Christian Michelsen Institute (CMI), http://www.cmi.no/research/clu-11.htm.

Bradley, C. 'Women's empowerment and fertility decline in western Kenya' in S. Greenhalgh (ed.) *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press .

Brass, W. (1980), 'Screening Procedures for Detecting Errors in Maternity History Data' Occasional papers in Regional Workshop on Techniques of Analysing WFS data, International Statistical Institute, Voorburg, the Netherlands.

Buckley, J. (1984), 'Conference on Population' Vital Species of the Day September, 1:677-679.

Bullough, V.L. (1994), 'On being a male in the middle ages' in *Medieval masculinities: Regarding men in the Middle Ages*, edited by C.A. Lees, 31-45. Minneapolis, MN: University of Minneapolis Press, cited in Garlick, Steve. 2003. 'What Is a Man? Heterosexuality and the Technology of Masculinity", *Men and Masculinities*, Vol. 6 No. 2, October 2003 156-172.

Butler, J. 1995. Melancholy gender/refused identification. In Constructing masculinity, edited by M. Berger, B. Wallis, and S. Watson, 21-37. London: Routledge.

Cain, M. (1986), 'The Consequences of reproductive failure: Dependence, Mobility and Mortality among the elderly in rural South Asia.' *Population Studies* Vol. 40 no.3:375-388.

Caldwell, J.C. (1976), 'Towards a Restatement of Demographic Transition Theory.' Population and Development Review 2(3/4):321-366.

Caldwell, J.C. (1978), 'A theory of fertility: From high plateau to destabilization,' *Population and Development Review* 4, No.4: 553-577 Cited in S. Greenhalgh (ed.) *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press.

Caldwell, J.C. (1980), 'Mass education as a determinant of the timing of fertility decline.' Population and Development Review, 6(2): 553-577.

Caldwell, J. (1982), *Theory of Fertility Decline*. Academic Press, New York, 1982.

Caldwell, J.C. (1996), 'Demography and Social Sciences.' *Population Studies*, vol. 50, pp. 305-333.

Caldwell, J.C. and P. Caldwell (1990), 'High Fertility in sub-Saharan Africa.' *Scientific American* (May 1990), pp. 118-125.

Caldwell, J, P. Caldwell and I.O. Orubuloye (1992), 'The Family and Sexual Networking in Sub-Saharan Africa: Historical Regional Differences and Present-Day Implications.' *Population Studies*, 46(3): 385-410.

Callaway, B. 1987, *Muslim Hausa Women in Nigeria*. Syracuse, NY: Syracuse University Press. P.28.

Carter, A.T. (1995), 'Agency and Fertility: For ethnography of Practice' in S. Greenhalgh (ed.) *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press.

Casterline, J.B. (2000), 'Fertility Attitudes and Behaviors: What's the Connection?' Paper delivered at a symposium at the University of Michigan in May 2000, honouring the retirement of Professor Albert Hermalin.

Casterline, J. (2001), 'Introduction' in J.Casterline (ed.) *Diffusion Processes and Fertility Transition* Washington D.C.: National Academy Press. Pp. 1-38.

Casterline J.B. and Steven W. Sinding, (2000), 'Unmet Need for Family Planning in Developing Countries and Implications for Population Policy.' *Population and Development*, 26(4): 691-723.

Casterline, J.B. and J. Trussell (1980), 'Age at First Birth.' *WFS Comparative Studies*, No.15 Voorburg, the Netherlands: International Statistical Institute.

Castle, S. (2003), 'Factors Influencing Young Malians' Reluctance to Use Hormonal Contraceptives.' *Studies in Family Planning* 2003; 34[3]: 186-199.

Cleland, J. (1985), 'Marital fertility decline in developing countries: theories and the evidence', in John Cleland and John Hobcraft (eds.) *Reproductive Change in Developing Countries: Insights from the World Fertility Survey*. Oxford: Oxford University Press, pp. 223-252.

Cochrane, S.H. (1979), 'Fertility and Education: What Do We Really Know?' World Bank Staff Occasional Papers, no. 26. Baltimore, MD: Johns Hopkins University Press.

Cohen, B. (1993), 'Fertility Levels, Differentials, and Trends.' *Demographic Change in Sub-Saharan Africa* K.A. Foote, K.H. Hill and L.G. Martin (eds.):8-67. Washington, D.C.: National Academy Press.

Conlon, M. (2004), 'Study links TV to teen sex' *YAHOO! News UK& Ireland.* Tuesday September 7, 2004, 07:28am.

Connell, R.W. (1987), *Gender and power: Society, the person and sexual politics*. Sydney, Australia: Allen and Unwin.

Connell, R.W. (1993), 'The big picture: Masculinities in recent world history.' *Theory and Society* 22 (5): 597-623, cited in, Garlick, Steve. 2003. 'What Is a Man? Heterosexuality and the Technology of Masculinity.' *Men and Masculinities*, Vol. 6 No. 2, October 2003 156-172.

Connell, R.W. (1995), *Masculinities* Berkeley: University of California Press.

Connelly M. and P. Kennedy. 1994. 'Must it be the rest against the West?' The Atlantic Monthly. December 1994.

Cook R.J. and Dickens B.M. (1981) 'Abortion laws in African commonwealth countries.' *Journal of African Law*, 1981, 25(2): 60-79.

Coontz, Sydney H. (1957), *Population Theories and the Economic Interpretation*. Routledge and Kegan Paul. London and Henley. pp 188-194.

Craig, S. (1992), *Men, masculinity and the media* London: Sage, cited in, Stibbe, Arran. 2004. 'Health and the Social Construction of Masculinity in Men's Health Magazine.' *Men and Masculinities*, Vol. 7 No. 1, July 2004 31-51.

Crook, N. (1997), *Principles of Population and Development with Illustrations form Asia and Africa*. Oxford University Press 1997.

Davis, K. (1963), 'The theory of change and response in modern demographic history.' *Population Index* 29 (October): 345-366.

De Silva, W. Indralal (1991), 'Consistency between reproductive preferences and behaviour: The Sri Lankan experience.' *Studies in Family Planning* 22(3): 188-197.

Demeny, P. (1988), 'Social Science and Population Policy.' *Population and Development Review*. Vol. 14, pp. 451-479.

Demeny, P. (1993), 'Policies seeking a reduction of high fertility: A case for the demand side,' in *Population Policies and Programmes*, Proceedings of the UN Expert Group Meeting on population Policies and Programmes, Cairo, Egypt, 1993.

Dennehy, E.B, C.A. Edward, and R.L. Keller (1995), 'AIDS education intervention utilizing a person with AIDS: Examination and clarification.' *AIDS Education and Prevention* 7 (2): 124-133.

Derne, S. (2002), 'Globalization and the Reconstitution of Local Gender Arrangements.' *Men and Masculinities*, Vol. 5 No. 2, October 2002 144-164.

Desantis, L. and J.T. Thomas (1987), 'Parental attitudes towards adolescent sexuality: Transcultural perspectives.' *Nurse Practitioner* 12(8):43-48.

Dickermann, M. (1984), 'Concepts and Classification in the Study of Human Infanticide' in Glenn Hausfatter and Sarah Hrdy, eds. *Infanticide: Comparative and Evolutionary Perspectives*, pp 427-437. New York: Aldine.

Dinan, C. (1983), 'Sugar daddies and gold-diggers: The white collar single woman in Accra' in Christine Oppong. ed., *Female and Male in West Africa* London: George Allen and Unwin. Pp. 344-366.

Dixon-Mueller, R. (1988), 'Redefining Family Planning: Feminist Perspectives on Service Delivery' in I. Smyth, 2000. 'Gender Analysis of Family Planning. Beyond the "feminist vs. population control" debate.' in Ruth Pearson and Cecile Jackson (eds.) *Feminist visions of development: gender analysis and policy* 2000 Routledge, London.

Dixon-Mueller, R. (1993), 'The sexuality connection in reproductive health.' *Studies in Family Planning* 24, 5: 269-282.

Dixon-Mueller, R. (1983), *Population Policy and Women's Rights: Transforming Reproductive Choice*. Westport: Praeger.

Dodoo, F.N. (2001), 'Fertility Preferences and Contraceptive Use: A Profitable Nexus for Understanding the Prospects for Fertility Decline in Africa.' Presented at a workshop on Prospects for fertility decline in high fertility countries, United Nations Secretariat, New York, 9-11 July 2001, UN/POP/PFD/2001/4.

Dodoo, F.N. (1995), 'Explaining contraceptive use differences: do men play a role?' *African Population Studies*, vol. 10 (November), pp. 15-37.

Dodoo, F.N and P. van Landewijk (1996), 'Men, women, and the fertility question in sub-Saharan Africa: an example from Ghana.' *African Studies Review*, vol.39, No.3, pp.29-41.

Easterlin, R.A. (1975), 'An economic framework for fertility analysis.' *Studies in Family Planning* 6 (3):54-63.

Easterlin, R.A. (1978), 'The Economics and Sociology of Fertility: A Synthesis', in *Historical Studies of Changing Fertility* Princeton, Princeton University Press.

Ehusani, G.O. 1994. *The Politics of Population Control.* Ahmadu Bello University Press, Zaria, Nigeria.

Einhorn, B. (1993), Cinderella Goes to Market. Citizenship, Gender and Women's Movements in East Central Europe, in I. Smyth 2000. 'Gender Analysis of Family Planning. Beyond the "feminist vs. population control" debate' in *Feminist visions of development: gender analysis and policy*. Edited by Ruth Pearson and Cecile Jackson. 2000. Routledge, London.

Ejembi, Clara. 1995. 'Personal communication' cited in Renne, E.P. 1996. 'Perceptions of Population Policy, Development, and Family Planning Programs in Northern Nigeria' *Studies in Family Planning* Vol.27, No.3 .

Ezeh, A.C. (1991), 'Gender Differences in Reproductive Orientation in Ghana: A new approach to understanding Fertility and Family Planning Issues in sub-Saharan Africa.' Demographic and Health Survey World Conferences Vol.1, Washington DC, p.308.

Ezeh, A. (1993), 'The influence of spouses over each other's contraceptive attitudes in Ghana.' *Studies in Family Planning*, 24(3): 163-174.

FAO (1997), Report of the Workshop on Population Characteristics and change in Coastal Fishing communities. Madras, India, 10-14 March, 1997. Project FPA/INT/695/FPA.

Farooq, G.M. (1981), 'Concepts and Measurements of Human Reproduction in economic Models of Fertility Behavior. Population and Labour Policies Programme.' *ILO Working Paper* No. 102. Geneva. ILO.

Farooq, G.M. and L.A. Adeokun (1972), 'Impact of a Rural Family Planning Programme in Ishan, Nigeria. 1969-72' *Studies in Family Planning* Vol. 17, No. 6.

Faruk, A.U. (1988), *Family Planning: The Islamic Viewpoint*. Lagos and Kano, Nigeria. pg.10.

Federal Office of Statistics (FOS) and Macro International (MI) (1992.), *Nigeria Demographic and Health Survey 1990*. Calverton, Maryland, USA: FOS and MI.

Feldman, R. (1987), 'The Politics of the New Reproductive Technologies,' *Critical Social Policy* 9(7): 21-39.

Feyisetan, B and J.B. Casterline (2000), 'Fertility Preferences and Contraceptive Change in Developing Countries.' Policy Research Division, *Population Council Working Papers*.

Finkle, J. L. and A. McIntosh (eds.) (1994), The Politics of Family Planning in the Third World. *Supplement to Population and Development Review* 20.

Forrest, J.D. (1994), 'Epidemiology of unintended pregnancy and contraceptive use.' *American Journal of Obstetric Gynaecology* 1994 May; 170 (5 pt 2):1485-9 http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?tool=abstractplus&db=pubmed&cmd=Retrieve&dopt=abstractplus&list_uids=8178895.

Frankel, J. (1996), 'An Investigation of the Causes of Marital Fertility Decline.' http://www.econ.duke.edu/journals/dje/dje_96.

Freedman, L.P. and S.L. Isaacs (1993), 'Human Rights and Reproductive Choice.' *Studies in Family Planning* Vol. 24(1), 1993.

Fricke, T. (1995), 'History, marriage politics, and demographic events in the central Himalaya.' in S. Greenhalgh (ed.) *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press.

Fuchs, R.G. and L.P. Moch (1990), 'Pregnant, single, and far from home: Migrant women in nineteenth-century Paris.' *The American Historical Review* 95, no. 4: 1007-1031.

Fuchs, R.G. and L.P. Moch (1995), 'Invisible cultures: Poor women's networks and reproductive strategies in the nineteenth-century Paris,' in S. Greenhalgh (ed.) *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press.

Gage-Brandon, A. and D. Meekers (1992). 'Sexual Activity among the Unmarried in Sub-Saharan Africa.' Paper presented at the annual Meeting of the Population Association of America, Denver.

Garlick, S. (2003), 'What Is a Man? Heterosexuality and the Technology of Masculinity.' *Men and Masculinities*, Vol. 6, No. 2, October 2003 156-172.

Ghana Statistical Service (GSS) and Marco International (MI), (1994), *Ghana Demographic and Health Survey 1993. Summary Report*, Calverton, Maryland, USA: GSS and MI.

Ghana Statistical Service (GSS) and Marco International (MI) (1999), *Ghana Demographic and Health Survey 1998. Summary Report* Calverton, Maryland, USA: GSS and MI.

Giele and Elder (1998), Life course research: development of a field. cited in Hideko Matsuo and Frans Willekens. 2003. *Event Histories in the Netherlands Fertility and Family Survey 1998*. A technical report. Population Research Centre Research Report 03-1, February 2003.

Gisselquist, D., R. Rothenberg, J. Potterat, E. Drucker. (2002), 'HIV infections in sub-Saharan Africa not explained by sexual or vertical transmission' *International Journal of STD & AIDS* 2002; 13: 657-666.

Government of Ghana, (1994), *National Population Policy (Revised Edition, 1994).* National Population Council, Advent Press, Accra.

Government of Ghana, (1985), Ghana Criminal Code (29), 1960, SS58-59, amendment, February 22, 1985.

Green, G. (1994), 'The reproductive careers of a cohort of men and women following an HIV-positive diagnosis.' *Journal of Biosocial Sciences* 26, 3: 409-415.

Greenhalgh, S. (1995), 'Anthropology theorizes reproduction: Integrating practice, political economic and feminist perspectives,' in S. Greenhalgh (ed). 1995. *Situating Fertility. Anthropological and Demographic Inquiry* Cambridge University Press, Cambridge, 1995.

Greenstreet, M.N. and R.A. Banibensu (1997), 'Cross-generational knowledge transfer among women in Ghana,' in Wendy Harcourt (ed.) *Power, Reproduction and Gender: The inter-generational transfer of knowledge* Zed Books in collaboration with Society for International Development (SID). Pp 3, 4, 58-71.

Groenewold, G. (1997), *Overview of Past and Future Population Studies and Activities on Rural Fishing Communities*: in Project FPA/INT/695/FPA, in FAO (1997). Report of the Workshop on Population Characteristics and change in Coastal Fishing communities. Madras, India, 10-14 March, 1997.

Guillaume, A. and A. Desgrées di Lou (2002), 'Fertility regulation among women in Abidjan, Côte d'Ivoire: Contraception, abortion, or both?' *International Family Planning Perspectives* 28[3]: 159-166.

Gutmann, M.C. (1996), *The meanings of macho: Being a man in Mexico City*. Berkeley: University of California Press, in, Roger Magazine. 2004. 'Both Husbands and Banda (Gang) Members Conceptualizing Marital Conflict and Instability among Young Rural Migrants in Mexico City' *Men and Masculinities*, Vol. 7 No. 2, October 2004 144-165.

Haddad, L., Hoddinott, J. and Alderman, H. (1997), *Intrahousehold Resource Allocation in Developing Countries Models, Methods, and Policies.* IFPRI Publication: Food Policy Statement 24.

Hammel, E.A. (1990), 'A theory of culture for demography.' *Population and Development Review*, Vol. 16(3), 455-485.

Handwerker, W.P. (ed.) (1986), *Culture and Reproduction. An Anthropological Critique of Demographic Transition Theory*. Introduction. Westview Press/Boulder London.

Harris, M and Ross, E.B (1987), *Death, Sex and Fertility: Population Regulation in Preindustrial and Developing Societies*. Columbia University Press, N.Y.

Hartmann, B. (1987), *Reproductive Rights and Wrongs: The Global Politics of Population Control and Contraceptive Choice*. New York: Harper and Row.

Hartmann, B. (1987), *Reproductive Rights and Wrongs: The Global Politics of Population Control and Contraceptive Choice*. New York: Harper and Row.

Hartmann, B. (1992), 'Population Control in the New World Order.' *Development in Practice* 2(3): 210-15.

Hartmann, B. (1993), 'The Present Politics of Population and Reproductive Rights.' Women's Global Network for Reproductive Rights Newsletter 43:1-3.

Hauser, P.M. (1967), 'Family Planning and population programs: A book review article.' *Demography* 4 (1): 397-414.

Henry, R. and C. Fayorsey (2002), *Coping with Pregnancy: Experiences of Adolescents in Ga Mashi, Accra*. Calverton, Maryland, USA: ORC Macro.

Hewitt and Smyth (1992), in Smyth, I. (2000), 'Gender Analysis of Family Planning. Beyond the "feminist vs. population control" debate' in, *Feminist visions of development: gender analysis and policy*. Edited by Ruth Pearson and Cecile Jackson. 2000. Routledge, London.

Hirschman, C. (1994), 'Why fertility changes.' *Annual Review of Sociology* 20:203-233.

Howell, N. (1979), *Demography of The Dobe !Kung*. Academic Press. New York.

Idoko, E.E.E. (2004), Malnutrition and Childhood Mortality in Nigeria. The Hague: ISS, 2004 MA Research Paper.

Inhorn, M.C. (1994), *Quest for conception: Gender, infertility, and Egyptian medical traditions*. Philadelphia: University of Pennsylvania Press, in Inhorn, Marcia C. 2003. 'The Worms Are Weak: Male Infertility and Patriarchal Paradoxes in Egypt.' *Men and Masculinities*, Vol. 5 No. 3, January 2003 236-256.

Inhorn, M.C. (2003), 'The Worms Are Weak: Male Infertility and Patriarchal Paradoxes in Egypt.' *Men and Masculinities*, Vol. 5 No. 3, January 2003 236-256.

Isiugo-Abanhie, U. (1994), 'Consequences of bridewealth changes on nuptiality patterns among the Ibo of Nigeria' in *Nuptiality in Sub-Saharan Africa: Contemporary Anthropological and Demographic Perspectives*, C. Bledsoe and G. Pison (eds.) Oxford: Clarendon Press.

Jackson, C. (1993). 'Doing What Comes Naturally? Women and Environment in Development.' *World Development* 21(12): 1947-63.

Jackson, C. (1993). 'Questioning Synergism: Win-win with Women in Population and Environment Policies.' *Journal of International Development* 5(6): 651-68.

Jagger, Alison M. (1983), 'Feminist Politics and Human Nature' in I Smyth (2000) 'Gender Analysis of Family Planning. Beyond the "feminist vs. population control" debate' in *Feminist visions of development: gender analysis and policy*. Edited by Ruth Pearson and Cecile Jackson. 2000. Routledge, London.

Joesoef, M.R., Baughman, A.L. and Budi Utomo, (1988), 'Husband's Approval of Contraceptive Use in Metropolitan Indonesia: Programme Implications.' Studies in Family Planning 19(3):162-8.

Joseph, V. and M. Garenne, (2001), 'Datation de la baisse de la fécondité en Afrique subsaharienne' Dossiers du CEPED No. 66 Paris: Centre Français sur la Population et le Développement, cited in, Castle, Sarah, (2003), 'Factors Influencing Young Malians' Reluctance to Use Hormonal Contraceptives.' *Studies in Family Planning* 2003; 34[3]: 186-199.

Kabeer, N. (1992), 'From Fertility Reduction to Reproductive Choice: Gender Perspectives in Family Planning Discussion.' Paper 299, Institute of Development Studies, Brighton.

Kabeer, N. (1993), 'Bridging the Gap.' *People and the Planet* 2(1): 27-8.

Kabeer, N. (1994). *Reversed Realities: Gender Hierarchies in Development Thought.* Verso Press, London.

Kabeer, N. (1996), 'Gender, Demographic Transition and the Economics of Family Size: Population Policy for a Human-Centred Development.' United Nation Research Institute for Social Development. Switzerland.

Kertzer, D.I. 1995, 'Political-economic and cultural explanations of demographic behavior,' in S. Greenhalgh (ed.), *Situating Fertility, Anthropology and Demographic Inquiry*, Cambridge University Press, Cambridge, 1995.

Keysers, L. and Smyth, I. (1989), 'Family Planning: More than Fertility Control? Women in International Development.' *Michigan State University Working Paper No. 198*.

Keysers, L. and Smyth, I. (1991), 'Reflections of Global Solidarity for Women's Health and Reproductive Rights.' *VENA* Journal 3(1): 26-31.

Knodel, J. and E. Van de Walle, (1979), 'Lessons from the Past: Policy Implications of Historical Fertility Studies.' *Population and Development Review* 5:227.

Kpedekpo, G.M.K. (1982), *Essential of Demographic Analysis for Africa* Heinemann, USA.

Lamptey, P.B. Janowitz, J.B. Smith, and C. Klufio, (1985), 'Abortion experience among obstetric patients at Korle-Bu Hospital, Accra, Ghana,' *Journal of Biosocial Science* 17: 195-203.

Latour, B. (translated by Couze Venn) (2002), 'Morality and Technology: The End of the Means.' *Theory, Culture & Society* (SAGE, London, Thousand Oaks and New Delhi), Vol. 19(5/6): 247-260.

Launay, R. (1995), 'The power of names: Illegitimacy in a Muslim community in Côte d'Ivoire' in S. Greenhalgh (ed.) 1995. *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press.

Lehrer, E.L. (1996), 'Religion as a determinant of marital fertility.' *Journal of Population Economic* (website) 1996 9 (2) 173-196.

Leibenstein H. (1975), 'The economic theory of fertility decline.' *Quarterly Journal of Economics* 89: 1-31. .

Leng, C.H. and C.C. Khoon (1984), *Designer Genes: I.Q., Ideology and Biology*. Institute for Social Analysis, Selangor, Malaysia.

Leridon H. (1987), La seconde revolution contraceptive: la regulation des naissances en France de 1950 a 1985. Travaux et Documents, Paris: Institut Hational d'Etudes Demographiques-Presses Universitaires de France (INED-PUF). No. 117.

Lightbourne, R.E. and A.L. MacDonald, (1982), 'Family Size Preferences.' *Comparative Studies* Cross National Summaries No.14, pp7, 8, 27.

Linn, W. A. (2001), 'Social Aspects of Polygamy.' Chapter XXIII, in, *The Story of the Mormons: From the Date of their Origin to the Year 1901*. Seattle, Washington: The World Wide School TM September 2001. http://www.worldwideschool.org/library/books/relg/historygeography/TheStoryoftheMormonsFromtheDateoftheirOrigintotheYear1901.

Magadi, M.A. and Curtis, C.L. (2003), 'Trends and Determinants of Contraceptive Method Choice in Kenya.' *Studies in Family Planning* 2003; 34[3]: 149-159.

Magazine, R. (2004), 'Both Husbands and Banda (Gang) Members Conceptualizing Marital Conflict and Instability among Young Rural Migrants in Mexico City.' *Men and Masculinities*, Vol. 7 No. 2, October 2004 144-165.

Majumdhar, H. (1983), 'Linear Models' in, *Fertility and Mortality Estimation in Africa*. Proceedings of a workshop on the Estimation of Fertility and Mortality in Africa, held at RIPS, University of Ghana, 11-22 July, 1983. pp 395-397.

Mason, K. (1986), 'The status of women: Conceptual and methodological issues in demographic studies.' *Sociological Forum* 1, No. 2: 284-300 .

Mason, K. (1987), 'The impact of women's social position on fertility in developing countries.' *Sociological Forum* 2, No.4:718-745.

Mass, B, (1976), *Population Target: The Political Economy of Population Control in Latin America*. Brampton, Ontario: Latin American Working Group.

Matsuo, H. (2001), *The First Child: The Transition to Motherhood in Japan and the Netherlands*. Population Research Centre Masters Series 01-4.

McDonald (1996), cited in, Hideko Matsuo and Frans Willekens, (2003), *Event Histories in the Netherlands Fertility and Family Survey 1998*. A technical report. Population Research Centre Research Report 03-1, February 2003.

McNay, L. (1999) 'Gender, Habitus and the Field: Pierre Bourdieu and the Limits of Reflexivity,' *Theory, Culture and Society* 16(1): 95-117, in, L. Adkins (2003), *Reflexivity Freedom or Habit of Gender? Theory, Culture and Society* (SAGE, London, Thousand Oaks and New Delhi) Vol. 20(6): 21-42.

McNicoll, G. (1975), 'Community-level population policy: An exploration.' *Population and Development Review* 1, no.1:1-21. .

McNicoll, G. (1992), 'Changing fertility patterns and policies in the third World.' *Annual Review of Sociology* Vol.18, 1992.

McNicoll, G. (1994), 'Institutional analysis of fertility,' in Kerstin Lindahl-Kiessling and Hans Landberg (eds.), *Population, Development and the Environment* Oxford: Oxford University Press.

Meekers, D. and G. Ahmed (1997), 'Adolescent Sexuality in Southern Africa: Cultural Norms and Contemporary Behavior.' PSI Research Division Working Paper No. 2. Washington, DC: Population Services International, cited in, Castle S. (2003), 'Factors Influencing Young Malians' Reluctance to Use Hormonal Contraceptives.' *Studies in Family Planning* 2003; 34[3]: 186-199.

Melhuus, M. (1998), 'Configuring gender: Male and female in Mexican heterosexual relations.' *Ethnos* 63 (3): 353-82, in, R. Magazine (2004), 'Both Husbands and Banda (Gang) Members Conceptualizing Marital Conflict and Instability among Young Rural Migrants in Mexico City.' *Men and Masculinities*, Vol. 7 No. 2, October 2004 144-165.

Mensch, B.S., D. Bagah, W.H. Clark, and F. Binka (1998), 'The changing social environment for adolescents in the Kassena-Nankana district of northern Ghana: Implications for reproductive behavior.' *Policy Research Division Working Paper No. 110*. New York: Population Council.

Mies, M. (1989), 'What Unites, What Divides Women from the South and from the North in the Field of Reproductive Technologies.' Paper presented at the FINRAGE-UBINIG conference Comilla, Bangladesh, 18-25 March, 1989.

Miles, W. (1990), 'Islam and Development in West Africa,' in *West Africa Regional Cooperation and Development* J.E. Okolo and S. Wright Boulder (eds.), CO: Westview Press, pp215-239.

Mindek, D. (2003), La pareja, su discurso y su actua cotidiano de la Mixteca poblana. In El matrimonio en Mesoamerica ayer y hoy: Unas miradas antropologicas, edited by D. Robichaux (pp. 311-330). Mexico City: Universidad Iberoamericana, in, R. Magazine (2004), 'Both Husbands and Banda (Gang) Members Conceptualizing Marital Conflict and Instability among Young Rural Migrants in Mexico City.' *Men and Masculinities*, Vol. 7 No. 2, October 2004 144-165.

Monekosso, T. (2001), 'Africa's forced marriages.' http://www.bbc.co.uk/2/hi/africa/1209099.stm.

Neel, J. V. (1968), 'Some Aspects of Differential Fertility in Two American Indian Tribe.' *Proceedings: 8th International Congress of Anthropological and Ethnological Sciences*, 1:356-361. Tokyo 1968.

Ngalinda, I. (2000), *Age at First Birth, Fertility, and Contraception in Tanzania*. D.Phil. Thesis. Humboldt University of Berlin, Department of Demography, Philosophical Faculty III.

Norsigian, J. (1987), 'Reproductive Choice in Jeopardy' in I. Smyth (2000), 'Gender Analysis of Family Planning. Beyond the "feminist vs. population control" debate' in *Feminist visions of development: gender analysis and policy*. Edited by Ruth Pearson and Cecile Jackson (2000), Routledge, London .

Norusis, J.M./SPSS Inc. (1992), *SPSS/PC+ ADVANCED STATISTICS, Version 5.0*, Chicago USA pg 1, 2, 6.

Nukunya, G.K. (1992), *Tradition and Change. The Case of the Family Ghana*. University Press, Accra.

Nzegwu, N. (2000), 'Chasing Shadows: The Misplaced Search for Matriarchy.' *West Africa Review*: 2,1 .[iuicode: http://www.icaap.org/iuicode?101.2.1.10]. www.africaresource.com/war/vol2.1/nzegwu.html.

Obermeyer, C.M. 'Religious Doctrine, State Ideology, and Reproductive Options in Islam' in Gita Sen and R.C. Snow (eds.) *Power and Decision. The Social Control of Reproduction*. Harvard Series on Population and International Health pp 59-76 .

Okonkwo, R. O. (2004). 'Saving Our Marriages'.
http://www.nigeriaworld.com Wednesday, June 9, 2004.

Oodit G. and Bhowon U. (1999), 'The use of induced abortion in Mauritius: an alternative to fertility regulation or an emergency procedure?' in Mundigo Al and Indriso C. eds. *Abortion in the Developing World*. New Delhi: World Health Organization pp. 151-166.

Overa, R. (2001), Institutions, mobility and resilience in the Fante migratory fisheries of West Africa. Population, Consumption and Environment Initiative (PCE) Programme on Global Security and Sustainability. The MacArthur Foundation Project: Small Scale Fisheries in Africa: Demographic Dynamics and Local Resource Management.

Phillips, D.R. (1990), *Health and Health Care in the Third World*. New York: John Wiley and Son.

Pittin, R. (1986), 'The Control of Reproduction: Principle and Practice in Nigeria.' *Review of African Political Economy* 35:40-53.

Population Reference Bureau, 2004, 2004. *World Population Data Sheet*.

Potter, J.E. (1983), 'Effects of societal and community institutions on fertility,' in R. A Bulatao and R. D. Lee (eds.), *Determinants of fertility in Developing Countries*, Vol. II. New York: Academic Press, pp.627-665.

Preston-Whyte, E. (1974), 'Kinship and marriage,' in Ed. H.D. Hammond-Tooke, *The Bantu-Speaking Peoples of Southern Africa*. London: Routledge and Kegan Paul. Pp. 77-204 Second edition.

Rao, K.V. and T.R. Balakrishnan (1988), 'Age at First Birth in Canada: A Hazards Model Analysis.' *GENUS* 44 (1-2): 53-72.

Renne, E.P. (1996), 'Perceptions of Population Policy, Development, and Family Planning Programs in Northern Nigeria.' *Studies in Family Planning* Vol.27, No.3 pp 131, 132, 134.

Reproductive Health Outlook (1999), 'Infertility: Overview and lessons learned.' http://www.rho.org.

Results from the Demographic and Health Survey Guineé 1999. *Studies in Family Planning*, Volume 33, Number 2, June 2002: Data. Guineé 1999.

Retherford, R.D. and J.A. Palmore, (1983), 'Diffusion Processes affecting fertility regulation' in R.A. Bulatao and R.D. Lee, (eds.), *Determinants of Fertility in Developing Countries*, Vol. II, New York: Academic Press, pp 761-796.

Robinson, W.C. (1992), 'Kenya Enters the Fertility Transition.' *Population Studies*, 46: 4450-457.

Rosaldo, R. (1989), *Culture and Truth: The Remarking of Social Analysis*. Boston: Beacon. .

Roseberry, W. (1989), *Anthropologies and histories: Essays in culture, History, and Political Economy*. New Brunswick: Rutgers University Press. In Greenhalgh, S. 'Anthropology theorizes reproduction: Integrating practice, political economic and feminist perspectives,' in S. Greenhalgh (ed). 1995. *Situating Fertility. Anthropological and Demographic Inquiry* Cambridge University Press,. Cambridge, 1995.

Rossier, C. (2003), 'Estimating Induced Abortion Rates: A Review.' *Studies in Family Planning* 2003; 34[2]: 87-102.

Rotundo, E.A. (1993), *American manhood: Transformations in masculinity from the Revolution to the modern era*. New York: Basic Books, in, Garlick, S. (2003), 'What Is a Man? Heterosexuality and the Technology of Masculinity.' *Men and Masculinities*, Vol. 6 No. 2, October 2003 156-172.

Rowland, R. and Klein, R. (1991), 'Radical Feminism,' Introduction in Sneja Guew (ed.) *A Reader in Feminist Knowledge*. London: Routledge.

Säävälä, M. (2001), *Fertility and Familial Power Relations: Procreation in South India*. Curzon Press, UK. Book review by A. M. Basu, *Studies in Family Planning* 33[4] December 2002.

Sathar, Z.A. and J.B. Casterline (1998), 'The Onset of Fertility Transition in Pakistan.' *Population Council Policy Research Division Working Papers* 1998 No. 112.

Schneider, J., and P. Schneider, (1992), Going Forward in Reverse Gear: Culture, Economy, and Political Economy in the Demographic Transitions of a

Sicilian Rural Town (Chapter 8) in Gillis, J., et. al. (eds.), *The European Experience of Declining Fertility 1850-1970: The Quiet Revolution* Oxford: Blackwell Publications. Pp. 146-174.

Schneider, P. and Schneider, J. (1995), 'High fertility and poverty in Sicily: Beyond the culture vs. rationality debate,' in S. Greenhalgh (ed.) *Situating Fertility: Anthropology and Demographic Inquiry*, Cambridge University Press.

Sen, A. (1992), *Economic Development and Women's Concerns' in Integration of Women's Concerns into Development Planning in Asia and the Pacific.* UN-ESCAP, New York, 1992.

Setel, P. (1995), 'The effects of HIV and AIDS on fertility in East and Central Africa,' *Health Transition Review*, Supplement to Volume 5, 1995, 179-189.

Sexton, S, (2000), 'Population Talk' A review, The Malthus Factor: Poverty, Politics and Population in Capitalist Development by Eric B. Ross, Monthly Review, New York, Vol. 52, No. 2, June, 2000 http://www.thecornerhouse.org.uk/item.shtml?x=52215.

Shadpour, K. (1999), *Communication and advocacy strategies, adolescent reproductive and sexual health: case study, Islamic Republic of Iran*. Bangkok: UNESCO PROAP, 1999. 19p.

Smith, D.J. (2002), Book Review of Obermeyer, C.M. (ed.). 2001. Cultural Perspectives on Reproductive Health. In, *Studies in Family Planning* 33[3] September 2002.

Smyth, I. (1991), 'The Indonesian Family Planning Programme: A Success Story for Women?' *Development and Change* 22: 782-805.

Smyth, I. (2000), 'Gender Analysis of Family Planning. Beyond the "feminist vs. population control" debate' in, *Feminist visions of development: gender analysis and policy*. Edited by Ruth Pearson and Cecile Jackson. 2000. Routledge, London.

So, A.Y. (1990), *Social Change and Development: Modernization, Dependency, and World-System Theories*. Newbury Park: Sage.

Stein, D. (1995), People who Count. Population and Politics, Women and Children. Earthscan Publications Ltd., London.

Stover, J. (1997), 'Revising the Proximate Determinants of Fertility Framework: What Have We Learned in the Past Twenty Years?' Presented at the 1997 Annual Meeting of the Population Association of America, Washington DC March 1997.

Stover, J. (1998), 'Revising the Proximate Determinants of Fertility Framework: What Have We Learned in the Past 20 Years?' *Studies in Family Planning* 1998; 29(3): 255267.

Suet-Ling Pong, (1994), 'Sex Preference and Fertility in Peninsular Malaysia' *Studies in Family Planning*; 25(3) (May, 1994).

Sylvester, C. (2000), *Producing Women and Progress in Zimbabwe. Narratives of Identity and Work from the 1980s.* Heinemann.

Taylor, J., and M. Abbey (1994), 'The dimensions of unsafe abortion: An exploratory study conducted in the Kwahu South District, Eastern Region,' cited in Blanc, A.K. and S. Grey (2000), *Greater than expected fertility decline in Ghana: An examination of the evidence*. Calverton, Maryland: Macro International Inc and National Population Council Secretariat [Ghana].

The Alan Guttmacher Institute, (2004), 'Adolescents in Ghana: Sexual and Reproductive Health.' *Research in Brief* 2004 Series, No. 1 06/2004 www.guttmacher.org.

The Economist, (2004), 'Demographic change: Old Europe.' *The Economist* October 2nd 2004. pp 27-28.

Thompson, E.P. (1978), *The Poverty of Theory and Other Essays*. New York: Monthly Review Press. Cited in, Greenhalgh, S. 'Anthropology theorizes reproduction: Integrating practice, political economic and feminist perspectives' in S. Greenhalgh (ed). 1995. *Situating Fertility. Anthropological and Demographic Inquiry* Cambridge University Press, Cambridge, 1995.

Turner, R. (1992), 'Russian fertility is low, despite early age at first birth and lack of effective contraceptive methods.' *Family Planning Perspectives* 24(5): 236-7.

UNESCO, (2002), 'Education goals remain elusive in more than 70 countries.' http://www.unesco.org/bpi/eng/unescopress/2002/02-93e.shtml.

United Nations, (1983), *Indirect Techniques for Demographic Estimation*. Manual X Sales .

United Nations, (1990), *Human Development Report 1990*. New York: Oxford University Press No.E.83, 13.2, New York.

United Nations, (2001), *World Population Prospects: The 2000 Revision and World Urbanization Prospects: The 2001 Revision*. Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. http://esa.un.org/unpp .

Van Dijk, T. (1997), 'Discourse as interaction in society' in *Discourse as social interaction*, Teun van Dijk (ed.), 1-37. London: Sage.

Varga, C.A. (2003), 'How Gender Roles Influence Sexual and Reproductive Health Among South African Adolescents.' *Studies in Family Planning* 2003; 34[3]: 160-172.

Walker, B. (1999), 'Dividing and Conquering the Sea: The Colonial History of Marine Fishing and Property Rights in Ghana.' Paper delivered in, Conference: Marine Environmental Politics in the 21st Century. April 30-May 2, 1999. MacArthur Program on Multilateral Governance, Institute of International Studies, UC Berkeley.

Waterman, P. (1993), 'Hidden from Herstory: Women, Feminism and New Global Solidarity.' *Economic and Political Weekly* 30 October.

Watkins, S.C. (1993), 'If all we know about women was what we read in Demography, what would we know?' *Demography*, 30(4), 1993 .

Watkins, S.C. (1986), 'Conclusions' in A.J. Coale and S.C. Watkins (eds.) *The Decline of Fertility in Europe*. Princeton University Press, pp. 420-449.

Watkins, S.C. (1987), 'The Fertility transition: Europe and the third world compared.' *Sociological Forum 2*, no. 4: 645-673.

Watkins, S.C. (1990), 'From local to national communities: The transformation of demographic regimes in Western Europe, 1870-1960.' *Population and Development Review* 16: 241-272.

Watkins, S.C. (1991), *From Provinces into Nations: Demographic integration in Western Europe, 1870-1960*. Princeton: Princeton University Press.

Wattenberg, B. and K. Zinsmeister, (1986), 'The Birth Dearth: The Geopolitical Consequences.' *Public Opinion* (December/January), pp. 7-13.

.

Akinyinka Akinyoade

Admitted to the PhD programme on the basis of:

M.Phil (Population Studies), UN Regional Institute for Population Studies, University of Ghana, Legon, Ghana, 1997

M.A. (Population Studies), UN Regional Institute for population Studies, University of Ghana, Legon, Ghana, 1993

B.Sc. (Geography: specialization in Hydrology), Obafemi Awolowo University, Ile-Ife, Nigeria, 1988

This PhD thesis has not been submitted to any university for a degree or any other award.